

Appendix I.  
Biscayne Bay annotated bibliography

Time coverage is the date of sampling (if known) or in the case of calculated or inferred parameters by publication date (noted with a diamond). Geological studies describing formation of geological features in the area are listed by publication date. Author and subject indices are provided in Appendices II and III.

1

Abel, C. E. (1980) Hurricane surge stage-frequency analysis for Dade County, Florida. Technical report HL-80-14. U.S. Army Engineer District, Jacksonville, FL.

TIME COVERAGE: 1980

SUMMARY: A numerical investigation of hurricane surge stage-frequency relationship was performed for Dade County. Surface wind stress was the dominant forcing function for this application of the model.

KEY WORDS: Hurricanes, Storm surges, Mathematical models, Dade County

2

Abele, L. G., and W. Kim (1986) An Illustrated Guide to the Marine Decapod Crustaceans of Florida. Florida State University, Tallahassee, FL.

TIME COVERAGE: 1986

SUMMARY: This is a guide to the decapod crustaceans of Florida.

KEY WORDS: Decapod crustaceans, Identification keys, Organism morphology, Florida, Guide

3

Achmad, S. (1973) The influence of temperature on the early development of the lined sole (*Achirus lineatus* Linnaeus) reared in the laboratory. M.Sc. thesis. University of Miami, Coral Gables, FL. 62 pp.

TIME COVERAGE: 1971

SUMMARY: Naturally spawned pelagic eggs were collected in Virginia Key and reared in the laboratory and exposed to a variety of temperature levels. Many abnormalities were observed and frequency of occurrence was affected by temperature.

KEY WORDS: *Achirus lineatus*, Lined sole, Rearing, Temperature effects, Virginia Key

4

Ackerman, B. B. (1995) Aerial surveys of manatees: a summary and progress report. In: Population Biology of the Florida Manatee. T. J. O'Shea, B. B. Ackerman, and H. F. Percival (eds.). Information and technology report 1. National Biological Service, Washington, DC. 13-33.

TIME COVERAGE: 1991 - 1992

SUMMARY: Aerial surveys were used to document the distribution and relative abundance of manatees and to assess population trends.

KEY WORDS: Manatees, *Trichechus manatus latirostris*, Aerial surveys, Florida

5

Ackerman, B. B., S. D. Wright, R. K. Bonde, D. K. Odell, and D. J. Banowetz (1995) Trends and patterns in mortality of manatees in Florida, 1974-1992. In: Population Biology of the Florida Manatee. T. J. O'Shea, B. B. Ackerman, and H. F. Percival Information and technology report 1. National Biological Service, Washington, DC. 223-258.

TIME COVERAGE: 1974 - 1992

SUMMARY: Number of recovered manatee carcasses increased steadily during the years of this study while the size of the human population and the number of registered watercraft in Florida increased less rapidly. Deaths from collisions with watercraft increased at 9%/yr. Deaths of perinatal calves from any cause increased at 12%/yr. Two less common categories cause of death - crushing or drowning in flood control gates and canal locks and other human related causes - did not change significantly. However, deaths in these categories decreased more than deaths from other causes. Some deaths were attributed to severe cold and to red tide toxicity. Watercraft-related mortalities were highest in eastern Florida. Natural mortality was greatest in winter. Anthropogenic mortality was greatest in summer. Anthropogenic mortality was greater in the eastern coast and disproportionately affected adult manatees.

KEY WORDS: Manatees, *Trichechus manatus latirostris*, Mortality, Florida

6

Adams, J. A. (1958) A contribution to the biology and postlarval development of the Sargassum fish, *Histrio histrio* (Linnaeus), with a discussion of the Sargassum complex. M.Sc. thesis. University of Miami, Coral Gables, FL. 66 pp.

TIME COVERAGE: 1958

SUMMARY: This work is a general discussion of Sargassum fish, and includes post-larval and juvenile series specimen documentation. Several specimens were obtained in Biscayne Bay.

KEY WORDS: *Histrio histrio*, Sargassum fish, Juveniles, Biological development

7

Adams, J. A. (1960) A contribution to the biology and postlarval development of the Sargassum fish, *Histrio histrio* (Linnaeus), with a discussion of the Sargassum complex. Bull. Mar. Sci. Gulf Caribb., 10(1):55-82.

TIME COVERAGE: 1951 - 1956

SUMMARY: The early development of *Histro* was described based on a collection of larval and juvenile specimens collected in the Florida Current and other areas including Miami. Growth, biology, feeding and relationship of the Sargassum complex were discussed.

KEY WORDS: Sargassum fish, *Histrio histrio*, Juveniles

8

Aftring, R. P. (1979) The bacterial degradation of phthalates emphasizing anaerobic catabolism linked to denitrification. M.Sc. thesis. University of Miami, Coral Gables, FL. 71 pp.

TIME COVERAGE: 1979

SUMMARY: Cultures that grew on phthalates were obtained by enrichment using sediments from the Miami River and Biscayne Bay as inocula. Suspensions of the cultures were used to study degradation of phthalates.

KEY WORDS: Biodegradation, Anaerobic bacteria, Phthalic acid, Isophthalic acid, Microbiology

9

Agassiz, A. (1896) The Florida elevated reef. With notes on the geology of southern Florida by Leon S. Griswold. Bulletin of the Museum of Comparative Zoology at Harvard College, 28(2):1-62.

TIME COVERAGE: 1896

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coral reefs, Geology, South Florida

10

Agassiz, A. (1888) Three cruises of the United States Coast and Geodetic Survey Steamer "Blake" in the Gulf of Mexico, in the Caribbean Sea, and along the Atlantic Coast of the United States, from 1877 to 1880. Bull. Museum of Comparative Zoology at Harvard College, 14(-):xxii, 1-314.

TIME COVERAGE: 1877 - 1880

SUMMARY: This book contains a detailed description of the cruises of the "Blake" in the Gulf of Mexico, Caribbean Sea and Atlantic Coast. One of the chapters discusses the reefs of Florida.

KEY WORDS: Coral reefs, Geology, Pelagic environment, Cruise reports, Blake (Ship), Gulf of Mexico, Caribbean, Atlantic coast, Dry Tortugas, Marquesas, Florida Keys, Cape Florida

11

Agassiz, L. (1857) Extracts from the report of Professor Agassiz to the Superintendent of the Coast Survey, on the examination of the Florida reefs, Keys and coast. Report of the Superintendent of the United States Coast Survey, showing the progress of the Survey during the year 1857. Appendix no. 10. House of Representatives, Executive document no. 87, 39th Congress, 2d session. US Government Printing Office, Washington, DC. 145-160. 140 pp.

TIME COVERAGE: 1857

SUMMARY: This paper discusses the Florida Keys and parts of the coast in mainland Florida. A brief mention is made of Miami.

KEY WORDS: Coral reefs, Coastal oceanography, Florida Keys, Gulf Stream

12

Agassiz, L. (1869) Extracts from the report of Professor Agassiz to the Superintendent of the Coast Survey, on the examination of the Florida reefs, Keys and coast. Report of the Superintendent of the United States Coast Survey, showing the progress of the Survey during the year 1866. Appendix no. 19. House of Representatives, Executive document no. 87, 39th Congress, 2d session. US Government Printing Office, Washington, DC. 120-130. 140 pp.

TIME COVERAGE: 1869

SUMMARY: This paper discusses the Florida Keys and parts of the coast in mainland Florida. A brief mention is made of Miami.

KEY WORDS: Coral reefs, Coastal oceanography, Florida Keys, Gulf Stream

13

Agassiz, L. (1880) Memoirs of the Museum of Comparative Zoology at Harvard College., 7(1):-61.

SUMMARY: Report on the Florida reefs, accompanied by illustrations of Florida corals.

KEY WORDS: Coral reefs, Coral, Florida

14

Ahearn, D. G. (1964) A comparative physiological and morphological study of terrestrial- and marine-occurring carotenogenic yeasts. Ph.D. dissertation. University of Miami, Coral Gables, FL. 164 pp.

TIME COVERAGE: 1964

SUMMARY: Specimens of water, sediments, plants and animals were collected at sites in northern Biscayne Bay and in the Bahamas. Offshore water samples were also collected. Yeasts were isolated and identified, and the physiological and morphological characteristics determined.

KEY WORDS: Fungi, Rhodotorula, Dioszegia, Sporobolomyces, Yeasts, Northern Bay, Bahamas

15

Ahearn, D. G. (1959) A study of the isolation and occurrence of pink yeasts in Biscayne Bay, Florida and adjacent subtropical marine localities. M.Sc. thesis. University of Miami, Coral Gables, FL. 49 pp.

TIME COVERAGE: 1959

SUMMARY: Yeast specimens of five species were isolated from sediment and water samples and identified.

KEY WORDS: Fungi, Rhodotorula, Yeasts, Coot Bay, Northern Bay, Bear Cut, Dinner Key, Key Biscayne, Government Cut

16

Ahearn, D. G., F. J. Roth, and S. P. Meyers (1968) Ecology and characterization of yeasts from aquatic regions of south Florida. Mar. Biol., 1(4):291-308.

TIME COVERAGE: 1968

SUMMARY: A collection of more than 1000 yeasts, representing more than 50 taxa, were characterized and studied. Highest densities were found in fresh waters.

KEY WORDS: Yeasts, Fungi, Candida, Cryptococcus, Rhodotorula, *Debaryomyces hansenii*, South Florida, Key Biscayne, Virginia Key, Bear Cut, Miami River

17

Aigner, T. (1985) Storm sedimentation in nearshore skeletal banks, South Florida. In: Storm Depositional Systems: Dynamic Stratigraphy in Modern and Ancient Shallow-Marine Sequences. G. M. Friedman, H. J. Neugebauer, and A. Seilacher (series eds.). Lecture notes in earth sciences 3. Springer-Verlag, Berlin, Germany. 174 p.

TIME COVERAGE: 1985

SUMMARY: The object of this citation was to provide an actualistic example of storm sedimentation in nearshore skeletal banks and to document storm-generated sequences not known before from such settings; and to examine the role of storms in the development and growth of near-shore skeletal banks as a style of storm sedimentation that contrasts with more offshore level-bottom environments. The Safety Valve was the chosen study site.

KEY WORDS: Sedimentation, Biogenic sedimentary structures, Storm surge, Hurricanes, Banks (Topography), Safety Valve

18

Aigner, T. (1992) Storm sedimentation in nearshore skeletal banks, south Florida. In: Upper Ordovician (Cincinnatian Series) Kope, Fairview and Bellevue Formations: storm-dominated carbonate-ramp deposits. Keck Consortium GSA pre-meeting fieldtrip, October 25th, 1992. Geological Society of America, Cincinnati, OH? 42-48.

TIME COVERAGE: 1992

SUMMARY: This is a geological field guide to the Safety Valve.

KEY WORDS: Sediment transport, Storms, Nearshore sedimentation, Sand bars, Safety Valve, Field guide

19

Albertson, H. D. (1973) A comparison of the upper lethal temperatures of animals of fifty common species from Biscayne Bay. M.Sc thesis. University of Miami, Coral Gables, FL. 78 pp.

TIME COVERAGE: 1973

SUMMARY: The upper lethal temperature of common species of animals collected in Biscayne Bay were determined. For most species, the interval between the temperature at which all specimens of a species were alive and all were dead ranged 1 - 2 °C only.

KEY WORDS: Temperature effects, Temperature tolerance, Animal physiology

20

Albertson, H. D. (1980) Long term effects of high temperatures and low salinities on specimens of *Melongena corona* and *Nassarius vibex*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 222 pp.

TIME COVERAGE: 1972 - 1977

SUMMARY: The purpose of this study was to examine the long term exposure to constant high temperatures and unvarying low salinities on growth and survival in two gastropod species. Some specimens were collected in Biscayne Bay,

KEY WORDS: Temperature effects, Salinity effects, *Melongena corona*, *Nassarius vibex*, Animal physiology, Gastropods

21

Albertson, H. D., and R. F. Thomas (1974) The regular sea urchins of South Florida. Sea Frontiers, 20(6):352-358.

TIME COVERAGE: 1974

SUMMARY: This article describes the most common species of sea urchins found in South Florida.

KEY WORDS: Sea urchin, *Eucidaris tribuloides*, *Echinometra viridis*, *Echinometra lucunter*, *Lytechinus variegatus*, *Tripneustes ventricosus*, *Diadema antillarum*, South Florida

22

Alexander, T. R. (1974) Evidence of recent sea level rise derived from ecological studies on Key Largo, Florida. In: Environments of South Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 219-222.

TIME COVERAGE: 1974

SUMMARY: *Pinus elliottii* stumps were found in situ in a saltwater community where soil salt levels were too high for pines. Evidence was presented to indicate that the plant communities in that site reflect and support other evidence that the ocean level has been rising.

KEY WORDS: Sea level changes, Key Largo, *Pinus elliottii*, Plant populations, Key Largo

23

Alexander, T. R., and A. G. Crook (1974) Recent vegetational changes in Southern Florida. In: Environments of South Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 61-72.

TIME COVERAGE: 1974

SUMMARY: Vegetational change or plant succession was described for South Florida. Several significant shifts in species composition within communities, as well as the replacement of communities, were recognized. There were documented for a 16-30 yr period, and include a landward increase of mangrove forests, loss of coastal hardwood hammocks, both gain and loss of Everglades tree islands, replacement of sawgrass by shrubs, pine and hardwood invasion by cypress, and pineland succession to hammock. The specific impact of farming, canals, roads and exotic plants was also discussed.

KEY WORDS: Plant populations, Coastal zone, Trees, Key Largo

24

Alexander, T. R., and A. G. Crook (1984) Recent vegetational changes in southern Florida. In: Environments of South Florida: Present and Past II. P. J. Gleason (ed.). Miami Geological Society, Miami, FL. p.

TIME COVERAGE: 1984

SUMMARY: Vegetational succession is described for South Florida. Several shifts in species composition within communities as well as replacement of communities are noted. These are documented for a 16 - 30-yr period.

KEY WORDS: Plant populations, Coastal zone, Trees, South Florida

25

Al-Hoti, B. N. (1987) Development of a model to predict biofouling control with chlorine in steam electric power plant condenser tubes. Ph.D. dissertation. University of Miami, Coral Gables, FL. 302 pp.

TIME COVERAGE: 1987

SUMMARY: A phenomenological model was developed to predict biofouling control in power plant condensers utilizing chlorine. The model was tested in Miami using Biscayne Bay water.

KEY WORDS: Fouling control, Models, Power plants, Chlorine, Tubing

26

Al-Hoti, B. N. (1989) A predictive model to find the optimum chlorine treatment scenario for biofouling control. *Desalination*, 74(-):227-241.

TIME COVERAGE: 1986 - 1987

SUMMARY: A phenomenological model was developed to predict biofouling control in power plant condensers utilizing chlorine. One of the studies of biofouling prevention was conducted in Miami using Biscayne Bay water.

KEY WORDS: Fouling control, Models, Power plants, Chlorine, Cooling water

27

Alleman, R. W. (1981?) Biscayne Bay: a survey of past mangrove mitigation/restoration efforts. Biscayne Bay Restoration and Enhancement Program. Dade County Department of Environmental Resources Management,, Miami, FL. 36 pp + appendices.

TIME COVERAGE: 1981

SUMMARY: This reports assessed ten sites where mangroves were either planted or naturally revegetated. Physical and biological conditions at these sites as well as planting methods utilized were described. The establishment of mangroves was successful when effective monitoring and replacement programs, proper substrate elevations, low wave energy and inaccessibility were combined.

KEY WORDS: Mangrove swamps, Restoration, Poinciana Island, Haulover easement, Mariners Bay, Villa Regina, Crandon Island, Cocoplum, No Name Harbor

28

Alleman, R. W. (1982) Biscayne Bay water quality: reporting period March 1981 - February 1982. No report number available. Dade Country Department of Environmental Resources Management, Miami, FL. 59 pp + appendices.

TIME COVERAGE: 1981 - 1982

SUMMARY: This report contains water quality data for surface waters collected in Biscayne Bay. Parameters measured include nutrients, dissolved oxygen, coliform bacteria and chlorophyll.

KEY WORDS: Water quality, Pollution monitoring, Pollution indicators, Nutrients, Dissolved oxygen, Coliform bacteria, Chlorophylls

29

Alleman, R. W. (1990) Surface water quality in the vicinity of Black Point, Dade County, Florida; March 1990. DERM technical report 90-14. Metro Dade Department of Environmental Resources Management, Miami, FL. 21 pp.

TIME COVERAGE: 1990

SUMMARY: This report contains water quality data for surface waters collected in Biscayne Bay. Parameters measured include nutrients, dissolved oxygen, coliform bacteria, chlorophyll, Cd, Cu, Pb, and Zn.

KEY WORDS: Surface water, Water quality, Black Point, Nutrients, Dissolved oxygen, Coliform bacteria, Chlorophyll, Cd, Cu, Pb, Zn

30

Alleman, R. W. (1991) A synopsis of the water quality and monitoring program in Biscayne Bay, Florida. In: *The Light Requirements of Seagrasses. Proc., workshop to examine the capability of water quality criteria, standards and monitoring programs to protect seagrasses.* W. J. Kenworthy, and D. E. Haurert (eds.). NOAA tech. memo. NMFS-SEFC 287. NOAA/NMFS, Beaufort Laboratory, Beaufort, NC. 181 pp. 152-159.

TIME COVERAGE: 1991

SUMMARY: In 1978 Metro-Dade County began a long term Bay-wide water quality monitoring program. Samples were collected and analyzed for color, turbidity, suspended solids and photosynthetically sensitive radiation (PAR). At the time of this writing, 15% of the bottom of the Bay was barren excluding naturally barren bottom habitats. Barren bottom types were associated with high average water column PAR values.

KEY WORDS: Water quality, Pollution monitoring, Color, Turbidity, Suspended particulate matter

31

Allen, D. M., and T. J. Costello (1966) Releases and recoveries of marked pink shrimp, *Penaeus duorarum* Burkenroad, in south Florida waters, 1958-64. Data rep. 11. Contribution no 201. Bureau of Commercial Fisheries Biological Laboratory, Galveston, TX. US Fish and Wildlife Service, Washington, DC. 77 pp.

TIME COVERAGE: 1958 - 1964

SUMMARY: Pink shrimp were captured, stain-marked, released and recaptured during the study period. The study sites included three in Biscayne Bay. Practically all recaptures were by commercial shrimp boats. Less than 1% of the shrimp released in estuaries or near shore were recovered, whereas 23% of those released on offshore fishing grounds were. This may be explained by the greater amount of fishing in the offshore areas.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Marking, Migrations, Growth, Florida Keys, Everglades

32

Allen, D. J., P. Kasibhatla, A. M. Thompson, R. B. Rood, B. G. Doddridge, K. E. Pickering, R. D. Hudson, and S. J. Lin (1996) Transport-induced interannual variability of carbon monoxide determined using a chemistry and transport model. J. Geophys. Res., 101(D22):28655-28669.

TIME COVERAGE: 1989 - 1993

SUMMARY: Transport-induced interannual variability of carbon monoxide was studied using the Goddard chemistry and transport model driven by assimilated data.

KEY WORDS: Carbon monoxide, Transport processes, Atmospheric circulation, Monitoring systems, Key Biscayne

33

Allen, G. W. (1967) A biologist's viewpoint of man-made changes in estuaries. Proc., Gulf Caribb. Fisheries Institute, xxth annual session. 1966. University of Miami, Coral Gables, FL. 69-74.

TIME COVERAGE: 1967

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuaries, Brackishwater environment, Man-induced effects, Environmental impact

34

Almasi, M. N. (1978) Ecology and color variation of benthic foraminifera in Barnes Sound, northeast Florida Bay. M.Sc. thesis. University of Miami, Coral Gables, FL. 144 pp.

TIME COVERAGE: 1978

SUMMARY: The object of this study was to investigate the taxonomy and distribution of recent benthonic foraminifera in Barnes Sound and to determine factors which cause color variations in the foraminiferal tests.

KEY WORDS: Foraminifera, Benthos, Barnes Sound, Sediment, Florida Bay

35

Alt, D., and H. K. Brooks (1965) Age of the Florida marine terraces. J. Geol., 73(2):406-411.

TIME COVERAGE: 1965

SUMMARY: The landscape of Florida is dominated by abandoned marine shore lines and associated terraces. This paper discusses the age of such terraces.

KEY WORDS: Coastal landforms, Terraces, Sea level changes, Topographic features, Stratigraphy

36

Altschuler, Z. S., and C. S. Zen (1975) Reconnaissance of trace elements and pollution in Biscayne Bay, Miami, and the adjoining Everglades, Florida. Abstracts with programs, 7(7):973-974.

TIME COVERAGE: 1975

SUMMARY: A reconnaissance of the distribution and the pollution pathways of trace elements in Holocene sediments was documented by analyses of cores and bottom muds of Biscayne Bay, and of "soils" and surface sediments sampled in pairs, both for distance from highways and for depth. Lead and Hg showed clear patterns or regional metropolitan pollution was evaluated against data from Florida Bay and geochemical norms established from deeper and more remote samples. Pollution is clearly augmented along major highways and declines rapidly within 100 to 200 yds laterally. Biscayne Bay sediment exhibited contamination by Pb, Hg and Cu which areally was related to major canal effluents and largely reflected urban runoff and sediment discharge. Concentrations of these elements increased upward within the uppermost 20 in of sediment

KEY WORDS: Trace elements, Sediment pollution, Pb, Hg, Cu, Everglades, Florida Bay

37

Andersen, B. L. (1975) A population study of the benthonic foraminiferida in northern Biscayne Bay, Florida. Tulane Studies in Geology and Paleontology, 11(4):253-301.

TIME COVERAGE: 1973

SUMMARY: A portion of northern Biscayne Bay was investigated to determine the distribution of its benthonic foraminiferal assemblage. Percentages were calculated for the standing crop and total population from a count of all specimens present in aliquots of 26 samples from 15 stations. One hundred fifty-two species were identified. Areal distributions and abundance of certain species can be correlated with grain size distribution of the sediments.

KEY WORDS: Foraminifera, Benthos, Ecological distribution, Abundance, North Bay

38

Andree, S. W. (1981) Locomotory activity patterns and food items of benthic postlarval spiny lobsters, *Panulirus argus*. M.Sc. thesis. Florida State University, Tallahassee, FL. 50 pp.

TIME COVERAGE: 1980 - 1981

SUMMARY: This study examined post-larval locomotory activity, foraging, and diet in the field, as well as activity patterns in the laboratory.

KEY WORDS: Spiny lobster, *Panulirus argus*, Juveniles, Locomotion, Activity patterns, Food consumption

39

Anonymous (1970) Aquaculture comes to Turkey Point. American Fish Farmer & World Aquaculture News, 1(8):14-18, 27.

TIME COVERAGE: 1970

SUMMARY: This article describes shrimp aquaculture activities at the Turkey Point power plant.

KEY WORDS: Shrimp culture, Thermal aquaculture, Turkey Point

40

Anonymous (1907) Fishing records in Biscayne Bay. The Sunday Times-Union, Jacksonville, FL. Mar. 10.

TIME COVERAGE: 1907

SUMMARY: This article reported on the record breaking tarpon catches in the upper Bay.

KEY WORDS: Recreational fisheries

41

Anonymous (1965?) *Islandia* story. 10 pp.

TIME COVERAGE: 1965

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land use, *Islandia*

42

Anonymous (1903) *Souvenir of Miami and Biscayne Bay*. Albertype Co., Brooklyn, NY. 11 pp.

TIME COVERAGE: 1903

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Description, Views

43

Anonymous (1907) Tarpon records in Biscayne Bay. *The Sunday Times-Union*, Jacksonville, FL. Mar. 3.

TIME COVERAGE: 1907

SUMMARY: This article discussed the record breaking tarpon catches in the upper Bay.

KEY WORDS: Recreational fisheries

44

Antonini, G. A., P. W. Box, E. Brady, M. Clarke, H. R. Ledesma, and J. L. Rahn (1993) Location and assessment of Hurricane Andrew damaged vessels on Biscayne Bay and adjoining shore areas. Vol. 1: Text and appendices. Tech. paper TP-70A. Florida Sea Grant College Program, Gainesville, FL. 58 pp.

TIME COVERAGE: 1992

SUMMARY: This report assessed damage to in-the-water vessels by Hurricane Andrew, to map the locations of the vessels, and to determine areas of potential impacts of vessel sinkings and wreckage on the environment. The project provides guidelines for developing hurricane vessel damage assessment strategies to cope with similar future natural hazards.

KEY WORDS: Boats, Marinas, Coastal structures, Damage, Hurricane Andrew

45

Antonini, G. A., and P. W. Box (1995) Location and assessment of Hurricane Andrew damaged vessels on Biscayne Bay and adjoining shore areas. In: *Coastal Zone '95. Proc., 9th Conf.* B. L. Edge, (ed.). American Society of Civil Engineers, New York. 169-170.

TIME COVERAGE: 1992

SUMMARY: Biscayne Bay experienced damage to shoreline boating facilities and docked/anchored vessels as the result of Hurricane Andrew. A GIS database of vessel locations and attributes as the result of the storm was created and the data interpreted.

KEY WORDS: Boats, Coastal structures, Damage, Hurricane Andrew, Ragged Keys

46

Applied Biology, I. (1982) Key Largo National Marine Sanctuary water quality assessment and modeling program: phase I. Contract no. NA81-GA-C-00047. Applied Biology, Inc., Atlanta, GA. (Various paging).

TIME COVERAGE: 1982

SUMMARY: This report described a mathematical model for managing the Key Largo National Marine Sanctuary and Biscayne National Park. Both geographical areas were treated differently.

KEY WORDS: Water quality, Coral reefs, Reef tract, Biscayne National Park, Key Largo National Marine Sanctuary

47

Aprieto, V. L. (1973) Early development of carangid fishes of the Gulf of Mexico and the south Atlantic coast of the United States. Ph.D. dissertation. University of Miami, Coral Gables, FL. 167 pp.

TIME COVERAGE: 1973

SUMMARY: This work is a description of the early development stages of carangid fishes. Some specimens were collected in Biscayne Bay.

KEY WORDS: Carangidae, Fish larvae, Gulf of Mexico, Atlantic coast

48

Araujo, R. J., J. C. Jaramillo, and S. C. Snedaker (1997) LAI and leaf size differences in two red mangrove forest types in south Florida. Bull. Mar. Sci., 60(3):643-647.

TIME COVERAGE: 1997

SUMMARY: Leaf area indices (LAI) were evaluated for two different mangrove forest types (basin and dwarf) using the plumb line and canopy line interceptions methods. LAI and leaf size were found to be significantly different.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Leaves, Matheson Hammock, Chapman Field

49

Armentano, T. V., R. F. Doren, W. J. Platt, and T. Mullins (1995) Effects of Hurricane Andrew on coastal and interior forests of southern Florida: overview and synthesis. In: Impacts of Hurricane Andrew on the Coastal Zones of Florida and Louisiana: 22-26 August 1992 (J. Coastal Res. Spec. Issue 21). G. W. Stone, and C. W. Finkl (eds.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 364 pp.

TIME COVERAGE: 1992

SUMMARY: This citation is a discussion of the effects of Hurricane Andrew upon inland forests in South Florida, most at the Everglades National Park. The discussion includes effects on the mangrove forests on the shore of Biscayne Bay

KEY WORDS: Mangrove swamps, Trees, Cypress, Vegetation, Hammocks, Hurricane Andrew, South Florida

50

Arnold, P. I., J. E. Serafy, M. E. Clarke, and D. R. Schultz (1996) An immunological study of predation on hatchery-reared juvenile red drum (*Sciaenops ocellatus*, Linnaeus): description of an ELISA and predator-prey studies in nature. J. Exp. Mar. Biol. Ecol., 199(1):26-44.

TIME COVERAGE: 1988 - 1994?

SUMMARY: This report is a continuation of an on-going study to develop immunological methods for eventual use in determining the predation mortality of newly released, hatchery-reared red drum. Using a specific goat antiserum produced to a purified 80 kDa red drum glycoprotein, the glycoprotein was determined routinely in extracts of red drum. After released of red drum fingerlings, great barracuda and redfin needlefish were collected, and the immunological tests used to identify the red drum specimens in the stomachs of these predators.

KEY WORDS: Red drum, *Sciaenops ocellatus*, Juveniles, Predation, Immunology, Hobie Beach, Matheson Hammock, Great barracuda, *Sphyraena barracuda*, *Strongylura notata*, Redfin needlefish

51

Ash, A. (1977) A view of Biscayne Bay; yachtsman's paradise. Arch. Digest, 34(4):118-121.

TIME COVERAGE: 1977

SUMMARY: This article describes the interior design of an apartment overlooking Biscayne Bay.

KEY WORDS: Art, Public access, Coastal zone management, Interior design

52

Ashton, R. E. (ed.) (1992) Rare and Endangered Biota of Florida. University Press of Florida, Gainesville, FL.

TIME COVERAGE: 1992

SUMMARY: These books discuss rare and endangered species found in Florida. Vol. 1 discusses mammals; Vol. 2, fishes; Vol. 3 amphibians and reptiles; and Vol. 4, birds.

KEY WORDS: Rare species, Biota, Mammals, Birds, Amphibians, Reptiles, Fish, Plants, Invertebrates, Florida, Guide

53

Aska, D. Y., and D. W. Pybas (1983) Atlas of artificial reefs in Florida. Sea Grant marine advisory bull. MAP-30. Florida Sea Grant College Program, Gainesville, FL. 15 pp.

TIME COVERAGE: 1983

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Artificial reefs, Atlases, Florida

54

Atkinson, B. (1970) Biscayne Bay: the splendor, the endless fight to save it. Audubon, 72(5):36-46.

TIME COVERAGE: 1970

SUMMARY: This article describes conditions in Biscayne Bay in the 1960s and some of the planned developments in the area that were not carried out.

KEY WORDS: Description, Biscayne National Park, Turkey Point, Environmental protection, Urbanization, Coastal zone management

55

Atkinson, B. (1972) This Bright Land: a Personal View. Doubleday/Natural History Press, Garden City, NY. 201 pp.

TIME COVERAGE: 1972

SUMMARY: This book describes the history of the development of the area including southern Biscayne Bay.

KEY WORDS: Environmental protection, Urbanization, Coastal zone management, Nature conservation, Turkey Point

56

Atomic Energy Commission (1972) Draft detailed statement on the environmental considerations related to the proposed issuance of operating licenses to the Florida Power and Light Company for Turkey Point plant units 3 and 4. Report. US Atomic Energy Commission, Division of Radiological and Environmental Protection, Washington, DC. 115 pp.

TIME COVERAGE: 1972

SUMMARY: This is the draft of the environmental statement regarding the Turkey Point Plant.

KEY WORDS: Environmental impact, Nuclear power plants, Turkey Point, Card Sound

57

Atomic Energy Commission (1972) Final environmental statement related to operation of Turkey Point Plant, Florida Power and Light Company. Final report. Dockets 50-250 and 50-251. US Atomic Energy Commission. Directorate of Licensing, Washington, DC. Various paging.

TIME COVERAGE: 1972

SUMMARY: This is the final environmental impact statement for the Turkey Point Plant.

KEY WORDS: Environmental impact, Power plants, Turkey Point

58

Atwood, A. D. (1996) The burning of Richmond. Naval Aviation, 78(4):36-39.

TIME COVERAGE: 1945

SUMMARY: Richmond Naval Air Station, one of the largest lighter than air ship base during the 1940s, was destroyed by fire during the Hurricane of 1945. The fire damage constitutes the biggest peacetime loss of federal property, in the shortest time, on record.

KEY WORDS: Richmond Naval Air Station, Lighter than air ships, Hurricane of 1945

59

Atwood, W. G., and A. A. Johnson (1924) Marine structures; their deterioration and preservation. Report of the Committee on Marine Piling Investigations of the Division of Engineering and Industrial Research of the National Research Council. National Research Council, Washington, DC. 534 pp.

TIME COVERAGE: 1922 - 1923

SUMMARY: This report describes the results of exposure of a test panel in Biscayne Bay. Little evidence of marine life was found.

KEY WORDS: Offshore structures, Boring organisms, Construction materials, Port installations

60

Ault, J. S., G. A. Diaz, S. G. Smith, J. Luo, and J. E. Serafy (1999) An efficient sampling survey design to estimate pink shrimp population abundance in Biscayne Bay, Florida. North Am. J. Fisheries Management, 19(3):696-712.

TIME COVERAGE: 1999

SUMMARY: An efficient sampling design-based approach using fishery-independent surveys to estimate population abundance of pink shrimp over time is described.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Population number, Biological sampling

61

Ault, J. S., J. Luo, S. G. Smith, J. E. Serafy, J. D. Wang, R. Humston, and G. A. Diaz (1999) A spatial dynamic multistock production model. Canadian J. Fish. Aquatic Sci., 56(Suppl. 1):4-25.

TIME COVERAGE: BB 512

SUMMARY: 1999

KEY WORDS: Population dynamics, Trophodynamic cycle, Predation, Spatial variations, Models, Pink shrimp, *Penaeus duorarum*, Spotted seatrout, *Cynoscion nebulosus*

62

Ault, J. S., J. Serafy, D. DiResta, and J. Dandelski (1997) Impacts of commercial fishing on key habitats within Biscayne National Park. Ann. rep. on cooperative agreement no. CA-5250-6-9018. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 80 pp.

TIME COVERAGE: 1997

SUMMARY: The purpose of this study was to determine the extent of the effects of commercial activities on habitats of Biscayne National Park, namely bait shrimp trawling, and trapping of spiny lobster, stone crab, and blue crab. Rollerframe trawling for shrimp does not appear to damage seagrasses but damage to sessile invertebrates (sponges and corals) in hardbottom communities is conspicuous and may be long lasting. Damage to seagrasses due to trap fisheries depends on trap type and soak time.

KEY WORDS: Commercial fishing, Pink shrimp, Stone crab, Blue crab, Spiny lobster, Trap fishing, Trawling, Habitat, Biscayne National Park

63

Ault, J. S., S. G. Smith, G. Meester, G. Diaz, J. Luo, and J. A. Bohnsack (1999) Design-based sampling to assess fish and macroinvertebrate populations in Biscayne Bay and the adjacent coral reef system. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 220.

TIME COVERAGE: 1999

SUMMARY: The results of a sampling design-based approach using fishery-independent surveys to assess populations of fish and macroinvertebrates in Biscayne Bay and adjacent coral reefs are presented.

KEY WORDS: Coral reefs, Fish population, Macroinvertebrates, Biological sampling, Statistical sampling, Population structure, Grunts, Snappers, Pink shrimp, *Penaeus duorarum*

64

Austin, C. B. (1971) An economic inventory of the Miami river and its economic and environmental role in Biscayne Bay. Sea Grant Tech. Bull. 17. University of Miami Sea Grant Program, Coral Gables, FL. 106 pp.

TIME COVERAGE: 1971

SUMMARY: The purpose of this report was to provide an economic description of the Miami river and consider the river's influence on Biscayne Bay, including land usage, employment, shipping and water pollution.

KEY WORDS: Miami River, Economic analysis, Environment management, Land use, Boats, Water pollution

65

Austin, C. B. (1976) Recreational boating in Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 247-253.

TIME COVERAGE: 1976

SUMMARY: This paper reviewed some of the major conflicts among recreational boaters, and between recreational boating and other users of Biscayne Bay.

KEY WORDS: Boating, Recreational waters

66

Austin, C. B., R. Brugger, J. C. Davis, and L. Seifert (1976) Recreational boating in Dade County, 1975-76. University of Miami Sea Grant special report no. 9. University of Miami Sea Grant Program, Coral Gables, FL. 143 pp.

TIME COVERAGE: 1975 - 1976

SUMMARY: This citation contains statistics on recreational boating in Dade County.

KEY WORDS: Boating, Recreational waters, Dade County, Marinas

67

Bacescu, M. (1961) *Taphromysis bowmani*, n.sp., a new brackish water mysid from Florida. Bull. Mar. Sci. Gulf Caribb., 11(4):517-524.

TIME COVERAGE: 1961

SUMMARY: The new species of mysid was described and figured and comparisons made with other species.

KEY WORDS: Mysids, *Taphromysis bowmani*, Taxonomy, New species, Matheson Hammock

68

Bach, S. D. (1975) The distribution and production of calcareous macroalgae in Card Sound, Florida. Ph.D. dissertation. University of Michigan, Ann Arbor, MI. 234 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: This study examined the distribution and production of four species of calcareous marine macroalgae in Card Sound, and their importance in the *Thalassia* community.

KEY WORDS: Card Sound, Algae, *Halimeda incrassata*, *Penicillus capitatus*, *Rhipocephalus phoenix*, *Udotea flabellum*

69

Bach, S. D. (1979) Standing crop, growth and production of calcareous Siphonales (Chlorophyta) in a south Florida lagoon. Bull. Mar. Sci., 29(2):191-201.

TIME COVERAGE: 1973 - 1974

SUMMARY: Production estimates of four genera of calcareous algae were made in Card Sound. Growth was measured directly in the field by periodically harvesting plants which emerged through rectangular strips of monofilament staked on the bottom. Production was measured directly by collecting one meter square samples of algae which grew through the net and indirectly by combining standing crop and life span data. *Halimeda incrassata* accounted for more than one half of the total production by all four genera.

KEY WORDS: Primary production, Growth, Card Sound, *Halimeda*, *Penicillus*, *Rhipocephalus*, *Udotea*, Algae, Chlorophyta, Siphonales, Lagoons, *Halimeda incrassata*, *Halimeda monile*, *Penicillus capitatus*, *Rhipocephalus phoenix*, *Udotea flabellum*

70

Baddour, F. R. (1983) Petroleum hydrocarbons in the canals that drain the Miami International Airport. M.Sc. thesis. University of Miami, Coral Gables, FL. 134 pp.

TIME COVERAGE: 1983

SUMMARY: Sediment samples from the canals that drain the airport were analyzed for hydrocarbons, which ranged from 4 to 230,000 ppm. The majority of the hydrocarbons entered the surface water system by direct spillage.

KEY WORDS: Petroleum hydrocarbons, Miami Canal, Tamiami Canal, Biscayne Aquifer, Miami International Airport

71

Bader, R. G. (1969) An ecological study of south Biscayne Bay in the vicinity of Turkey Point. Progress report to the US Atomic Energy Commission, contract number AT-(40-1)-3801. Institute of Marine Sciences, University of Miami, Miami, FL. 63 pp.

TIME COVERAGE: 1969

SUMMARY: This study was conducted to determine what the effects would be of incremental increases in thermal effluent from conventional and nuclear electrical generating power plants at Turkey Point.

KEY WORDS: Turkey Point, Thermal pollution, Baseline studies, Ecosystems, South Bay

72

Bader, R. G., M. A. Roessler, and A. Thorhaug (1972) Thermal pollution of a tropical marine estuary. In: Marine Pollution and Sea Life Marine Pollution and Sea Life. FAO Techn. Conf. on Marine Pollution and its Effects on Living Resources and Fishing. M. Ruivo, (ed.). Rome, Italy, 1970. Fishing News Books, West Byfleet, Surrey, UK. 425-428.

TIME COVERAGE: 1970

SUMMARY: The results of field and laboratory studies of Biscayne Bay clearly showed that sustained temperatures above 33 °C can cause extensive mortalities of some of the most important macroalgae and sea grasses. This, in turn, may eliminate the major food source and shelter for a great number of herbivores and detritus feeders.

KEY WORDS: Thermal pollution, Turkey Point, Seagrass, Algae

73

Bader, R. G., and D. C. Tabb (1970) An ecological study of south Biscayne Bay in the vicinity of Turkey Point. Progress report to the US Atomic Energy Commission. Institute of Marine Sciences, University of Miami, Miami, FL. 81 pp.

TIME COVERAGE: 1970

SUMMARY: This study was conducted to determine what the effects would be of incremental increases in thermal effluent from conventional and nuclear electrical generating power plants at Turkey Point.

KEY WORDS: Turkey Point, Thermal pollution, Baseline studies, Ecosystems, South Bay

74

Baedeker, K. (1909) The United States With Excursions to Mexico, Cuba, Porto Rico, and Alaska. Charles Scribner and Sons, New York, NY.

TIME COVERAGE: 1909

SUMMARY: This is an early travelers handbook that includes a description of Biscayne Bay.

KEY WORDS: History, Travel

75

Baker, E. K., and M. L. Villanueva (1993) Analysis of Hurricane Andrew economic damage and recovery options for the boating, marina and marine service industries. Tech. paper 72. Florida Sea Grant College Program, Gainesville, FL. 100 pp.

TIME COVERAGE: 1992

SUMMARY: This study was undertaken to analyze the impact of Hurricane Andrew on three factors of recreational boating: boaters, marine storage facilities and marine services industries. The objectives were to evaluate the hurricane preparedness of boaters, marinas and other marine related businesses; to assess the damage caused by the hurricane to boats, marinas and other boating businesses; and to determine the future of boating activities and industry in Dade County.

KEY WORDS: Damage, Recovery, Boats, Marinas, Industries, Hurricane Andrew

76

Baker, E. K., and M. L. Villanueva (1995) Longitudinal study of hurricane evacuation plans of wet berthed boat owners before and after Hurricane Andrew. In: Coastal Zone '95. Proc., 9th Conf. B. L. Edge, (ed.). American Society of Civil Engineers, New York, NY. 270-271.

TIME COVERAGE: 1992

SUMMARY: After the passage of Andrew, an attempt was made to reach the original berthed boat owners who responded to the 1990 survey. After Andrew, 95% of berthed boat owners had hurricane plans. Prior to Andrew, 67% of the owners said they planned to evacuate, and 53% did.

KEY WORDS: Evacuation, Boats, Marinas, Berthing, Hurricane Andrew

77

Baker, J. (1993) A meteorological analysis of Hurricane Andrew. In: Excerpts, 15th Ann. National Hurricane Conf. L. S. Tait, (compiler). Orlando, FL, April 13 - 16, 1993. National Hurricane Conference, Tallahassee, FL.

TIME COVERAGE: 1992

SUMMARY: This citation describes the emergency preparedness of South Florida during Hurricane Andrew and the public response during the emergency.

KEY WORDS: Hurricane Andrew, Emergency preparedness

78

Baker, L. D. (1973) Ecology of the ctenophore *Mnemiopsis mccradyi* Mayer, in Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 131 pp.

TIME COVERAGE: 1973

SUMMARY: Seasonal abundance and distribution of this ctenophore were monitored in Biscayne Bay over a 17-month period and various aspects of its biology such as growth, egg production, feeding and oxygen consumption examined in the laboratory.

KEY WORDS: Ctenophores, *Mnemiopsis mccradyi*, Zooplankton

79

Baldwin, A. S. (1875) An address on the climatology of Florida. Ann. Mtg., Medical Association of the State of Florida. Jacksonville, FL, February 17-18, 1875. Walker, Evans & Cogswell, Charleston, SC.

TIME COVERAGE: 1875

SUMMARY: This paper contains a chart of average temperatures and rainfall at various sites in Florida including Key Biscayne.

KEY WORDS: Climatology

80

Bales, J. E., J. M. Fulford, and R. Swain (1996) Review and evaluation of a model for simulating the natural hydrology of south Florida. USGS fact sheet FS-180-96. US Geological Survey, Reston, VA. 4 pp.

TIME COVERAGE: 1996

SUMMARY: This is a four-page fact sheet on Biscayne Bay.

KEY WORDS: Hydrology, Models, Water circulation, South Florida

81

Balido, Y. (1997) Cape Florida wetlands: restoration is bearing fruit: displaced by storm, fish, birds return. The Miami Herald, Miami, FL. January 5. Neighbors. 3.

TIME COVERAGE: 1997

SUMMARY: The Wetlands Restoration Project was design to restore the biological communities that thrived in the Cape Florida area during the 1920s. Much of the mangrove area was destroyed during development of the area. Hurricane Andrew leveled the region and toppled the large Australian pines that dominated the area. Vegetation is being restored using native plants. Numerous channels will connect the area to Biscayne Bay.

KEY WORDS: Cape Florida, Restoration, Hurricane Andrew

82

Ball, M. M. (1967) Carbonate sand bodies of Florida and the Bahamas. J. Sed. Petrol., 37(2):556-591.

TIME COVERAGE: 1967

SUMMARY: This paper classifies the sand bodies of Florida and the Bahamas in order to facilitate their description. The implication of the interrelationship of topography with sand body orientation, shape, internal structure, and composition is that knowledge of a sand body's topographic setting enables the prediction of its other attributes.

KEY WORDS: Carbonate sediment, Sand bars, Bahamas, Safety Valve, Biscayne Flats, Sedimentary structures

83

Ball, M. C. (1980) Patterns of secondary succession in a mangrove forest of southern Florida. Oecologia, 44(2):226-235.

TIME COVERAGE: 1928, 1938, 1945, 1958, 1974

SUMMARY: Successional patterns were studied in mangrove forests which had developed recently in response to salinization of areas formerly supporting freshwater marshes along northern Biscayne Bay. The population structures of these induced forests were compared with an adjacent historical forest which consisted of a nearly pure stand of *Rhizophora mangle*. A

mixed forest of *Rhizophora* and *Laguncularia racemosa* had developed in intertidal areas, while areas above the mean high water elevation supported a scrub community dominated by *Laguncularia*. Maximum growth of both species occurred in intertidal areas.

KEY WORDS: Mangrove swamps, *Laguncularia racemosa*, Ecological succession, South Florida, *Rhizophora mangle*

84

Ball, M. M., E. A. Shinn, and K. W. Stockman (1967) The geologic effects of Hurricane Donna in south Florida. *J. Geol.*, 75(5):583-597.

TIME COVERAGE: 1960

SUMMARY: Hurricane Donna caused storm effects in an area where detailed data on prestorm sea floor conditions existed. The amount of boulder-sized rubble formed by hurricane surf on platform-edged reefs far exceeded the amount produced by day-to-day processes and death and deterioration. Large quantities of skeletal sand on the shoals behind the reefs and linear rock patches were transported and redeposited during the hurricane. The ebb of the storm tides left large amounts of layered lime mud stranded on the supratidal flats. The main conclusion of the study was that a bias exists for preservation of effects of higher-energy events. Although such events are catastrophic in terms of man's longest period of observation (a lifetime), they are only common place events in terms of geologic time.

KEY WORDS: Hurricane Donna, Hurricanes, Storm surge, Geology, South Florida

85

Bancroft, G. T., A. M. Strong, and M. Carrington (1995) Deforestation and its effects on forest-nesting birds in the Florida Keys. *Conservation Biol.*, 9(4):835-844.

TIME COVERAGE: 1991

SUMMARY: By 1991, the extent of the seasonal coverage of deciduous forest in the upper Florida Keys had decreased by 41%, the number of fragments increased by an order of magnitude, and the acreage in the large fragments decreased by 84%. To examine the effects of fragment size on the presence of breeding birds of several species, a census was undertaken of singing males.

KEY WORDS: Vegetation, Deforestation, Birds, Key Largo, Ragged Keys, Florida Keys, Black-whiskered vireo, *Vireo altiloquos*, White-eyed vireo, *Vireo griseus*, Giant crested flycatcher, *Myiarchus crinitus*, Northern cardinal, *Cardinalis cardinalis*, Northern flickers, *Colaptes auratus*, Red-bellied woodpecker, *Melanerpes carolinus*, Yellow-billed cuckoos, *Coccyzus americanus*, Mangrove cuckoos, *Coccyzus minor*

86

Banks, A. (1990) The hero of Key Largo. *Condé Nast traveler*, -(March):178-181, 196-201.

TIME COVERAGE: 1990

SUMMARY: Capt. Ed Davidson, charter boat captain, challenged, denounced and litigated to keep condominium development away from Biscayne National Park.

KEY WORDS: Coral reefs, Resource conservation, Biscayne National Park, Davidson, E., Reef Rover (Ship), North Key Largo

87

Banner, A. (1968) Attraction of young lemon sharks, *Negaprion brevirostris*, by sound. *Copeia*, -(4):871-872.

TIME COVERAGE: 1967

SUMMARY: This is a short paper on preliminary studies of the attraction of lemon sharks to certain sounds.

KEY WORDS: Sound, Bioacoustics, Lemon shark, *Negaprion brevirostris*

88

Banner, A. (1971) Use of sound in predation by young lemon sharks, *Negaprion brevirostris* (Poey). Ph.D. dissertation. University of Miami, Coral Gables, FL. 100 pp.

TIME COVERAGE: 1967 - 1969

SUMMARY: The purpose of this study was to determine the nature and role of biological sounds in predation by young lemon sharks. Stomach content analysis showed that young lemon sharks at the test site fed primarily on mullet. The abundance of marine catfish and other efficient scavengers suggested that prey were usually captured alive. Sounds from prey and other species common to the site were analyzed and played back in the field and the behavior of sharks observed. Pulsed broadcast sound, produced by healthy and wounded mullet, catfish vocalization, and other sounds were found attractive. There was no relationship between attractiveness of sounds and importance of sources of prey.

KEY WORDS: Bioacoustics, Predation, Lemon shark, *Negaprion brevirostris*, Virginia Key

89

Banner, A. (1972) Use of sound in predation by young lemon sharks, *Negaprion brevirostris* (Poey). Bull. Mar. Sci., 22(2):251-283.

TIME COVERAGE: 1972

SUMMARY: The purpose of this study was to determine the role of hearing in predation by young lemon sharks. Responses to various sounds and their relative attractiveness were compared.

KEY WORDS: Bioacoustics, Predation, Lemon shark, *Negaprion brevirostris*, Virginia Key

90

Barbour, G. M. (1882) Florida for Tourists, Invalids, and Settlers. D. Appleton and Co., New, NY.

TIME COVERAGE: 1880

SUMMARY: This book contains descriptions of Florida including climate, soil, cities and towns, farming, sports and scenic locations.

KEY WORDS: Climate, Agriculture

91

Barbour, T. (1923) The crocodile in Florida. Occasional papers, Museum of Zoology, University of Michigan, 131(-):1-6.

TIME COVERAGE: 1923

SUMMARY: This paper reviews early account of crocodiles in Florida, including the Miami River.

KEY WORDS: Crocodiles, *Crocodylus acutus*, Miami River

92

Barbour, T. (1944) That Vanishing Eden. Little, Brown and Co., Boston, MA. 250 pp.

TIME COVERAGE: 1944

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Crocodiles

93

Barnes, A. D. (1949) Crandon Park: yesterday-now-tomorrow. Shore and Beach, 17(1):7-8.

TIME COVERAGE: 1949

SUMMARY: This description of Crandon Park, Key Biscayne, was published one year after the park opened.

KEY WORDS: Beaches, Public access, Crandon Park, Key Biscayne

94

Barnes, H. H., F. W. Meyer, and J. H. Hartwell (1968) Some hydrologic effects of Canal 111 near Homestead, Florida. Open file report 68002. US Geological Survey, Tallahassee, FL. 17 pp.  
TIME COVERAGE: 1950 - 1965

SUMMARY: The feasibility of a salinity-control structure on the C-111 canal was examined.

KEY WORDS: Ground water, Water table, Saline intrusion, Canal C-111, Homestead

95

Barnett, M. R., and D. W. Crewz (1989) An introduction to planting and maintaining selected common coastal plants in Florida. Florida Sea Grant report no. 97. Florida Sea Grant College Program, Gainesville, FL. 108 pp.

TIME COVERAGE: 1989

SUMMARY: This is a planting and maintenance guide to coastal plants including mangroves.

KEY WORDS: Coastal zone, Vegetation, Florida

96

Barrett, S. K. (1983) An oil spill priority protection response strategy for south Florida. M.A. thesis. University of Miami, Coral Gables, FL. 29 pp.

TIME COVERAGE: 1983

SUMMARY: The purposes of this study were to provide shoreline priorities and technical information for sound decision-making, and to develop a coordinative mechanism for agencies and interest groups that would be involved in oil spill response. Biological, geomorphological and socioeconomic characteristics of several stations along the coast of South Florida were determined. Several of these stations are in Biscayne Bay.

KEY WORDS: Oil spills, Shore protection, Shipping lanes, Containment, Oil removal, South Florida

97

Barros, N. B. (1987) Food habits of bottlenose dolphins (*Tursiops truncatus*) in the southeastern United States, with special reference to Florida waters. M.Sc. thesis. University of Miami, Coral Gables, FL. 139 pp.

TIME COVERAGE: 1973 - 1987

SUMMARY: Stomach contents were preserved and contents identified. Samples were collected from stranded specimens in the southeastern US through the Southeastern US Marine Mammal Stranding Network. Some samples were collected from Biscayne Bay strandings.

KEY WORDS: Bottlenose dolphin, *Tursiops truncatus*, Food consumption, Feeding behavior, Prey selection, Florida

98

Barros, N. B., and D. K. Odell (1990) Food habits of bottlenose dolphins in the southeastern United States. In: The Bottlenose Dolphin. S. Leatherwood, and R. R. Reeves (eds.). Academic Press, San Diego, CA. 653 pp.

TIME COVERAGE: 1990

SUMMARY: Stomach contents were collected from stranded dolphins through the southeastern US and identified. The collection of stomach contents was opportunistic. Seventy five of the 76 dolphins in this study preyed on fish. In 28 individuals, cephalopods were also found. The study area included Biscayne Bay.

KEY WORDS: Bottlenose dolphin, *Tursiops truncatus*, Food consumption, Feeding behavior

99

Bartsch, P. (1936-37) An ecological cross-section of the lower part of Florida based largely upon its molluscan fauna. Excerpt from the Report of the Committee on Paleocology. National

Research Council, Division of Geology and Geography, Washington, DC. 11-25 (mimeographed copy).

TIME COVERAGE: 1936?

SUMMARY: This report describes the most commonly found species of mollusks found various ecological niches in south Florida.

KEY WORDS: Ecology, Biota, Marine mollusks, Freshwater mollusks, Brackishwater mollusks, South Florida, Species list

100

Bartsch, P., and H. A. Rehder (1945) The west Atlantic boring mollusks of the genus *Martesia*. Smithsonian Misc. Coll., 104(11):1-16.

TIME COVERAGE: 1945

SUMMARY: This citation describes the species of *Martesia* occurring on the east coast of Florida. Illustrations are included.

KEY WORDS: Martesias, Boring organisms, Marine mollusks

101

Baxter, R. P. (1994) Trenchless pipe repair. Military Engineer, 86(-):46-47.

TIME COVERAGE: 1994

SUMMARY: This article described the in-situ rehabilitation of the sewer pipeline between Miami and Miami Beach using a trenchless pipe repair procedure.

KEY WORDS: Pipelines, Star Island, Miami Beach

102

Bayer, F. M. (1964) Littoral marine life of southern Florida. Guidebook for field trip no. 7, Geological Society of America Convention, Nov. 1964. Geological Society of America, [Boulder, CO].

TIME COVERAGE: 1964

SUMMARY: This is a field trip guide to the littoral marine life of South Florida.

KEY WORDS: Key Biscayne, Littoral zone, Biota, Field guide

103

Bayer, F. M. (1943) Observations on marine mollusca, with descriptions of new species. Nautilus, 56(4):109-124.

TIME COVERAGE: 1941

SUMMARY: This paper describes species of marine mollusks discovered as the result of dredging and shallow water collecting off Virginia Key, including some new species.

KEY WORDS: Marine mollusks, Pecten, Marginella, Chamas, Chamidae, New species

104

Bayer, F. M. (1963) Observations on pelagic mollusks associated with the siphonophores *Veilella* and *Physalia*. Bull. Mar. Sci., 13(3):454-466.

TIME COVERAGE: 1963

SUMMARY: Specimens of three species of the violet snail and of a nudibranch, all of which fed on siphonophores, were collected and during strandings of *Veilella* and studied in an aquarium. Observations were made upon float building and feeding behavior of the snails, and upon feeding, growth and reproduction of the nudibranch.

KEY WORDS: Siphonophores, Veilella, Physalia, Porpita, Marine mollusks, *lanthina ianthina*, *Fiona pinnata*, *lanthina pallida*, *lanthina prolongata*

105

Bayer, F. M. (1961) The Shallow-Water Octocorallia of the West Indian Region: a Manual for Biologists. M. Nijhoff, The Hague, The Netherlands. 373 pp + plates.

TIME COVERAGE: 1961

SUMMARY: This is a comprehensive book of corals of the West Indies including species found in South Florida and the Florida Keys.

KEY WORDS: Octocorallia, Coral, Identification keys, Caribbean, Guide

106

Baynes, T. W. (1986) The effect of current on the sessile benthic community structure of an artificial reef. M.Sc. thesis. University of Miami, Coral Gables, FL. 117 pp.

TIME COVERAGE: 1985

SUMMARY: The effect of water flow and sedimentation on the cover and species diversity of a sessile benthic community encrusting an artificial reef off Key Biscayne was investigated. The predominantly northerly flow was attributed to the influence of Florida Current processes. The cover of the sessile benthic organisms was higher in areas of the wreck with high velocity flow. Similar trends were observed for diversity, evenness and richness. The deck exhibited less cover and a lower species diversity, the result of sedimentation. In general, areas of high velocity flow and low sedimentation around the wreck corresponded to regions of high cover and species diversity.

KEY WORDS: Artificial reefs, Sessile species, Benthos, Water currents, Sedimentation, Biscayne (Ship), Key Biscayne

107

Baynes, T. W., and A. M. Szmant (1988) Effect of current on the sessile benthic community structure of an artificial reef. Bull. Mar. Sci., 44(-):545-566.

TIME COVERAGE: 1985

SUMMARY: [SEE PREVIOUS CITATION FOR DESCRIPTION OF THE WORK.]

KEY WORDS: Artificial reefs, Sessile species, Benthos, Water currents, Sedimentation, Biscayne (Ship)

108

Beacon Council (The) (1991) The Miami River: a valuable asset. Reprot. The Beacon Council, Miami, FL.

TIME COVERAGE: 1991

SUMMARY: This report provides statistics on the economic impact of the Miami River on the economy of Miami.

KEY WORDS: Miami River, Transportation, Economy

109

Beaven, T. R., and F. W. Meyer (1978) Record of wells in the Floridan Aquifer in Dade and Monroe Counties, Florida. US Geological Survey, Tallahassee, FL. 30 pp.

TIME COVERAGE: 1978

SUMMARY: The Floridan Aquifer underlies all of Florida and parts of adjacent states. The use of the Floridan Aquifer for subsurface storage of freshwater and as an industrial water supply for Dade and Monroe Counties was considered. Information obtained from 67 wells drilled into the Floridan Aquifer is presented.

KEY WORDS: Wells, Floridan Aquifer, Dade County, Monroe County

110

Beeler, I. E., and T. J. O'Shea (1988) Distribution and mortality of the West Indian manatee (*Trichechus manatus*) in the southeastern United States: a compilation and review of recent information. Vol. I: The Atlantic Coast, and Vol. II: The Gulf of Mexico Coast. Report 88-09 (NTIS PB88-207980) prepared for the US Army Corps of Engineers. Sirenia Project, National Ecology Research Center, Gainesville, FL. 613 pp.

TIME COVERAGE: 1988

SUMMARY: This report summarizes data on manatee distribution and mortality in the southeastern US.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Geographical distribution, Mortality, Florida

111

Benson, M. A., and R. A. Gardner (1974) The 1971 drought in south Florida and its effect on the hydrologic system. Water resources investigations 12-74. US Geological Survey, Tallahassee, FL.

TIME COVERAGE: 1971

SUMMARY: The rainfall in South Florida during 1971 was very low resulting in drought conditions. Canal flow and ground-water levels reflected the drought conditions but no record lows were set.

KEY WORDS: Droughts, Ground water, Rainfall, South Florida

112

Bentley, T. B. (1989) Attempts at breeding Kemp's ridley sea turtles at Miami Seaquarium. In: Proc., First Internatl. Symp. on Kemp's Ridley Sea Turtle Biology, Conservation and Management. C. W. Caillouet, and A. M. Landry, (eds.). TAMU-SG-89-105. Texas A&M University, Sea Grant College Program, Galveston, TX. 233-236.

TIME COVERAGE: 1984 - 1985

SUMMARY: A breeding program for the endangered Kemp's ridley sea turtle was initiated by the Miami Seaquarium to investigate breeding behavior and induce successful reproduction in captivity. The attempt was unsuccessful.

KEY WORDS: Turtle culture, Breeding, Kemp's ridley sea turtle, *Lepidochelys kempi*, Miami Seaquarium

113

Berg, C. J., and R. A. Glazer (1991) Current research on queen conch (*Strombus gigas*) in Florida waters. In: Proc., 40th Ann. Gulf and Caribbean Fisheries Institute. G. T. Waugh, and M. H. Goodwin, (eds.). Curacao, Netherlands Antilles, 1987. Gulf and Caribbean Fisheries Institute, Charleston, SC. 303-306.

TIME COVERAGE: 1987

SUMMARY: Florida stocks of the queen conch decreased markedly during the last decade and a moratorium on all harvest was set into effect. This research effort was initiated to measure stock size, population dynamics and reproductive activity.

KEY WORDS: Queen conch, *Strombus gigas*, Depleted stocks, Florida Keys, Key Biscayne, Boca Grande Key

114

Berg, C. J., R. A. Glazer, J. Carr, J. Krieger, and S. Acton (1992) Status of the queen conch, *Strombus gigas*, in Florida waters. In: Proc., 41st Ann. Gulf Caribb. Fisheries Institute. G. T. Waugh, and M. H. Goodwin, (eds.). St. Thomas, USVI, November 1988. Gulf and Caribbean Fisheries Institute, Charleston, SC. 439-443.

TIME COVERAGE: 1987 - 1988

SUMMARY: A transect research program was conducted for one year to determine the abundance of the queen conch in the Florida Keys, from Key Biscayne to Boca Grande Key. Highest densities were found in Marathon and adjacent waters. Values obtained are far lower than those reported for similar studies in the Bahamas and the Caribbean.

KEY WORDS: Queen conch, *Strombus gigas*, Abundance, Florida Keys, Key Biscayne, Boca Grande Key

115

Berkeley, S. A. (1972) Some factors affecting the abundance and distribution of *Cerithium muscarum* (Say) and *Neopanope packardii* (Kingsley) in south Biscayne Bay, Florida, in the vicinity of Turkey Point. M.Sc. thesis. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1968 - 1971

SUMMARY: The major factor determining the abundance and distribution of the gastropods studied was the amount of benthic macroalgae, with *Laurencia poitei* being the most productive. Temperature and salinity were not limiting factors in the study area.

KEY WORDS: *Cerithium muscarum*, *Neopanope packardii*, Gastropods, Xanthid crabs, Abundance, Geographical distribution, Turkey Point, South Bay

116

Berkeley, S. A., and W. L. Campos (1984) Fisheries assessment of Biscayne Bay. Final draft. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 58 pp + appendices.

TIME COVERAGE: 1982 - 1983

SUMMARY: This report contains the seasonal distribution of recreational catch and effort in Biscayne Bay. Seagrass communities was the most important factor in determining the abundance of the most important species of fish in the Bay.

KEY WORDS: Fisheries, Fishery resources, Fishery surveys, Species list

117

Berkeley, S. A., and E. D. Houde (1978) Biology of two exploited species of halfbeaks, *Hemiramphus brasiliensis* and *H. balao* from southeast Florida. Bull. Mar. Sci., 28(4):624-644.

TIME COVERAGE: 1974 - 1976

SUMMARY: This paper describes the biology and life history of two species of halfbeaks (ballyhoo) obtained in Biscayne Bay.

KEY WORDS: Halfbeaks, Ballyhoo, *Hemiramphus brasiliensis*, *Hemiramphus balao*, Life history

118

Berkeley, S. A., E. D. Houde, and F. Williams (1975) Fishery and biology of ballyhoo on the southeast Florida coast. Sea Grant special report 4. University of Florida, Coral Gables, FL. 15 pp.

TIME COVERAGE: 1975

SUMMARY: This citation is a description of the general biology and fisheries of the ballyhoo. The ballyhoo commercial fishery, centered in South Florida, provides an important bait for sports anglers.

KEY WORDS: *Hemiramphus brasiliensis*, *Hemiramphus balao*, Fisheries, Fishery biology, Ballyhoo, Southeast Florida

119

Berkeley, S. A., D. W. Pybas, and W. L. Campos (1985) Bait shrimp fishery of Biscayne Bay. Florida Sea Grant Program tech. paper 40. Florida Sea Grant College Program, Gainesville, FL. 16 pp.

TIME COVERAGE: 1971 - 1983

SUMMARY: The value of the Biscayne Bay shrimp fishery is considerable. Possible detrimental effects of bait shrimp fishing operations on the biota or the environment are potentially of great consequence. Species composition and community structure of juvenile fish in Biscayne Bay appears to have remained unchanged since the mid-1960s. However, it does not follow that effects of the bait shrimp fishing operations are non-existent.

KEY WORDS: Shrimp fisheries, *Fosjeru omdistru*, Bait fish, Fishery statistics, Fishery economics

120

Bert, T. M. (1985) Geographic variation, population biology, and hybridization in *Menippe mercenaria* and evolution in the genus *Menippe* in the southwestern Atlantic Ocean. Ph.D. dissertation. Yale University, New Haven, CT. 306 pp.

TIME COVERAGE: 1985

SUMMARY: All species of the genus *Menippe* inhabiting southeastern US have relatively high levels of polymorphism and heterozygosity in allele frequencies compared to other decapod crustaceans, probably due to their tropic position and life history pattern. Stone crab population dynamics and biology were studied in the Everglades National Park and southern Biscayne Bay.

KEY WORDS: Stone crab, *Menippe mercenaria*, Population dynamics, Hybridization, Evolution, Southwest Atlantic Ocean, Biscayne National Park, Everglades National Park

121

Bert, T. M., J. Dodrill, G. E. Davis, and J. T. Tilmant (1983) The population dynamics of the stone crab (*Menippe mercenaria*) in Everglades and Biscayne National Parks. Florida Scient., 46(Suppl. 1):24.

TIME COVERAGE: 1983

SUMMARY: Data on population indicate that a major nursery area for stone crabs exists off shore from the two major terrestrial drainage systems in the area: Big Cypress Swamp and the Everglades. Stone crabs apparently disperse from the area southward toward the Florida Keys and into Florida Bay. The stone crabs in Biscayne National Park are apparently not locally recruited and may be dispersing from farther north along the east coast.

KEY WORDS: Stone crab, *Menippe mercenaria*, Population dynamics, Florida Keys, Florida Bay, Everglades National Park, Biscayne National Park

122

Bert, T. M., J. T. Tilmant, J. Dodrill, and G. E. Davis (1986) Aspects of the population dynamics and biology of the stone crab (*Menippe mercenaria*) in Everglades and Biscayne National Parks as determined by trapping. SFRC 86/04. South Florida Research Center, Everglades National Park, Homestead, FL. 77 pp.

TIME COVERAGE: 1979 - 1980

SUMMARY: Stone crabs were trapped during lunar cycles for an entire year to investigate the population biology and life history of the organisms. An array of morphometric and biological data was taken on each crab captured. Salinity, temperature, water clarity, principal fouling biota, and bottom type were recorded at each station during sampling.

KEY WORDS: Stone crab, *Menippe mercenaria*, Population dynamics, Trap fishing, Everglades National Park, Biscayne National Park, Water quality

123

Betz Environmental Engineers Inc. (1977) Dade County water quality analysis for Metropolitan Dade County, Florida, Environmental Resources Management. Vol. I: tech. rep. Beiswenger Hoch and Associates, Inc., North Miami Beach, FL. 80 pp.

TIME COVERAGE: 1977

SUMMARY: This report presents the analyses of water quality conditions of Dade County. It principally addresses stormwater runoff impacts to surface and ground water quality,

KEY WORDS: Water quality, Stormwater runoff, Ground water, Canals, Dade County

124

Bielsa, L. M., W. H. Murdich, and R. F. Labisky (1983) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - pink shrimp. FWS/OBS-82/11.17. US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 21 pp.

TIME COVERAGE: 1983

SUMMARY: This citation is species profile of the pink shrimp. One of the nursery areas of the pink shrimp in South Florida is Biscayne Bay. This report is one in a series on the life histories of marine life.

KEY WORDS: Pink shrimp, *Penaeus duorarum duorarum*, Florida Bay, Dry Tortugas, Ten Thousand Islands

125

Biffar, T. A. (1969) A study of the genus *Callianassa* (Crustacea, Decapoda) in south Florida. M.Sc. thesis. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1969

SUMMARY: This work is a study of the genus *Callianassa*. Some specimens were collected in Biscayne Bay.

KEY WORDS: Crustaceans, *Callianassa*, Decapoda, South Florida

126

Bilhorn, T. W. (1975) Biscayne Bay and its environs: an analysis of its present and future uses for Metropolitan Dade County. Sea Grant special rep. 7. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1975

SUMMARY: Recommendations were made in this report to capitalize on the diversity that the Biscayne Bay region provides to Dade county and its municipalities.

KEY WORDS: Resource conservation, Resource management, Environment management

127

Bingham, F. O., and H. D. Albertson (1974) Observations on beach strandings of the *Physalia* (Portuguese-man-of-war) community. Veliger, 17(2):220-224.

TIME COVERAGE: 1971 - 1972

SUMMARY: Data presented in this work represent the species, their sizes and numbers in ten strandings of the *Physalia* community.

KEY WORDS: *Physalia physalis*, Portuguese man-of-war, Stranding, Crandon Park

128

Biosystems Research, I. (1984) Benthic sampling program in Biscayne Bay. Final report to Dade County Department of Environmental Resources Management. Biosystems Research, Inc, Miami, FL. 481 pp.

TIME COVERAGE: 1981 - 1982

SUMMARY: This sampling program consisted of two phases. During Phase I, 60 stations representing diverse habitats were sampled in Biscayne Bay, Dumfoundling Bay and Card Sound. At each station, several parameters were determined including freshwater flow, bottom type, current, dissolved oxygen, salinity and water clarity. Sediment cores were also collected at each site. During Phase II, 15 stations were selected and dredge samples obtained.

KEY WORDS: Benthos, Zoobenthos, Phytobenthos, Seafloor sampling, Dumfoundling Bay, Card Sound, Dissolved oxygen, Salinity, Sediment, Currents, Species list

129

Birdsong, R. S. (1969) A systematic review of the gobiid fish genus *Microgobius* with special emphasis on osteology. Ph.D. dissertation. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1969

SUMMARY: This work reviews the systematics of gobies. Some samples were collected in Biscayne Bay.

KEY WORDS: *Microgobius*, Gobies, Osteology

130

Birnhak, B. I. (1974) An examination of the influence of freshwater canal discharges on salinity in selected southeastern Florida estuaries. NTIS #PB-231 610. National Technical Information Service, Springfield, VA. 40 pp.

TIME COVERAGE: 1971 - 1972

SUMMARY: The purpose of this study was to collect baseline data on existing salinity patterns in six southeast coastal areas that receive discharges from major canals including Biscayne Bay. During the study period, freshwater discharge by the Miami River was not sufficient to dilute the salt content of Bay waters.

KEY WORDS: Estuaries, Saline water, Salinity, Canals, Water quality, River discharge, Miami Canal, Miami River, New River Canal

131

Biscayne Bay Yacht Club (1948) Biscayne Bay Yacht Club, Miami, Florida, 1948. Biscayne Bay Yacht Club, Miami, FL.

TIME COVERAGE: 1948

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Boating, Yachting, Biscayne Bay Yacht Club

132

Biscayne Bay Management Committee (1983) State of the Bay; annual report 1983. Biscayne Bay Management Committee, Miami, FL. 14 pp.

TIME COVERAGE: 1983

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

133

Biscayne Bay Management Committee (1983) State of the Bay; annual report 1983. Issued as a map. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1983

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

134

Biscayne Bay Management Committee (1984) State of the Bay; annual report 1984. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1984

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

135

Biscayne Bay Management Committee (1986) State of the Bay; annual report 1985/86. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1985 - 1986

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

136

Biscayne Bay Management Committee (1988) State of the Bay; annual report 1987/88. Issued as a map. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1988

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

137

Biscayne Bay Management Committee (1988) State of the Bay; annual report 1987-88. Issued as a map. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1987 - 1988

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

138

Biscayne Bay Management Committee (1991) State of the Bay; annual report 1990 - 1991. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1991

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

139

Biscayne Bay Management Committee (1992) State of the Bay; annual report 1991 - 1993. Biscayne Bay Management Committee, Miami, FL.

TIME COVERAGE: 1991 - 1993

SUMMARY: This is one of the annual state of the Biscayne Bay reports.

KEY WORDS: Natural resources, Water management, Environmental protection

140

Bishop, E. W., and N. C. Landrum (1963) Control of salt water intrusion in Dade County for protection of the Biscayne Aquifer. Report. State Board of Conservation, Division of Water Resources and Conservation, Tallahassee, FL. 13 pp.

TIME COVERAGE: 1963

SUMMARY: This report discusses suggested applications of the salt water barrier line principle for the control of salt water intrusion.

KEY WORDS: Saline intrusion, Biscayne Aquifer, Dade County

141

Black, A. P., and E. Brown (1951) Chemical character of Florida's waters 1951. Water Survey & Research paper 6. Florida State Board of Conservation, Division of Water Survey & Research, Tallahassee, FL. 119 pp.

TIME COVERAGE: 1951

SUMMARY: This report contains chapters by various authors on geology, fresh water quality, strontium, fresh water treatment and fresh water analysis.

KEY WORDS: Surface water, Subsurface water, Water analysis, Chemical analysis, Florida, Sr

142

Black, D. W. (1994) Protecting the water quality of Biscayne Bay. Florida Scient., 57(Suppl. 1):51-52.

TIME COVERAGE: 1994

SUMMARY: This abstracts briefly discusses the Future Land Use Plan Map for Metro-Dade County, which projected substantially increased development in the county by 2010. Much of the stormwater in the Biscayne Bay watershed enters canals which carry it directly to the bay without the sheetflow through wetlands that purified such water before the area was developed.

KEY WORDS: Water quality, Urbanization, Stormwater runoff

143

Black, N. A., A. M. Szmant, and R. S. Tomchik (1994) Planulae of the scyphomedusa *Linuche unguiculata* as a possible cause of seabather's eruption. Bull. Mar. Sci., 54(3):955-960.

TIME COVERAGE: 1992

SUMMARY: Plankton tows were done coincident with outbreaks of seabather's eruption or "sea lice" in 1992 along several beaches in southeast Florida. Several of the tows contained large number of zooxanthellate green and brown planulae, *Trichodesmium* and copepods. The panulae were identified as the benthic stage of the coronatescyphozoan *Linuche unguiculata*. Evidence was found to support *Linuche* planulae as the source of "sea lice".

KEY WORDS: Seabather's eruption, "Sea lice", Thimble jellyfish, *Linuche unguiculata*

144

Blaha, J. P. (1984) Fluctuations of monthly sea level as related to the intensity of the Gulf Stream from Key West to Norfolk. J. Geophys. Res., 89(C5):8033-8042.

TIME COVERAGE: 1955 - 1975

SUMMARY: Tide gauge data from Key West to Norfolk were used to identify a monthly signal in sea level that is uncorrelated with local shelf-trapped processes. One of the measurement sites is in Biscayne Bay.

KEY WORDS: Tidal records, Sea level measurement, Gulf Stream

145

Blaha, J. P., and W. Sturges (1987) Slope of sea level from Miami to Atlantic City. J. Phys. Oceanogr., 17(2):177-183.

TIME COVERAGE: 1987

SUMMARY: Results of land leveling do not agree with oceanographers concerning coastal slopes of sea level. Recent studies have shown that along the west coast of the US this discrepancy can be explained by the vertical movement of leveling benchmarks.

KEY WORDS: Sea level measurement, Surface slope, Atlantic coast

146

Blair, S. M. (1993) Reef areas of southeastern Florida: hardbottom reef communities of Dade, Broward, and Palm Beach counties. In: Proc. First Ann. Conf., Coral Reef Coalition. A. D. Merow, (ed.). Key West, FL, 1992. Center for Marine Conservation, Washington, DC. 67-78.

TIME COVERAGE: 1993

SUMMARY: The benthic reef habitats found offshore of Miami and Palm Beach lack the coral development commonly associated with the coral reefs further south in the Florida Keys. However, the hard bottom reef areas of Dade, Broward and Palm Beach counties are thriving habitats which mark the northern extent of numerous hard coral species and serve as a transition zone between tropical, subtropical and warm temperate species.

KEY WORDS: Coral reefs, Reef tract, Dade County, Broward County, Palm Beach County

147

Blair, S. M., B. S. Flynn, and S. M. Markley (1990) Characteristics and assessment of dredge related mechanical impact to hard-bottom reef areas off northern Dade County, Florida. In: Diving for Science 1990. Proc., Amer. Acad. of Underwater Sciences, 9th Ann. Scientific Diving Symp. W. C. Jaap, (ed.). American Academy of Underwater Sciences, Costa Mesa, CA. 5-20.

TIME COVERAGE: 1988

SUMMARY: During the summer of 1988, Dade County sponsored a beach erosion control project to renourish a segment of the northern Dade County shoreline. Near the time of completion, areas of mechanical impact to the reef adjacent to the borrow area were discovered. Detailed assessments were made of the 2.2-acre area with severe damage. Approximately 1.5 acres of benthic hard bottom communities were destroyed. This destruction represents a significant

impact to the hard bottom community within the region by reducing habitat quality, density of organisms, reef structural complexity and the overall productivity of the area.

KEY WORDS: Dredging, Beach nourishment, Benthic environment, Environmental impact, Damage, Reefs, North Bay, Sunny Isles

148

Blair, S. M., T. L. McIntosh, and B. J. Mostkoff (1994) Impacts of Hurricane Andrew on the offshore reef systems of central and northern Dade County, Florida. Bull. Mar. Sci., 54(3):961-973.

TIME COVERAGE: 1992

SUMMARY: Qualitative visual surveys and quantitative photogrammetric surveys were used to estimate the impact of Hurricane Andrew on natural reefs of Biscayne Bay. The algal community showed the greatest loss of benthic cover. Hard corals were the least affected.

KEY WORDS: Coral reefs, Artificial reefs, Hurricane Andrew, Dade County

149

Blake, N. M. (1980) Land into water - water into land; a history of water management in Florida. Tallahassee University Presses of Florida, Tallahassee, FL. 344 pp.

TIME COVERAGE: 1980

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water supply, Water management, Florida

150

Bland, R. A., H. W. Hiser, S. S. Lee, and S. Sengupta (1977) Aerial remote sensing of thermal plumes. In: Proc., Conf. on Waste Heat Management and Utilization. S. S. Lee, and S. Sengupta, (eds.). Miami Beach, FL, 1977. University of Miami, Department of Mechanical Engineering, Miami, FL. Vol. 2: IV.B.55-IV.B.65.

TIME COVERAGE: 1975

SUMMARY: Thermal remote sensing data from Biscayne Bay and Hutchinson Island were used in the development and initial application of a three-dimensional thermal plume mathematical model.

KEY WORDS: Thermal plumes, Remote sensing, Mathematical models, Power plants, Hutchinson Island, Cutler Ridge

151

Blank, J. G. (1996) Key Biscayne: a History of Miami's Tropical Island and the Cape Florida Lighthouse. Pineapple Press, Sarasota, FL. 212 pp.

TIME COVERAGE: 1996

SUMMARY: This book is a historical account of Key Biscayne from the Spanish Conquista to the date of publication.

KEY WORDS: History, Lighthouses, Key Biscayne, Cape Florida

152

Bock, W. D., D. R. Moore, A. C. Neumann, and P. R. Supko (1969) Late Pleistocene geology in an urban area. 3rd annual field trip, July, 1969. Miami Geological Society, Miami, FL. 26 pp.

TIME COVERAGE: 1969

SUMMARY: This is a field trip guide to the Late Pleistocene geology of South Florida.

KEY WORDS: Geology, Carbonate rocks, Mangrove swamps, Pleistocene, Miami limestone, Field guide

153

Bodge, K. R. (1992) Beach nourishment with aragonite and tuned structures. In: Coastal Engineering Practice '92. Proc., Specialty Conf. on Planning, Design, Construction, and

Performance of Coastal Engineering Projects. S. A. Hughes, (ed.). Long Beach, CA, 1992. American Society of Civil Engineers, New York. 73-89.

TIME COVERAGE: 1990 - 1991

SUMMARY: The first full scale use in the US of imported aragonite sand was undertaken at Fisher Island. About 20,000 cy of rubble and sand were excavated from the project beach, and 30,000 cy of aragonite fill barged from the Bahamas, placed by truck, and stabilized using rock structures. Six-month monitoring suggested the project performed as predicted and no adverse impacts or physical decay of the aragonite had been observed.

KEY WORDS: Beach nourishment, Aragonite, Fisher Island

154

Bodge, K. R., and E. J. Olsen (1992) Aragonite beachfill at Fisher Island, Florida. Shore and Beach, 60(1):3-8.

TIME COVERAGE: 1992

SUMMARY: This citation describes the beach fill project at Fisher Island.

KEY WORDS: Aragonite, Beach nourishment, Restoration, Fisher Island

155

Bodge, K. R., and D. S. Rosen (1988) Offshore sand sources for beach nourishment in Florida: Part 1: Atlantic coast. In: Proc., Beach Preservation Technology 88: Problems and Advancements in Beach Nourishment. L. S. Tait, (comp.). Florida Shore & Beach Preservation Association, Tallahassee, FL. 175-189.

TIME COVERAGE: 1988

SUMMARY: This paper discusses sources of sand potentially available for beach nourishment offshore and along the Atlantic coast of Florida including the Florida Keys.

KEY WORDS: Beach nourishment, Sand, East Florida

156

Bogart, D. B. (1946) Some surface-water relationships in south Florida. Proc., Soil Science Society of Florida. Soil Science Society of Florida, Hollywood, FL. 60-71.

TIME COVERAGE: 1946

SUMMARY: This paper discusses some of the surface-water phases of the cooperative investigations between the USGS and Miami, Miami Beach, Coral Gables and Dade County.

KEY WORDS: Surface water, Water table, Evapotranspiration, Everglades, South Florida

157

Bohlke, J. E., and C. C. G. Chaplin (1968) Fishes of the Bahamas and Adjacent Tropical Waters. Livingston, Wynnewood, PA. 771 pp.

TIME COVERAGE: 1968

SUMMARY: This is a guide to the fishes of the Bahamas and south Florida.

KEY WORDS: Fish, Bahamas, Guide

158

Böhlke, J. E., and C. R. Robins (1960) A revision of the gobioid fish genus *Coryphopterus*. Proc. Acad. Nat. Sci. Phila., 112(5):103-128.

TIME COVERAGE: 1960

SUMMARY: This is a taxonomic study of gobies. Some specimens were caught in Biscayne Bay.

KEY WORDS: Gobies, *Coryphopterus*, Taxonomy, Florida Keys

159

Bohlke, J. E., and C. R. Robins (1968) Western Atlantic seven-spined gobies, with descriptions of the new species and a new genus, and comments on Pacific relatives. Proc. Acad. Nat. Sci. Phila., 120(-):45-174.

TIME COVERAGE: 1968

SUMMARY: This citation is a taxonomic study of gobies.

KEY WORDS: Gobies, Gobiosoma, Risor, Ginsburgellus, Nes, Aruma, Enypnias, Barbulifer, Eleotrica, Gymneleotris, Pycnomma, Taxonomy, New genera, New species

160

Bohnsack, J. A., D. E. Harper, D. B. McClellan, M. W. Hulsbeck, T. N. T. N. Rutledge, M. H. Pickett, and A. M. Eklund (1992) Quantitative visual assessment of fish community structure in Biscayne National Park. Draft final report. NOAA/NMFS/SEFSC, Miami, FL.

TIME COVERAGE: 1992

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Stock assessment, Population dynamics, Reef fish, Biological sampling, Biscayne National Park

161

Bohnsack, J. A., D. B. McClellan, D. E. Harper, G. S. Davenport, G. J. Konoval, A. M. Eklund, J. P. Contillo, S. K. Bolden, P. C. Fischel, G. S. Sandorf, J. C. Javech, M. W. White, M. H. Pickett, M. W. Hulsbeck, J. L. Tobias, J. S. Ault, G. A. Meester, S. G. Smith, and J. Luo (1999) Baseline data for evaluating reef fish populations in the Florida Keys, 1979 - 1998. NOAA Tech. Memo. NMFS-SEFSC-427. NOAA/NMFS/SEFSC, Miami, FL. 61 pp.

TIME COVERAGE: 1979 - 1998

SUMMARY: This report provides a summary of a 20-year historical data base that will be the baseline for assessing future changes in reef fish communities in the Florida Keys National Marine Sanctuary. A total of 263 fish taxa from 54 families were observed at 188 sites. The ten most abundant species accounted for 59% for all individuals observed. The study area extends from Key Biscayne to the Dry Tortugas.

KEY WORDS: Fishes, Florida Keys, Dry Tortugas

162

Bohnsack, J. A., D. B. McClellan, D. E. Harper, S. K. Bolden, A. M. Eklund, and S. Sandorf (1994) Effects of Hurricane Andrew on reef fishes in Biscayne National Park. Bull. Mar. Sci., 54(3):1072.

TIME COVERAGE: 1992

SUMMARY: Reef fish have been monitored in Biscayne Bay for the past several years. Hurricane Andrew passed directly over some of the study sites. Most reef fishes showed no injuries or effects from the storm. Large numbers of the newly settled ocean sturgeon were observed in some disturbed sites.

KEY WORDS: Reef fish, Hurricane Andrew, Biscayne National Park

163

Boldrick, S. J. (1975) The ship that stopped the Boom. South Florida History Magazine, 2(5):8-9.

TIME COVERAGE: 1926

SUMMARY: This is an account of the grounding of the Prinz Valdemar in Government Cut and the ultimate fate of the ship.

KEY WORDS: Prinz Valdemar, Government Cut, Land Boom

164

Booker, F., A. Thorhaug, G. L. Beardsley, and B. Flynn (1982) Seagrass species, density and theoretical productivity off Key Biscayne, Florida. Florida Scient., 45(Suppl. 1):23.

TIME COVERAGE: 1982

SUMMARY: This abstract describes the fauna and flora of a seagrass bed off Key Biscayne.

KEY WORDS: Seagrass, *Thalassia testudinum*, *Syringodium filiforme*, *Halodule wrightii*, Population density, Biological production, Key Biscayne

165

Borkowski, T. V. (1970) The biology and ecology of some tropical western Atlantic Littorinidae (Gastropoda: Prosobranchia). Ph.D. dissertation. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1970

SUMMARY: Growth, spawning, mortality and productivity have been studied for several representatives of the Family Littorinidae.

KEY WORDS: Littorinidae, Gastropods, *Littorina lineata*, *Littorina lineolata*, *Littorina ziczac*, *Nodilittorina tuberculata*, *Tectarius muricatus*, *Echininus nodulosus*

166

Borkowski, T. V. (1974) Growth, mortality, and productivity of south Floridian Littorinidae (Gastropoda: Prosobranchia). Bull. Mar. Sci., 24(2):409-438.

TIME COVERAGE: 1974

SUMMARY: This is the second paper of a series of papers on the reproduction, growth, mortality, productivity, distribution, and zonal dynamics of some south Floridian Littorinidae.

KEY WORDS: Littorinidae, *Tectarius muricatus*, *Nodilittorina tuberculata*, *Echininus nodulosus*, *Littorina lineata*, *Littorina lineolata*, *Littorina ziczac*, Growth, Mortality, Biological production, Government Cut

167

Borkowski, T. V. (1971) Reproduction and reproductive periodicities of south Floridian Littorinidae (Gastropoda: Prosobranchia). Bull. Mar. Sci., 21(-):826-840.

TIME COVERAGE: 1971

SUMMARY: This is the first of a series of papers on the reproduction, growth, mortality, productivity, distribution, and zonal dynamics of some south Floridian Littorinidae.

KEY WORDS: Littorinidae, *Tectarius muricatus*, *Nodilittorina tuberculata*, *Echininus nodulosus*, *Littorina lineata*, *Littorina lineolata*, *Littorina ziczac*, Reproduction, Spawning seasons, Government Cut

168

Bortone, S. A., and J. L. Williams (1986) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - gray, lane, mutton, and yellowtail snappers. Biological rep. 82 (11.52). US Fish and Wildlife Service, National Coastal Ecosystem Team, Slidell, LA. 18 pp.

TIME COVERAGE: 1986

SUMMARY: The life history, growth characteristics, fishery, ecological role, environmental requirements, and morphology of four snapper species are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Gray snapper, *Lutjanus griseus*, Lane snapper, *Lutjanus synagris*, Mutton snapper, *Lutjanus analis*, Yellowtail snapper, *Ocyurus chrysurus*, Snappers, South Florida

169

Boucher, G. C. (1974) Parasites of the checkered puffer, *Sphoeroides testudineus*, in Biscayne Bay, Florida, with an analysis of host-parasite relationships. M.Sc. thesis. University of Miami, Coral Gables, FL. 69 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: Checkered puffers parasites were identified, and their location in the host, incidence and intensity of infection noted. Thirteen species of parasites were observed.

KEY WORDS: Pufferfish, Checkered puffer, *Sphoeroides testudineus*, Parasites, *Argulus varians*, *Tagia ecuadori*, *Bianium plicatum*, *Bucephalus* sp., Virginia Key

170

Bouchet, G. C. (1985) Redescription of *Argulus varians* Bere, 1936 (Branchiura, Argulidae) including a description of its early development and first larval stage. Crustaceana, 49(1):30-35.

TIME COVERAGE: 1985

SUMMARY: This citation is a redescription of species based on specimens collected during a parasitology study.

KEY WORDS: Parasites, Animal morphology, Males, Crustacean larvae, *Argulus varians*

171

Bowman, H. H. M. (1917) Ecology and physiology of the red mangrove. Proceedings of the American Philosophical Society, 56(-):589-672.

TIME COVERAGE: 1915-1916

SUMMARY: This citation is a comprehensive review of the state of knowledge about mangroves, including historical references going as far back as 325 BC.

KEY WORDS: Rhizophora, Red mangrove, Ecophysiology, Miami River, Arch Creek

172

Boyer, J. N., and J. D. Jones (1999) Modeling the southeast Florida coastal ecosystem - Hydrodynamic transport, salinity, and trophodynamics. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 212.

TIME COVERAGE: 1999

SUMMARY: Water quality of the Florida Keys National Marine Sanctuary is influenced by the Florida Current, the Gulf of Mexico Loop Current, currents of the Southwest Shelf, and by tidal exchange with Florida Bay and Biscayne Bay. Quarterly sampling of stations in the Florida Keys, Biscayne Bay, Florida Bay, the Shelf and mangrove estuaries is being used to study the spatial component of water quality in the area.

KEY WORDS: Florida Bay, Water quality, Nutrients

173

Bragg, R. (1999) Developers covet a Florida island beach that was born of racism. The New York Times, New York, NY. March 28. National Report. 19.

TIME COVERAGE: 1999

SUMMARY: This article discusses the history of Virginia Beach.

KEY WORDS: Virginia Beach, Virginia Key

174

Brand, L. E. (1988) Assessment of plankton resources and their environmental interactions in Biscayne Bay, Florida. Final report to Dade County Department of Environmental Resources Management. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 125 pp.

TIME COVERAGE: 1988

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Plankton, Environmental conditions, Species list

175

Brand, L. E., M. D. Gottfried, C. C. Baylon, and N. S. Romer (1991) Spatial and temporal distribution of phytoplankton in Biscayne Bay, Florida. Bull. Mar. Sci., 49(1-2):599-613.

TIME COVERAGE: 1986 - 1987

SUMMARY: Phytoplankton at 24 stations were examined monthly for one year. Abundances were high in north Biscayne Bay and even higher near canal mouths, and reached the highest levels during the rainy season. Eutrophication from freshwater runoff was the probable cause of the high abundances in the northern part of the Bay. Phytoplankton abundance showed virtually no seasonality in the southern part of the bay.

KEY WORDS: Phytoplankton, Geographical distribution, Temporal distribution

176

Brandt, L. A., F. J. Mazzotti, J. R. Wilcox, P. D. Barker, G. L. Hasty, and J. Wasilewski (1995) Status of the American crocodile (*Crocodylus acutus*) at a power plant site in Florida, USA. Herpetological Natural History, 3(1):29-36.

TIME COVERAGE: 1983 - 1993

SUMMARY: Surveys for distribution and nesting of the American crocodile at the Turkey Point Nuclear Power Plant were conducted from 1983 - 1993. The number of nests, hatchlings and non-hatchlings observed per survey have increased over the time of the survey. The percentage of animals of each size class fluctuated from year to year.

KEY WORDS: *Crocodylus acutus*, American crocodile, Turkey Point

177

Branyon, M. (1988) Florida Saltwater Fishing Guide. Orlando Sentinel, Orlando, FL. 143 pp.

TIME COVERAGE: 1988

SUMMARY: This is a fishing guide to Florida.

KEY WORDS: Fishing, Marine fish, Florida, Guide

178

Breaker, L. C., L. D. Burroughs, J. F. Culp, N. L. Guinasso, R. L. Teboule, and C. R. Wong (1993) Surface and near-surface marine observations during Hurricane Andrew. NMC Office note no. 398; OPC contribution no. 68. NOAA/NWS, Washington, DC. 37 pp.

TIME COVERAGE: 1992

SUMMARY: This report includes marine observations obtained from two buoys and two C-MAN stations close to the storm track, storm surges, currents, temperature and salinities, and sea surface temperature maps.

KEY WORDS: Temperature, Salinity, Time series analysis, Surface topography, Sea level measurement, Hurricane tracking, Meteorological observations, Hurricane Andrew, Southeast Florida, Bahamas, Gulf of Mexico

179

Brice, J. J. (1898) The fish and fisheries of the coastal waters of Florida. Report of the Commissioner (US Commission of Fish and Fisheries) for the year ending June 30, 1896. Report. US Commission of Fish and Fisheries, Washington, DC (?). 263-342.

TIME COVERAGE: 1898

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Fish, Coastal fisheries, Turtles, Crustaceans, Sponges, Florida

180

Briggs, J. C. (1958) A list of Florida fishes and their distribution. Bull. Florida State Museum, Biol. Sci., 2(8):223-318.

TIME COVERAGE: 1958

SUMMARY: This paper lists fishes found in Florida. The greatest variety of fish occurs in the Florida Keys.

KEY WORDS: Fish, Geographical distribution, Florida, Species list

181

Brook, I. M. (1978) Comparative macrofaunal abundance in turtlegrass (*Thalassia testudinum*) communities in south Florida characterized by high blade density. Bull. Mar. Sci., 28(1):212-217.

TIME COVERAGE: 1973

SUMMARY: Five *Thalassia* communities with high blade density were sampled by suction dredge and macrofaunal abundance evaluated. A high standing crop of seagrass may not be the primary determining factor in faunal abundance.

KEY WORDS: *Thalassia testudinum*, Seagrass, Population density, Abundance, Turtle grass, Aquatic communities

182

Brook, I. M. (1982) The effect of freshwater canal discharge on the stability of two seagrass benthic communities in Biscayne National Park, Florida. In: (Oceanologica Acta; supplement to vol. 4, December 1982.) Proc., Internat. Symp. on Coastal Lagoons. P. Lasserre, and H. Postma, (eds.). Bordeaux, France, 1981. Gauthier Villars, Montreuil. 63-72.

TIME COVERAGE: 1979 - 1980

SUMMARY: A two-year study of western Biscayne National Park examined two benthic communities affected by fresh water canal discharge of Mowry and Moody Canals. The Moody Canal community evolved into a new moderately abundant community, with mollusks replacing amphipods. The Mowry Canal community, with a more diverse vegetation than that of the Moody Canal site, proved to be resilient, maintaining composition and only moderately lower levels of abundance.

KEY WORDS: River discharge, Pollution effects, Seagrass, Marine invertebrates, Population number, Biomass, Species diversity, Salinity, Phytobenthos, Embryophyta, *Halodule wrightii*, *Thalassia testudinum*, *Syringodium filiforme*, *Laurencia poitei*, *Digenea simplex*, Biscayne National Park, Mowry Canal, Moody Canal

183

Brook, I. M. (1981) Epibenthic and benthic sampling survey of western Biscayne National Park. Final report, Part I. NPS contract no. CXS 280-9-159. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 62 pp + appendices.

TIME COVERAGE: 1979 - 1980

SUMMARY: This study examined the four distinct benthic communities near the western shoreline of Biscayne Bay and how these were affected by changes in salinity.

KEY WORDS: Benthos, Biological surveys, Biscayne National Park, Moody Canal, Mowry Canal, Grand Canal, Mangrove Key, Species list

184

Brook, I. M. (1979) A portable suction dredge for quantitative sampling in difficult substrates. Estuaries, 2(-):54-58.

TIME COVERAGE: 1979

SUMMARY: This paper describes a suction dredge for use in benthic sampling of difficult substrates including *Thalassia* beds.

KEY WORDS: Samplers, Dredges, *Thalassia testudinum*, Seagrass

185

Brook, I. M. (1975) Some aspects of the trophic relationships among the higher consumers in a seagrass community (*Thalassia testudinum* König) in Card Sound, Florida. Ph.D. dissertation, University of Miami, Coral Gables, FL.

TIME COVERAGE: 1972 - 1973

SUMMARY: The most important interaction between the primary consumers in *Thalassia* flats and higher trophic level consumers is via polychaetes and peracaridean crustaceans which were

the preferred food of all but two of fishes examined. The population of resident predators is low and limited by the small standing stock of polychaetes and peracaridean crustaceans. The majority of the fishes captured were foragers.

KEY WORDS: *Thalassia testudinum*, Seagrass, Turtle grass, Trophic relationships, Card Sound, Aquatic communities, Benthos, Biomass, Predation, Food chains, Arsenicker Key

186

Brook, I. M. (1977) Trophic relationships in a seagrass community (*Thalassia testudinum*), in Card Sound, Florida. Fish diets in relation to macrobenthic and cryptic faunal abundance. Trans. Am. Fish. Soc., 106(3):219-229.

TIME COVERAGE: 1972 - 1973

SUMMARY: The trophic interaction between fishes, and the macrobenthic and cryptic fauna in seagrass communities was examined. The principal interaction between primary consumers and the higher trophic level predators was via polychaetes and peracaridean crustaceans. Mollusks were not a preferred food. The majority of the fishes captured were foragers over a wide area.

KEY WORDS: Aquatic communities, Trophic relationships, Card Sound, *Thalassia testudinum*, Seagrass, Benthos, Biomass, Predation, Food chains, *Floridichthys carpio*

187

Brooks, C. P., D. P. Dreves, and D. S. White (1998) New records of *Taphromysis louisianae* Banner, 1953 (Mysidae) with notes on its ecology. Crustaceana, 71(8):955-970.

TIME COVERAGE: 1998

SUMMARY: *Taphromysis* is a North American genus of opossum shrimps (Mysidae) containing two species: *T. bowmani* Bacescu, 1961 which has been reported only from a brackish tidepool adjacent to a mangrove swamp in Biscayne Bay, and *T. louisianae* Banner, 1953 originally described from a roadside ditch in Gueydan, Louisiana. In this paper, new records for *T. louisianae* are added, indicating that it may be more widely distributed than originally thought.

KEY WORDS: Ecological distribution, Mysidae, *Taphromysis louisianae*, *Taphromysis bowmani*, Freshwater crustaceans

188

Browder, J. A. (1990) Briefing for viewing of Kandrashoff Collection. Unpublished manuscript. NOAA/NMFS/SEFC, Miami, FL.

TIME COVERAGE: 1990

SUMMARY: This paper describes the collection of diseased or abnormal fish and crabs collected by the Kandrashoffs (father and son). The fish were mostly collected in the northern part of the Bay. Frequently occurring problems in fish are: scale disorientation, missing dorsal fins spines, missing pectoral fins and skin ulcerations. Frequently occurring problems in crabs are: ulcerated carapaces, abnormal lateral and/or antero-lateral spines on carapaces, and brown spots on carapaces.

KEY WORDS: Fish diseases, Crabs, Pathology, Tumors

189

Browder, J. A., C. B. Littlejohn, and D. L. Young (1976) South Florida: seeking a balance of man and nature; land, water and energy use for long range economic vitality in south Florida. The South Florida Study. In cooperation with the National Park Service. Center for Wetlands, University of Florida, Gainesville, FL. 117 pp.

TIME COVERAGE: 1900 - 1976

SUMMARY: This report discusses the energy systems of the South Florida environment.

KEY WORDS: Environment management, Regional planning, Water resources, Land use, Energy resources, South Florida

190

Browder, J. A., D. B. McClellan, D. E. Harper, M. G. Kandrashoff, and W. Kandrashoff (1993) A major developmental defect observed in several Biscayne Bay, Florida, fish species. Environ. Biol. Fishes, 37(2):181-188.

TIME COVERAGE: 1989 - 1990

SUMMARY: Roughly 43,000 fish were caught mainly by hook and line and scanned for abnormalities. This activity took place mainly north of the Rickenbacker Causeway. Most fish were measured (fork length). Abnormalities were recorded in 17 species from 12 families. Saddleback was the most common abnormality.

KEY WORDS: Abnormalities, Pathology, Fish physiology, Scales, Fins, Saddleback syndrome, North Bay, *Haemulon sciurus*, *Haemulon parrai*, *Haemulon plumieri*, *Lagodon rhomboides*, *Archosargus rhomboidalis*, *Diplodus argenteus*, *Lutjanus griseus*, *Kyphosus sectatrix*, *Sphaeroides testudineus*, *Lactrophyrys quadricornis*, *Abudefduf saxatilis*

191

Brown, J. W. (1988) Fractionation studies of aquatic fatty acids from coastal & off-shore marine environments of southern Florida. J. Coastal Res., 4(4):565-572.

TIME COVERAGE: 1988

SUMMARY: The nature, quantity and distribution of dissolved and particulate-adsorbed fatty acids in seawater were studied in different coastal marine environments of South Florida. The total fatty acid concentration increased in surface waters as sampling proceeded from off-shore to terrestrial-influenced areas.

KEY WORDS: Fatty acids, Lipids, Sea water, Marco Island, Islamorada, Key West, Gulf Stream

192

Brown, J. W. (1987) Studies of humic and fulvic acid dynamics in coastal marine waters of south Florida. Mar. Environ. Res., 21(3):163-174.

TIME COVERAGE: 1979 - 1981

SUMMARY: Humic and fulvic acid concentrations were monitored in different areas of Biscayne and Florida Bays to determine the fluctuations in the nature and chemical nature of humic substances in productive coastal environments in South Florida. Fluctuations were found to be as much as eleven-fold and appeared to follow the artificially-controlled input of water from the South Florida mainland. In all marine locations studied, coarse particulate humic substances were low in comparison to the dissolved component of this chemical class.

KEY WORDS: Florida Bay, Humic acids, Fulvic acids, Coastal waters, Dynamics, Key West

193

Brown, R. H., and G. G. Parker (1945) Salt water encroachment in limestone at Silver Bluff, Miami, Florida. Economic Geol. and the Bull. Soc. Economic Geologists, 40(4):235-262.

TIME COVERAGE: 1945

SUMMARY: Silver Bluff is part of a low coastal ridge that averages approximately 8 ft above sea level. It is composed of oolitic limestone. Construction of drainage canals has lowered the water table by several feet allowing salt water intrusions. This study investigated salt water intrusion at Silver Bluff.

KEY WORDS: Saline intrusion, Ground water, Limestone, Canals, Silver Bluff, Miami

194

Bruun, P., R. Dorrestein, and F. Gerritsen (1960) Storm tide problems with special reference to Biscayne Bay. University of Florida, College of Engineering, Engineering and Industrial Experiment Station, Gainesville, FL. Various paging.

TIME COVERAGE: 1960

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Storm surge, Sea walls, Shore protection

195

Buchanan, T. J., and H. Klein (1976) Effects of water management on fresh-water discharge to Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 271-277.

TIME COVERAGE: 1947 - 1976?

SUMMARY: This paper discusses the effect of the flood and water control measures and water management practices instituted in South Florida after the flooding of 1947 on fresh water flow to Biscayne Bay. Since 1953 annual fresh water flow to the Bay was reduced by about 20% and the duration of storm water runoff was also reduced.

KEY WORDS: Drainage water, Urban runoff, Water management, Miami Canal, Tamiami Canal, Saline intrusion

196

Buck, J. (1979) Biscayne sketches at the far south. Tequesta, 39(-):70-86.

TIME COVERAGE: 1877

SUMMARY: James Buck moved to South Florida in 1877 from his home in Cambridge, MA and settled in what is now south Coconut Grove. His stay in Florida only lasted 6 months. He wrote an account of his experiences, discouraging his fellow co-workers at the Riverside Press in Cambridge from moving to South Florida.

KEY WORDS: Historical

197

Buck, J. D. (1965) A comparative study of selected marine pseudomonads with special reference to antiyeast activity. Ph.D. dissertation. University of Miami, Coral Gables, FL. 162 pp.

TIME COVERAGE: 1965

SUMMARY: Pseudomonad bacteria samples were obtained in Biscayne Bay and Bimini and cultured in the laboratory in various media.

KEY WORDS: Pseudomonads, Bacteriology, Yeasts, Key Biscayne, Soldier Key

198

Buck, J. D. (1976) Pollution microbiology of Biscayne Bay beaches. Florida Scient., 39(-):111-120.

TIME COVERAGE: 1972

SUMMARY: Water, sediment and sand from recreational and other areas in southern Biscayne Bay were examined for the presence of "indicator" and potentially pathogenic bacteria and yeasts. The Miami River was the most significant source of pollution. Bathing beaches showed low densities of all microorganisms sought.

KEY WORDS: Microbial contamination, Water pollution, Beaches, Public health, Recreational waters, Pollution monitoring, Indicator species, Sediment, Water, Key Biscayne, Virginia Key, Miami River

199

Buck, J. D., and L. J. Greenfield (1964) Calcification in marine-occurring yeasts. Bull. Mar. Sci. Gulf Caribb., 14(2):239-245.

TIME COVERAGE: 1964

SUMMARY: Five species of yeasts including three of marine origin were tested for their ability to induce calcium carbonate crystal formation in four different artificial media. Round or bundle-shaped crystals were formed after 18 days in cultures of washed "exhausted" cells or

two marine yeasts. Cell debris of a sediment isolate and of a terrestrial form showed roundish crystals after two days.

KEY WORDS: Yeasts, Calcification, *Rhodotorula aurea*, *Cryptococcus albidus*, *Rhodotorula glutinis*

200

Budd, A. E., K. G. Johnson, and D. C. Potts (1994) Recognizing morphospecies in colonial reef corals: I. Landmark-based methods. *Paleobiol.*, 20(4):484-505.

TIME COVERAGE: 1989

SUMMARY: Morphological discrimination of species of scleractinian corals has been plagued by a shortage of independent characters and by high ecophenotypic plasticity. This paper presented a newly developed protocol for the morphometric recognition of species.

KEY WORDS: Coral, Organism morphology, Porites, Soldier Key, Sands Key, Bache Shoal, St. Croix, Belize

201

Bulger, A. J., T. A. Lowery, and M. E. Monaco (1995) Estuarine-catadromy: a life history strategy coupling marine and estuarine environments via coastal inlets. ELMR report no. 14. NOAA/NOS Strategic Environmental Assessments Division, Silver Spring, MD. 110 pp.

TIME COVERAGE: 1995

SUMMARY: This report was undertaken to develop a better understanding of 12 estuarine-catadromous species' larval utilization of estuaries along the US East Coast including Biscayne Bay.

KEY WORDS: Catadromous species, Life history, Estuaries, Marine environment, Coastal inlets

202

Bunt, J. S. (1971) Microbiology. in: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler (eds.). Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. VIII:1-11.

TIME COVERAGE: 1971

SUMMARY: The microbial community of Card Sound is of major importance in the production and turnover of organic materials. Photosynthetic pigments, particulate organic carbon, plate counts of heterotrophic microorganisms, and carbon and nitrogen fixation were studied.

KEY WORDS: Microbiology, Photosynthetic pigments, Carbon fixation, Nitrogen fixation, South Bay

203

Bunt, J. S. (1969) Observations on photoheterotrophy in a marine diatom. *J. Phycol.*, 5(1):37-42.

TIME COVERAGE: 1969

SUMMARY: An unidentified species of a diatom of the genus *Cocconeis* was isolated from Biscayne Bay mud. The organism was capable of utilizing a variety of organic substrates in the light. Data obtained on the kinetics of uptake of lactate and glucose raise questions on the possible ecological significance of photoheterotrophy along marine microalgae.

KEY WORDS: *Cocconeis*, Diatoms, Heterotrophy

204

Bunt, J. S., and E. R. Anang (1976) Hydrological, productivity and nutrient data near Miami, the Bahamas and Haiti. UM data report 76-2. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 32 pp.

TIME COVERAGE: 1976

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Primary production, Hydrology, Photosynthetic pigments, Chlorophylls, Miami, Bahamas

205

Bunt, J. S., C. C. Lee, and E. Lee (1972) Primary productivity and related data from tropical and subtropical marine sediments. Mar. Biol., 16(-):28-36.

TIME COVERAGE: 1971

SUMMARY: Measurements in situ were made of oxygen exchange and carbon-14 fixation in calcareous sediments in Biscayne Bay and at various sites in the Caribbean. Sediment samples were analyzed for total organic carbon, nitrogen and photosynthetic pigments.

KEY WORDS: Primary production, Carbon fixation, Carbonate sediment, Photosynthetic pigments, Key Biscayne, Caribbean, Long Reef

206

Bunt, J. S., C. C. Lee, B. F. Taylor, P. Rost, and E. Lee (1970-1971) Quantitative studies on certain features of Card Sound as a biological system. RSMAS technical report 72011. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 13 pp.

TIME COVERAGE: 1970 - 1971

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Carbon fixation, Photosynthetic pigments, Chlorophylls, Bacteriology, Card Sound

207

Bureau of Sport Fisheries and Wildlife (1970) National estuary study. Report. Seven volumes. US. Government Printing Office, Washington, DC. Various paging.

TIME COVERAGE: 1970

SUMMARY: This is a comprehensive report on estuaries.

KEY WORDS: Estuaries, Estuary Protection Act

208

Burns, L. A. (1976) Ecosystem models of mangrove communities in Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 113-132.

TIME COVERAGE: 1976

SUMMARY: This paper discusses ecosystem models of mangrove communities. The models emphasize productivity, interception and filtration of runoff, detrital production, and nursery and breeding aspects of mangrove ecosystems.

KEY WORDS: Mangroves, Models, Productivity, Nursery grounds

209

Burrus, E. C. (1984) A history of the islands and waters of the Biscayne National Park -- a multi-media interpretive program. D.A. thesis. University of Miami, Coral Gables, FL. 165 pp.

TIME COVERAGE: 1700s - 1980s

SUMMARY: This thesis is a multi-media presentation on the history of the area encompassing Biscayne National Park.

KEY WORDS: History, Turtle fisheries, Sponge fisheries, Wrecks, Biscayne National Park

210

Burse, C. R., and C. E. Lane (1971) Ionic and protein concentration changes during the molt cycle of *Penaeus duorarum*. Comparative Biochem. Physiol., 40A(-):155-162.

TIME COVERAGE: 1971

SUMMARY: Sodium, K, Ca and protein concentrations were determined throughout the molt cycle of pink shrimp. Sodium, K and Ca are greatest at molting and fall to a relatively stable

level during the intermolt period. Protein concentration rises during the premolt phase, falls at molt, and rises to an intermediate level during intermolt.

KEY WORDS: Molting, Proteins, Biochemistry, Pink shrimp, *Penaeus duorarum*, Na, K, Ca

211

Burton, E. A. (1986) Gradients in carbonate mineralogy, Biscayne Bay, SE Florida: a reassessment of XRD analysis. In: SEPM annual midyear mtg. abstracts. Raleigh, NC, 1986. Society of Economic Paleontologists and Mineralogists, Tulsa, OK. 16-17.

TIME COVERAGE: 1986

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Carbonate minerals, Calcite, Aragonite, X-ray diffraction analysis

212

Burzycki, G. W., and D. L. Drum (1992) Environmental/regulatory planning for the SW Biscayne Bay wetlands (advance identification of disposal areas). Final draft, tech. summary document. Wetlands Planning Unit, US Environmental Protection Agency, Atlanta, GA. (Various paging).

TIME COVERAGE: 1992

SUMMARY: This report is an effort to identify wetlands potentially suitable for development.

KEY WORDS: Wetlands, Land use, Resource development, Resource conservation, Waste disposal

213

Bush, J. (1958) The foraminifera and sediments of Biscayne Bay, Florida and their ecology. Ph.D. dissertation. University of Washington, Seattle, WA. 128 pp.

TIME COVERAGE: 1948

SUMMARY: Foraminiferal fauna in Biscayne Bay is provincial in nature due to adaptation to the rigorous changes in salinity and temperature, and to geographical isolation. Thirteen biotopes were recognized and shown to be influenced in their faunal composition by currents, salinity and temperature.

KEY WORDS: Foraminifera, Sedimentation, Carbonate sediment, Quartz

214

Bush, J. (1949) A preliminary report on the foraminifera of Biscayne Bay, Florida and their ecological relations. M.A. thesis. Indiana University, Bloomington, IN. 50 pp.

TIME COVERAGE: BB RSMAS

SUMMARY: 1949

KEY WORDS: Foraminifera, Ecological distribution

215

Bush, L. F. (1966) Distribution of sand fauna in beaches at Miami, Florida. Bull. Mar. Sci., 16(1):58-75.

TIME COVERAGE: 1966

SUMMARY: This paper is a brief survey of the sand fauna of some beaches in Miami.

KEY WORDS: Beaches, Psammon, Sand, Copepods, Turbellarians, Virginia Key, Key Biscayne

216

Butler, M. J., W. F. Herrnkind, and J. H. Hunt (1994) Sponge mass mortality and Hurricane Andrew: catastrophe for juvenile spiny lobsters in south Florida? Bull. Mar. Sci., 54(3):1073.

TIME COVERAGE: 1991 - 1992

SUMMARY: The sponges, macroalgae and octocorals are prime settlement and juvenile nursery habitat for the spiny lobster. During 1991 - 1992, a massive sponge die off occurred in Florida

Bay, and in 1992 Hurricane Andrew passed over Biscayne Bay. These events provided opportunities to study the impact of such disturbances on juvenile spiny lobsters.

KEY WORDS: Sponges, Mortality causes, Hurricane Andrew, Spiny lobster, *Panulirus argus*, South Florida

217

Byrne, J. D. (1976) Thermal infrared studies in the Biscayne Bay area. M.Sc. thesis. University of Miami, Coral Gables, FL. 154 pp.

TIME COVERAGE: 1975

SUMMARY: Thermal infrared images of surface water were obtained by low flying aircraft. A time series of thermal discharge from a power plant was prepared and analyzed to define the structural features of the thermal anomaly area. Surface water temperatures were obtained from a boat to establish ground truth conditions.

KEY WORDS: Infrared detectors, Thermal pollution, Surface temperature, Cutler Power Plant, Card Sound

218

Byrne, M., and J. F. Meeder (1997) Ground water delivery to Biscayne Bay. Proc., First Ann. Conf. of the Walt Dineen Society. Florida International University, 1997. Walt Dineen Society, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ground water, Nutrients (Mineral), Water motion

219

Byrne, M., and J. Meeder (1999) Groundwater discharge and nutrient loading to Biscayne Bay. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 221-222.

TIME COVERAGE: 1999

SUMMARY: Two transects of wells were drilled between the outlets of Military and Mowry Canals and nutrient levels were determined. Preliminary results were presented.

KEY WORDS: Groundwater, Nutrients, Military Canal, Mowry Canal

220

Cable, J. E., W. C. Burnett, J. P. Chanton, D. R. Corbett, and P. H. Cable (1997) Field evaluation of seepage meters in the coastal marine environment. Estuar. Coast. Shelf Sci., 45(3):367-375.

TIME COVERAGE: 1997

SUMMARY: The response of seepage meters was evaluated in a nearshore marine environment where water motion effects are more pronounced than in lake settings.

KEY WORDS: Hydrology, Tidal dynamics, Seepages, Groundwater

221

Cai, C. (1993) Miami River environmental management and planning. Masters thesis. University of Miami, Coral Gables, FL. 185 pp.

TIME COVERAGE: 1993

SUMMARY: This study identifies and evaluates the existing environmental and regulatory conditions of the Miami River.

KEY WORDS: River basin management, Environment management, Regional planning, Urbanization, Miami River

222

Caillouet, C. W., G. L. Beardsley, and N. Chitty (1971) Notes on size, sex ratio, and spawning of the spiny lobster *Panulirus guttatus* (Latreille), near Miami Beach, Florida. Bull. Mar. Sci., 21(4):944-951.

TIME COVERAGE: 1970

SUMMARY: Spiny lobsters were collected along the jetties bordering the ship channel near Miami Beach. Observations on size distribution, sex ratio, and proportion of ovigerous females were presented.

KEY WORDS: Spiny lobster, *Panulirus guttatus*, Size, Sex ratio, Spawning, Government Cut

223

Cairns, S. D. (1976) Guide to the commoner shallow-water gorgonians (sea whips, sea feathers and sea fans) of Florida, the Gulf of Mexico, and the Caribbean region. Field guide series 6. University of Miami Sea Grant College Program, Coral Gables, FL. 74 pp.

TIME COVERAGE: 1976

SUMMARY: This is a field guide to common gorgonians of Florida, the Gulf coast and the Caribbean.

KEY WORDS: Gorgonians, Sea whips, Sea feathers, Sea fans, Identification keys, Florida, Gulf of Mexico, Caribbean, Field guide

224

Calas, E. L., and D. K. Valdes (1988) Miami River stormwater drainage basin prioritization. Metro Dade DERM technical report 88-2. Metro Dade Department of Environmental Resources Management, Miami, FL. 4 pp + appendices.

TIME COVERAGE: 1988

SUMMARY: This report described improvements that could be made to improve the environmental quality of stormwater runoff discharge into the Miami River.

KEY WORDS: Stormwater runoff, Drainage water, Pollutants, Miami River

225

Camilleri, J. C., and G. Ribi (1986) Leaching of dissolved organic carbon (DOC) from dead leaves, formation of flakes from DOC, and feeding on flakes by crustaceans in mangroves. Mar. Biol., 91(-):337-344.

TIME COVERAGE: 1986

SUMMARY: Organic matter was released into seawater from dead mangrove leaves under both biotic and abiotic conditions. Particulate matter (flakes) formed in the leachates under both conditions. Flakes cultured in the laboratory and flakes obtained from natural environments were colonized by microbial organisms and were utilized as food by copepods, amphipods, isopods, crabs and shrimps.

KEY WORDS: Mangrove swamps, *Rhizophora mangle*, Dissolved organic carbon, Leaves, Detritus feeders

226

Camp Dresser & McKee, I. (1988) Munisport Landfill site, North Miami, Florida. Draft focused feasibility study. Final report. Unpublished manuscript. Camp Dresser & McKee, Inc., Atlanta, GA. (Various paging).

TIME COVERAGE: 1988

SUMMARY: This report is a feasibility study of five remedial actions to be applied to the Munisport Landfill site in North Miami, an area immediately adjacent to Biscayne Bay. The remedial actions were designed to minimize, contain and control contaminant migration and to protect human health and the environment.

KEY WORDS: Feasibility studies, Environmental restoration, Chemical pollutants, Munisport Landfill, North Miami

227

Campbell, C. S. (1974) 1-<sup>14</sup>C-linoleic acid utilization in female pink shrimp, *Penaeus duorarum* Burkenroad. M.Sc. thesis. University of Miami, Coral Gables, FL. 55 pp.

TIME COVERAGE: 1974

SUMMARY: Pink shrimp were obtained from local fishermen, kept in aquariums and fed <sup>14</sup>C-labeled food. Radioactivity was determined in various tissues of the shrimp and the distribution of the radiolabeled material determined with time within the specimens.

KEY WORDS: *Penaeus duorarum*, Pink shrimp, Linoleic acid

228

Campos, W. L. (1985) Distribution patterns of juvenile epibenthic fish in south Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 109 pp.

TIME COVERAGE: 1982 - 1983

SUMMARY: This study examined the distribution of juvenile epibenthic fish in relation to the abiotic environmental factors in southern Biscayne Bay. The composition and spatial distribution of the species assemblages remained consistent from one season to another, although abundances were generally lower during winter. Habitat differences throughout the study period were consistently displayed on physical factors such as bottom type and salinity. The results showed that the topographical heterogeneity of the Bay, along with the interior circulation pattern, regulate the seasonal distribution of the species assemblages. The most important habitat factors were grassland density and salinity.

KEY WORDS: Marine fish, Juveniles, Ecological distribution, Benthos, South Bay, Central Bay, Species list

229

Campos, W. L., and S. A. Berkeley (1986) Impact of the commercial fishery on the population of bait shrimp (*Penaeus* spp.) in Biscayne Bay. Final report to Dade County dept. of Environmental Resources Management. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 46 pp.

TIME COVERAGE: 1984 - 1985

SUMMARY: Pink shrimp were found to exhibit a mean residence time in the Biscayne Bay nursery area of approximately 21 weeks. It was estimated that 23% and 26% of the male and female monthly population size respectively was absorbed by both the fishery and ecosystem monthly. Fishing mortality represented only 8-9% of the losses to the shrimp population. The biggest loss was emigration suggesting that shrimp beyond the size at recruitment are not utilized for food while in the Bay. Thus it appeared that the direct impact of the fishery on the bait shrimp population was relatively small.

KEY WORDS: Commercial fishing, Bait fishing, Shrimp, *Penaeus*, Population dynamics

230

Campton, D. E., C. J. Berg, L. M. Robison, and R. A. Glazer (1992) Genetic patchiness among populations of queen conch *Strombus gigas* in the Florida Keys and Bimini. Fishery Bull., 90(2):250-259.

TIME COVERAGE: 1992

SUMMARY: Spatial and temporal genetic patchiness among populations of queen conch were found, most likely the result of presettlement stochastic events and processes in the marine environment. The populations were very similarly genetically presumable reflecting high levels of gene flow due to larval drift.

KEY WORDS: Queen conch, *Strombus gigas*, Population genetics, Florida Keys, Bimini

231

Cantillo, A. Y., G. G. Lauenstein, and T. P. O'Connor (1997) Mollusc and sediment contaminant levels and trends in south Florida coastal waters. Mar. Pollut. Bull., 34(7):511-521.

TIME COVERAGE: 1986 - 1994

SUMMARY: Concentrations of organic and inorganic contaminants in sediments and mollusks collected in South Florida from 1986 to 1994 show temporal and spatial trends that reflect anthropogenic influence in areas removed from large population centers. Generally, contaminant levels found in South Florida sites are low compared to those found nationwide or as low as any found in the Western Hemisphere.

KEY WORDS: Oysters, *Crassostrea virginica*, Sediment pollution, Anthropogenic factors, Princeton Canal, Goulds Canal, South Florida

232

Cantillo, A. Y., G. G. Lauenstein, and T. P. O'Connor (1999) Oyster and sediment contaminant levels and trends in South Florida. Proc., 1995 Florida Bay Science Conf. Gainesville, FL, October 17-18, 1995. University of Florida, Gainesville, FL. 33.

TIME COVERAGE: 1986 - 1994

SUMMARY: A summary of the Mussel Watch Project findings regarding concentrations of contaminants in South Florida was discussed. Two Mussel Watch sites are located in Biscayne Bay.

KEY WORDS: Mussel Watch, *Crassostrea virginica*, Maule Lake, Goulds canal, PAHs, PCBs, Trace elements

233

Cantillo, A. Y., G. G. Lauenstein, T. P. O'Connor, and W. E. Johnson (1999) Status and trends of contaminant levels in biota and sediments of south Florida. NOAA Regional reports series 2. NOAA/NOS/NCCOS, Silver Spring, MD. 40 pp.

TIME COVERAGE: 1986 - 1997

SUMMARY: The results of the NOAA National Status and Trends Program Mussel Watch Project in South Florida are described.

KEY WORDS: Chemical pollutants, Aromatic hydrocarbons, PCBs, Pesticides, Butyltins, Trace elements, Sediment pollution, Oysters, *Crassostrea virginica*, South Florida, Florida Keys, Naples, Rookery Bay, Everglades

234

Cantillo, A. Y., G. G. Lauenstein, T. P. O'Connor, and W. E. Johnson (1999) Update of results of the Mussel Watch Project in South Florida and the Caribbean. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 235.

TIME COVERAGE: 1986 - 1997

SUMMARY: A summary of the Mussel Watch Project findings regarding concentrations of contaminants in South Florida and Puerto Rico was presented. At some sites, the NS&T results were compared with those obtained in the Caribbean by the International Mussel Watch Program. The Mussel Watch Project determines the concentrations of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, several pesticides, butyltins, and selected trace elements in sediment and mollusk samples from U.S. coastal waters. Mollusks and sediments are collected at each Mussel Watch Project site. Several species of mollusks are collected: eastern oysters (*Crassostrea virginica*) from the South Atlantic and the Gulf of Mexico; smooth-edge jewelbox (*Chama sinuosa*) from the Florida Keys; and Caribbean oyster (*C. rhizophorae*) from Puerto Rico. The results at the South Florida and Caribbean sites are shown and compared to the nationwide levels of several contaminants.

KEY WORDS: Mussel Watch, *Crassostrea virginica*, Maule Lake, Goulds canal, PAHs, PCBs, Trace elements, Bahia Honda, Puerto Rico

235

Cantillo, A. Y., T. P. O'Connor, and G. G. Lauenstein (1993) South Florida environmental quality. NOAA technical memorandum NOS ORCA 75. NOAA/National Ocean Service, Silver Spring, MD. 82 pp.

TIME COVERAGE: 1986 - 1991

SUMMARY: This document is a summary of the environmental conditions of Florida Bay, Biscayne Bay, and the southern portion of the Gulf Coast of Florida; the levels of contaminants found at the NOAA National Status and Trends (NS&T) Program sites in the area; and how these levels compare with those found in other NS&T sites nationwide.

KEY WORDS: Environmental conditions, Pollution monitoring, Florida Bay, South Florida

236

Cantril, J., and J. Bowman (1975) Field study of wave environment vs. boating activity for seven sites in the eastern U. S. Work performed under contract DOT-CG-40,672-A Task 58901-03. Wyle Laboratories, Huntsville, AL. Various paging.

TIME COVERAGE: 1975

SUMMARY: This work describes the measurement of the wave environment at seven sites including Miami to determine if a series of water conditions could be identified which would act as threshold barriers for the presence of various classes of recreational power boat.

KEY WORDS: Wave height, Surface water waves, Recreation, Boating

237

Capone, D. G. (1978) Dinitrogen fixation in subtropical seagrass and macroalgal communities. Ph.D. dissertation. University of Miami, Coral Gables, FL. 93 pp.

TIME COVERAGE: 1974 - 1978

SUMMARY: The purpose of this work was to resolve the controversy regarding the significance of nitrogen fixation in *Thalassia* communities. Nitrogen fixation was found to be highly variable spatially and temporally. High rates of foliar nitrogen fixation were correlated with the presence of a heterocystous cyanobacterium, *Calothrix* sp. The seasonal and diurnal variations in nitrogenase activity, where noted, were probably attributable to responses by these photosynthetic procaryotes to environmental fluctuations.

KEY WORDS: Nitrogen fixation, Seagrass, Thalassia, Algae, Microdictyon, Laurencia, Calothrix, Soldier Key

238

Capone, D. G., R. S. Oremland, B. F. Taylor, and H. B. Stewart (1977) Significance of N<sub>2</sub> fixation to the production of *Thalassia testudinum* communities. Symp. on Progress in Marine Research in the Caribbean and Adjacent Regions. Papers on fisheries, aquaculture and marine biology. H. B. Stewart, (ed.). Caracas, Venezuela, 1976. FAO fisheries report no. 200. Food and Agriculture Organization of the United Nations, Rome, Italy. 71-85.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: *Thalassia testudinum*, Bacteria, Photosynthesis, Seasonal variations, Calothrix, Turtle grass, Bahamas, Bimini

239

Capone, D. G., and B. F. Taylor (1980) N<sub>2</sub> fixation in the rhizosphere of *Thalassia testudinum*. Canadian J. Microbiol., 26(-):998-1005.

TIME COVERAGE: 1980 (lab study)

SUMMARY: N<sub>2</sub> fixation (acetylene reduction) associated with the roots, rhizomes and sediments of *Thalassia* were measured at sites in Soldier Key and the Bahamas. The results

suggested significant inputs of nitrogen into the rhizosphere of *Thalassia* by N<sub>2</sub> fixation but the value of these inputs could not be fully assessed until more is known about the total nitrogen cycle in the community.

KEY WORDS: Nitrogen fixation, *Thalassia testudinum*, Seagrass, Soldier Key, Bimini

240

Capone, D. G., and B. F. Taylor (1977) Nitrogen fixation (acetylene reduction) in the phyllosphere of *Thalassia testudinum*. Mar. Biol., 40(-):19-28.

TIME COVERAGE: 1977 (lab study)

SUMMARY: N<sub>2</sub> fixation (acetylene reduction) associated with *Thalassia* leaves was investigated at five sites in Biscayne Bay and one site in Bimini. Significant activities were correlated with the occurrence of a heterocystous blue-green alga on the leaves. Methylen reduction was not stimulated by organic compounds. Diurnal and seasonal variations in nitrogen fixation were noted.

KEY WORDS: Nitrogen fixation, *Thalassia testudinum*, Seagrass, Calothrix, Bimini, Soldier Key

241

Capriotti, A. (1962) Yeasts of the Miami, Florida, area. I. From Key Biscayne soils. Archiv. für Mikrobiologie, 41(-):142-146.

TIME COVERAGE: 1960

SUMMARY: This paper describes yeasts found in Key Biscayne soils

KEY WORDS: Yeasts, Soils, Key Biscayne, Species list

242

Capriotti, A. (1962) Yeasts of the Miami, Florida, area. II. From the Miami River. Archiv. für Mikrobiologie, 41(-):147-153.

TIME COVERAGE: 1960

SUMMARY: More than 300 yeast cultures collected from Miami River samples demonstrated the presence of 18 yeasts. Comparison of Miami River samples with those collected in Key Biscayne soils as well as Biscayne Bay revealed common species in all three habitats.

KEY WORDS: Yeasts, River water, Miami River, Key Biscayne, Species list

243

Capriotti, A. (1962) Yeasts of the Miami, Florida, area. III. From sea water, marine animals and decaying materials. Archiv. für Mikrobiologie, 42(-):407-414.

TIME COVERAGE: 1960

SUMMARY: The isolation and examination of yeasts from seawater, marine animals and decaying material demonstrated different patterns of distribution and speciation among these substrates. Yeast species were found with low frequency in intestinal tracts of marine animals, occurring with greater abundances in other environs. Interchange of species between terrestrial and inshore marine locales was apparent.

KEY WORDS: Yeasts, Sea water, Marine organisms, Biodegradation

244

Carballo, J. C., L. M. Valdez, M. Chacken, and J. R. Montague (1993) Analyses of decay and parrot fish bites along attached blades of turtle grass (*Thalassia testudinum*) from two sites in Biscayne Bay. Florida Scient., 56(Suppl. 1):17-18.

TIME COVERAGE: 1988 - 1989, 1990 - 1992

SUMMARY: Samples of *Thalassia* blades collected at the Crandon Marina and at Bear Cut showed the same patterns and proportions of fresh and decayed tissues. Parrot fish tended to graze selectively on completely decayed portions near the tips of the blades. Earlier data from 1988 - 1989 suggested grazing by parrot fish in Bear Cut had decreased. The establishment of an

artificial reef near Bear Cut in 1988 may have had an influence on abundance of parrot fish. The 1992 collection occurred after Hurricane Andrew.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Parrot fish, Crandon Marina, Bear Cut, Hurricane Andrew

245

Carder, K., R. Steward, P. Betzer, D. Johnson, and J. M. Prospero (1983) Chronology of an aeolian input event to the Sargasso Sea. Eos, 64(45):729.

TIME COVERAGE: 1980

SUMMARY: A major outbreak of Saharan dust passed over the Sargasso Sea in 1980. The flux of aeolian dust across the sea-air interface was calculated based on a free-floating sediment trap held at 30 m. Large aeolian particles were found in the trap during the middle of the event. These giant particles were not found in aerosol samples filtered at Key Biscayne.

KEY WORDS: Aerosols, Aeolian dust, Air-water interface, Sargasso Sea

246

Cardozo, Y., and B. Hirsch (1985) Florida artificial reefs - alive and growing. Sea Frontiers, 31(6):324-333.

TIME COVERAGE: 1985

SUMMARY: This articles describes the artificial reefs of Florida including the process of sinking ships destined to become reef material and fish colonization.

KEY WORDS: Artificial reefs, Attracting techniques, Habitat improvement, Dade County

247

Cardozo, Y., and B. Hirsch (1991) Tidal creeks and scuba gear. Sea Frontiers, 37(4):32-36.

TIME COVERAGE: 1991

SUMMARY: This article describes scuba diving in the creeks and canals of Biscayne Bay.

KEY WORDS: Mangrove swamps, Tidal inlets, Scuba diving

248

Carlton, J. M. (1974) Land-building and stabilization by mangroves. Environmental Conserv., 1(4):285-294.

TIME COVERAGE: 1974

SUMMARY: This paper reviews land-building and shore stabilization by mangroves, and transplantation of these plants.

KEY WORDS: Mangrove swamps, *Rhizophora mangle*, *Avicennia germinans*, *Laguncularia racemosa*, Florida Bay

249

Carlton, J. M. (1972) A preliminary survey of mangrove communities in Florida. Quart. J. Fla. Acad. Sci., 35(Suppl. 1):12.

TIME COVERAGE: 1972

SUMMARY: This work investigated the revegetated mangrove communities of the Bay.

KEY WORDS: Mangrove swamps, *Rhizophora mangle*, Virginia Key

250

Carpenter, J. H. (1977) Chemistry of copper and chlorine introduced into marine systems during energy production. NTIS DE85004334/XAB. Sponsored by Department of Energy. National Technical Information Service, Springfield, VA. 18 pp.

TIME COVERAGE: 1977

SUMMARY: This study describes Cu and chlorine species in seawater. Decreasing Cu complexing capacity was found with distance from shore.

KEY WORDS: Cu, Coastal waters, Chemical oceanography, Sea water, Gulf Stream, Turkey Point Power Plant, Chlorine

251

Carpenter, J. H., and C. A. Smith (1978) Reactions in chlorinated sea water. In: Water Chlorination: Environmental Impact and Health Effects. Proc., 2nd Conf. on the Environmental Impact of Water Chlorination. R. L. Jolley, H. Gorchev, and H. Hamilton, (eds.). Gatlinburg, TN, 1977. Ann Arbor Science, Ann Arbor, MI. 195-207.

TIME COVERAGE: 1977

SUMMARY: This citation reviews reactions that take place in chlorinated seawater including the formation of bromates and halogenated organic compounds, and copper complexing capacity.

KEY WORDS: Chlorination, Sea water, Halogen compounds, Bromine compounds, Cu

252

Carpenter, J. H., C. A. Smith, and R. G. Zika (1980) Reaction products from the chlorination of seawater. In: Water chlorination: environmental impact and health effects. Vol. 3. Proc., 3rd Conf. on Water Chlorination: Environmental Impact and Health Effects. R. L. Jolley, W. A. Brungs, and R. B. Cumming, (eds.). Colorado Springs, CO, 1979. Ann Arbor Science, Ann Arbor, MI. 379-385.

TIME COVERAGE: 1979

SUMMARY: This paper discusses the chemical species formed during the chlorination of seawater.

KEY WORDS: Chlorination, Sea water, Halogen compounds, Bromine compounds, Port Everglades Power Plant

253

Carpenter, J. H., C. A. Smith, and R. G. Zika (1981) Reaction products from chlorination of seawater. EPA 600/4-81-010. NTIS report PB81-172280. EPA, Environmental Research Laboratory, Gulf Breeze, FL. 52 pp.

TIME COVERAGE: 1981

SUMMARY: Chlorination of seawater in the presence of light produces bromate ions which can influence standard analytical procedures and represent an unknown factor in estuarine and coastal waters. The Cu complexing capacity of Biscayne Bay water was reduced with the addition of chlorine. Thus chlorination of seawater may produce toxicity and growth reduction through the indirect mechanism of Cu release and/or reduced binding capacity. Chloroform extracts of chlorinated Biscayne Bay water were found to contain halogenated compounds which are uncommon and posed unusual analytical problems.

KEY WORDS: Chlorination, Sea water, Halogen compounds, Bromine compounds, Port Everglades Power Plant, Cu

254

Carr, R. S., and J. G. Beriault (1984) Prehistoric man in southern Florida. In: Environments of South Florida: Present and Past II. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL. 551 pp.

TIME COVERAGE: 1984

SUMMARY: Man has lived in South Florida for at least the last 10,000 yrs. This citation synthesizes significant research in the region as well as the area's basic subsistence and settlement patterns.

KEY WORDS: Archaeology, Prehistoric man, South Florida

255

Carson, R. B. (1951) The Florida tropics. Econ. Geography, 27(4):321-339.

TIME COVERAGE: 1951

SUMMARY: This paper is a general discussion of the climate of Florida.  
KEY WORDS: Climate, Tropical environment, Temperature effects, Florida

256

Carter, L. J. (1974) The Florida Experience: Land and Water Policy in a Growth State. John Hopkins University Press, Baltimore.

TIME COVERAGE: 1974

SUMMARY: Chapter 6 of this book discusses Dade County.

KEY WORDS: Regional planning, Land use, Coastal zone management, Water policy, Environmental protection, Florida

257

Carter, R. W. G., and J. D. Orford (1982) When hurricanes sweep Miami Beach. Geographical Mag., 54(8):442-448.

TIME COVERAGE: 1982

SUMMARY: This article describes the effects of hurricanes on Miami Beach and what can be done to lessen damages.

KEY WORDS: Hurricanes, Miami Beach

258

Carver, J. R. (1962) Survey of Biscayne Bay (east of Homestead and Homestead Air Base): April 32 - May 15, 1962.

TIME COVERAGE: 1962

SUMMARY: The results of this survey indicated that the area of Biscayne Bay covered by this survey was chemically the equivalent of good clean ocean water. Some fresh water influence was apparent at the sampling points in the general vicinity of canal outfalls.

259

Casagrande, D. J. (1970) Geochemistry of amino acids in selected Florida peats. Ph.D. dissertation. Pennsylvania State University, University Park, PA. 245 pp.

TIME COVERAGE: 1970

SUMMARY: Peat samples were collected from various locations in South Florida and analyzed for amino acids. Attempts were also made to culture the microorganisms found in the peat samples.

KEY WORDS: Peat, Amino acids, Geochemistry, Everglades, Sediment

260

Causaras, C. R. (1982) Annotated bibliography of the geology and hydrology of the surficial aquifers in Dade, Broward, and Palm Beach counties, Florida. Open file report 82-154. US Geological Survey, Tallahassee, FL. 59 pp.

TIME COVERAGE: 1982

SUMMARY: This is a bibliography of citations related to aquifers in South Florida.

KEY WORDS: Bibliographies, Aquifers, Hydrology, Geology, Dade County, Broward County, Palm Beach County

261

Causaras, C. R. (1987) Geology of the surficial aquifer system, Dade County, Florida: lithologic logs. Water resources investigations rep. 86-4126. US Geological Survey, Tallahassee, FL. 240 pp.

TIME COVERAGE: 1987

SUMMARY: This report contains lithologic logs of material found during well excavation.

KEY WORDS: Aquifers, Geological structures, Surface water, Dade County

262

Chalk's International Airlines (1999?) Chalk's International Airlines: the craftsmanship of yesterday - the technology of today. Company history. Chalk's International Airlines, Miami, FL. Various paging.

TIME COVERAGE: 1919 - 1999

SUMMARY: This report is a history of Chalks International Airlines, which has been in operation in Biscayne Bay using mostly seaplanes since 1919.

KEY WORDS: Chalk's International Airlines, Seaplanes, Air transportation, Aircraft

263

Chapman, A. (1993) "Watch the Port of Miami". Tequesta, 53(-):7-30.

TIME COVERAGE: 1842 - 1993?

SUMMARY: This citation is a history of the development of the Port of Miami.

KEY WORDS: History, Harbors, Port installations, Miami

264

Chapman, V. J. (1962) Respiration studies of mangrove seedlings. I. Material and some preliminary experiments. Bull. Mar. Sci. Gulf Caribb., 12(1):137-167.

TIME COVERAGE: 1962

SUMMARY: The morphology of seedlings of three genera of mangroves was studied in this paper: *Avicennia nitida*, *A. marina*, *Rhizophora mangle*, *R. conjugata*, and *Brughiera gymnorhiza*. Initial experiments were designed to give some information about different types of treatment such as exposure to different levels of salinity. Respiration in *Avicennia* and *R. mangle* was lower in sea water than in distilled water, which may be due to the great excess of dissolved salts in sea water. There was also a difference in respiration rate between material floating in medium or on filter moistened paper which simulates a humid atmosphere. In *Rhizophora* the difference disappears with increasing age of the seedling. Specimens of *A. marina* were collected in the Miami area.

KEY WORDS: Mangrove swamps, *Avicennia nitida*, *Rhizophora mangle*, *Rhizophora conjugata*, *Brughiera gymnorhiza*, Respiration, *Avicennia marina*

265

Chapman, V. J. (1962) Respiration studies of mangrove seedlings. II. Respiration in air. Bull. Mar. Sci. Gulf Caribb., 12(2):245-263.

TIME COVERAGE: 1962

SUMMARY: This paper is a continuation of the respiration study reported in Chapman (1962).

KEY WORDS: Mangrove swamps, *Avicennia nitida*, *Rhizophora mangle*, *Rhizophora conjugata*, *Brughiera gymnorhiza*, Respiration, *Avicennia marina*

266

Chardon, R. E. (1982) A best-fit evaluation of De Brahm's 1770 chart of northern Biscayne Bay, Florida. Amer. Cartographer, 9(1):47-67.

TIME COVERAGE: 1770

SUMMARY: A description and evaluation of De Brahm's 1770 chart of northern Biscayne Bay was presented for the purpose of reconstruction of the area's natural environment in the 1770s. Current shorelines are compared to those in the 1770 chart.

KEY WORDS: Mapping, Coastal landforms, Geography, De Brahm, W. G., North Bay

267

Chardon, R. E. (1975) The Cape Florida Society of 1773. Tequesta, 35(-):1-36.

TIME COVERAGE: 1773

SUMMARY: The Cape Florida Society was formed to develop the land given to Lord Dartmouth by King George III. The Society was the result of the efforts of two Swiss entrepreneurs, W. G. de Brahm and Lord Dartmouth. The proposed settlement never materialized.

KEY WORDS: De Brahm, W. G., Cape Florida Society, Mapping, Natural resources

268

Chardon, R. E. (1977) Cartographic analysis of coastal change: natural and urban. In: Research Techniques in Coastal Environments. H. J. Walker (ed.). Geoscience and Man. Vol. 18. School of Geoscience, Louisiana State University, Baton Rouge, LA.

TIME COVERAGE: 1977

SUMMARY: Historical maps were used to evaluate coastal change in northern Biscayne Bay and Norris Cut. Historical maps permitted the dating of the formation of a tidal inlet to within a nine year period. Nautical charts from 1887 and 1974 were used to compile a map of open-water dredge and fill in northern Biscayne Bay.

KEY WORDS: Coastal landforms, Coastal zone, Mapping, Dredging, Norris Cut

269

Chardon, R. E. (1978) Coastal barrier changes, 1779-1867, Biscayne Bay area, Florida. Geology, 6(6):333-336.

TIME COVERAGE: 1770 - 1867

SUMMARY: Examination of historical maps of the pre-urban sedimentary barrier bordering northern Biscayne Bay indicated that there was a net shore retreat in the northern Atlantic portion of the barrier, and a net spit accretion in two areas to the south.

KEY WORDS: Coastal morphology, Barriers

270

Chardon, R. E. (1976) Evaluating portions of three late 18th-century maps by core-boring analysis. National Geographic Society Res. Rep., 17(-):281-299.

TIME COVERAGE: 1976

SUMMARY: This report summarizes the results of efforts to determine, using core techniques and boring log data, the accuracy of three late 18th century maps of the northern Biscayne Bay region. In some areas, the 18th century maps exhibit a high degree of geographic correspondence with later and modern charts, other portions of the maps are incompatible with the vegetation or shoreline patterns depicted on later charts.

KEY WORDS: Mapping, Coring, Coastal landforms, Geography, De Brahm, W. G., Key Biscayne, North Bay

271

Chardon, R. E. (1976) A geographical history of the Biscayne Bay area. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 235-245.

TIME COVERAGE: 1763 - 1976?

SUMMARY: This paper describes the geographical history of Biscayne Bay which is said to start ca. 1100 BCE. Small human settlements in the area began ca. 300 ACE and the indigenous people utilized local available resources until ca. 1763. After an uninhabited but exploitative 40-yr period, pioneer agricultural colonization began. Founding of Miami in 1896 and an expanding national economy led to continued intense urbanization leading to major modifications of the environment.

KEY WORDS: Geography, Natural resources, Coastal zone

272

Chardon, R. E. (1975) Northern Biscayne Bay in 1776. Tequesta, 35(-):37-74.

TIME COVERAGE: 1776

SUMMARY: This paper describes northern Biscayne Bay, then called Dartmouth Stream, population and uses during the late 18th century.

KEY WORDS: Geography, De Brahm, W. G., Mapping, Romans, B. A., North Bay

273

Chardon, R. E. (1977) Notes on south Florida place names: Norris Cut. Tequesta, 37(-):51-61.

TIME COVERAGE: 1977

SUMMARY: Early maps suggest that Norris Cut was created between 1829 and 1838 due to natural causes, quite possibly by the Hurricane of 1835. Previous names for the cut were Narrows Cut, Narrow Cut, Narres's Cut and Norez Cut. Norris Cut first appears by that name in 1862.

KEY WORDS: Norris Cut, Mapping, Hurricane of 1835

274

Charles McKay and Associates (1973) An evaluation: the FEC ocean terminal; a special purpose port serving Miami and South Florida. Charles McKay and Associates, Miami, FL. 76 pp.

TIME COVERAGE: 1973

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Florida East Coast Railway, Cargoes, Shipping, Port installations, Miami

275

Charles, R. (1975) Aspects of the biology of the mojarra, *Eucinostomus gula* (Quoy and Gaimard), in Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 107 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: Catch per haul varied seasonally, the highest levels being in August and September. There were two major recruitment peaks, May through July, and November. Mojarra consumed benthic invertebrates, and some seasonal changes in feeding habits were observed.

KEY WORDS: Mojarra, *Eucinostomus gula*, Life history, Key Biscayne

276

Cheung, T. S. (1969) The environmental and hormonal control of growth and reproduction in the adult female stone crab, *Menippe mercenaria* (Say). Biol. Bull., 136(3):327-346.

TIME COVERAGE: 1966 - 1967

SUMMARY: This citation is a study of the reproduction of stone crabs. Specimens were collected in Biscayne Bay.

KEY WORDS: Stone crab, *Menippe mercenaria*, Growth, Reproduction, Hormones, Seasonal variations

277

Chin, D. A. (1990) A method to estimate canal leakage to the Biscayne Aquifer, Dade County, Florida. Water - Resources Investigations rep. 90-4135. US Geological Survey, Tallahassee, FL. 32 pp.

TIME COVERAGE: 1989

SUMMARY: This report describes the development of a quantitative relation between canal leakage and canal and aquifer characteristics in Dade County. Leakage characteristics were described in terms of reach transmissivity defined as the volume flow rate out of the channel per unit length of the channel per unit drawdown. Drawdown is defined as the difference in altitude between the water surface in the canal and the water table in the adjacent aquifer.

KEY WORDS: Seepages, Canals, Channel flow, Snapper Creek Extension Canal, L-31N Canal, Biscayne Aquifer, Dade County

278

Chin Fatt, J. (1986) Canal impact on Biscayne Bay salinities. M.Sc. thesis. University of Miami, Coral Gables, FL. 229 pp.

TIME COVERAGE: 1986

SUMMARY: A two-dimensional finite element numerical model to simulate transport in an advection dominated shallow estuarine bay was developed. The model predicts the salinity distribution in the bay for any prescribed rate of fresh water inflow and initial salinity distribution.

KEY WORDS: Salinity, Canals, Runoff, Mowry Canal, Military Creek, Black Creek, Moody Canal, Snapper Creek, Cutler Drain

279

Chin Fatt, J., and J. D. Wang (1987) Canal discharge impacts on Biscayne Bay salinities, Biscayne National Park. Research/resources management rep. SER-89. National Park Service, Southeast Regional Office, Atlanta, GA. 229 pp.

TIME COVERAGE: 1987

SUMMARY: A two-dimensional Finite element numerical model to simulate transport in an advection-dominated shallow estuarine bay was developed. The model predicts the salinity distribution in the bay for any prescribed rate of freshwater inflow and initial salinity distribution. The model was used to investigate the impact of contemplated doubling of freshwater inflow rates into Biscayne Bay.

KEY WORDS: Canals, Fresh water, Salinity, Central Bay, Biscayne National Park

280

Chin Fatt, J., and J. D. Wang (1986) Canal impact on Biscayne Bay salinities. Tech. rep. 86-005. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 228 pp.

TIME COVERAGE: 1985

SUMMARY: A two-dimensional Finite Element numerical model was developed to simulate transport in an advection dominated shallow estuarine bay such as Biscayne Bay. The model predicts salinity distribution in the Bay for any prescribed rate of fresh water inflow and initial salinity distributions.

KEY WORDS: Stormwater runoff, Canals, Salinity, Fresh water, Mowry Canal, Military Creek, Black Creek, Moody Canal, Snapper Creek, Cutler Drain

281

Chitty, N. (1973) Aspects of the reproductive biology of the spiny lobster, *Panulirus guttatus* Latreille. M.Sc. thesis. University of Miami, Coral Gables, FL. 60 pp.

TIME COVERAGE: 1970 - 1971

SUMMARY: Sexual development was investigated in relation to season, size, molt cycle, spermatophoric mass deposition and eggbearing for the spiny lobster.

KEY WORDS: Spiny lobster, *Panulirus guttatus*, Reproduction, Government Cut

282

Chow, S., M. E. Clarke, and P. J. Walsh (1993) PCR-RFLP analysis on thirteen western Atlantic snappers (subfamily Lutjaninae): a simple method for species and stock identification. Fishery Bull., 91(4):619-627.

TIME COVERAGE: 1993

SUMMARY: Amplification of two mitochondrial genes using fresh or frozen samples, ethanol-preserved embryos and larvae, and alcohol-preserved museum samples of thirteen western Atlantic snapper species, and results of restriction fragment length polymorphism (RFLP) on these two DNA fragments were described within and between species.

KEY WORDS: Population genetics, Stock identification, Stock assessment, Snappers, Lutjanidae

283

Chow, S., and P. J. Walsh (1992) Biochemical and morphometric analyses for phylogenetic relationships between seven snapper series (subfamily Lutjaninae) of the western Atlantic. Bull. Mar. Sci., 50(3):508-519.

TIME COVERAGE: 1992

SUMMARY: Electrophoretic and skull morphometric comparisons among seven species were performed. Cluster and additive tree analyses based on the genetic distance indicated that: 1) there were at least two distinct groups (gray and red snapper groups) within the genus *Lutjanus*; 2) the lane snapper has a closer relationship with the red snapper group than with the gray snapper group; 3) there is a closer relationship between *Lutjanus* and *Ocyurus chrysurus* than between *Rhomboplites aurorubens* and *Lutjanus* or *O. chrysurus*.

KEY WORDS: Phylogenetics, Animal morphology, Snappers, Lutjanidae, *Ocyurus chrysurus*, *Rhomboplites aurorubens*, *Lutjanus analis*, Mutton snapper, *Lutjanus apodus*, School master snapper, *Lutjanus griseus*, Gray snapper, *Lutjanus synagris*, Lane snapper, *Lutjanus vivanus*, Silk snapper, Yellow tail snapper, Vermillion snapper

284

Christo (1986) Christo: Surrounded Islands: Biscayne Bay, Greater Miami, Florida, 1980-83. Harry N. Abrams, New York, NY. 162 pp.

TIME COVERAGE: 1983

SUMMARY: This book describes the Surrounded Islands Project by artist Christo. Eleven islands were surrounded with 6 million square feet of pink woven polypropylene fabric covering the surface of the water, floating and extending 200 feet from the island into Biscayne Bay. The fabric was sewn in patterns to follow the contours of the islands. The Surrounded Islands Project remained in place for two weeks in 1983.

KEY WORDS: Barrier islands, Art

285

Chulamanis, S., and C. Chulamanis (1978) Fossil mangrove reef of Key Biscayne. Sea Frontiers, 24(2):108-114.

TIME COVERAGE: 1978

SUMMARY: This paper describes the fossil mangrove reef found by Hoffmeister on the northern tip of Key Biscayne.

KEY WORDS: Vegetal fossils, Reefs, Mangrove swamps, Erosion, Black mangrove, *Avicennia nitida*, Key Biscayne

286

Chung, G. S. (1988) Application of nuclear fission track mapping of uranium to the study of diagenesis in carbonate rocks. Ph.D. dissertation. University of Miami, Coral Gables, FL. 375 pp.

TIME COVERAGE: 1988

SUMMARY: Detailed spatial U distributions were investigated in modern carbonates and submarine cements, and in young ooid and reef limestones using the fission track techniques. Pleistocene Miami limestone was used in the study.

KEY WORDS: U, Carbonate rocks, Diagenesis, Coral, Ooids, Limestone

287

Ciardelli, A. (1967) The anatomy of the feeding mechanism and the food habits of *Microspathodon chrysurus* (Pisces: Pomacentridae). Bull. Mar. Sci., 17(4):845-883.

TIME COVERAGE: 1967

SUMMARY: The morphology and action of the bones, ligaments and muscles involved in feeding by demoiselles were described.

KEY WORDS: Demoiselle, *Microspathodon chrysurus*, Feeding, Food consumption, Ajax Reef

288

Ciardelli, A. (1966) Food and feeding of *Microspathodon chrysurus* (Pisces: Pomacentridae). M.Sc. thesis. University of Miami, Coral Gables, FL. 114 pp.

TIME COVERAGE: 1966

SUMMARY: Feeding behavior of the demoiselle fish was studied using stomach contents.

KEY WORDS: Demoiselle, *Microspathodon chrysurus*, Feeding, Food consumption, Ajax Key, Bahamas

289

Clapp, R. B., R. C. Banks, D. Morgan-Jacobs, and W. A. Hoffman (1982-1983) Marine birds of the southeastern United States and Gulf of Mexico. Biological Services Program FWS/OBS-82/01; 82/20; 83/30. US Fish and Wildlife Service, Office of Biological Services, Washington, DC.

TIME COVERAGE: 1982

SUMMARY: This is a guide to the birds of the southeastern US including Florida.

KEY WORDS: Marine birds, Southeast United States, Gulf of Mexico, Guide

290

Clark, R. R. (1989) Beach conditions in Florida - a statewide inventory and identification of the beach erosion problem areas in Florida for beach management planning. In: Beach Preservation Technology '89: Strategies and Alternatives in Erosion Control. L. S. Tait, (comp.). Tampa, FL, 1989. Florida Shore and Beach Preservation Association, Tallahassee. 219-228.

TIME COVERAGE: 1989

SUMMARY: This citation is a statewide survey of beach erosion problems.

KEY WORDS: Beach erosion, Barrier beaches, Restoration, Florida

291

Clark, R. R. (1990) Beach conditions in Florida: a statewide inventory and identification of the beach erosion problem areas in Florida. Beaches and shores technical and design memorandum 89-1. Florida Department of Natural Resources, Division of Beaches and Shores, Tallahassee, FL. 185 pp.

TIME COVERAGE: 1990

SUMMARY: This document presented the results of an investigation of beach erosion conditions in Florida, and updates the beach length data provided in the National Shoreline Study of 1971.

KEY WORDS: Beach erosion, Barrier beaches, Restoration, Florida

292

Clark, R. R. (1993) Hurricane Andrew's impact on southeast Florida's beaches. Abstracts with programs (Geological Society of America), 25(4):8.

TIME COVERAGE: 1992

SUMMARY: This abstract briefly describes the impact of Hurricane Andrew on South Florida Beaches. In Dade County, erosion conditions worsened towards the south and on Key Biscayne which was completely inundated by a 9- to 10-foot storm tide, beach lowering occurred along the island with erosion balanced with both offshore sand losses and extensive washover deposits inland of the beach.

KEY WORDS: Beach erosion, Storm surge, Hurricane Andrew, Southeast Florida, Elliott Key, Key Biscayne

293

Clarke, T. L. (1983) Transverse doppler current profilers. In: Proc., Oceans '83. Institute of Electrical and Electronics Engineers, New York, NY. 194-198.

TIME COVERAGE: 1983

SUMMARY: A prototype transverse Doppler current profiler was used in Bear Cut and the Chesapeake Bay. The profiler can provide real time current monitoring and shipping channels.

KEY WORDS: Doppler effect, Profilers, Acoustic current meters, Bear Cut

294

Clemente, A. J. (1986) The need to streamline the erosion control process: a decade of experience at Key Biscayne, Florida. In: Ann. Conf. on Beach Preservation [1984-1985]. L. Tait, (ed.). Florida Shore & Beach Preservation Association, Tallahassee, FL. 114-121.

TIME COVERAGE: 1986

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach erosion, Key Biscayne

295

Cleo, J., and H. Mesouf (1964) Florida, Polluted Paradise. Chilton Books, Philadelphia, PA. 183 pp.

TIME COVERAGE: 1964

SUMMARY: This book discusses the problems of Florida. One chapter discusses pollution in Biscayne Bay.

KEY WORDS: Land use, Water pollution, Sociological aspects, Development projects, Florida

296

Coastal Technology Corporation (1993) Effects of Hurricane Andrew on Dade County's artificial reefs, Florida. Submitted to Metro-Dade Dept. of Environment Resources Management. Coastal Technology Corporation, Coral Gables, FL. 17 pp.

TIME COVERAGE: 1992

SUMMARY: The purpose of this study was to evaluate the impact of Hurricane Andrew on the marine artificial reefs located on the east side of the barrier islands. Damage to the reefs was mainly due to 30- to 35-foot storm waves generated by the hurricane. Movement of deployed reefs followed the direction of the storm waves, mainly west in Dade County. Orienting reef structures in an east-west direction would minimize such movement.

KEY WORDS: Artificial reefs, Hurricane Andrew

297

Coastal Technology Corporation (1989) Miamarina at Bayside wave agitation study. Prepared for the City of Miami. Coastal Technology Corporation, Coral Gables, FL. 44 pp.

TIME COVERAGE: 1989

SUMMARY: The purpose of this study was to evaluate cost effective modifications to the Miamarina towards reducing the wave agitation within the site.

KEY WORDS: Wave height, Wave effects, Marinas, Miamarina

298

Cocking, S. (1997) Bay watchers aglow: record catches. Sea trout. Tarpon. S. Florida's aquatic back yard is back. The Miami Herald, Miami, FL. Mar. 23. Outdoors. Section C. 17C.

TIME COVERAGE: 1997

SUMMARY: This article describes the improved recreational fisheries of Biscayne Bay.

KEY WORDS: Recreational fisheries

299

Cocking, S. (1996) A dive without the drive for diving, Biscayne Park remains well-kept secret. The Miami Herald, Miami, FL. July 5. Sports. 8C.

TIME COVERAGE: 1996

SUMMARY: This article describes diving at Biscayne National Park.

KEY WORDS: Biscayne National Park

300

Cocking, S. (1999) Reel in the new year with easy catch: trout. The Miami Herald, Miami, FL. Jan. 1.

TIME COVERAGE: 1999

SUMMARY: Trout fishery in north Biscayne Bay has improved since the sharp decline in the 1980s. The water quality as improved and seagrass beds in the area support the trout. The state-wide ban that took effect in 1995 also helped boost the bait supply and prevent large ocean-going trout from being caught before they could spawn.

KEY WORDS: Fisheries, Trout

301

Cocoanut Grove Development Company (1910) Cocoanut Grove by Bay Biscayne: the land of perpetual June. Cocoanut Grove Development Co., Coconut Grove, FL. 55 pp.

TIME COVERAGE: 1910

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Coconut Grove, Real estate development, Description

302

Cody, E. (1983) Wrapping with Christo: the artist begins putting the pink on Biscayne Bay, but nature squalls. The Washington Post, Washington, DC. May 5. 1.

TIME COVERAGE: 1983

SUMMARY: Account of the deployment of the pink polypropylene fabric around the Biscayne Bay islands.

KEY WORDS: Christo, Surrounded Islands

303

Cofer-Shabica, S. V., and J. D. Wang (1989) The effects of freshwater canal discharges on salinities in Biscayne National Park. In: Coastal Zone '89. Proc., 6th Symp. on Coastal and Ocean Management. O. T. Magoon, H. Converse, D. Miner, L. T. Tobin, and D. Clark, (eds.). Charleston, SC, 1989. American Society of Civil Engineers, New York. 2738-2753.

TIME COVERAGE: 1989

SUMMARY: A high correlation exists between canal discharge and Biscayne Bay salinities in the vicinity of Mowry Canal. Intermittent canal discharges lower the salinity near the mouth of the canal for several hours. The possible effects of this changes in salinity were discussed.

KEY WORDS: Canals, Fresh water, Salinity, Mowry Canal, South Bay, Biscayne National Park

304

Cohen, A. D., and W. Spackman (1974) The petrology of peats from the Everglades and coastal swamps of southern Florida. In: Environments of south Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 233-255.

TIME COVERAGE: 1974

SUMMARY: This citation describes the peats formed in various wetland environments of South Florida.

KEY WORDS: Peat, Florida, Mangroves, Everglades

305

Cohn, J. P. (1994) Restoring the Everglades. Bioscience, 44(9):579-583.

TIME COVERAGE: 1994

SUMMARY: Approximately 1400 miles of canals divert water from the Everglades, sending most of it east into the Atlantic Ocean or south into Biscayne Bay. The US Army Corps of Engineers built most of the canals, pumps, and gates during the past 50 years and manages

them in cooperation with the South Florida Water Management District, an independent state agency that controls virtually all water flow in the southern part of the state. Designed to prevent flooding and to open land for development, the canals have broken up what was once a single ecosystem into separate compartments.

KEY WORDS: Everglades, Water management, Food control, Canals, Ecological effects, Urbanization

306

Cole, C. A. (1989) Effects of salinity upon the leaf morphology and leaf growth rate of the dwarf form of the red mangrove (*Rhizophora mangle* L.) in southern Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 130 pp.

TIME COVERAGE: 1989

SUMMARY: Leaf morphology of dwarf red mangroves can be related to the growing conditions experienced by leaves during the first 100 days of their existence when growth is most rapid. Increasing salinity increased the variability in leaf shapes and sizes within trees rather than simply decreasing leaf sizes as had been hypothesized. This was attributed to differences in osmotic potential within tree branches.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Salinity, Biscayne National Park

307

Cole, S. A. (1974) The effect of thermal stress conditions on benthic foraminifera in Biscayne Bay, Florida. M.Sc. thesis. University of Illinois, Urbana, IL. 106 pp.

TIME COVERAGE: 1973

SUMMARY: Sediment samples were obtained from a shallow lagoon east of the Old Cutler area. The lagoon is adjacent to the Cutler Power Plant of Florida Power and Light. Under thermal stress conditions, the dominant species of foraminifera was found to comprise a large percentage of the total population, whereas under normal conditions more species could compete successfully. High temperatures will also result in malformed tests.

KEY WORDS: Foraminifera, Thermal pollution, Cutler Power Plant

308

Collins, M. R. (1985) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - striped mullet. Biological rep. 82 (11.34). US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 11 pp.

TIME COVERAGE: 1985

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of striped mullet are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Striped mullet, Mullet, *Mugil cephalus*, South Florida

309

Collins, M. R. (1985) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - white mullet. Biological rep. 82 (11.39). US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 7 pp.

TIME COVERAGE: 1985

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of white mullet are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: White mullet, Mullet, *Mugil curema*, South Florida

310

Colon, Y. (1998) Armed volunteers battle to restore state park. The Miami Herald, Miami, FL. April 22. Section B, 4B.

TIME COVERAGE: 1998

SUMMARY: This article describes the ongoing efforts to restore the vegetation of the Cape Florida State Recreation Area to its original state after the passage of Hurricane Andrew.

KEY WORDS: Cape Florida, Hurricane Andrew, Flora

311

Comp, G. S., and W. Seaman (1985) Estuarine habitat and fishery resources of Florida. In: Florida Aquatic Habitat and Fishery Resources. W. Seaman (ed.). Florida Chapter, American Fisheries Society, Kissimmee, FL. 543 pp.

TIME COVERAGE: 1985

SUMMARY: This citation describes the estuarine habitats of Florida. Descriptions of the major estuaries in the state are included.

KEY WORDS: Estuaries, Estuarine fisheries, Estuarine dynamics, Florida

312

Compton, G. (1970) Beautiful blue Biscayne Bay. The Miamian, -(October):28-30.

TIME COVERAGE: 1970

SUMMARY: This is a short outline of how the Biscayne Bay shoreline changed with time.

KEY WORDS: Urbanization, Pollution

313

Compton, M. J. M. (1999) Environmental benefits and impacts of dredging the Miami River. M.A. report. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. Various paging.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Dredging, Environmental impact, Miami River

314

Conley, W. J., and B. A. Hoffman (1987) Nesting activity of sea turtles in Florida, 1979-1985. Florida Scient., 50(-):201-210.

TIME COVERAGE: 1979 -1985

SUMMARY: Loggerhead and leatherback turtle nesting activities remained fairly stable during the seven year period of the study, while green turtle nesting increased markedly during the 1985 season.

KEY WORDS: Turtles, Loggerhead turtle, *Caretta caretta*, Nesting, Leatherback turtle, Green turtle, *Dermochelys coriacea*, *Chelonia mydas*

315

Connell Associates, Inc. (1975) Florida Power and Light Company biological field survey; preliminary vegetation map with sampling station locations at the South Dade plant site. Report. Connell Associates, Inc., Miami, FL.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Vegetation cover, Maps, Turkey Point, South Bay

316

Connet-Richards, R. (1995) When blimps were warships. S. Florida Hist. Mag., 23(1):30-32.

TIME COVERAGE: 1939-1945

SUMMARY: The activities of lighter than air ships in South Florida during World War II are described.

KEY WORDS: Lighter than air ships, History, Richmond Naval Air station

317

Conover, D. O., and G. K. Reid (1975) Distribution of the boring isopod *Sphaeroma terebrans* in Florida. *Florida Scient.*, 38(2):65-72.

TIME COVERAGE: 1975

SUMMARY: Distribution of this isopod was recorded by measuring its relative density at stations around the state of Florida. The species was found continuously on the west coast as far down as Flamingo; and on the east coast intermittently from New Smyrna Beach to Jupiter, and continuously from Jupiter to Card Sound. The organism was absent in the Florida Keys. *Sphaeroma* was usually found on the prop roots of red mangroves and other trees exposed to water.

KEY WORDS: Boring organisms, *Sphaeroma terebrans*, Mangrove swamps, Geographical distribution, Florida

318

Continental Shelf Associates Inc. (1989) A biological assessment of a proposed beach restoration project at Fisher Island, Florida. Prepared for Olsen Associates Inc. Continental Shelf Associates Inc., Jupiter, FL. 22 pp.

TIME COVERAGE: 1988

SUMMARY: The purpose of the study was to describe and delineate the inshore habitats along the east coast of Fisher Island in preparation for a proposed beach restoration program. The east coast of the island is on the Atlantic Ocean and its community is influenced by oceanic factors.

KEY WORDS: Beach nourishment, Aragonite, Biota, Habitat, Fisher Island

319

Continental Shelf Associates Inc. (1990/91) Synthesis of available biological, geological, chemical, socioeconomic, and cultural resource information for the south Florida area. Continental Shelf Associates Inc., Jupiter, FL. 33 pp + appendix.

TIME COVERAGE: 1990-1991

SUMMARY: Because there have been no major oil spills studies in South Florida, results from similar environments elsewhere were reviewed. The largest recorded oil spill in a similar environment was the one that took place in 1986 at Bahía Las Minas, Panama.

KEY WORDS: Natural resources, Geology, Oil and gas exploration, South Florida, Florida Keys, Florida Bay, Reef Tract, Panama

320

Continental Shelf Associates Inc. (1983) Technical report on the availability of data on marinas that are located on Biscayne Bay, Dade County, Florida. Final Rep. US Army Corps of Engineers, contract no. DACW17-83-C-00025. Continental Shelf Associates Inc., Jupiter, FL. Vol. I, Report, 168 pp. Vol. II, Data appendices, various paging.

TIME COVERAGE: 1983

SUMMARY: This report describes data availability on the zones of influence and threshold levels of water quality, sediment and selected biological data for marinas in Biscayne Bay. A majority of the data available were associated with pre-permit baseline surveys and permit compliance monitoring studies. Of the 83 marinas, 28 had available data. Eleven of the marinas were constructed before 1970. For most marinas there were not data to support the supposition that water quality was degraded as the result of marine activities. This did not necessarily indicate that marinas do not impact water quality but that data are inadequate.

KEY WORDS: Marinas, Water quality, Sediment chemistry, Seagrass, Oil spills, Pollution

321

Cook, C. (1979) A field study of the interrelationship of *Bostrychia* and *Rhizophora mangle*. In: Marine Science Teachers Research Experience. B. Burke, and A. Volker (eds.). Sea Grant special rep. no. 17. University of Miami Sea Grant, Coral Gables, FL. 35-56.

TIME COVERAGE: 1974 - 1979

SUMMARY: This study determined the growth of red mangroves as a function of the increase in their diameter at breast high. Diatoms, microinvertebrates, protozoans and worms associated with the red alga *Bostrychia* which grows on the mangrove roots were identified.

KEY WORDS: Red algae, *Bostrychia*, Red mangrove, *Rhizophora mangle*

322

Cooke, C. W. (1945) Geology of Florida. Geol. Bull. 29. Florida Geological Survey, Tallahassee, FL. 339 pp.

TIME COVERAGE: 1945

SUMMARY: This citation is a comprehensive description of the geology of Florida.

KEY WORDS: Geology, Landforms, Florida

323

Cooke, C. W. (1939) Scenery of Florida interpreted by a geologist. Geol. Bull. 17. State Geological Survey, Tallahassee, FL. 118 pp.

TIME COVERAGE: 1939

SUMMARY: This citation is a comprehensive description of geological features of Florida.

KEY WORDS: Geology, Landforms, Coastal landforms, Florida, Florida Keys, Dry Tortugas, Rainfall, Marquesas, Florida Bay

324

Cooke, C. W., and S. Mossom (1929) Geology of Florida. In: 20th Ann. Rep. of the Florida State Geological Survey. Report. Florida State Geological Survey, Tallahassee, FL. 29-228.

TIME COVERAGE: 1929

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Geology, Landforms, Florida

325

Cooksey, K. E., B. Cooksey, P. M. Evans, and E. L. Hildebrand (1976) Benthic diatoms as contributors to the carbon cycle in a mangrove community. In: Proc., 10th European Symp. on Marine Biol. G. Persoone, and E. Jaspers, (eds.). Ostand, Belgium, 1975. Institute for Marine Scientific Research, Bredene, Belgium. Vol. 2: 165-178.

TIME COVERAGE: 1976

SUMMARY: Soluble organic matter in sediment porewater from a mangrove community increased during the dry season and decreased in the wet part of the year. The biological activity of soluble material extracted from the sediment was measured using the growth yield of two diatoms as indicators of the presence of assimilable organic carbon.

KEY WORDS: Diatoms, Amphora, Mangrove swamps, Carbon cycle, Card Sound

326

Cooksey, K. E., and B. Cooksey (1978) Growth-influencing substances in sediment extracts from a subtropical wetland: investigation using a diatom bioassay. J. Phycol., 14(3):347-352.

TIME COVERAGE: 1975

SUMMARY: A biological assay using two varieties of *Amphora coffeaeformis* was used to investigate the changes in the properties of soluble organic carbon in sediments taken from a coastal wetland. During January to May sediment extracts became increasingly inhibitory to diatom growth. After the onset of the spring rains, the inhibitory properties of the extracts disappeared. Substances capable of promoting mixotrophic growth and heterotrophic growth

were found in extracts taken in July and December. These positive responses took place at the time of mangrove leaf fall.

KEY WORDS: Mangrove swamps, Benthos, Diatoms, Sediment, Detritus, Little Card Sound, *Rhizophora mangle*, *Amphora coffeaeformis*, Growth inhibition

327

Cooksey, K. E., E. L. Hildebrand, and B. Cooksey (1976) The role of microorganisms as indicators of changing environmental conditions in mangrove and marsh communities. Final report (section B) on a research project in South Dade County. Submitted to Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 130 pp.

TIME COVERAGE: 1973 - 1976

SUMMARY: The purpose of this study was to determine the role of plant litter systems in the Florida Power and Light study site in south Dade County. This is the final study report.

KEY WORDS: Microorganisms, Diatoms, Dissolved organic carbon, Detritus, Mangrove swamps, Marshes, Indicators, Little Card Sound, Sediment, Salinity, Interstitial waters

328

Cooper, D. J. (1986) Variability in biogenic hydrogen sulfide emissions from selected Florida ecosystems. M.Sc. thesis. University of Miami, Coral Gables. 164 pp.

TIME COVERAGE: 1986

SUMMARY: Hydrogen sulfide emission fluxes by a variety of Florida ecosystems were studied. One of the study sites was in Virginia Key.

KEY WORDS: Hydrogen sulfide, Emission sources, Biogenic materials, Marshes, Tidal flats, Wetlands, Florida, Everglades, Merritt Island, Virginia Key

329

Cooper, R. M., and J. Lane (1987) An atlas of eastern Dade County surface water management basins. Tech. memo. South Florida Water Management District, Resource Planning Department, Water Resources Division, West Palm Beach, FL. 97 pp.

TIME COVERAGE: 1987

SUMMARY: This report is an atlas of the 17 surface water management basins of eastern Dade County.

KEY WORDS: Water management, Flood control, River basins, Drainage water, Canals, Dade County

330

Corcoran, E. F. (1983?) Report on the analyses of five (5) Biscayne Bay sediments. Unpublished manuscript. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1983

SUMMARY: Five sediment samples collected in Biscayne Bay were analyzed for hydrocarbons, pesticides and trace metals.

KEY WORDS: Sediment analysis, Hydrocarbons, Pesticides, Herbicides, PCBs, Cd, Cu, Hg, Pb, Zn, As

331

Corcoran, E. F., M. S. Brown, F. R. Baddour, S. A. Chasens, and A. D. Freay (1983) Biscayne Bay hydrocarbon study. Final rep. Florida Department of Natural Resources, St. Petersburg, FL. 327 pp.

TIME COVERAGE: 1982 - 1983

SUMMARY: The purpose of this study was to prepare a court-competent database on the distribution of petroleum and naturally-occurring hydrocarbons in water, surface sediments,

sediment cores and organisms collected in Biscayne Bay. The samples with the highest concentrations of hydrocarbons in water and sediments were collected in the Miami River. The sediments with the highest hydrocarbons levels were associated with boats and ships, and with land runoff.

KEY WORDS: Hydrocarbons, Oil pollution, Hazard assessment, Baseline studies, Sediment, Body burden, Radiocarbon dating, Grain size, Organic carbon

332

Corcoran, E. F., M. S. Brown, and A. D. Freay (1987) Organic pollution of the water in the Black Creek vicinity, Biscayne National Park. Research/resources management rep. SER-86. National Park Service, Southeast Regional Office, Atlanta, GA. 18 pp.

TIME COVERAGE: 1987

SUMMARY: The purpose of this study was to investigate possible causes for the changes that occurred in the Black Creek area. This report discusses organic pollution of water and sediment pore waters in the area. Existing bottom communities were described in Froelich (1955).

KEY WORDS: Hydrocarbons, Water pollution, Insecticides, Herbicides, PCBs, Black Creek, Biscayne National Park

333

Corcoran, E. F., M. S. Brown, and A. D. Freay (1984) The study of trace metals, chlorinated pesticides, polychlorinated biphenyls and phthalic acid esters in sediments of Biscayne Bay. In-house rep. Dade County Environmental Resources Management, Miami, FL. 59 pp.

SUMMARY: The purpose of this study was to establish baseline data regarding levels of synthetic organic materials and trace metals in Biscayne Bay sediments. The sediments analyzed were collected as part of the study described in Corcoran *et al.* (1983). In general, highest levels of the organic compounds and metals analyzed were found in the northern Bay.

KEY WORDS: As, Cd, Cr, Cu, Hg, Pb, Zn, Insecticides, PCBs, Phthalate esters, Sediment analysis

334

Corcoran, E. F., M. S. Brown, and S. C. Snedaker (1988) Water quality characteristics of a southeast Florida Sewage Treatment and Bioeffects Laboratory. Florida Scientist, 51(1):49-55.

TIME COVERAGE: 1988

SUMMARY: Untreated wastewater was supplied to the lab from the Virginia Key Sewage Treatment Plant for processing using primary and secondary treatment methods yielding different effluents. The effluents were diluted with seawater and organisms exposed to the diluted effluent in bioeffects tanks. The wastewater and seawater were analyzed for a variety of contaminants.

KEY WORDS: Water quality, Sewage disposal, Sewage Treatment and Bioeffects Laboratory (STABEL), Virginia Key, Nutrients, Cd, Cr, Cu, Pb, Zn, Pesticides, PCBs, Phthalic acid esters

335

Corrales, J., L. B. Nye, S. Baribeau, N. J. Gassman, and M. C. Schmale (2000) Characterization of scale abnormalities in pinfish, *Lagodon rhomboides*, from Biscayne Bay. Environmental Biology of Fishes, 57(-):205-220.

TIME COVERAGE: 2000

SUMMARY: Scale disorientation was studied in pinfish. Scale disorientation was more prevalent in North Bay. Observations of pinfish in the laboratory revealed that scale disorientation can appear spontaneously in normal juvenile and adult fish, developed rapidly, did not require prior scale and remained stable in size after the first appearance.

KEY WORDS: Fish diseases, Scales, Environmental diseases, Scale disorientation, Pinfish, *Lagodon rhomboides*

336

Correa, D. D. (1960) Two new marine turbellaria from Florida. Bull. Mar. Sci. Gulf Caribb., 10(2):208-216.

TIME COVERAGE: 1960

SUMMARY: This paper described two new species of turbellaria collected in Miami.

KEY WORDS: Turbellaria, *Probursa moei*, *Hofstenia miamia*, Virginia Key

337

Cory, C. B. (1896) Hunting and Fishing in Florida, Including a Key to the Water Birds Known to Occur in the State. Estes & Lauriat, Boston, MA.

TIME COVERAGE: 1896

SUMMARY: {COPY NOT AVAILABLE.]

KEY WORDS: Fishing, Aquatic birds, Hunting, Florida

338

Cory, C. B. (1896) Key to the Water Birds of Florida. Bradlee Whidden, Boston, MA. 172 pp.

TIME COVERAGE: 1896

SUMMARY: This is an identification guide to Florida birds.

KEY WORDS: Aquatic birds, Florida, Guide

339

Cosper, T. C. (1973) Aspects of the biology of *Sagitta hispida* (Chaetognatha), with emphasis on feeding, digestion, and defecation. Ph.D. dissertation. University of Florida, Coral Gables, FL. 168 pp.

TIME COVERAGE: 1973

SUMMARY: This paper is a description of the biology of the planktonic species *Sagitta hispida*. Some samples were collected in Biscayne Bay.

KEY WORDS: *Sagitta hispida*, Chaetognaths, Digestive system, Feeding

340

Costanza, R. (1975) The spatial distribution of land use subsystems, incoming energy and energy use in south Florida from 1900 to 1973. M.A. thesis. University of Florida, Gainesville. 204 pp.

TIME COVERAGE: 1900 - 1973

SUMMARY: This study attempted to empty energy as the common denominator of all systems to achieve a comprehensive understanding of the processes which drive regional evolution and thereby increase predictive capability.

KEY WORDS: Energy budget, Energy flow, Land use, Kissimmee-Everglades Basin

341

Costello, T. J. (1959) Marking shrimp with biological stains. Proc., Gulf Caribb. Fisheries Institute, 11th annual session. Miami Beach, FL, 1958. University of Miami, Coral Gables, FL. 1-6.

TIME COVERAGE: 1959

SUMMARY: Field experiments were carried out to: test the longevity of stains on shrimp under natural conditions; learn how rapidly shrimp could be stained; learn how rapidly stained shrimp could be identified; and study the movement of stained shrimp within Biscayne Bay.

KEY WORDS: Staining, Marking, Pink shrimp, *Penaeus duorarum*

342

Costello, T. J., and D. M. Allen (1965) Migrations and geographic distribution of pink shrimp, *Penaeus duorarum*, of the Tortugas and Sanibel grounds, Florida. Fishery Bull., 65(-):449-459.

TIME COVERAGE: 1958 - 1962

SUMMARY: The migration routes and geographical distribution of pink shrimp in the Dry Tortugas and Sanibel grounds were studied using mark-recovery experiments. Marked shrimp were released in Biscayne Bay, Flamingo, the Florida Keys, the Dry Tortugas and Sanibel.

KEY WORDS: *Penaeus duorarum*, Pink shrimp, Migrations, Geographical distribution, Shrimp fisheries, Dry Tortugas, Sanibel, Florida Keys, Florida Bay, Flamingo

343

Courtenay, W. R. (1965) Atlantic fishes of the genus *Rypticus* (Grammistidae): systematics and osteology. Ph.D. dissertation. University of Miami, Coral Gables, FL. 148 pp.

TIME COVERAGE: 1965

SUMMARY: This is a systematics and osteological study of the soapfishes. Some specimens were collected in Biscayne Bay.

KEY WORDS: *Rypticus*, Soapfishes, Taxonomy, Osteology

344

Courtenay, W. R. (1967) Atlantic fishes of the genus *Rypticus* (Grammistidae). Proc. Acad. Nat. Sci. Phila., 119(-):241-293.

TIME COVERAGE: 1967

SUMMARY: This citation is a taxonomic study of soapfishes found in the Atlantic coast.

KEY WORDS: *Rypticus*, Soapfishes, Taxonomy, Osteology

345

Courtenay, W. R. (1960) Western Atlantic fishes of the genus *Haemulon* (Pomadasyidae): systematic status and juvenile pigmentation. M.Sc. thesis. University of Miami, Coral Gables, FL. 191 pp.

TIME COVERAGE: 1960

SUMMARY: This is a taxonomical study of grunts. Some specimens were collected in Biscayne Bay.

KEY WORDS: *Haemulon*, Grunts, Taxonomy, Juveniles, Pigments

346

Courtenay, W. R. (1961) Western Atlantic fishes of the genus *Haemulon* (Pomadasyidae): systematic status and juvenile pigmentation. Bull. Mar. Sci. Gulf Caribb., 11(1):66-149.

TIME COVERAGE: 1961

SUMMARY: Thirteen species of the genus *Haemulon* collected in the western Atlantic are described.

KEY WORDS: *Haemulon*, Grunts, Taxonomy, Juveniles, Pigments

347

Cox, C., J. H. Hunt, W. G. Lyons, and G. E. Davis (1996) Nocturnal foraging in the Caribbean spiny lobster, *Panulirus argus*. Proc., 24th Benthic Ecology Mtg. Columbia, SC, March 1996. University of South Carolina, Columbia, SC. 30.

TIME COVERAGE: 1996

SUMMARY: Spiny lobsters (*Panulirus argus*) were observed during the night by diving along randomly selected transects across sand, seagrass, and rubble zones within the reef flat in the Looe Key National Marine Sanctuary. Lobsters from dens on the fore reef were repeatedly observed foraging on the reef flat during the night. Gut contents of 75 intermolt lobsters caught in Biscayne Bay and Dry Tortugas consisted of a myriad of prey items dominated by molluscs, especially gastropods (48%), chitons (14%) and bivalves (11%), and by crabs (11%).

KEY WORDS: Marine crustaceans, *Panulirus argus*, Feeding behavior, Coral reefs, Stomach content, *Cerithium litteratum*, Looe Key National Marine Sanctuary, Dry Tortugas

348

Cox, J., R. Kautz, M. MacLaughlin, and T. Gilbert (1994) Closing the gaps in Florida's wildlife habitat conservation system: recommendations to meet minimum conservation goals for declining wildlife species and rare plant and animal communities. Report. Florida Game & Fresh Water Fish Commission, Office of Environmental Services, Tallahassee, FL. 239 pp.

TIME COVERAGE: 1994

SUMMARY: This report identified and makes recommendations for closing gaps in Florida's wildlife habitat. The status of several individual species, such as the American crocodile, and regions, including South Florida, were discussed.

KEY WORDS: Nature conservation, Environmental protection, Rare species, Florida

349

Craighead, F. C. (1964) Land, mangroves and hurricanes. Fairchild Tropical Garden Bull., 19(4):1-28.

TIME COVERAGE: 1964

SUMMARY: This paper reviews the role of mangroves in the building of new land and the effects of hurricanes on mangrove forests.

KEY WORDS: Mangrove swamps, Hurricanes, Coastal landforms, Florida Bay, Florida Keys, Hurricane Donna

350

Craighead, F. C. (1971) The Trees of South Florida. Vol. I [no more published]. University of Miami Press, Coral Gables, FL.

TIME COVERAGE: 1971

SUMMARY: This is a guide to the trees of South Florida.

KEY WORDS: Trees, Botanical resources, South Florida, Everglades, Guide

351

Craighead, F. C., and V. C. Gilbert (1962) The effects of Hurricane Donna on the vegetation of southern Florida. Quart. J. Fla. Acad. Sci., 25(1):1-28.

TIME COVERAGE: 1960

SUMMARY: The damage caused by Hurricane Donna was evaluated shortly after the passage of the storm over South Florida. Hurricane damage to vegetation was generally most severe in the mangrove belt and on the Florida Keys.

KEY WORDS: Hurricane Donna, Hurricanes, Botanical resources, Mangrove swamps, South Florida, Everglades

352

Creager, D. B. (1962) A new *Cercospora* on *Rhizophora mangle*. Mycologia, 54(-):536-539.

TIME COVERAGE: 1962

SUMMARY: This paper describes a leafspot fungus found in 1962 on red mangroves.

KEY WORDS: *Cercospora rhizophorae*, *Rhizophora mangle*, Red mangrove, Fungal diseases

353

Crocker, R. A. (1960) A contribution to the life history of the gray (mangrove) snapper *Lutjanus griseus* (Linnaeus). M.Sc. thesis. University of Miami, Coral Gables, FL. 93 pp.

TIME COVERAGE: 1960

SUMMARY: This work describes the life history of the gray snapper. Most specimens studied were collected in the Everglades National Park.

KEY WORDS: Gray snapper, Mangrove snapper, *Lutjanus griseus*, Life history

354

Crocker, R. A. (1962) Growth and food of the gray snapper, *Lutjanus griseus*, in Everglades National Park. Trans. Amer. Fisheries Soc., 91(-):379-383.

TIME COVERAGE: 1959 - 1960

SUMMARY: A study of the biology of the gray snapper was based on specimens collected primarily in Everglades National Park. Gray snappers ranged from 1 to 5 years of age. All Everglades Park fish were immature. Crustaceans made up to 62% of the food items by number and 77% by volume.

KEY WORDS: Gray snapper, Mangrove snapper, *Lutjanus griseus*, Life history, Food consumption, Everglades

355

Cropper, W. P., and D. DiResta (1999) Simulation of a Biscayne Bay, Florida commercial sponge population: effects of harvesting after Hurricane Andrew. Ecological Modeling, 118(-):1-15.

TIME COVERAGE: 1992

SUMMARY: A size-based population matrix of the dominant commercial sponge species was developed as a tool to aid in assessing sponge population viability and management. Tagged sponges were repeatedly measured for growth, survival and fragmentation. Fecundity was estimated. Harvest simulations indicated that modest levels of removal could reduce the population at Billy's Point significantly. Hurricane Andrew impacted the sponge population primarily through a reduction in the numbers of the smallest size classes.

KEY WORDS: Sponge fisheries, *Spongia graminea*, Population number, Hurricane Andrew, Billy's Point, Biscayne National Park

356

Cross, C. I. (1953) Some aspects of beach erosion on the southeast Florida coast. Quart. J. Fla. Acad. Sci., 16(1):95-101.

TIME COVERAGE: 1953

SUMMARY: This paper discusses beach erosion in South Florida. A brief mention was made of Baker's Haulover Cut.

KEY WORDS: Beach erosion, Coast defenses, Shore protection, Southeast Florida, Bakers Haulover Cut

357

Cross, W. P., and S. K. Love (1942) Ground water in southeastern Florida. J. Amer. Water Works Assoc., 34(4):490-504.

TIME COVERAGE: 1942

SUMMARY: This paper describes the environment of South Florida and water-bearing formations.

KEY WORDS: Ground water, Wells, Southeast Florida

358

Culp, J. F., and C. R. Wong (1992) Effects of Hurricane Andrew on water levels in coastal Florida and Louisiana: data report. NOAA tech. memo. NOS OES 004. NOAA/National Ocean Service, Rockville, MD. Various paging.

TIME COVERAGE: 1992

SUMMARY: Data collected by the National Water Level Observation Network was used to determine water level changes during the passage of Hurricane Andrew.

KEY WORDS: Storm surge, Water levels, Hurricane Andrew, Louisiana

359

Cummings, M. V. (1987) The feeding energetics of the double-crested cormorant in Biscayne Bay, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 143 pp.

TIME COVERAGE: 1986 - 1987

SUMMARY: The purpose of this study was to determine the annual energy requirement of cormorants and to identify the fish species and the numbers of each which these birds consume.

KEY WORDS: Double-crested cormorant, *Phalacrocorax auritus auritus*, *Phalacrocorax auritus floridanus*, Food consumption, Bioenergetics

360

Cundell, A. M., M. S. Brown, R. L. Stanford, and R. Mitchell (1979) Microbial degradation of *Rhizophora mangle* leaves immersed in the sea. Est. Coastal Mar. Sci., 9(3):281-286.

TIME COVERAGE: 1976

SUMMARY: The leaching and degradation of senescent red mangrove leaves immersed in the water column adjacent to a mangrove stand were investigated. During the first 70 days, the C:N ratio decreased. Readily leachable carbohydrates and tannin-like compounds were lost from the leaf material by the 14th and 28th days respectively. A microbial population slowly built up on the leaf surface after the tannin was lost and the degradation of the structural material was observed using scanning microscopy. Changes in the caloric content of the leaves reflected their microbial degradation.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Leaves, Biodegradation, Detritus, Virginia Key

361

Cunningham, K. J., D. F. McNeill, L. A. Guertin, P. F. Ciesielski, T. M. Scott, and L. de Verteuil (1998) New Tertiary stratigraphy for the Florida Keys and southern peninsula of Florida. Geol. Soc. Amer. Bull., 110(2):231-258.

TIME COVERAGE: 1998

SUMMARY: Seven lithologic formations ranging in age from Oligocene to Pleistocene were recently penetrated by core holes in southernmost Florida. The formations were described.

KEY WORDS: Tertiary, Stratigraphy, Florida Keys, Everglades, Soldier Key, Elliott Key

362

Curry, R. W. (1975) The concentration and distribution of nitrate-nitrogen and nitrite-nitrogen in the sediments of Biscayne Bay. M.Sc. thesis. University of Miami, Coral Gables, FL. 129 pp.

TIME COVERAGE: 1975

SUMMARY: Nitrate and nitrite were measured in the interstitial waters of sediments collected in Biscayne Bay. Only the littoral sample clearly demonstrated active sub-surface nitrification. Two types of redox profiles and color trends were observed and these correlated well with the vertical and horizontal distribution of the ionic oxides of nitrogen.

KEY WORDS: Nitrogen cycle, Sediment analysis, Sediment, Nutrients, Card Sound, Virginia Key

363

Dachnowski-Stokes, A. P. (1928) A preliminary note on blue-green algal marl in southern Florida in relation to the problem of coastal subsidence. J. Washington Acad. Sciences, 18(-):476-480.

TIME COVERAGE: 1928

SUMMARY: This paper discusses the role of blue-green algal mats in the formation of marl in South Florida.

KEY WORDS: Algal mats, Marl, Coastal landforms

364

Dade County (1980) Biscayne Bay management plan. Technical supplement. Dade County, Department of Environmental Resources Management and Dade County Planning Department, Miami, FL.

TIME COVERAGE: 1980

SUMMARY: This technical supplement contains results of water analysis, surveys of biota and discussions of proposed construction projects.

KEY WORDS: Water quality, Biota, Boating, Marinas, Coastal zone management

365

Dade County (1981) Biscayne Bay management plan. Dade County Department of Environmental Resources Management and Dade County Planning Department, Miami, FL.

TIME COVERAGE: 1981

SUMMARY: This is a management plan for Biscayne Bay.

KEY WORDS: Ecosystem management, Resource management, Recreational waters, Water use, Environment management, Coastal zone management

366

Dade County (1985) Biscayne Bay water quality: baseline data and trend analysis report, 1979-1983. Dade County. Department of Environmental Resources Management, Miami, FL. 78 pp.

TIME COVERAGE: 1979-1983

SUMMARY: This report contains a description of data collected on a monthly basis from 1979 to 1983. Aspects of the physical properties, clarity, nutrient load and sanitary quality of the Bay water were summarized.

KEY WORDS: Water quality, Pollution monitoring, Pollution indicators, Baseline studies, Nutrients, Turbidity, Color, Cd, Cu, Fe, Pb, Zn

367

Dade County (1987) Biscayne Bay and Miami River: a water quality summary, Biscayne Bay through 1984 and Miami River through 1985. DERM technical report 1987. Dade County. Department of Environmental Resources Management, Miami, FL. 38 pp.

TIME COVERAGE: 1984 - 1985

SUMMARY: This report is a data summary through 1994 for Biscayne Bay and 1995 for the Miami River.

KEY WORDS: Water quality, Pollution monitoring, Salinity, Dissolved oxygen, Turbidity, Chemical pollutants, Bacteria, Miami River, Nutrients, Cd, Cu, Fe, Pb, Zn

368

Dade County (1983) Bottom communities of Biscayne Bay. Map no. 013, 27" x 39"; 1:40,000. Dade County. Department of Environmental Resources Management, Miami, FL.

TIME COVERAGE: 1983

SUMMARY: This map shows the various types of bottom communities in Biscayne Bay.

KEY WORDS: Bottom topography, Aquatic communities, Maps

369

Dade County (1979) Comprehensive development master plan for Metropolitan Dade County. 275 pp. Dade County. Planning Department, Miami, FL.

TIME COVERAGE: 1979

SUMMARY: This report is the official guide for managing growth and development in the Metropolitan Dade County area including the area's environmental resources.

KEY WORDS: Resource development, Resource management, Environmental protection, Dade County

370

Dade County (1978) Dade County's planning process and factors for evaluating amendments. Proc., Planning Advisory Board's workshop no. 1. Miami, FL, February 2, 1978. Dade County. Planning Department, Miami, FL.

TIME COVERAGE: 1978

SUMMARY: These proceedings discuss population, economic growth, and natural resources.

KEY WORDS: Urbanization, Land use, Natural resources, Coastal zone management, Dade County

371

Dade County (1977-1978) Dade County 208 areawide water quality management plan. Chapter I: Executive summary; Chapter X: Non point source water quality assessment; Chapter XVII: Environmental, social and economic baseline (interim report); Chapter XXI: Inventory, sampling, and analyses of raw water from the major public water supply wells in Dade County for selected volatile organic compounds and organochlorine insecticides; Chapter XXII: Mass emission inventory and development of a nearshore monitoring program; Water quality analysis (preliminary report). Dade County. Department of Environmental Resources Management, Miami, FL.

TIME COVERAGE: 1977 - 1978

SUMMARY: The water management plan for Dade County, including Biscayne Bay, was described in this report.

KEY WORDS: Water quality, Water supply, Water use, Water management, Dade County

372

Dade County (1993) Dade County environmental protection ordinance coastal and freshwater wetlands regulations, sections 24-58 and 24-59. Dade County. Department of Environmental Resources Management, Miami, FL. Various paging.

TIME COVERAGE: 1993

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Wetlands, Environmental legislation, Coastal waters, Dade County

373

Dade County (1986) Draft Biscayne Bay Aquatic Preserve management plan. Executive summary. Metropolitan Dade County, Miami, FL. 68 pp.

TIME COVERAGE: 1986

SUMMARY: This document is the draft management plan for the Biscayne Bay Aquatic Preserve established by the Florida Legislature in 1974.

KEY WORDS: Natural resources, Water circulation, Water quality, Conservation, Environmental protection, Biscayne Bay Aquatic Preserve

374

Dade County (1981) An inventory of stormwater pollutant discharges and their loadings into major surface water bodies within Dade County, Florida. Report. Dade County. Department of Environmental Resources Management, Miami, FL. 30 pp.

TIME COVERAGE: 1981

SUMMARY: The purpose of this study was to locate critical areas where excessive stormwater pollutant loads discharged into surface waters.

KEY WORDS: Stormwater runoff, Drainage water, Pollution data, Canals, Dade County

375

Dade County (1989) Metro-Dade County comprehensive development master plan for 2000 and 2010: coastal management element support component. Report. Dade County. Planning Department, Miami, FL. 222 pp.

TIME COVERAGE: 1989

SUMMARY: This report is the master development plan for Dade County.

KEY WORDS: Coastal zone management, Resource conservation, Resource management, Regional planning

376

Dade County (1984) Overview of the Biscayne Bay Aquatic Preserve management area. Unpublished draft manuscript. Dade County. Planning Advisory Board, Miami, FL. 63 pp.

TIME COVERAGE: 1984

SUMMARY: This draft report is the management plan for the Biscayne Bay Aquatic Preserve which includes all the publicly owned uplands and all submerged lands within Biscayne Bay from the Sunny Isles Causeway to Card Sound Road.

KEY WORDS: Natural resources, Environment management, Biscayne Bay Aquatic Preserve

377

Dade County (1959) Planning review report of the Miami seaport location. Project report no. 1. Dade County. Planning Department, Miami, FL. 70 pp.

TIME COVERAGE: 1959

SUMMARY: The objectives of this report were to determine whether a seaport was needed for the Miami area, determine the best location for such a facility, prepare a plan for the existing port site, and determine if a redeveloped Miami port would be metropolitan in character and if so which governmental agencies would take responsibility for it.

KEY WORDS: Port installations, Shipping, Trade, Cruises, Merchant ships, Miami

378

Dade County (1974) Proposed metropolitan development guide for metropolitan Dade County. Part 3 of the Comprehensive Development Master Plan, July 1974. Dade County. Planning Department, Miami, FL. 248 pp.

TIME COVERAGE: 1974

SUMMARY: This is the proposed 1974 development guide for Dade County. The proposed guidelines were to provide functioning ecosystems in a state approximating natural conditions; provide assurance that the quality and quantity of the natural water supply was not threatened by urban growth; and insure that the carrying capacity of given natural areas is not exceeded by resulting development based on hydrological condition, soil suitability and vegetative viability and character.

KEY WORDS: Regional planning, Land use, Dade County

379

Dade County (1974) Recommended metropolitan development policies. Part 1. Comprehensive Development Master Plan for Metropolitan Dade County. Dade County. Planning Advisory Board, Miami, FL. 27 pp.

TIME COVERAGE: 1974

SUMMARY: This document contains policies for growth management, services, environmental protection, transportation, and other areas.

KEY WORDS: Resource development, Resource management, Environmental protection, Dade County

380

Dade County (1968) Review of the bulkhead line on the west side of Biscayne Bay from Coral Gables south to the Monroe County line. Report. Dade County. Public Works Department, Miami, FL. Various paging.

TIME COVERAGE: 1968

SUMMARY: Florida's law defines the bulkhead line as the limit beyond which any extension creating or filling of land outwards into the water shall be deemed an interference with the servitude in favor of commerce, navigation and conservation of natural resources. The 1967 amendment to the 1957 law states that biological and ecological reports be considered in determining the proposed location of the bulkhead line.

KEY WORDS: Bulkhead Act, Shore protection, Coastal structures, Dredging, Navigational channels, Sea walls

381

Dade County (1968) Seaports and waterways master plan. Dade County. Planning Department, Miami, FL. 57 pp.

TIME COVERAGE: 1968

SUMMARY: This report is one of five comprehensive transportation master plan reports which have been prepared by Dade County as part of the Miami Urban Area Transportation Study. The goals of the plan included maintaining and improving the Port of Miami and ensuring the compatibility of port and waterway development and activity with tourism and the area's natural assets.

KEY WORDS: Transportation, Shipping, Public access, Passenger ships, Navigational channels, Harbors, Miami

382

Dade County (1970) South Bay area study. Report. Dade County. Planning Department, Miami, FL. 28 pp.

TIME COVERAGE: 1970

SUMMARY: This purpose of this report is to develop a detailed land use policy plan for the area.

KEY WORDS: Land use, Regional planning, Coastal zone management, South Bay

383

Dade County (1987) State of the environment 1987-88. Report. Dade County. Department of Environmental Resources Management, Miami, FL. 22 pp.

TIME COVERAGE: 1987

SUMMARY: This document is a description of the County's natural environment, and summarizes local activities and programs to protect, manage, enhance and restore Dade's natural resources.

KEY WORDS: Environmental protection, Water management, Coastal zone management, Resource conservation, Environmental conservation, Dade County

384

Dade County (1970) Supplementary report on review of the bulkhead line on the west side of Biscayne Bay from Coral Gables south to the Monroe County line. Report. Dade County, Public Works Department, Miami, FL. 5 pp + charts.

TIME COVERAGE: 1970

SUMMARY: This report provides addition information on the bulkhead line along Biscayne Bay.

KEY WORDS: Bulkhead Act, Shore protection, Coastal structures, Navigational channels, Dredging, Sea walls, Black Point, Mangrove Point, Card Point

385

Dade County (1978) A water quality assessment of Metropolitan Dade County Florida. Report. Dade County. Department of Environmental Resources Management, Miami, FL. 224 pp.

TIME COVERAGE: 1978

SUMMARY: The purpose of this summary report is to highlight the objectives, methods, and conclusions of the Water Quality Assessment of Dade County.

KEY WORDS: Water quality, Pollution monitoring, Ground water, Canals, Dade County

386

Dalrymple, G. H., J. S. Hampp, and D. J. Wellins (1985) Male-biased sex ratio in a cold nest of a hawksbill sea turtle (*Eretmochelys imbricata*). *J. Herpetology*, 19(1):158-159.

TIME COVERAGE: 1982

SUMMARY: This paper discusses the effects of temperature on the sex ratio of hawksbill sea turtles. Nestlings from a clutch deposited in Soldier Key were collected, mostly still in the eggs, after the animals died. Sexual differentiation is affected by incubation temperature

KEY WORDS: Sex ratio, Temperature effects, Turtles, Hawksbill sea turtle, *Eretmochelys imbricata*, Soldier Key

387

Daly, R. J. (1966) A systematic study of southern Florida anchovies (Pisces: Engraulidae). M.Sc. thesis. University of Miami, Coral Gables, FL. 72 pp.

TIME COVERAGE: 1966

SUMMARY: The systematics of several species of anchovy collected in Florida were described. Some specimens were collected in Biscayne Bay.

KEY WORDS: Anchovy, Engraulis, Anchoviella, Anchoa, Taxonomy

388

Daly, R. J. (1970) Systematics of southern Florida anchovies (Pisces: Engraulidae). Bull. Mar. Sci., 20(-):70-104.

TIME COVERAGE: 1970

SUMMARY: This is a taxonomy study of anchovies. Some specimens were collected in Biscayne Bay.

KEY WORDS: Anchovy, *Anchoa lamprotaenia*, *Anchoa hepsetus*, *Anchoa nasuta*, *Anchoa mitchilli*, *Anchoviella perfasciata*, Taxonomy

389

D'Amato, R. (1973) The movement of effluent from the City of Miami sewage ocean outfall. Sea Grant Tech. Bull. 27. University of Miami Sea Grant Program, Coral Gables, FL. 91 pp.

TIME COVERAGE: 1972

SUMMARY: The purpose of this study was to trace the path taken by the effluent from the Miami Sewage Treatment Plant in Virginia Key when it leaves the outfall pipe in the Atlantic coastal waters. Dye studies and water quality measurements were performed and a mathematical model developed.

KEY WORDS: Outfalls, Sewage disposal, Wastes, Miami Sewage Treatment Plant, Virginia Key, Bear Cut, Norris Cut, Nutrients, Bacteria, Suspended particulates, Salinity, Water quality

390

D'Amato, R., and T. N. Lee (1977) A kinematic model of the City of Miami ocean outfall plume behavior. Ecological Modeling, 3(-):227-243.

TIME COVERAGE: 1977

SUMMARY: A kinematic model was developed to predict the movement of effluent from the City of Miami ocean outfall. The outfall terminates at the 5 m isobath in the vicinity of three tidal inlets opening into Biscayne Bay. Local wind records suggested that sewage effluent entered the Bay on about 80% of the flood tides or roughly 11 times per week.

KEY WORDS: Outfalls, Sewage disposal, Wastes, Government Cut, Bear Cut, Norris Cut, Virginia Key, Models

391

Dames & Moore (1975) Floridan aquifer water supply investigation, Turkey Point area, Dade County, Florida. 4598-050-26. Dames & Moore, Boca Raton, FL.

SUMMARY: The objective of this study was to evaluate in detail the water supply potential of the brackish Floridan aquifer for large volume, long-term withdrawals for use as a cooling medium for power plants in southern Dade County.

KEY WORDS: Floridan Aquifer, Brackishwater, Ground water, Water supply, Turkey Point

392

Dames & Moore (1976) Surface water investigation, South Dade biological study, South Dade area. Report to Florida Power and Light Company. Dames & Moore, Boca Raton, FL. Various paging.

TIME COVERAGE: 1974

SUMMARY: This surface water investigation was part of an integrated study sponsored by Florida Power & Light to determine the nutrient exchange between Card Sound and the South Dade area, the area south of the cooling canal system at the Turkey Point Generating Station.

KEY WORDS: Surface water, Water quality, Hydraulic models, Card Sound, South Bay, Turkey Point

393

Damsgaard, A., and A. F. Dinsmore (1975) Numerical simulation of storm surges in bays. In: Symposium on Modeling Techniques. 2nd Ann. Symp. of the Waterways, Harbors and Coastal Engineering Division of ASCE. San Francisco, CA, 1975. American Society of Civil Engineers, New York, NY. 1535-1551.

TIME COVERAGE: 1975

SUMMARY: A two-stage approach for numerical simulation of storm surges in complex coastal areas was tested for Biscayne Bay.

KEY WORDS: Storm surge, Mathematical models, Coastal waters, Hurricanes

394

D'Asaro, C. N. (1967) The comparative embryogenesis and early organogenesis of *Bursa caelata*, *Distorsio clathrata* and *Thais haemastoma* (Gastropoda: Prosobranchia). Ph.D. dissertation. University of Miami, Coral Gables, FL. 163 pp.

TIME COVERAGE: 1967

SUMMARY: This is a study of the development of embryos of Prosobranchs. Some specimens were collected in Biscayne Bay.

KEY WORDS: Prosobranchs, *Bursa caelata*, *Distorsio clathrata*, *Thais haemastoma*, Oyster drill, Embryonic development, Organogenesis, Bear Cut

395

D'Asaro, C. N. (1966) The egg capsules, embryogenesis, and early organogenesis of a common oyster predator, *Thais haemastoma floridiana* (Gastropoda: Prosobranchia). Bull. Mar. Sci., 16(4):884-914.

TIME COVERAGE: 1966

SUMMARY: Communal spawning, egg capsule formation, oviposition, and the morphology of the egg capsule were described. Embryogenesis is outlined from the maturation divisions through the first torsional stage.

KEY WORDS: Oyster drill, Rock-shell, *Thais haemastoma*, Embryonic development, Veligers, Organogenesis, Prosobranchs

396

Davis, C. C. (1949) Observations of plankton taken in marine waters of Florida in 1947 and 1948. Quart. J. Fla. Acad. Sci., 12(2):67-103.

TIME COVERAGE: 1947 - 1948

SUMMARY: This paper describes the plankton collected during 1947 and 1948 throughout Florida including several sites in Biscayne Bay.

KEY WORDS: Plankton, Florida, Species list

397

Davis, C. C. (1947) Two monstrellids from Biscayne Bay, Florida. Trans. Amer. Microscopical Soc., 66(-):390-395.

TIME COVERAGE: 1947

SUMMARY: Two male specimens of monstrolloids were encountered in plankton tows taken at Shoal Point and Chicken Key. Both belonged to different genera and appeared to be new to science.

KEY WORDS: *Monstrilla rugosa*, *Cymbasoma quadridens*, Monstrolloids, Copepods, Shoal Point, Chicken Key

398

Davis, G. E. (1985) Artificial structures to mitigate marina construction impacts on spiny lobster, *Panulirus argus*. Bull. Mar. Sci., 37(1):151-156.

TIME COVERAGE: 1975 - 1976

SUMMARY: Concrete block structures were placed in Biscayne Bay adjacent to a marina prior to its rehabilitation. A population of juvenile lobsters moved in before rehabilitation began and the lobster stayed in the structures during construction. The structures were placed in the marina and the lobsters moved back into them.

KEY WORDS: Lobster culture, *Panulirus argus*, Marinas, Shelters, Spiny lobster

399

Davis, G. E. (1981) Effects of injuries on spiny lobster, *Panulirus argus*, and implications for fishery management. Fishery Bull., 78(-):979-984.

TIME COVERAGE: 1976 - 1977

SUMMARY: More than 7000 spiny lobsters were captured and tagged. Growth of spiny lobsters takes place as the result of a series of molts, during which discontinuous size changes occur. The rate of growth is dependent on both magnitude of change in size with each molt and the length of the intermolt period. In this study, growth rate was expressed as change in carapace length per week since nearly all observations of marked lobsters were made as weekly intervals.

KEY WORDS: Spiny lobster, *Panulirus argus*, Injuries, Lobster fisheries

400

Davis, G. E. (1978) Field evaluation of a tag for juvenile spiny lobsters, *Panulirus argus*. Transactions of the American Fisheries Society, 107(-):100-103.

TIME COVERAGE: 1976

SUMMARY: Spaghetti tags for marking juvenile lobsters were evaluated for retention. The tags effectively marked specimens as small as 35-mm carapace for up to 27 months.

KEY WORDS: Juveniles, Tagging, *Panulirus argus*, Spiny lobster

401

Davis, G. E. (1978) Management recommendations for juvenile spiny lobsters, *Panulirus argus* in Biscayne National Monument, Florida. Report M-530. Everglades National Park, South Florida Research Center, Homestead, FL. 32 pp.

TIME COVERAGE: 1976 - 1977

SUMMARY: The purposes of this report were to document the effects of fishery harvest on the juvenile spiny lobster population in the Biscayne Bay area of the Biscayne National Monument; and to recommend a management strategy that will conform with Park Service policy to perpetuate naturally functioning native ecosystems and support the Florida lobster fishery in accordance with the intent of public law.

KEY WORDS: Spiny lobster, Juveniles, *Panulirus argus*, Biscayne National Monument

402

Davis, G. E. (1978) National Park Service spiny lobster fishery research in Florida; a progress report. In: Proc., Spiny Lobster Research Review. R. E. Warner, (ed.). Key West, FL, 1976. Tech. paper no. 4. Florida Sea Grant College Program, Gainesville, FL.

TIME COVERAGE: 1978

SUMMARY: Recreational harvest alone effectively reduced a previously unfinished lobster population by 50% in a single season. Creation of a nursery sanctuary in Biscayne National Monument was proposed to increase fishery production. Biscayne Bay was identified as a nursery of the Keys lobster fishery.

KEY WORDS: Spiny lobster, *Panulirus argus*, Elliott Key, Biscayne National Monument, Dry Tortugas, Florida Keys

403

Davis, G. E., and J. W. Dodrill (1980) Marine parks and sanctuaries for spiny lobster fisheries management. In: Proc. 32nd Ann. Gulf and Caribbean Fisheries Institute, Miami Beach, 1979. J. B. Higman, (ed.). Gulf and Caribbean Fisheries Institute, Miami, FL. 194-207.

TIME COVERAGE: 1971 - 1979

SUMMARY: More than 14,000 spiny lobsters were tagged and another close to 6,000 were measured and examined at the Fort Jefferson National Monument, Biscayne National Monument and the Florida Keys. Growth rates, reproductive biology and movement patterns were examined.

KEY WORDS: Spiny lobster, *Panulirus argus*, Fishery management, Fort Jefferson National Monument, Biscayne National Monument, Florida Keys, Florida Bay, Dry Tortugas

404

Davis, G. E., L. L. Loope, C. T. Roman, G. Smith, J. T. Tilmant, and M. Soukup (eds.) (1996) Effects of Hurricane Andrew on natural and archeological resources; Big Cypress National Preserve, Biscayne National Park, Everglades National Park. Tech. rep. NPS/NRGCC/NRTR/96-02. National Park Service, Natural Resource Program Center, Natural Resource Information Division, Denver, CO. 150 pp.

TIME COVERAGE: 1992

SUMMARY: This report describes the conditions of the resources and the effects of Hurricane Andrew on the resources of the national park system units in South Florida.

KEY WORDS: Natural resources, Hurricane Andrew, Big Cypress National Preserve, Biscayne National Park, Everglades National Park

405

Davis, J. H. (1940) The ecology and geologic role of mangroves in Florida. Papers from Tortugas Laboratory, 32(-):303-412.

TIME COVERAGE: 1940

SUMMARY: This investigation attempted to include many phases of the ecology of the mangrove swamps, some phases of the ecology of associated organisms, the migration and establishment of the plants, the nature of the soils, marine factors of the habitat, and the soil accretions, with accurate determination of coastal and insular changes. One of the regions studied was southern Biscayne Bay.

KEY WORDS: Mangrove swamps, Coastal landforms, Florida Keys, Florida Bay, Dry Tortugas, Ten Thousand Islands, Tampa, Cape Canaveral

406

Davis, J. H. (1943) The Natural Features of Southern Florida, Especially the Vegetation, and the Everglades. Geological bulletin 25. Florida Geological Survey, Tallahassee, FL. 311 pp.

TIME COVERAGE: 1943

SUMMARY: This book describes the natural history of southern Florida including geology, flora and fauna.

KEY WORDS: Natural resources, Botanical resources, Landforms, Biota, Everglades, Geology

407

Davis, S. M., and J. C. Ogden (1994) Towards ecosystem restoration. In: Everglades: the Ecosystem and its Restoration. S. M. Davis, and J. C. Ogden (eds.). St. Lucie Press, Delray Beach, FL. 769-?

TIME COVERAGE: 1994

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Restoration

408

Davis, W. P. (1964) The western Atlantic fishes of the family Callionymidae. M.Sc. thesis. University of Miami, Coral Gables, FL. 93 pp.

TIME COVERAGE: 1964

SUMMARY: This work is a description of the dragonet fish family. Some specimens were collected in Biscayne Bay.

KEY WORDS: Callionymus, Dragonetta, Callionymidae, Taxonomy, Dragonets

409

Day, S. (1953) Horizontal convergence and the occurrence of summer precipitation at Miami, Florida. Monthly Weather Rev., 81(-):155-161.

TIME COVERAGE: 1951

SUMMARY: The general diurnal pattern and the extent of the sea-breeze effect were established and graphed. Data was too sparse to permit definition of rules correlating divergence values and precipitation.

KEY WORDS: Rainfall, Thunderstorms, Convergence, Sea breezes, Summer, Miami

410

De Brahm, J. G. W. (1974) The Atlantic Pilot. (Facsimile reproduction of the 1772 edition, with introduction and index by L. De Vorse.) University Presses of Florida, Gainesville, FL. 25 pp + index.

TIME COVERAGE: 1772

SUMMARY: This book is an early survey of Florida conducted by the English Crown. Maps of the area are included.

KEY WORDS: Surveying, History, Florida, Dry Tortugas, Florida Keys, Cape Florida

411

De la Lanza, G., and Arenas F. V. (1978) Naturaleza quimica de las hojas y rizomas de los pastos marinos y su ambiente sedimentario. Rev. Biol. Trop., 26(2):277-289 (Spanish).

TIME COVERAGE: 1978

SUMMARY: Biodegradation of *Thalassia* and its energy flow throughout the food chain via detritus exhibited a close relationship to the surrounding sedimentary substratum. The chemical composition of the biotic and abiotic material was analyzed and evaluated.

KEY WORDS: Turtle grass, Thalassia, Biodegradation, Detritus, Sediment analysis, Virginia Key, Soldier Key, Cutler

412

de Laubenfels, M. W. (1953) A guide to the sponges of eastern North America. Special publication of The Marine Laboratory. University of Miami Press, Coral Gables, FL.

TIME COVERAGE: 1953

SUMMARY: This report is a taxonomical guide to the sponges of the east coast of the US.

KEY WORDS: Sponges, Identification, Atlantic coast, Taxonomy, Species list

413

de Laubenfels, M. W., and J. F. Storr (1958) The taxonomy of American commercial sponges. Bull. Mar. Sci. Gulf Caribb., 8(2):99-117.

TIME COVERAGE: 1958

SUMMARY: The taxonomy of commercial sponges was revised and four new species and one new subspecies described.

KEY WORDS: Sponges, Spongia, Hippospongia, Taxonomy, Species list

414

de Sylva, D. P. (1984) A bibliography and index of the Biscayne Bay ecosystem. Unpublished manuscript. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 91 pp.

TIME COVERAGE: 1964

SUMMARY: This report is a bibliography of Biscayne Bay.

KEY WORDS: Bibliographies, Ecosystems

415

de Sylva, D. P. (1994) Distribution and ecology of ciguatera fish poisoning in Florida, with emphasis on the Florida Keys. Bull. Mar. Sci., 54(3):944-954.

TIME COVERAGE: 1994

SUMMARY: Ciguatera fish poisoning cases in South Florida were investigated. This paper documents the species, locations, and size of fish.

KEY WORDS: Ciguatera, Florida Keys

416

de Sylva, D. P. (1970) Ecology and distribution of postlarval fishes of Southern Biscayne Bay, Florida. Progress report to the EPA Water Quality Office. Contract FWQA 18050 DIU, covering the period 1 June 1969 - 30 September 1970. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1969 - 1970

SUMMARY: This report presented the physical, chemical and biological data collected at 39 stations in southern Biscayne Bay, Card Sound and adjacent waters. These data include information on monthly distribution of surface and bottom measurements of temperature, salinity, dissolved oxygen and turbidity. Biological information includes plankton collections. Larvae of 33 of the 71 teleost fish known from the area were found in the plankton samples. Larval fishes were less common and were represented by fewer families in the plume of heated effluent from Turkey Point as well as in area receiving sewage wastes.

KEY WORDS: Fish, Juveniles, Geographical distribution, Ecological distribution, South Bay, Turkey Point, Sewage wastes, Temperature, Salinity, Dissolved oxygen, Turbidity, Card Sound, Species list

417

de Sylva, D. P. (1976) Ecology and distribution of larval fishes of Biscayne Bay, Florida. Prepared for the EPA Office of Research and Monitoring. Project R 800996-03, Program Element 1B1022; EPA-000/0-00-000. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 412 pp.

TIME COVERAGE: 1970

SUMMARY: Plankton tows and hydrographic studies were made in Biscayne Bay and Card Sound to determine the numbers and kinds of larval fishes occurring at various locations, in different seasons, and in a variety of habitats. Surface and bottom measurements of temperature, salinity, dissolved oxygen and turbidity were also obtained. A positive correlation was found between the volume of zooplankton collected the number of fish larvae. A correlation was found between the volume of zooplankton plus turbidity with the number of fish larvae. The largest

numbers occurred in May and the fewest in August. The highest numbers came from around the effluent of the Turkey Point Power Plant and in northern Biscayne Bay between Coconut Grove and Key Biscayne, while the fewest were behind Elliott Key and in Card Sound. Diversity was lowest in the Turkey Point region and highest in Coconut Grove, around Virginia Key and in parts of Card Sound.

KEY WORDS: Fish larvae, Geographical distribution, Ecological distribution, Thermal pollution, Turkey Point, Card Sound

418

de Sylva, D. P. (1975) Fisheries assessment of south Biscayne Bay, Florida. Unpublished manuscript. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 18 pp.

TIME COVERAGE: 1975 - 1979

SUMMARY: The objectives of this report were to determine which economically important species occur in south Biscayne Bay, their geographical and seasonal distributions, and to provide baseline data for managers.

KEY WORDS: Fisheries, Resource conservation, South Bay

419

de Sylva, D. P. (1976) Fishes of Biscayne Bay, Florida. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 181-202.

TIME COVERAGE: 1976

SUMMARY: This paper describes the fish species of Biscayne Bay. More than 500 species have been recorded. Tropical fishes prevalent in the summer are partially replaced in the winter by temperate species. Their ecological relationships are also associated with the freshwater runoff from western Biscayne Bay.

KEY WORDS: Fish, Geographical distribution, Ecological distribution, Species list

420

de Sylva, D. P. (1975) Natural resources of Biscayne Bay -- research and needs. Presented at the Public Hearing on Biscayne Bay, Session of Bay Bottom Problems, Biscayne Bay Management Task Force. Miami, FL, November 20, 1975. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1975

SUMMARY: This paper outlines research needs in Biscayne Bay.

KEY WORDS: Natural resources, Resource management

421

de Sylva, D. P. (1953) Notes on mullet (*Mugil*) swimming upside down. Copeia, -(4):240-241.

TIME COVERAGE: 1952

SUMMARY: This is a short account of observations of a mullet specimen swimming upside down.

KEY WORDS: Mullet, *Mugil cephalus*, Mugil, Swimming, Key Biscayne, Fisher Island

422

de Sylva, D. P. (1963) Systematics and life history of the great barracuda, *Sphyaena barracuda* (Walbaum). Studies in Tropical Oceanography 1. University of Miami Press, Coral Gables, FL. 134 pp.

TIME COVERAGE: 1963

SUMMARY: This citation is a detailed description of the biology of the great barracuda.

KEY WORDS: Barracuda, *Sphyaena barracuda*, Taxonomy, Life history, Florida Bay, Florida Keys, Ten Thousand Islands, Dry Tortugas

423

de Sylva, D. P. (1969) Theoretical considerations of the effects of heated effluents on marine fishes. In: Biological Aspects of Thermal Pollution. Proc., Natl. Symp. on Thermal Pollution. P. A. Krenkel, and F. L. Parker, (eds.). Vanderbilt University Press, Nashville, TN. 229-293.

TIME COVERAGE: 1969

SUMMARY: This citation discussed the complex problem of the effects of heated effluents on marine fish.

KEY WORDS: Thermal pollution, Temperature effects, Waste disposal, Power plants, Fish

424

de Sylva, D. P., and L. N. Scotton (1972) Larvae of deep-sea fishes (Stomiatoidea) from Biscayne Bay, Florida, USA, and their ecological significance. Mar. Biol., 12(1):122-128.

TIME COVERAGE: 1972

SUMMARY: Larvae of twenty deep sea fishes were collected in plankton nets in Biscayne Bay. The adults were mesopelagic in the open water of the Florida Current and therefore, these larvae were presumably advected in parcels of high salinity water into the shallows of the Bay.

KEY WORDS: Stomiatoids, Bathophilus, Stomias, Cyclothone, Fish larvae, Deep water

425

de Sylva, D. P., H. B. Stearns, and D. C. Tabb (1956) Populations of the black mullet (*Mugil cephalus* L.) in Florida. Technical series 19, Florida State Board of Conservation. Marine Laboratory, University of Miami, Coral Gables, FL. 45 pp.

TIME COVERAGE: 1956

SUMMARY: Thirty proportional measurements were made of mullet collected in Florida. There were highly significance differences in these characteristics in mullets from different localities. Four subpopulations of black mullet were identified: east coast, west coast, the northwest coast, and a single population in Pensacola Bay.

KEY WORDS: Black mullet, *Mugil cephalus*, Population structure, Pensacola Bay, Apalachicola Bay, St. Marks, Steinhatchee, Cedar Key, Homosassa, Pass-a-grille, Englewood, Lemon Bay, Marco, Salerno, Allenhurst, New Berlin, Trout River

426

Dean, R. G. (1993) Terminal structures at ends of littoral systems. In: Beach/Inlet Processes and Management: a Florida Perspective (J. Coastal Res. Spec. Issue 18). A. J. Mehta (ed.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 398 pp.

TIME COVERAGE: 1993

SUMMARY: The interaction of deepened navigation channels with the adjacent shorelines was examined with the conclusion that the effect is to cause sediment transport from and draw down of the adjacent beaches thereby contributing to two undesirable effects: erosion on the adjacent shorelines, and accelerated deposition in the deepened channel. One of the sites studied was Bakers Haulover Inlet.

KEY WORDS: Inlets (Waterways), Navigational channels, Sediment transport, Shore protection, Bakers Haulover Inlet

427

Dean, R. G., J. Cheng, and S. Malakar (1998) Characteristics of shoreline change along the sandy beaches of the State of Florida: an atlas. UFL/COEL-98/015. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. Various paging.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach morphology, Coasts, Florida

428

Dean, R. G., and T. Y. Chiu (1981) Combined total storm tide frequency analysis for Dade County, Florida. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 55 pp.

TIME COVERAGE: 1981

SUMMARY: The objective of this study was to develop, verify and apply a procedure that would yield valid estimates of total storm tides for various return periods at the vicinity of the shoreline of Dade County.

KEY WORDS: Storm surge, Hurricanes, Frequency analysis, Tides, Dade County

429

Dean, R. G., and R. B. Taylor (1972) Numerical modeling of constituent transport in bay systems. In: Proc., 13th Coastal Engineering Conf. Vancouver, B. C., Canada, 1972. American Society of Civil Engineers, New York. 2227-2249.

TIME COVERAGE: 1972

SUMMARY: This citation describes the results of a numerical modeling study of lower Biscayne Bay designed to predict the effects of cooling water intake and discharge associated with the Turkey Point Nuclear Power Plant.

KEY WORDS: Mathematical models, Bay dynamics, Tidal mixing, Winds, Waste discharge, Turkey Point, Card Sound

430

Dearborn, B. B. (1983) Municipal boundaries in Biscayne Bay: evolution and conflict potential. M.A. thesis. University of Miami, Coral Gables, FL. 130 pp.

TIME COVERAGE: 1896 - 1983?

SUMMARY: This thesis examined the evolution of political boundaries in Biscayne Bay from 1896 when the first municipality was incorporated to the time of writing (1983).

KEY WORDS: Boundaries, Urbanization, History

431

Deichmann, E. (1938) Holothurians from Biscayne Bay, Florida. Proc. Florida Academy of Sciences, 3(-):128-137.

TIME COVERAGE: 1937

SUMMARY: This paper describes the holothurians of Biscayne Bay.

KEY WORDS: Holothurians, Echinoderms, Taxonomy, Species list

432

Delfino, J. J., D. Frazier, and J. Nepshinsky (1984) Contaminants in Florida's coastal zone: a review of present knowledge and proposed research strategies. Florida Sea Grant rep. SGR-62. Florida Sea Grant College Program, Gainesville, FL. 176 pp.

TIME COVERAGE: 1984

SUMMARY: The objectives of this project were to hold a workshop to discuss research issues and priorities with representatives from Florida's scientific, regulatory and private organizations, and to conduct a literature review for research related to the topic of contaminants in Florida's coastal zone.

KEY WORDS: Pollutants, Coastal waters, Coastal zone management, Florida

433

Dennis, J. V. (1959) Oil pollution survey of the United States Atlantic coast with special reference to southeast Florida coast conditions. Report. American Petroleum Institute, Division of Transportation, Washington, DC. Various paging.

TIME COVERAGE: 1958

SUMMARY: Daily observations of the number of pieces and weights of oil found at the three study sites were made during one year. A description of the oil and other types of debris found on the beaches is included.

KEY WORDS: Oil pollution, Coastal zone, Beaches, Atlantic coast, Hallandale Beach, Golden Beach, Haulover Beach

434

Dennis, J. V. (1960) Oil pollution conditions of the Florida east coast. Report. American Petroleum Institute, Division of Transportation, Washington, DC. 7 pp.

TIME COVERAGE: 1959

SUMMARY: This report is a continuation of the work described in Dennis (1959).

KEY WORDS: Oil pollution, Beaches, Hallandale Beach, Golden Beach, Haulover Beach, Key Biscayne, Crandon Park

435

Dennis, R. E. (1981) The role of the seagrass *Syringodium filiforme* and sediment stability on benthic harpacticoid copepods. M.Sc. thesis. Florida State University, Tallahassee, FL. 27 pp.

TIME COVERAGE: 1981

SUMMARY: The composition of the harpacticoid copepod community found in *Syringodium* seagrass beds is believed to result from the presence of the seagrass and sediment characteristics. The two influences are not mutually exclusive since the presence of the seagrass determines in part the composition of the sediment.

KEY WORDS: Seagrass, *Syringodium filiforme*, Sediment stability, Copepods, Ecological zonation, Turkey Point

436

Derr, M. (1989) Some Kind of Paradise: a Chronicle of Man and the Land in Florida. William Morrow and Company, Inc., New York, NY. 416 pp.

TIME COVERAGE: 1989

SUMMARY: This historical account of Florida includes some material on Biscayne Bay.

KEY WORDS: History, Florida

437

Dewar, H. (1993) Paradise lost finds buyer. The Miami Herald, Miami, FL. September 12. 1-B.

TIME COVERAGE: 1993

SUMMARY: This article discusses the purchase of Soldier Key by the National Park Service.

KEY WORDS: Soldier Key, Restoration

438

DiResta, D., B. Lockwood, and R. Curry (1995) Monitoring of the recruitment, growth and mortality of commercial sponges in Biscayne Bay National Park. Final report. SFWMD contract C91-2547. Biscayne National Park, Miami, FL. 26 pp + appendices.

TIME COVERAGE: 1992 - 1995

SUMMARY: This report is a study of the growth, mortality and recruitment of the commercial sponges *Hippospongia lachne*, *Spongia barbara*, *Spongia graminea* and *S. tubulifera*. The Bay was closed to commercial sponge fishing in 1991.

KEY WORDS: Sponges, Biscayne Bay National Park, *Hippospongia lachne*, *Spongia barbara*, *Spongia graminea*, *Spongia tubulifera*, Yellow sponge, Sheepswool sponge, Glove sponge, Grass sponge, Sponge fisheries, Pelican Bank, Billy's Point, Black Point, Black Ledge

439

Dobkin, S. (1965) Abbreviated larval development in caridean shrimps with the description of the larval stages of some species from South Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 228 pp.

TIME COVERAGE: 1965

SUMMARY: The larval development of several species of caridean shrimp was studied. Specimens of *Thor floridanus* were collected in Bear Cut. Loggerhead sponges were collected at Soldier Key, cut open, and specimens of *Synalpheus brooksi* removed.

KEY WORDS: Caridean shrimp, Larval development, *Palaemonetes paludosus*, *Synalpheus brooksi*, *Glyphocrangon spinicauda*, *Thor floridanus*, Bear Cut

440

Dobkin, S. (1968) The larval development of a species of *Thor* (Caridea, Hippolytidae) from South Florida, U.S.A. Crustaceana, Supplement II(-):1-18.

TIME COVERAGE: 1961

SUMMARY: A species of *Thor* was collected in seagrass beds in Bear Cut and the larval development of this shrimp described based on larvae from one of the collected specimens.

KEY WORDS: Larval development, Caridean shrimp, *Thor floridanus*, Bear Cut

441

Dodge, C. R. (1987) Subtropical Florida. In: Tales of Old Florida. Castle, Secaucus, NJ. 477 pp.

TIME COVERAGE: 1894

SUMMARY: This article describes travel in South Florida including Biscayne Bay and Miami.

KEY WORDS: Natural resources, History, South Florida, Florida Keys

442

Dole, R. B. (1914) Some chemical characteristics of sea-water at Tortugas and around Biscayne Bay, Florida. Papers from the Tortugas Laboratory of the Carnegie Institution of Washington, 5(-):69-78.

TIME COVERAGE: 1913

SUMMARY: Chemical tests were performed to determine the soluble effect, if any, carbon dioxide in seawater might have on coral and other deposits of calcium carbonate. Tests of Biscayne Bay waters were made to ascertain the differences in concentration of seawater in the Bay and the diluting effect of the Miami River.

KEY WORDS: Carbon dioxide, Chlorine, Salinity, Alkalinity, Water analysis, Sea water, Dry Tortugas, Cape Florida, Miami River, Soldier Key, Featherbed Bank, Black Ledge

443

Dombrowski, M. R., and A. J. Mehta (1993) Inlets and management practices: southeast coast of Florida. In: Beach/Inlet Processes and Management: a Florida Perspective (J. Coastal Res. Spec. Issue 18). A. J. Mehta (ed.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 308 pp.

TIME COVERAGE: 1993

SUMMARY: Management practices for bypassing sand have been examined at eight tidal inlets with respect to existing engineering protocols and recommendations for future changes made through previous and ongoing engineering studies at these inlets which include Bakers Haulover Inlet and Government Cut.

KEY WORDS: Beach erosion, Inlets (Waterways), Sediment transport, Bakers Haulover Inlet, Southeast Florida, Government Cut

444

Domeier, M. L. (1994) Speciation in the serranid fish *Hypoplectrus*. Bull. Mar. Sci., 54(1):103-141.

TIME COVERAGE: 1994

SUMMARY: The species status of individual color morphs of fishes of the genus *Hypoplectrus* was examined.

KEY WORDS: Hamlets, Hypoplectrus, Biological speciation

445

Doochin, H. D. (1949) The morphology of *Balanus improvisus* Darwin and *Balanus amphitrite niveus* Darwin during initial attachment and metamorphosis. M.Sc. thesis. University of Miami, Coral Gables, FL. 63 pp.

TIME COVERAGE: 1949

SUMMARY: This is a study of barnacles fouling test panels deployed in the channel between Belle Isle and Miami Beach.

KEY WORDS: Barnacles, *Balanus improvisus*, *Balanus amphitrite niveus*, Larval settlement, Metamorphosis, Biological attachment

446

Doochin, H. D. (1951) The morphology of *Balanus improvisus* Darwin and *Balanus amphitrite niveus* Darwin during initial attachment and metamorphosis. Bull. Mar. Sci. Gulf Caribb., 1(1):15-39.

TIME COVERAGE: 1951

SUMMARY: This paper described the morphology of barnacles during attachment and metamorphosis.

KEY WORDS: Barnacles, *Balanus improvisus*, *Balanus amphitrite niveus*, Biological attachment, Metamorphosis, Larval settlement

447

Doochin, H. D., and F. G. W. Smith (1951) Marine boring and fouling in relation to velocity of water currents. Bull. Mar. Sci. Gulf Caribb., 1(2):196-208.

TIME COVERAGE: 1949

SUMMARY: Experiments were conducted to determine the effects of current velocity upon the intensity of attack of wood boring worms.

KEY WORDS: Boring organisms, Fouling organisms, Current velocity, MacArthur Causeway

448

Dowgiallo, M. J., I. C. Sheifer, F. G. Everdale, K. B. Pechmann, M. C. Predoehl, and T. W. Waltz (1987) Marine environmental assessment, southeastern U. S., 1986 annual summary. Report. NOAA, Marine Environmental Assessment Division, Marine Assessment Branch, Washington, DC. 134 pp.

TIME COVERAGE: 1987

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marine environment, Brackishwater environment, Climate, Oceanography, Hydrology, Fisheries, Recreation, Transportation, Pollution, North Carolina, South Carolina, Georgia, Florida

449

Duane, D. B., and E. P. Meisburger (1969) Geomorphology and sediments of the nearshore continental shelf, Miami to Palm Beach, Florida. Tech. memo. 29. US Army Corps of Engineers, Coastal Engineering Research Center, Washington, DC. 120 pp.

TIME COVERAGE: 1969

SUMMARY: The continental shelf between Palm Beach and Miami was surveyed to locate and evaluate sand deposits usable for shore protection and restoration projects. South of Boca Raton to Miami, much of the shelf is essentially rocky with a thin sediment veneer. In terms of

potential use as beach sand, the sand size sediment from the shelf in the study area was of marginal quality.

KEY WORDS: Continental shelves, Sediment, Geomorphology, Sand, Seismic profiles, Miami, Palm Beach

450

Duellman, W. E., and A. Schwartz (1958) Amphibians and reptiles of southern Florida. Bulletin of the Florida State Museum, Biological Sciences, 3(5):1-324.

TIME COVERAGE: 1958

SUMMARY: This book describes the amphibians and reptiles found in South Florida.

KEY WORDS: Amphibians, Reptiles, South Florida

451

Duerr, E. O. (1976) Oxygen consumption studies on the pink shrimp, *Penaeus duorarum*, as a function of activity, size, water temperature, and flow, with notes on starvation and sand substrate effects. M.Sc. thesis. University of Miami, Coral Gables, FL. 119 pp.

TIME COVERAGE: 1976

SUMMARY: This study of oxygen consumption rates showed that resting consumption rates occurred during the day and an active rate was measured at night. Rates were measured in the laboratory using pink shrimp obtained from a commercial trawler operating in southern Biscayne Bay.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Oxygen consumption

452

Dunn, G. E., and Staff (1965) The hurricane season of 1964. Monthly Weather Review, 93(3):175-187.

TIME COVERAGE: 1964

SUMMARY: Hurricane Cleo passed near Key Biscayne August 27. Meteorological information on the storm can be found in this article.

KEY WORDS: Hurricanes, Hurricane Cleo

453

Dunn, G. E., and B. I. Miller (1960) Atlantic Hurricanes. Louisiana State University Press, Baton Rouge, LA. 326 pp.

TIME COVERAGE: 1960

SUMMARY: This book is a general discussion on hurricanes and how to prepare for them. Florida hurricanes are briefly discussed.

KEY WORDS: Hurricanes, Tropical meteorology

454

Duplaix, N. (1990) South Florida water: paying the price. National Geographic Magazine, 178(1):89-113.

TIME COVERAGE: 1990

SUMMARY: This article is a historical summary of water usage in South Florida and the alteration of the hydrology of the area.

KEY WORDS: Water supply, Water quality, Water management, South Florida

455

Durako, M. J. (1993) Photosynthetic utilization of  $\text{CO}_{2(\text{aq})}$  and  $\text{HCO}_3^-$  in *Thalassia testudinum* (Hydrocharitaceae). Mar. Biol., 115(-):373-380.

TIME COVERAGE: 1988 (lab study)

SUMMARY: The effects of total dissolved organic carbon, free carbon dioxide and bicarbonate on net photosynthetic oxygen evolution of *Thalassia* collected in Biscayne and Tampa Bays were studied.

KEY WORDS: Carbon dioxide, Bicarbonates, Dissolved inorganic matter, Photosynthesis, *Thalassia testudinum*, Tampa Bay

456

Durako, M. J., R. C. Phillips, and R. R. Lewis (eds.) (1987) Proc., Symp. on Subtropical-Tropical Seagrasses of the Southeastern United States. Gainesville, FL, 1985. Florida marine research publications 42. Florida Department of Natural Resources, Bureau of Marine Research, St. Petersburg, FL.

TIME COVERAGE: 1985

SUMMARY: This publication contains chapters on generalized topics related to the seagrass ecosystem in the southeast US such as biology, trace metals cycling, invertebrate and fish communities, historic trends and restoration.

KEY WORDS: Seagrass, Subtropical zones, Tropical environment

457

Durako, M., and F. Wettstein (1994) Johnson's seagrass: the Rodney Dangerfield of seagrasses (gets no respect, survives harsh conditions, little or no known sex). The Palmetto Winter, Winter(-):3-5.

TIME COVERAGE: 1994

SUMMARY: Johnson's seagrass is a small rare seagrass that is known to occur only in lagoons along the southeast coast of Florida. This paper is a general description of the genus *Halophila* and of *Halophila johnsonii*.

KEY WORDS: Seagrass, *Halophila*, Johnsons seagrass, *Halophila johnsonii*

458

Earl, A. W. (1989) Sediment mixing on a modern coastal sandflat by tidal, longshore and storm currents, Key Biscayne, Florida. Abstracts with programs (Geological Society of America), 21(6):A161.

TIME COVERAGE: 1989

SUMMARY: A complex mixture of carbonate and clastic sediment is presently accumulating on an intertidal-subtidal sandflat of Key Biscayne. Grains of five different origins were recognized. Since its origin 1000 - 2000 yrs BP, the sandflat has propagated laterally.

KEY WORDS: Sediment mixing, Sand bars, Tidal currents, Longshore currents, Key Biscayne

459

Earl, A. W. (1989) Sedimentology of a recent mixed carbonate-clastic sandflat, Key Biscayne, Florida. M.Sc. thesis. West Virginia University, Morgantown, WV.

TIME COVERAGE: 1989

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Tidal flats, Grain properties, Carbonate sediment, Clastics, Quartz, Key Biscayne

460

Earley, C. F. (1967) The sediments of Card Sound, Florida. Contribution - Sedimentological Research Laboratory, no. 18. M.Sc. thesis. Florida State University, Tallahassee, FL. 72 pp.

TIME COVERAGE: 1967

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sediment, Carbonate sediment, Card Sound

461

Earley, C. F., and H. G. Goodell (1968) The sediments of Card Sound, Florida. J. Sed. Petrol., 38(4):985-999.

TIME COVERAGE: 1968

SUMMARY: Surface sediments of Card Sound and southern Biscayne Bay were found to differ considerably from those found in the continental shelf.

The shelf sediments are entirely carbonate, composed primarily of aragonite, high-magnesium calcite, and lesser amounts of low-magnesium calcite. The sediments of Card Sound and southern Biscayne Bay are composed of detrital quartz and low-magnesium calcite. Sediment transport is primarily by waves and wave-generated currents, and secondarily by tidal currents.

KEY WORDS: Sediment, Carbonate sediment, Card Sound

462

Ebbs, N. K. (1966) The coral-inhabiting polychaetes of the northern Florida reef track. Part I. Aphroditidae, Polynoidae, Amphinomidae, Eunicidae, and Lysaretidae. Bull. Mar. Sci., 16(3):485-555.

TIME COVERAGE: 1961 - 1963

SUMMARY: This paper is part of a series of studies carried out in Margot Fish Shoal, just east of Elliott Key. The polychaetes found in the coral reef are described.

KEY WORDS: Polychaetes, Coral reefs, Margot Fish Shoal, Elliott Key, Aphroditidae, Polynoidae, Amphinomidae, Eunicidae, Lysaretidae

463

Ebbs, N. K. (1964) Some errant polychaetous annelids of the coral patches of Margot Fish Shoal (off Elliott Key, Miami, Florida.) excluding the Syllidae. M.Sc. thesis. University of Miami, Coral Gables, FL. 209 pp.

TIME COVERAGE: 1961 - 1963

SUMMARY: Coral heads were collected, taken to the laboratory and broken up. All the errant polychaetes were collected, preserved and identified.

KEY WORDS: Polychaetes, Coral reefs, Polynoidae, Aphroditidae, Amphinomidae, Eunicidae, Lysaretidae, Margot Fish Shoal, Elliott Key, Taxonomy, Species list

464

Ebbs, N. K., and J. C. Staiger (1965) Some osmotic adaptations of *Onuphis magna* (Polychaeta: Onuphidae). Bull. Mar. Sci., 15(4):835-849.

TIME COVERAGE: 1965

SUMMARY: Microcryoscopic comparisons of freezing-point depressions in paired coelomic fluid and diluted sea water samples show that this polychaete is a hyperosmotic regulator with an osmoregulation curve inhibiting a distinct leveling. The polychaete fails to survive at greater dilutions indicating a probable lack of tolerance to dilution in its tissues.

KEY WORDS: *Onuphis magna*, Polychaetes, Osmotic adaptations, Osmoregulation, Virginia Key, Bear Cut, Key Biscayne

465

Edwards, C. E. (1980) Giant shrimp in Biscayne Bay. Of Sea and Shore, 11(1):74-75.

TIME COVERAGE: 1980

SUMMARY: This brief article describes the shrimp fishery by local people including reports of giant species of pink shrimp

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Shrimp fisheries

466

Edwards, R. E. (1977) Respiration of a shallow-water benthic community associated with the seagrass *Halodule wrightii*. M.Sc. thesis. University of Miami, Coral Gables, FL. 85 pp.

TIME COVERAGE: 1976

SUMMARY: The ecology of a shallow-water, benthic, marine community associated with *Halodule* was analyzed by partitioning total community respiration measured by oxygen consumption. Macrofaunal composition was also described.

KEY WORDS: Seagrass, *Halodule wrightii*, Oxygen consumption, Benthos, Microorganisms, Respiration, Shoal Point, Species list

467

Egler, F. E. (1948) The dispersal and establishment of red mangrove, *Rhizophora* in Florida. Caribbean Forester, 9(-):299-319.

TIME COVERAGE: 1948

SUMMARY: The purpose of this report was to draw attention to two phenomena of the mangrove swamp: 1) the strong curvature of the hypocotyl in young seedlings recently established; and 2) the discontinuous age-class groups of pioneer communities fronting the sea.

KEY WORDS: Red mangrove, *Rhizophora*, Seeds, Florida

468

Eichler, L. W. (1977) Benthic infaunal assemblages associated with turtlegrass (*Thalassia testudinum* König) in Biscayne Bay, Florida. M.Sc. thesis. Florida Atlantic University, Boca Raton, FL. 67 pp.

TIME COVERAGE: 1976

SUMMARY: Benthic organisms associated with *Thalassia* beds were studied at four sites in Virginia Key and Key Biscayne. A total of 109 species were collected. The major taxa were Polychaeta, Amphipoda, Bivalvia, Gastropoda, Isopoda and Sipunculida. Sediment cores were collected for particle size and organic carbon determination. Differences in faunal densities at the sampling sites were discussed in relation to sediment type and current velocity.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Zoobenthos, Aquatic communities, Virginia Key, Key Biscayne, Sediment

469

Eidman, M. (1967) Contribution to the biology of needlefishes, *Strongylura* spp., in south Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 84 pp.

TIME COVERAGE: 1963

SUMMARY: This work is a study of the biology of needlefishes. Some specimens were collected in Biscayne Bay.

KEY WORDS: Needlefish, Timucu, *Strongylura*, Buttonwood Canal, Virginia Key

470

Einziger, W. L. (1983?) Biscayne Bay restoration and enhancement program. Report. Dade County. Department of Environmental Resources Management, Miami, FL. 39 pp.

TIME COVERAGE: 1983

SUMMARY: The goal of the Biscayne Bay restoration and enhancement program is to maintain, restore, enhance and provide those physical, chemical, biological and aesthetic qualities of Biscayne Bay that provide the basic character and value of the resource.

KEY WORDS: Environmental restoration, Resource management, Biscayne Bay Restoration and Enhancement Program

471

Eiseman, N. J. (1970) The green alga *Chalmasia antillana* from the Florida Keys. Phycologia, 9(-):45-47.

TIME COVERAGE: 1968 - 1969

SUMMARY: Four species of the marine green algal subfamily Acetabularieae were found in the same habitat between the Florida Keys and Biscayne Bay. The species are described.

KEY WORDS: Algae, *Chalmasia antillana*, Lake Surprise, Florida Keys

472

Eiseman, N. J., and C. McMillan (1980) A new species of seagrass, *Halophila johnsonii*, from the Atlantic coast of Florida. Aquatic Botany, 9(1):15-19.

TIME COVERAGE: 1974

SUMMARY: A new species of seagrass was described in this citation. This plant had been previously described as *Halophila decipiens*.

KEY WORDS: New species, *Halophila johnsonii*, Johnson's seagrass, Norris Cut, Aquatic plants, Seagrass

473

Eklund, A. M. (1997) The importance of post-settlement predation and reef resource limitation on the structure of reef fish assemblages. In: Proc., 8th Internatl. Coral Reef Symp. H. A. Lessios, and I. G. Macintyre, (eds.). Panama, 1996. Smithsonian Tropical Research Institute, Balboa, Panama. 1139-1142.

TIME COVERAGE: 1997

SUMMARY: Reef resources and predation pressure were controlled in a series of experiments to test whether the structure and production of coral reef fish assemblages could be affected by resource limitation rather than recruitment limitation.

KEY WORDS: Reef fish, Population density, Predation, Key Biscayne, Palm Beach

474

Eldred, B. (1960) A note on the occurrence of the shrimp, *Penaeus brasiliensis* Latreille, in Biscayne Bay, Florida. Quart. J. Fla. Acad. Sci., 23(2):164-165.

TIME COVERAGE: 1960

SUMMARY: This paper describes the occurrence of the *Penaeus brasiliensis*, a species closely related to *Penaeus duorarum* in Biscayne Bay.

KEY WORDS: Shrimp, *Penaeus duorarum*, *Penaeus brasiliensis*

475

Eldred, B., C. R. Futch, and R. M. Ingle (1972) Studies of juvenile spiny lobsters, *Panulirus argus*, in Biscayne Bay, Florida. Special scientific report 35. Florida Department of Natural Resources, Marine Research Laboratory, St. Petersburg, FL. 15 pp.

TIME COVERAGE: 1968 - 1969

SUMMARY: Young spiny lobsters were captured in commercial bait shrimp trawls from Biscayne Bay. Size frequencies were consistent with those found for juvenile lobsters from similar habitats elsewhere. Only immature lobsters were associated with the inshore sand/mud, alga/phanerogam habitat.

KEY WORDS: Spiny lobster, *Panulirus argus*, Juveniles

476

Ellicott, A. (1978) From Tampa Bay to Biscayne Bay in 1799. Reprinted from The journal of Andrew Ellicott, 1803, with an introduction by Charlton W. Tebeau. Tequesta, 38(-):72-82.

TIME COVERAGE: 1799

SUMMARY: This is an account of the trip undertaken by Ellicott from Tampa to Biscayne Bay across Florida Bay.

KEY WORDS: Exploration, Florida Bay, Florida Keys, Key Biscayne

477

Ellis, R. W., A. Rosen, and A. W. Moffett (1958) A survey of the number of anglers and of their fishing effort and expenditures in the coastal recreational fishery of Florida. Florida Board of Conservation technical series 14. Marine Laboratory, University of Miami, Miami, FL. 50 pp.

TIME COVERAGE: 1958

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Angling, Sport fishing statistics, Recreation, Costs, Florida

478

Emin, J. (1997) Dune vegetation [vegetation] and erosion. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Dunes, Beach erosion, Virginia Key

479

Emmel, T. C. (1992) Mother Nature reeks havoc on endangered habitats: a field survey of endangered species habitats and tropical hardwood hammocks in south Florida following Hurricane Andrew, August 28-30, 1992. Florida Naturalist, 65(3):12-13,15,21-22.

TIME COVERAGE: 1992

SUMMARY: This paper is the account of the field survey undertaken after the passage of Hurricane Andrew.

KEY WORDS: Hammocks, Habitat, Rare species, Tree snails, Schaus swallowtail, Hurricane Andrew, Key Biscayne

480

Engstrom, N. A. (1980) Development, natural history and interstitial habits of the apodous holothurian *Chiridota rotifera* (Pourtales, 1851) (Echinodermata: Holothuroidea). Brenesia, 17(-):85-96.

TIME COVERAGE: 1969

SUMMARY: This holothurian broods its young in the coelum. Development is thus viviparous and all the young from an adult are apparently released simultaneously. Reproduction occurs year round and upon release, the young burrow in soft sediment and fine sand.

KEY WORDS: Reproduction, Larval development, Life history, *Chiridota rotifera*, Holothurians, Crandon Park Marina, Key Biscayne

481

Engstrom, N. A. (1970) The reproductive cycles, systematic status and general biology of *Holothuria (Halodeima) floridana* Pourtales, 1851 and *H. (H.) mexicana* Ludwig, 1875. M.Sc. thesis. University of Miami, Coral Gables, FL. 92 pp.

TIME COVERAGE: 1970

SUMMARY: Holothurians were collected for one year in Biscayne Bay and the Florida Keys and held in aquarium. Their biology and systematics were studied.

KEY WORDS: Holothurians, *Holothuria (Halodeima) floridana*, *Holothuria (Halodeima) mexicana*, Reproductive cycle, Taxonomy, Bear Cut, Key Biscayne, Soldier Key, West Point

482

Enos, P., and R. D. Perkins (1977) Quaternary sedimentation in south Florida. Geological Society of America memoir 147. Geological Society of America, Boulder, CO. 198 pp.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sedimentation, Quaternary, Geology, South Florida

483

Environmental Protection Agency (1973) Central Dade County, Florida. Final environmental impact statement. EIS-FL-73-1489-F. National Technical Information Service, Springfield, VA. 295 pp.

TIME COVERAGE: 1973

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

484

Environmental Protection Agency (1971) Industrial waste sources inventory and evaluation: Dade County, Florida. PB-258 404. EPA/330/2-71/003. National Technical Information Service, Springfield, VA.

TIME COVERAGE: 1971

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

KEY WORDS: Waste sources

485

Environmental Protection Agency (1988) Munisport toxicity and bioaccumulation studies. Final report. The Agency, Environmental Services Division, Ecological Support Branch, Athens, GA. Various paging.

TIME COVERAGE: 1987

SUMMARY: Samples of lake and well water were collected at the Munisport Landfill and analyzed for Hazardous Substance List chemicals and assessed for toxics and mutagens. Bioaccumulation studies were also carried out.

KEY WORDS: Toxicity tests, Bioaccumulation, Chemical pollutants, Ammonia, Munisport Landfill, North Miami

486

Environmental Protection Agency (1973) Ocean outfalls and other methods of treated wastewater disposal in southeast Florida. Transcript of proceedings held in Lake Worth, Florida, January 24, 1973, Miami Beach, Florida, January 26, 1973, Fort Lauderdale, Florida, January 27, 1973. EIS-FL-0491-F-1 and EIS-FL-0491-F-2. Environmental Protection Agency, Region IV, Atlanta, GA. Various paging.

TIME COVERAGE: 1973

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

KEY WORDS: Outfalls, Waste water, Waste disposal, Palm Beach County, Broward County, Dade County

487

Environmental Protection Agency (1973) Ocean outfalls and other methods of treated wastewater disposal in southeast Florida. Public hearing on draft environmental impact statement. National Technical Information Service, Springfield, VA. 624 pp.

TIME COVERAGE: 1973

SUMMARY: This environmental impact statement identified adverse and beneficial environmental effects resulting from a proposed action regarding wastewater disposal.

488

Environmental Protection Agency (1973) South Dade County, Florida. Final environmental impact statement. EIS-FL-1490-F. National Technical Information Service, Springfield, VA. 295 pp.

TIME COVERAGE: 1973

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

489

Environmental Protection Agency (1990) Superfund record of decision: Munisport Landfill, FL. PB91-921525. National Technical Information Service, Springfield, VA. Various paging.

TIME COVERAGE: 1990

SUMMARY: This report describes the remedial actions to be taken at the Munisport Landfill.

KEY WORDS: Groundwater pollution, Water quality, Chemical pollution, Munisport Landfill, State Mangrove Preserve, North Miami

490

Environmental Protection Agency (1994) Technical summary document for the advance identification of possible future disposal sites and areas generally unsuitable for disposal of dredged or fill material in wetlands adjacent to southwest Biscayne Bay, Dade County, Florida. Prepared in cooperation with the Metro-Dade Department of Environmental Resources Management and the US Army Corps of Engineers, Jacksonville District. DERM tech. rep. 94-2, EPA 904/R-94/007. Environmental Protection Agency, Atlanta, GA.

TIME COVERAGE: 1994

SUMMARY: Future disposal sites along the southwest shore of Biscayne Bay were identified. Coast habitats, wildlife, soil types, jurisdiction and other parameters were examined.

KEY WORDS: Waste disposal sites, Dredge spoil, Site surveys, Wetlands, South Bay

491

Erickson, J. T. (1985) Age-specific respiration in larval Queen conch, *Strombus gigas* Linnaeus, determined by open gradient diver microrespirometry. M.Sc. thesis. University of Miami, Coral Gables, FL. 137 pp.

TIME COVERAGE: 1983

SUMMARY: Queen conch larvae were collected in Biscayne Bay and reared in the laboratory. Open gradient diver microrespirometry was developed to measure age-specific respiration in individual Queen conch larvae with a precision of  $\pm 7-10\%$ .

KEY WORDS: Queen conch, *Strombus gigas*, Larvae, Respiration

492

Ernst, I., I. D. Whittington, and M. K. Jones (2000) Three new species of Polyclithrum Rogers, 1967 (Gyrodactylidae: Monogenea) from mugilid fishes from Australia and Brazil, with a redescription of *P. mugilini* Rogers, 1967. Systematic Parasitology, 45(-):61-73.

TIME COVERAGE: 2000

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Striped mullet, *Mugil cephalus*, Parasites, Polyclithrum spp., *Micropolyclithrum parvum* Skinner

493

Escalante Fontaneda, H. d' (1944) Memoir of Do. d'Escalente Fontaneda Respecting Florida. (Written in Spain, about the year 1575. Translated from the Spanish with notes by Buckingham Smith, Washington, 1854. Reprinted, with revisions; edited by David O. True.) University of Miami and the Historical Association of Southern Florida, Miami, FL.

TIME COVERAGE: 1575

SUMMARY: This is a short and early account of Florida.

KEY WORDS: Florida, Geographical exploration

494

Eschmeyer, W. N. (1967) A systematic review of the scorpionfishes of the Atlantic Ocean. Ph.D. dissertation. University of Miami, Coral Gables, FL. 241 pp.

TIME COVERAGE: 1967

SUMMARY: Scorpionfish species from the Atlantic Ocean were described. Several specimens were collected in Biscayne Bay.

KEY WORDS: Scorpionfish, Scorpaenidae, Taxonomy, Elliott Key, Florida Keys

495

Espejo-Beshers, O. (1992) The map collection of the archives and special collections department, Otto G. Richter Library, University of Miami. Tequesta, 52(-):39-50.

TIME COVERAGE: 1992

SUMMARY: The map collection of the Richter Library is described. Included in the collection are maps of Biscayne Bay.

KEY WORDS: Charts, Maps

496

Esteves, L. S. (1997) Evaluation of shore protection measures applied to eroding beaches in Florida. M.Sc. thesis. Florida Atlantic University, Boca Raton, FL. 181 pp.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach erosion, Shore protection, Coast defenses, Florida

497

Esteves, L. S., and C. W. Finkl (1998) The problem of critically eroded areas (CEA): an evaluation of Florida beaches. In: Proc., Palm Beach International Coastal Symp. (J. Coastal Res. special issue 26). C. W. Finkl, and P. Bruun, (eds.). Nov. 18, 1998. Coastal Education & Research Foundation, Royal Palm Beach, FL.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach erosion, Shore protection, Florida

498

Estevez, E. D., and J. L. Simon (1975) Systematics and ecology of *Sphaeroma* (Crustacea: Isopoda) in the mangrove habitats of Florida. In: Proc., Internatl. Symp. on Biol. and Management of Mangroves. G. E. Walsh, S. C. Snedaker, and H. J. Teas, (eds.). Honolulu, HI, 1974. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. 286-304.

TIME COVERAGE: 1975

SUMMARY: This citation describes the systematics of the wood-boring isopod genus *Sphaeroma*.

KEY WORDS: Isopods, *Sphaeroma walkeri*, *Sphaeroma terebrans*, *Sphaeroma quadridentatum*, Mangrove swamps, *Rhizophora mangle*, Florida

499

Evans, C. C. (1982) Aspects of the depositional and diagenetic history of the Miami Limestone: control of primary sedimentary fabric over early cementation and porosity development. M.Sc. thesis. University of Miami, Coral Gables, FL. 233 pp.

TIME COVERAGE: 1982

SUMMARY: This study utilized a series of core borings made for the engineering concerns associated with the Metrorail Rapid Transit System as well as some cores provided by the USGS in studying deposits immediately underlying the Miami Limestone in addition to the depositional and diagenetic history of the Miami Limestone.

KEY WORDS: Ooids, Miami Limestone, Sedimentation, Diagenesis

500

Evans, C. C. (1987) Facies, sedimentary structures, and topography of the late Pleistocene Miami Limestone. In: Symposium on South Florida Geology. F. J. R. Murrasse, (ed.). Memoir 3. Miami Geological Society, Coral Gables, FL. 7-8.

TIME COVERAGE: 1987

SUMMARY: The use of cores from closely spaced borings in combination with both natural and man made outcrops allowed the refinement of the depositional history of the Miami limestone. Contrary to complications of previous studies, the ooid sand shoal complex of the eastern part of the Miami limestone was built up in place and did not migrate backward over earlier platform interior deposits of the brozoan facies. The distribution of cross-bedding in the shoal and channel system confirms the bar and channel origin for his morphology. The seaward barrier is a more complex feature than suggested by its morphology, probably the result of coalescing tidal deltas.

KEY WORDS: Ooids, Miami Limestone, Facies, Sedimentary structures, Topography (Geology)

501

Evans, C. C. (1987) The relationship between the topography and internal structure of an ooid shoal sand complex: the upper Pleistocene Miami Limestone. In: Symposium on South Florida Geology. F. J. R. Murrasse, (ed.). Memoir 3. Miami Geological Society, Coral Gables, FL. 18-41.

TIME COVERAGE: 1987

SUMMARY: The revision of previous speculations on the depositional history of the Miami limestone proposed in the previous citation is using cores from closely spaced borings in combination with both natural and man made outcrops.

KEY WORDS: Ooids, Miami Limestone, Topography (Geology), Facies

502

Evermann, B. W. (1898) The fish fauna of Florida. Bulletin of the United States Fish Commission, 17(-):201-208.

TIME COVERAGE: 1898

SUMMARY: This paper describes the fish families found in Florida waters.

KEY WORDS: Fish, Florida

503

Evermann, B. W., and W. C. Kendall (1900) Check-list of the fishes of Florida. Report of the Commissioner [of Fish and Fisheries] for the year ending June 30,1899. Government Printing Office, Washington, DC. 35-103.

TIME COVERAGE: 1899

SUMMARY: This citation is a list of fish species found in Florida

KEY WORDS: Fish, Species list, Florida

504

Evoy, J. H. (1978) An evaluation of the use of environmental information for dredge and fill decisions in Biscayne Bay, Dade County, Florida. Thesis, Masters in Urban and Regional Planning. University of Miami, Coral Gables, FL. 220 pp.

TIME COVERAGE: 1978

SUMMARY: The way in which environmental information was used to make dredge and fill decisions at the Federal, state and local level was evaluated and compared with the availability of scientific data and pertinent statutory requirements. Three case studies in Dade County were examined: Miamarina, South Cutler Bay and Munisport.

KEY WORDS: Dredging, Environment policy, Information handling, Decision making, Miamarina, South Cutler Bay, Munisport

505

Ewald, J. J. (1965) The larval development of *Tozeuma carolinense* Kingsley from Florida waters, with notes on the biology of the species. M.Sc. thesis. University of Miami, Coral Gables, FL. 122 pp.

TIME COVERAGE: 1961 - 1963

SUMMARY: The larval development and taxonomy of the ghost shrimp is described. Some of the samples were collected in Biscayne Bay.

KEY WORDS: Phantom shrimp, Grass shrimp, *Tozeuma carolinensis*, Crustacean larvae, Larval development, Biological development, Florida, Bear Cut

506

Ewald, J. J. (1969) Observations on the biology of *Tozeuma carolinense* (Decapoda, Hippolytidae) from Florida, with special reference to larval development. Bull. Mar. Sci., 19(3):510-549.

TIME COVERAGE: 1969

SUMMARY: Aspects of the biology of the phantom shrimp, one of the most common shrimp species found in grass beds, were discussed. Data were presented which suggested the effect of temperature and genetic constitution on the number of larval intermolts and on the length of larval life.

KEY WORDS: Phantom shrimp, Grass shrimp, *Tozeuma carolinensis*, Crustacean larvae, Larval development, Biological development, Florida, Bear Cut, Soldier Key

507

Fairbridge, R. W. (1974) The Holocene sea-level record in South Florida. In: Environments of south Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 223-232.

TIME COVERAGE: 1974

SUMMARY: This citation describes the gradual Holocene sea level rise continuing up to the present in Florida.

KEY WORDS: Sea level rise, Florida

508

Farmer, L. L. (1974) A budget for p,p'DDT in a static aquarium with a simple marine food chain. M.Sc. thesis. University of Miami, Coral Gables, FL. 38 pp.

TIME COVERAGE: 1974

SUMMARY: The purpose of this investigation was to account quantitatively for the distribution of DDT over a 96-hr period through a controlled three-level laboratory food chain consisting of algae, a herbivore and a carnivore. An average of 79% of the DDT was recovered from the system during the 96-hr period. Equilibrium between water concentrations and algal tissue was established with three hours. Specimens were collected in Bear Cut.

KEY WORDS: DDTs, Toxicity, Food chains, Bioaccumulation, Bear Cut

509

Farmer, L. L. (1977) Physiological adaptations to salinity change in the calanoid copepod *Acartia tonsa*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 83 pp.

TIME COVERAGE: 1977

SUMMARY: Two physiological mechanisms were examined that may account for the demonstrated ecological success of this copepod species: cell volume regulation and haemolymph sodium regulation. Studies were done in the laboratory using specimens collected in Bear Cut.

KEY WORDS: Copepods, *Acartia tonsa*, Salinity tolerance, Acclimatization, Bear Cut

510

Farmer, L. L., and M. R. Reeve (1978) Role of the free amino acid pool of the copepod *Acartia tonsa* in adjustment to salinity change. Mar. Biol., 48(-):311-316.

TIME COVERAGE: 1978

SUMMARY: The free amino acid pool of this copepod was reduced in proportion to the decrease in external salinity within 24 hr, with a corresponding increase in ammonia excretion and a transient rise in oxygen consumption. The free amino acid pool was not increased in response to increased salinity. Antagonistic demands of osmotic preservation and nutritional metabolism on the free amino acid pool may limit the production of the species in waters of higher salinity.

KEY WORDS: Copepods, *Acartia tonsa*, Salinity tolerance, Amino acids

511

Feddern, H. A. (1968) Hybridization between the western Atlantic angelfishes, *Holocanthus isabelita* and *H. ciliaris*. Bull. Mar. Sci., 18(2):351-382.

TIME COVERAGE: 1968

SUMMARY: Two species of angelfish were studied to determine the status of angelfishes that possess coloration intermediate between the two species. Analysis was primarily accomplished by using portions of the general color pattern of adults, but gonads, behavior and relative populations were also investigated.

KEY WORDS: Blue angelfish, Queen angelfish, *Holocanthus isabelita*, *Holocanthus ciliaris*, Hybridization

512

Feddern, H. A. (1967) Larval development of the neon goby, *Elacatinus oceanops*, in Florida. Bull. Mar. Sci., 17(2):367-375.

TIME COVERAGE: 1962

SUMMARY: The larval development of the neon goby is described. Some specimens were caught near Miami.

KEY WORDS: Neon goby, *Elacatinus oceanops*, Larval development

513

Federal Emergency Management Agency (1993) Andrew, Iniki, Omar: FEMA evaluation of federal response and recovery efforts. In: Excerpts, 15th Ann. National Hurricane Conf. L. S. Tait, (compiler). Orlando, FL, April 13 - 16, 1993. National Hurricane Conference, Tallahassee, FL.

TIME COVERAGE: 1992

SUMMARY: This citation evaluated the federal response during the aftermath of Hurricanes Andrew, Iniki and Omar.

KEY WORDS: Hurricane Andrew, Hurricane Iniki, Hurricane Omar, Emergency preparedness

514

Federal Water Quality Administration (1970) Pollution of the waters of Dade County, Florida. Lower Florida Estuary Study, report. Department of the Interior, Federal Water Quality Administration, Ft. Lauderdale, FL. 44 pp.

TIME COVERAGE: 1970

SUMMARY: This report is an assessment of the effect of Dade County's sewage treatment on the quality of the water in the aquifer and canals discharging into Biscayne Bay.

KEY WORDS: Waste disposal, Water pollution, Sewage disposal, Groundwater pollution, Snake Creek, Snapper Creek, Little River, Tamiami Canal, Biscayne Canal, Taylor Slough, Miami Canal, Oleta River, Opa Locka Canal, Coral Gables Waterway

515

Federal Water Pollution Control Administration (1970) Proc., Conference in the Matter of Pollution of the Navigable Waters of Biscayne Bay and its Tributaries in the State of Florida. Miami, FL, 1970. US Dept. of the Interior, Federal Water Pollution Control Administration, Washington, DC.

TIME COVERAGE: 1970

SUMMARY: This are the proceedings of a conference on Biscayne Bay.

KEY WORDS: Thermal pollution, Pollution control, Turkey Point

516

Federal Water Quality Administration (1970) Proc., Conf. in the Matter of Pollution of the Navigable Waters of Dade County Florida and Tributaries Embayments and Coastal Waters. Miami, FL, 1970. US Dept. of the Interior, Federal Water Quality Administration, Washington, DC.

TIME COVERAGE: 1970

SUMMARY: This document is a transcript of the conference proceedings.

KEY WORDS: Pollution control, Waste disposal, Sewage

517

Federal Water Pollution Control Administration (1970) Report on thermal pollution of intrastate waters, Biscayne Bay, Florida. Lower Florida Estuary Study, report. US Department of the Interior, Federal Water Pollution Control Administration,, Ft. Lauderdale, FL. 44 pp.

TIME COVERAGE: 1970

SUMMARY: This report discusses the effects of heated effluent from the Turkey Point Power Plant on Biscayne Bay.

KEY WORDS: Thermal pollution, Temperature effects, Turkey Point

518

Feigenbaum, D. L. (1977) Nutritional ecology of the Chaetognatha with particular reference to external hair patterns, prey detection, and feeding. Ph.D. dissertation. University of Miami, Coral Gables, FL. 106 pp.

TIME COVERAGE: 1977

SUMMARY: Chaetognaths are plankton predators that apparently rely in external sensory hairs to receive prey-produced vibrations. Hair fan patterns were mapped in several species. Feeding experiments were conducted in the laboratory. Some specimens were collected in Biscayne Bay.

KEY WORDS: Chaetognaths, Sagitta, Spadella, Food consumption, Feeding behavior, Predation

519

Feigenbaum, D. L. (1973) Parasites of the commercial shrimp, *Penaeus vannamei* Boone and *Penaeus brasiliensis* Latreille. M.Sc. thesis. University of Miami, Coral Gables, FL. 84 pp.

TIME COVERAGE: 1972

SUMMARY: Parasites found in juvenile shrimp were described. Specimens of *Penaeus brasiliensis* were collected in Biscayne Bay.

KEY WORDS: Shrimp, *Penaeus vannamei*, *Penaeus brasiliensis*, Parasites

520

Feigenbaum, D. L. (1975) Parasites of the commercial shrimp *Penaeus vannamei* Boone and *Penaeus brasiliensis* Latreille. Bull. Mar. Sci., 25(4):491-514.

TIME COVERAGE: 1972

SUMMARY: This paper describes ten species of parasites reported in two commercial species of shrimp from Sinaloa, Mexico. One of the shrimp species was also collected in Biscayne Bay and the parasites found in those specimens identified.

KEY WORDS: Shrimp, *Penaeus vannamei*, *Penaeus brasiliensis*, Parasites, Mexico

521

Feigenbaum, D. L., and J. Carnuccio (1976) Comparison between the trypanorhynchid cestode infections of *Penaeus duorarum* and *Penaeus brasiliensis* in Biscayne Bay, Florida. J. Invertebr. Pathol., 28(-):127-130.

TIME COVERAGE: 1974

SUMMARY: Two species of shrimp from Biscayne Bay were found to be infected with four species of trypanorhynchid cestode larvae. The two shrimp species contained cestodes in significantly different proportions. Female pink shrimp had different proportions of cestodes than male shrimp.

KEY WORDS: Shrimp, *Penaeus duorarum*, *Penaeus brasiliensis*, Cestodes, *Parachristianella monomegacantha*, *Parachristianella heteromegacanthus*, *Prochristianella penaei*, *Renibulbus penaeus*

522

Feingold, J. S. (1987) Ecological studies of a cyanobacterial infection of the sea plume *Pseudopterogorgia acerosa* (Pallas) (Coelenterata: Octocorallia). M.Sc. thesis. University of Miami, Coral Gables, FL. 61 pp.

TIME COVERAGE: 1987

SUMMARY: Some scleractinian corals are susceptible to a cyanobacterial infection called black band disease. The disease agent has been discovered in colonies of two species of sea plumes. Affected colonies were found in the northern Florida Keys.

KEY WORDS: Sea plume, *Pseudopterogorgia acerosa*, Bacterial diseases, Black band disease, Coral, Biscayne National Park, Sands Key, Soldier Key, Ragged Keys

523

Fell, J. W. (1965) Bionomics and physiological taxonomy of marine occurring yeasts. Ph.D. dissertation. University of Miami, Coral Gables, FL. 181 pp.

TIME COVERAGE: 1965

SUMMARY: Water samples, sediment and associated fauna and flora were examined for yeasts. Yeast specimens were evaluated taxonomically and physiologically.

KEY WORDS: Yeasts, *Candida*, *Cryptococcus*, Taxonomy, Ecology, Bahamas, Key Biscayne, Elliott Key, Indian Ocean

524

Fell, J. W. (1961) A new species of *Saccharomyces* isolated from a subtropical estuary. Antonie van Leeuwenhoek, 27(-):27-30.

TIME COVERAGE: 1958

SUMMARY: This citation describes a new species of yeast found in Biscayne Bay.

KEY WORDS: Yeasts, *Saccharomyces aesttuarii*

525

Fell, J. W. (1966) *Sterigmatomyces*, a new fungal genus from marine areas. Antonie van Leeuwenhoek, 32(-):99-104.

TIME COVERAGE: 1966

SUMMARY: A new species of fungus isolated from samples collected in the Indian Ocean and Biscayne Bay was described.

KEY WORDS: Fungi, *Sterigmatomyces halophilus*

526

Fell, J. W. (1970) *Sterigmatomyces* Fell. In: The yeasts: A Taxonomic Study. J. Lodder (ed.). North-Holland, Amsterdam, Holland. 1385 pp.

TIME COVERAGE: 1970

SUMMARY: This citation describes *Sterigmatomyces halophilus* Fell based on three strains, one of which was isolated from Biscayne Bay.

KEY WORDS: Yeasts, *Sterigmatomyces halophilus*, *Sterigmatomyces indicus*

527

Fell, J. W. (1976) The study of fungi in Biscayne Bay - a synopsis. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 157-166.

TIME COVERAGE: 1976

SUMMARY: This paper reviews the roles of fungi emphasizing available information on Biscayne Bay. Three aspects were considered of primary importance to the ecology of the Bay: possible role of fungi as indicators of pollution, the impact on the sponge industry, and the decomposition of submerged and intertidal plants.

KEY WORDS: Fungi, Fungal diseases, Sponges, Pollution indicators, Biodegradation, Seagrass, *Thalassia*, Mangrove swamps, *Rhizophora mangle*

528

Fell, J. W. (1959) A survey and taxonomic study of some yeasts from Biscayne Bay, Florida, and adjacent subtropical marine localities. M.Sc. thesis. University of Miami, Coral Gables, FL. 81 pp.

TIME COVERAGE: 1958

SUMMARY: This work studied yeasts found in Biscayne Bay including their taxonomy, ecology and physiology.

KEY WORDS: Yeasts, Taxonomy, Sediment, Water, Bear Cut, Key Biscayne

529

Fell, J. W., D. G. Ahearn, S. P. Meyers, and F. J. Roth (1960) Isolation of yeasts from Biscayne Bay, Florida and adjacent benthic areas. Limnol. Oceanogr., 5(-):366-371.

TIME COVERAGE: 1960

SUMMARY: Investigations of the yeasts present in Biscayne Bay indicated the occurrence of various yeast taxa representing 179 isolates. The collection and isolation of the yeasts is described in this paper. A yeast biota, with many species similar to those isolated from the Bay, was collected in deep sea sediments from the Bahamas.

KEY WORDS: Yeasts, Benthos, Bahamas

530

Fell, J. W., R. C. Cefalu, I. M. Master, and A. S. Tallman (1975) Microbial activities in the mangrove (*Rhizophora mangle*) leaf detrital system. In: Proc., Internatl. Symp. on Biol. and Management of Mangroves. G. E. Walsh, S. C. Snedaker, and H. J. Teas, (eds.). Honolulu, HI, 1974. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. 661-679.

TIME COVERAGE: 1974

SUMMARY: This report describes some of the microbial population associated with decaying mangrove leaf litter. Specific aspects studied during the degradation process were the sequence of fungal infestation, alterations in leaf dry weights, the carbon and nitrogen content, and quantitative and qualitative aspects of the meiofungal populations.

KEY WORDS: Fungi, Biodegradation, Mangrove swamps, *Rhizophora mangle*, Leaves, Detritus

531

Fell, J. W., and K. E. Cooksey (1974) The role of microorganisms as indicators of changing environmental conditions in mangrove and marsh communities. Literature reviews, project

reports and proposal. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1974

SUMMARY: The purpose of this study was to determine the role of plant litter systems in the Florida Power and Light study site in south Dade County. This is a continuation of previous studies.

KEY WORDS: Mangrove swamps, Detritus, Microorganisms, Fungi, Marshes, Indicators, Card Sound, South Bay

532

Fell, J. W., R. C. Hendrix, I. L. Hunter, S. Y. Newell, and A. S. Tallman (1976) The role of microorganisms as indicators of changing environmental conditions in mangrove and marsh communities. Faculty File. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 350 pp.

TIME COVERAGE: 1973 - 1976

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Bacteria, Fungi, Indicators, Environmental conditions, Mangrove swamps, Red mangrove, *Rhizophora mangle*, Salt marshes, Black rush, Needle rush, *Juncus roemerianus*, Detritus, Biodegradation, Card Sound, South Bay

533

Fell, J. W., B. Hopper, R. C. Cefalu, and I. M. Master (1972) Mangrove detrital system. In: An ecological study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. VII:1-27.

TIME COVERAGE: 1971

SUMMARY: The objective of this program was to investigate the microbiological activities associated within benthic mangrove detrital communities, to identify species of organisms associated with mangrove leave degradation, to determine the functional role of these organisms in the conversion and transfer to lead organic material to organisms of higher trophic levels, and to assess the effects of normal and abnormal environmental factors on the individual organisms and on their roles within the detrital community.

KEY WORDS: Mangrove swamps, Leaves, Biodegradation, Fungi, Detritus, *Rhizophora mangle*, Turkey Point, Card Sound

534

Fell, J. W., and I. L. Hunter (1979) Fungi associated with the decomposition of the black rush, *Juncus roemerianus*, in South Florida. *Mycologia*, 71(-):322-342.

TIME COVERAGE: 1979

SUMMARY: A total of 123 fungal taxa were observed on black rush leaves. The observed community structure was affected by the condition of the leaves, position on the leaf, season of the year, and culture technique.

KEY WORDS: Fungi, Biodegradation, Detritus, Black rush, *Juncus roemerianus*, Leaves, Little Card Sound

535

Fell, J. W., and I. M. Master (1980) The association and potential role of fungi in mangrove detrital systems. *Botanica Marina*, 23(-):257-263.

TIME COVERAGE: 1980

SUMMARY: Field examination of the decomposition of mangrove leaves demonstrated a sequence of fungal populations. During this period, an increase in nitrogen and a decrease in carbon were observed.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Leaves, Fungi, Decomposers, Detritus

536

Fell, J., I. M. Master, R. Cefalu, and S. Newell (1971) Fungi. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. IX:1-14.

TIME COVERAGE: 1971

SUMMARY: A major portion of the organic material in Biscayne Bay is contributed by the mangrove leaf fall that is converted by microbial activity into detrital particles that support large populations of animals. The aims of this study included the determination on a seasonal basis the fungi associated with the degradation of the mangrove leaves; and the examination the protein production and ascertain which specific fungi are instrumental in the conversion process.

KEY WORDS: Turkey Point, Card Sound, Fungi, Mangroves, Detritus

537

Fell, J. W., and I. M. Master (1973) Fungi associated with the degradation of mangrove (*Rhizophora mangle* L.) leaves in South Florida. In: Estuarine Microbial Ecology. L. H. Stevenson, and R. R. Colwell (eds.). University of South Carolina Press, Columbia, SC. 536 pp.

TIME COVERAGE: 1969 - 1970

SUMMARY: This paper reports the mycoflora of mangrove leaf degradation at different locations in South Florida. Further research is needed to determine the specific role of these organisms in the food web.

KEY WORDS: Fungi, Mangrove swamps, *Rhizophora mangle*, Biodegradation, Leaves, Turkey Point, Florida Bay, Florida Keys

538

Fell, J. W., I. M. Master, and S. Y. Newell (1980) Laboratory model of the potential role of fungi in the decomposition of red mangrove (*Rhizophora mangle*) leaf litter. In: Marine Benthic Dynamics. K. R. Tenore, and B. C. Coull (eds.). University of South Carolina Press, Columbus, SC. 451 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: A laboratory model was developed to examine the role of fungi in the decomposition of mangrove leaf litter. Mangroves leaves were collected at two sites at different times of the year and fungal degradation studied.

KEY WORDS: Fungi, Mangrove swamps, *Rhizophora mangle*, Biodegradation, Leaves, Detritus, Card Sound, Fahkahatchee Strand

539

Fell, J. W., and I. M. Master (1975) Phycomycetes (*Phytophthora* spp. nov. and *Pythium* sp. nov.) associated with degrading mangrove (*Rhizophora mangle*) leaves. Can. J. Bot., 53(-):2908-2922.

TIME COVERAGE: 1975

SUMMARY: Fungi of the genus *Phytophthora* were found associated with the initial stages of leaf litter decay of mangroves, and appears to be an important component of the litter degradation system in the Tropics. Descriptions of the new varieties of fungi were provided.

KEY WORDS: Fungi, Phycomycetes, *Phytophthora*, *Pythium*, Biodegradation, Leaves, Mangrove swamps, *Rhizophora mangle*, Detritus, Bear Cut, West Point, Matheson Hammock, Turkey Point, Mangrove Point, Card Sound, Florida Keys, Flamingo, Ten Thousand Islands

540

Fell, J. W., and A. S. Tallman (1980) *Rhodospodium paludigenum* sp. nov., a basidiomycetous yeast from intertidal waters of south Florida. Internatl. J. of Systematics Bacteriology, 30(4):658-659.

TIME COVERAGE: 1973

SUMMARY: A new species of yeast was described.

KEY WORDS: Yeasts, *Rhodospodium paludigenum*, Taxonomy, Card Sound

541

Fell, J. W., and N. Van Uden (1963) Yeasts in marine environments. In: Symp. on Marine Microbiology. C. H. Oppenheimer, (ed.). 1961, Chicago, IL. Charles C. Thomas, Springfield, IL. 329-340.

TIME COVERAGE: 1963

SUMMARY: This citation describes yeasts found in the marine environment including Biscayne Bay. In regions of high organic matter and current boundaries, a quantitative increase in the yeast population has been observed. Due to low organic content in the open ocean, the resident yeasts rely mainly on oxidative metabolic processes. The exterior surfaces of marine algae do not sustain a significant yeast population. With rare exceptions, yeasts encountered in this study represent terrestrial species of transitory status in the marine environment or adaptive forms which survive in both environments.

KEY WORDS: Yeasts, Marine environment, Bimini

542

Fenchel, T. (1970) Studies on the decomposition of organic detritus derived from the turtle grass *Thalassia testudinum*. Limnol. Oceanogr., 15(-):14-20.

TIME COVERAGE: 1970

SUMMARY: This paper describes the quantitative composition of microbial communities living on detrital particles derived from *Thalassia*. The number of organisms on and the rate of oxygen consumption of the detritus are approximately proportional to the total surface area. Amphipods decrease the particle size of the detritus thus increasing the surface area and microbial activity.

KEY WORDS: Degradation, Detritus, Turtle grass, *Thalassia testudinum*, Seagrass, Bear Cut

543

Finefrock, D. (1997) Old sewage pipe to be replaced. The Miami Herald, Miami, FL. January 24. Local. 6B.

TIME COVERAGE: 1997

SUMMARY: The old sewage pipeline that carries raw sewage from Miami to the Virginia Key treatment plant is scheduled to be replaced. Construction was expected to destroy up to two acres of submerged habitat.

KEY WORDS: Seagrasses, Cross Bay Line, Sewage

544

Finkl, C. W. (1985) Definition & interpretation of Holocene shorelines in the south Atlantic coastal zone, southeast Florida. Abstracts with programs (Geological Society of America), 17(7):582.

TIME COVERAGE: 1985

SUMMARY: Because the natural sequence of shorelines in the urban coastal corridor from Miami to Beach is partly obscured by dredge and fill operations initiated in early 1920's, some coastal segments are subject to reinterpretation. Analysis of early aerial photographs, old coastal charts and bore log data locates a much more complicated sequence of Recent coastlines than is generally appreciated. Before development, much of the coastal zone contained complicated networks of freshwater marshes and lakes with lagoons, bays, and sounds lying

behind extensively developed spits. The larger spits prograded southward (downdrift) forming long coastal-wise sounds that eventually led into freshwater marshes such as Lake Mabel (now Port Everglades). When new inlets were cut to link the ICW with the sea, the spits were beheaded to form what are now called "barrier islands." After subsequent inlet stabilization with inadequate sand bypassing, some spits became welded to the shore and others eroded away.

KEY WORDS: Holocene, Geomorphology, Coastal landforms, Southeast Florida, Key Biscayne, Port Everglades, Dredge and fill

545

Finkl, C. W. (1994) Management strategies for enhanced sand bypassing and beach replenishment in the southeast Florida coastal zone: potentials for application of new technologies. In: Proc., MTS 94: Challenges and Opportunities in the Marine Environment. Marine Technology Society, Washington, DC. 107-114.

TIME COVERAGE: 1994

SUMMARY: The advantage of beach artificial replentishment combined with new technologies for sand bypassing is a pre-emptive strategy over conventional beach restoration techniques.

KEY WORDS: Beach nourishment, Erosion control, Sand, Southeast Florida, Bakers Haulover Cut, Government Cut

546

Finkl, C. W. (1996) Potential impacts of a federal policy promoting "no new beach replenishment activities" on U.S. shorelines: iterations from SE Florida. In: Proc., 9th Natl. Conf. on Beach Preservation Technology. The Future of Beach Nourishment. L. S. Tait, (comp.). St. Petersburg, FL, 1996. Florida Shore & Beach Preservation Association, Tallahassee, FL. 281-296.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach nourishment, Government policy, Beach erosion, Shore protection, Broward County, Southeast Florida

547

Finkl, C. W. (1995) Pre-emptive strategies for enhanced sand bypassing and beach replenishment activities in southeast Florida: a geological perspective. In: Beach/Inlet Processes and Management: a Florida Perspective (J. Coastal Res. Spec. Issue 18). A. J. Mehta (ed.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 364 pp.

TIME COVERAGE: 1995

SUMMARY: It matters little what methodologies are considered "acceptable" if shoreline stabilization techniques do not operate in harmony with natural coastal processes. The purpose of this paper was to briefly identify some relevant aspects of the geological evolution and framework of the southeast Florida coastal belt that may influence strategies for coastal management, and to indicate some new sand management techniques that may be compatible with environmental conditions along this coast.

KEY WORDS: Beach erosion, Coastal erosion, Shore protection, Sand, Environmental monitoring, Southeast Florida

548

Fish and Wildlife Service (1958) A report on the fish and wildlife resources in relation to plans for protection from hurricane tides, Biscayne Bay, Florida. Report. Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, Vero Beach, FL. 20 pp.

TIME COVERAGE: 1958

SUMMARY: This report examined the fish and wildlife resources of Biscayne Bay as related to various plans for hurricane protection.

KEY WORDS: Fish, Sport fishing, Commercial fishing, Hurricanes, Levees, Environmental protection

549

Fitzgerald, I. Y., and R. C. Muirhead (1973) Airborne remote sensing calibration and correlation data. In: Proc., American Society of Photogrammetry Fall Convention. Lake Buena Vista, FL, 1973. American Society of Photogrammetry, Falls Church, VA. 424-430.

TIME COVERAGE: 1973

SUMMARY: Airborne remote sensing surveys were described including objectives, sensors and methods used to collect correlation data. One of the surveys was conducted in Biscayne Bay.

KEY WORDS: Aerial photography, Remote sensing equipment, Infrared detectors, Mangrove swamps

550

Fitzsimmons, K. (1996) Cycles of gonadal development in six common gorgonians from Biscayne National Park in the northern Florida Keys. M.Sc. thesis. University of South Florida, Tampa, FL. 61 pp.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Animal reproductive organs, Gorgonians, *Plexaura homomalla*, *Plexaura flexuosa*, *Muricea atlantica*, *Muriceopsis flavida*, *Gorgonia ventalina*, *Pseudopterogorgia americana*, Dome Reef, Star Reef, Schooner Reef, Elkhorn Reef, Biscayne National Park

551

Fleming, M., G. Lin, and L. da S. L. Sternberg (1990) Influence of mangrove detritus in an estuarine ecosystem. Bull. Mar. Sci., 47(3):663-669.

TIME COVERAGE: 1986 - 1987

SUMMARY: This study determined the relationship and extent of mangrove reduced carbon flow and its contribution to the diet of higher consumers in nearby seagrass beds. Seagrass detritus and other marine sources of carbon are the major contributors of reduced carbon. Mangroves make only localized contributions.

KEY WORDS: Mangrove swamps, Detritus, Estuarine organisms, Seagrass, Food chains, Matheson Hammock Park, Bill Baggs State Park

552

Flik, Y. M. (1993) Biscayne National Park: an examination of submerged cultural resource management. M.A. internship report. Rosenstiel School of Marine and Atmospheric Science, Division of Marine Affairs, Miami, FL. Various paging.

TIME COVERAGE: 1993

SUMMARY: This report is an introduction to Biscayne National Park and its marine affairs.

KEY WORDS: Resource management, Marine parks, Archaeology, Wrecks, Biscayne National Park

553

Florida Bureau of Sanitary Engineering (1949) Biscayne Bay pollution survey, Biscayne Bay, Dade County, Florida, May-October, 1949. Florida State Board of Health, Jacksonville, FL. 78 pp.

TIME COVERAGE: 1940 - 1947

SUMMARY: The entire Bay area from south of the Miami River northward to 79th Street was found to be grossly polluted. Deterioration of water quality from 1941 to the time of publication was noted. The rivers were found to act as open sewers. The area south of the Rickenbacker Cswy. was relatively free of sewer pollutants. Diluted sewage reached the ocean

through Government Cut and to the bathing beaches of Miami Beach. A prediction was made for continued deterioration of the Bay unless remedial actions were taken.

KEY WORDS: Pollution surveys, Waste disposal, Public health, Water resources, Coliform bacteria, Dissolved oxygen

554

Florida Department of Natural Resources (1991) Biscayne Bay Card Sound - Aquatic Preserve management plan. Cabinet draft. Florida Department of Natural Resources, Tallahassee, FL. 180 pp.

TIME COVERAGE: 1991

SUMMARY: This report describes a proposed management plan for Card Sound which is part of the Biscayne Bay Aquatic Preserve of the State of Florida.

KEY WORDS: Natural resources, Water quality, Environmental protection, Card Sound, Biscayne Bay Aquatic Preserve

555

Florida International University (1995) Biscayne Bay: water quality monitoring. Annual report. Florida International University, Miami, FL. Unpaginated.

TIME COVERAGE: 1993 - 1995

SUMMARY: This report is the second annual report of data collected as part of the Biscayne Bay water quality monitoring network.

556

Florida Coastal Coordinating Council (1971) Coastal zone management in Florida - 1971. Status report to the Governor, Cabinet and the 1972 Legislature. Florida Coastal Coordinating Council, Tallahassee, FL. 11 pp.

TIME COVERAGE: 1971

SUMMARY: This is the 1971 coastal zone management plan for Florida.

KEY WORDS: Coastal zone management, Florida

557

Florida Department of Community Affairs (1994) Coastal infrastructure policy report; a report on the State's coastal barrier areas. Rep. 9. Florida Department of Community Affairs, Tallahassee, FL. 46 pp.

TIME COVERAGE: 1994

SUMMARY: The intent of the coastal policy and related infrastructure strategies is to decrease state subsidy of inappropriate coastal development.

KEY WORDS: Coastal zone, Barrier islands, Environmental policy, Florida

558

Florida Department of Community Affairs (1995) Coastal infrastructure policy report; a report on the State's coastal barrier areas. Rep. 10. Florida Department of Community Affairs, Tallahassee, FL. 20 pp.

TIME COVERAGE: 1995

SUMMARY: The intent of the coastal policy and related infrastructure strategies is to decrease state subsidy of inappropriate coastal development.

KEY WORDS: Coastal zone, Barrier islands, Environmental policy, Florida

559

Florida Hurricane Damage Study Committee (1965) Florida hurricane survey report 1965. Florida Hurricane Damage Study Committee, Tallahassee, FL. 81 pp.

TIME COVERAGE: 1965

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Hurricanes, Shore protection, Coast defenses, Storm surge, Flooding, Florida

560

Florida Department of Natural Resources (1976) Florida regional coastal zone management atlas. Region 10: South Florida. Florida Department of Natural Resources, Division of Resource Management, Bureau of Coastal Zone Planning, Tallahassee, FL. 260 pp.

TIME COVERAGE: 1976

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coastal zone management, Land use, Regional planning, South Florida

561

Florida Department of Environmental Regulation (1980) Florida coastal management program state hearing draft. Florida Department of Environmental Regulation, Tallahassee, FL. Various paging.

TIME COVERAGE: 1980

SUMMARY: This document is the hearing draft for the state of Florida coastal management program.

KEY WORDS: Coastal zone management, Environment management, Resource conservation

562

Florida Conservation Foundation (1993) Guide to Florida environmental issues and information. Florida Conservation Foundation, Winter Park, F. 364 pp.

TIME COVERAGE: 1993

SUMMARY: This report is an environmental guide to Florida including coastal and marine ecosystems.

KEY WORDS: Environmental conditions, Environmental management, Directories

563

Florida Division of Water Survey and Research (1952) Information on beach protection in Florida. Water Survey & Research paper 8. Florida Division of Water Survey and Research, Tallahassee, FL. 41 pp.

TIME COVERAGE: 1952

SUMMARY: This report discusses the erosion and protection problems of sea-fronting beaches composed mostly of sand and shell.

KEY WORDS: Beach erosion, Shore protection, Coast defenses, Florida

564

Florida Department of Health and Rehabilitative Services (1993) Public health assessment, Munisport Landfill, North Miami, Dade County, Florida. Report. Florida Department of Health and Rehabilitative Services, Tallahassee, FL. 45 pp + appendices.

TIME COVERAGE: 1993

SUMMARY: This is a health assessment of the Munisport location which is adjacent to Biscayne Bay.

KEY WORDS: Public health, Landfill, Pollution effects, Munisport Landfill

565

Florida Institute of Technology (1991) SEAKEYS Phase I: Sustained ecological research related to management of the Florida Keys seascape. Final report. Florida Institute of Technology, St. Petersburg, FL. 67 pp.

TIME COVERAGE: 1991

SUMMARY: This report is a description of the Phase I of the SEAKEYS Program which incorporates a framework for long-term studies in a large geographical scale.

KEY WORDS: SEAKEYS, Environmental monitoring, Physical oceanography, Coral reefs, Nutrient cycles, Florida Keys, Biscayne National Park

566

Florida Department of Transportation (1991) US 1 hydrology study: US 1/SR 5 from Key Largo to Card Sound Road. State project no. 87010-1512, federal aid project no. F-485-2(51), work program item no. 6113527. Florida Department of Transportation, District 6, Miami, FL.

TIME COVERAGE: 1988

SUMMARY: A computer model of the study area was developed and calibrated to field data. The model was used to simulate the spatial distributions and patterns of water elevations resulting from flow converted across US 1 to the basin between US 1 and Card Sound Road.

KEY WORDS: Hydrology, Environmental impact, Transportation, Key Largo, Card Sound

567

Florida Department of Transportation (1992?) Wetland evaluation report: US 1/SR 5 from Key Largo to Card Sound Road, Florida City: Dade and Monroe counties, Florida. Work program item no. 6113527, 6113533, 6116801, 6116800; State project no. 87010-1512, -1509, 90060-1585, -1590; federal aid project no. F-4 85-2(5). Florida Department of Transportation, District 6, Miami, FL.

TIME COVERAGE: 1992

SUMMARY: The proposed project will impact more than 164 acres of wetland throughout the 20.4 mi corridor and the FDOT Conceptual Mitigation Plan is believed to be the most practical means of impact minimization and compensation. The improvements include restoration and enhancement of crocodile habitat creation of tidal creeks, eradication of undesired plant species, establishment of appropriate grades for the enhancement of tidal movements and natural vegetation, and supplemental flood control.

KEY WORDS: Wetlands, Transportation, Key Largo, Card Sound, Environmental impact

568

Florida Power and Light Company (1987) Atlas of environmental jurisdictions in Florida. Environmental Affairs. Florida Power and Light Company, Florida. Unpaged.

TIME COVERAGE: 1987

SUMMARY: This publication contains a series of maps showing the jurisdictions of various federal, state, local and industrial organizations.

KEY WORDS: Environment management, Jurisdiction, Atlases, Florida

569

Florida Power and Light Company (1967) Turkey Point plant; reprints from Sunshine Service News. Report. Florida Power and Light Company, Miami, FL.

TIME COVERAGE: 1967

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Nuclear power plants, Turkey Point

570

Flynn, B. S. (1992) Beach nourishment, sea turtle nesting, and nest relocation in Dade County, Florida. In: New directions in beach management. Proc., 5th Ann. Natl. Conf. on Beach Preservation Technology. L. S. Tait, (comp.). 1992, St. Petersburg, FL. Florida Shore & Beach Preservation Association, Tallahassee, FL. 381-394.

TIME COVERAGE: 1992

SUMMARY: This paper describes two Dade County sea turtle protection programs representing highly urbanized (Miami Beach) and relatively natural (Key Biscayne) areas. Data indicate that since 1980 sea turtle nesting in Dade County has increase more than ten-fold. This increase may be due in part to beach restoration efforts.

KEY WORDS: Turtles, Nesting, Beach nourishment, Protected resources, Miami Beach, Key Biscayne

571

Flynn, B. S., S. M. Blair, and S. M. Markley (1991) Environmental monitoring of the Key Biscayne Beach Restoration Project. In: Preserving and Enhancing our Beach Environment. Proc., 4th Ann. Natl. Beach Preservation Technology Conf. L. S. Tait, (comp.). Charleston, SC, 1991. Florida Shore & Beach Preservation Association, Tallahassee, FL. 234-248.

TIME COVERAGE: 1991

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Environmental monitoring, Seagrass, Key Biscayne Beach Restoration Project

572

Fong, P., M. E. Jacobson, M. C. Mescher, D. Lirman, and M. C. Harwell (1997) Investigating the management potential of a seagrass model through sensitivity analysis and experiments. Ecol. Appl., 7(1):300-315.

TIME COVERAGE: 1997

SUMMARY: Loss of seagrass-dominated ecosystems worldwide has been attributed to anthropogenic modifications of watersheds. In this paper, sensitivity analysis and comparison of model predictions to field observations identified conditions under which a subtropical to tropical seagrass ecosystem model would be a useful management tool. Sensitivity analysis indicated that under low-nutrient conditions, physical factors such as temperature, light, and salinity controlled model predictions of seagrass and epiphyte biomass, but that when nutrients were abundant control shifted to biological interactions. Model predictions matched the seasonal abundance of seagrasses measured in three distinct seagrass communities in Biscayne Bay suggesting that in its present form the model could be useful to managers to run "what-if" scenarios in order to make long-term decisions about upstream water management practices.

KEY WORDS: Seagrasses, Ecosystem management, Seagrasses, Habitat, Ecosystem disturbance

573

Fortman, P., and A. Tuggle (1981) Key Biscayne Yacht Club: 25 years of memories. Key Biscayne Yacht Club, Key Biscayne, FL.

TIME COVERAGE: 1981

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Fishing, Boating, Yachting, History, Key Biscayne Yacht Club

574

Fowler, H. W. (1941) Notes on Florida fishes with descriptions of seven new species. Proc. Acad. Nat. Sci. Phila., 93(-):81-106.

TIME COVERAGE: 1940

SUMMARY: This citation describes fishes found in Florida including seven new species.

KEY WORDS: Fish, Taxonomy, New species, Florida

575

Franks, B. J. (ed.) (1987) Principal aquifers in Florida. Water resources investigations open-file report 82-255. US Geological Survey, Tallahassee, FL. 4 sheets.

TIME COVERAGE: 1987

SUMMARY: This report contains charts of the principal aquifers of Florida.

KEY WORDS: Aquifers, Water supply, Water table, Florida

576

Fraser, T. H. (1968) Comparative osteology of the Atlantic snooks (Pisces, *Centropomus*). Copeia, -(3):433-460.

TIME COVERAGE: 1968

SUMMARY: The osteology of snook is described in detail. Some specimens were collected in Biscayne Bay.

KEY WORDS: Snook, Centropomus, Osteology

577

Fraser, T. H. (1967) Contributions to the biology of *Tagelus divisus* (Tellinacea: Pelecypoda) in Biscayne Bay, Florida. Bull. Mar. Sci., 17(1):111-132.

TIME COVERAGE: 1964 - 1965

SUMMARY: This citation describes the biology of *Tagelus divisus*.

KEY WORDS: *Tagelus divisus*, Clams, Biological development, Seaquarium Flats

578

Frazier, J. C. (1975) Samuel Touchett's Florida plantation, 1771. Tequesta, 35(-):75-88.

TIME COVERAGE: 1771

SUMMARY: This paper describes the South Florida land grant given by the English government to Samuel Touchett for development.

KEY WORDS: History, Landforms, Surveying

579

Freiberger, H. J. (1972) Nutrient survey of surface waters in southern Florida during a wet and a dry season, September 1970 and March 1971. Open file report 72008. US Geological Survey, Tallahassee, FL. 29 pp.

TIME COVERAGE: 1970 - 1971

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Nutrients (Mineral), Nitrogen, Phosphorus, South Florida

580

Froggatt, J. L. (1979) Seasonal zooplankton diversity, abundance, and biomass across Biscayne Bay, Florida. Unpublished M.Sc. thesis. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 55 pp.

TIME COVERAGE: 1977 - 1978

SUMMARY: Five stations were sampled along a west-east transect extending across the central basin of Biscayne Bay from Shoal Point outwards beyond Fowey Rocks into the Florida Current. Species distributions and yearly means were determined.

KEY WORDS: Zooplankton, Seasonal variations, Abundance, Shoal Point, Fowey Rocks, Soldier Key, Black Ledge

581

Frohling, N. M. (1986) The Dade County beach vegetation project: creation of an eight mile erosion control park. In: Ann. Conf. on Beach Preservation [1984-1985]. L. Tait, (ed.). Florida Shore & Beach Preservation Association, Tallahassee, FL. 122-128.

TIME COVERAGE: 1986

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach erosion, Dune stabilization, Vegetation, Dade County

582

Frohling, N. M. (1986) The new beach in Dade County: its impact on the community. In: Ann. Conf. on Beach Preservation [1984-1985]. L. Tait, (ed.). Florida Shore & Beach Preservation Association, Tallahassee, FL. 114-121.

TIME COVERAGE: 1986

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach erosion, Environmental impact, Dade County

583

Fry, B., A. L. Bern, M. S. Ross, and J. F. Meeder (2000)  $^{15}\text{N}$  studies of nitrogen use by the red mangrove, *Rhizophora mangle* L. in south Florida. Est. Coastal Shelf Sci., 50(2):291-96.

TIME COVERAGE: 2000

SUMMARY: To help define N sources and patterns of processing in mangrove ecosystems, mangrove leaf nitrogen content and  $\delta$  values were assayed in three marshes in South Florida. Highest percent N and  $^{15}\text{N}$  occurred in marshes along Biscayne Bay where canals draining agricultural lands deliver high nitrate waters. High mangrove  $^{15}\text{N}$  may be a good indicator of anthropogenic N loading.

KEY WORDS: Nitrogen isotopes, Red mangrove, *Rhizophora mangle*, Sugarloaf Key, Key Largo Mowry Canal

584

Gaby, D. C. (1988) The early years upriver. Tequesta, 48(-):6-24.

TIME COVERAGE: 1890s-1920s

SUMMARY: This article describes the Miami River, canals, and changes made to the riverbed.

KEY WORDS: Miami River, History

585

Gaby, D. C. (1990) An historical guide to the Miami River and its tributaries. Historical Association of Southern Florida, Miami, FL. 40 pp.

TIME COVERAGE: 1880s - 1991

SUMMARY: This booklet is a historical guide to the Miami River.

KEY WORDS: Rivers, History, Miami River

586

Gaby, D. C. (1993) The Miami River and its Tributaries. Historical Association of Southern Florida, Miami, FL. 193 pp.

TIME COVERAGE: 1880s - 1991

SUMMARY: This book is a detailed history of the development of the Miami River.

KEY WORDS: Rivers, History, Miami River

587

Gaby, D. C. (1974) Miami's earliest known great hurricane. Tequesta, 34(-):64-67.

TIME COVERAGE: 1824

SUMMARY: In 1824, Miami Beach was battered by a severe hurricane. Although no written records have been found, there is evidence to suggest that a powerful storm passed over the area in September of that year.

KEY WORDS: Hurricanes, Miami, Hurricane of 1824, Miami Beach

588

Gaby, R., S. Langley, and R. F. Keough (1986) Port of Miami seagrass restoration: analysis of management and economics of a large scale dredge mitigation project. In: XIth World Dredging Congress. Brighton, UK, 1986. Central Dredging Association, Delft, Netherlands. 550-561.

TIME COVERAGE: 1986

SUMMARY: As a condition to obtain the dredge and fill permit for the construction of the Port of Miami extension, the Seaport was required to plant 251 acres of seagrasses in Biscayne Bay. Success was extremely limited. Management issues of this seagrass restoration effort are discussed.

KEY WORDS: Seagrass, Revegetation, Port of Miami

589

Gaby, R., and S. Langley (1985) Seagrass mitigation in Biscayne Bay, Florida. In: Proc., Coastal Zone '85, 4th Symp. Coastal and Ocean Management. O. T. Magoon, H. Converse, D. Miner, D. Clark, and L. T. Tobin, (eds.). Baltimore, MD, 1985. American Society of Civil Engineers, New York, NY. 904-919.

TIME COVERAGE: 1982

SUMMARY: This paper describes the large scale seagrass revegetation pilot project undertaken by the Port of Miami in 1982. The pilot project covered 38 acres. The planned effort would cover 251 acres. Seagrass mean survival for the entire project was 12%.

KEY WORDS: Seagrass, Revegetation, *Thalassia testudinum*, *Syringodium filliforme*, *Halodule wrightii*, Port of Miami

590

Gaby, R., M. P. McMahon, F. J. Mazzotti, W. N. Gillies, and J. R. Wilcox (1985) Ecology of a population of *Crocodylus acutus* at a power plant site in Florida. J. Herpetology, 19(2):189-198.

TIME COVERAGE: 1978 - 1982

SUMMARY: This paper presented the status and ecology of a population of crocodiles associated with the Turkey Point power plant. Distribution, habitat preference, reproduction, population size and structure, and recruitment and dispersal were discussed. Nesting occurred on the spoil berms of the cooling canal system. The Turkey Point population contributes 10% of the annual production of hatchlings in south Florida. The resident population exhibits differential habitat preference according to size class, and shows seasonal changes in distribution. Salinity was a factor in these trends. Ecology and population structure were similar to those of the population residing in the more pristine habitat of Everglades National Park.

KEY WORDS: American crocodile, *Crocodylus acutus*, Ecological distribution, Habitat, Population structure, Power plants, Turkey Point

591

Gaiser, E., M. Ross, J. Meeder, and M. Lewin (1999) Multi-taxon analysis of the "white zone," a common ecotonal feature of South Florida coastal wetlands. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 229.

TIME COVERAGE: 1999

SUMMARY: A common feature of South Florida coastal areas is the "white zone" of low plant cover between the more densely vegetated mangrove and interior ecosystems. The distribution of plants, diatoms and mollusks in relation to several environmental parameters along a coastal transect adjacent to Biscayne Bay and south of Turkey Point were examined. Plant, diatom and mollusk assemblages correlated strongly with coastal gradient. Diatom distribution correlated strongly with salinity. Plants and mollusks integrate a variety of environmental variables correlated to distance.

KEY WORDS: Turkey Point, Vegetation, Diatoms, Mollusks, Assemblages, Mangroves, Wetlands, Coastal waters, Mangrove swamps, Ecosystem disturbance, South Bay

592

Gallagher, C. F., and J. E. Hull (1969) Hydrologic conditions during 1967 in Dade County, Florida. Open file report 69001. US Geological Survey, Tallahassee, FL. 46 pp.

TIME COVERAGE: 1969

SUMMARY: This report is one in a series designed to describe the annual hydrologic conditions in Dade County.

KEY WORDS: Hydrology, Rainfall, Ground water, Surface water, Water use, Snake Creek Canal, Miami Canal, Snapper Creek Canal, Biscayne Canal, Tamiami Canal

593

Gantz, C. O. (1971) A Naturalist in Southern Florida. University of Miami Press, Coral Gables, FL. 256 pp.

TIME COVERAGE: 1971

SUMMARY: This book contains descriptions of several environments in Florida including Key Biscayne.

KEY WORDS: Natural resources, Environmental protection, South Florida, Key Biscayne

594

Garlock, M. (1994) Crocodile comeback at Turkey Point. Florida Naturalist, 67(1):13-15.

TIME COVERAGE: 1994

SUMMARY: The cooling canals of the Turkey Point Power Plant are an ideal place for crocodile breeding since they provide circulating seawater and an abundant food source. The number of nests in the canals has been increasing over the past few years. A surge in breeding was noted after Hurricane Andrew.

KEY WORDS: Crocodiles, *Crocodylus acutus*, Turkey Point, Hurricane Andrew

595

Gassman, N. J., L. B. Nye, and M. C. Schmale (1994) Distribution of abnormal biota and sediment contaminants in Biscayne Bay, Florida. Bull. Mar. Sci., 54(3):929-943.

TIME COVERAGE: 1994 (various years)

SUMMARY: Hook and line, and crab trap surveys were used to determine the nature and distribution of abnormalities and diseases in fish and blue crabs. The prevalence of abnormalities for all fish surveyed was correlated with concentration of total and aromatic hydrocarbons in sediment. No correlations were found with levels of aliphatic hydrocarbons, polychlorinated biphenyls, Cd, Cu, Pb, Hg and Zn in sediment.

KEY WORDS: Abnormalities, Fish diseases, Pathology, Sediment pollution, Sea bream, *Archosargus rhomboidalis*, Blue striped grunt, *Haemulon sciurus*, Pinfish, *Lagodon rhomboides*, Gray snapper, *Lutjanus griseus*, Blue crab, *Callinectes sapidus*

596

Gelsanliter, S. (1993) Modifications to the mangrove environment and coastlines of south Florida as a result of Hurricane Andrew. Abstracts with programs (Geological Society of America), 25(4):17.

TIME COVERAGE: 1992

SUMMARY: Hurricane Andrew flattened over 70,000 acres of mangrove forest on the east and west coasts of south Florida. This flattening was primarily caused by wind, although onshore storm surges were important near the coastline. The areas of severe mangrove destruction were Soldier Key to Caesar's Creek on the Eastern Islands, south of Matheson Hammock on the mainland Biscayne Bay shore, and the mangrove belt between north Ponce de Leon Bay and Chatham River on the west coast. The northern and southern portions of these areas generally had less complete destruction than in the middle. Areas such as Highland Beach on southwest Florida, subjected to direct onshore surge and maximum winds, suffered nearly complete knockdown of the 15 - 30 in high mangrove forest. Limb breakage and uprooting are both important. The extensive uprooting of the larger mangroves has left an extremely irregular swamp surface with over one meter of relief.

KEY WORDS: Mangrove swamps, Storm surge, Hurricane Andrew, South Florida

597

Gentile, J. H. (ed.) (1996) Workshop on "South Florida ecological sustainability criteria", 1996. Final report. Center for Marine and Environmental Analyses (CMEA), Rosenstiel School of Marine and

Atmospheric Science, University of Miami and The Everglades Partnership,

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ecosystem management, Hydrology, Environmental restoration, Nature conservation, Sociological aspects, Everglades, South Florida

598

Gentle, E. C. (1977) The charterboat sport fishery of Dade County, Florida, March, 1976 to February, 1977. M.Sc. thesis. University of Miami, Coral Gables, FL. 162 pp.

TIME COVERAGE: 1976 - 1977

SUMMARY: The objectives of this study were to determine: fishing effort, species and size composition of the catch, catch per unit effort, and total catch; customer residence; fishing experience and catch frequency; and economic impact of the charter boat fishery of Dade County.

KEY WORDS: Sport fishing statistics, Fishing vessels, Boating, Dade County

599

Gentry, R. C. (1974) Hurricanes in South Florida. In: *Environments of South Florida: Present and Past*. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 73-81.

TIME COVERAGE: 1974

SUMMARY: This citation describes the effects of hurricane passing through South Florida and their effects.

KEY WORDS: Hurricanes, Everglades, Hurricane Donna, Hurricane of 1935, Hurricane of 1926, Lake Okeechobee, Hurricane of 1928, Hurricane of 1945, Ft. Lauderdale Hurricane of 1947, Palm Beach Hurricane of 1949, Hurricane Betsy

600

Gerchakov, S. M., D. S. Marszalek, F. J. Roth, and L. R. Udey (1976) Succession of periphytic microorganisms on metal and glass surfaces in natural seawater. Report prepared for Office of Naval Research. NTIS AD-AO25 592. National Technical Information Service, Springfield, VA. 24 pp.

TIME COVERAGE: 1976

SUMMARY: Stainless steel and glass substrates were exposed to Biscayne Bay seawater for several months. Samples were removed at regular intervals and examined for periphytic microorganisms. The major changes occurred during the first five weeks of exposure. The first fouling organisms were bacteria followed by fungi. Within one week of exposure, the assemblage was modified by the appearance of numerous unidentified filamentous microorganisms. After two weeks, the fungi became scarce, bacteria became more numerous, and diatoms, filamentous algae and protozoa appeared. Three to five weeks of exposure produced thick fouling layers composed mainly of diatoms and bacteria. Invertebrates and other macroscopic organisms became more conspicuous with continued exposure.

KEY WORDS: Fouling organisms, Microorganisms, Metals, Glass, Sea water

601

Gerchakov, S. M., C. Rooth, D. A. Segar, and R. D. Stearns (1973) Rapid delineation of the mean plume intensity pattern from the sediment temperatures underlying a thermal discharge. Bull. Mar. Sci., 23(3):496-509.

TIME COVERAGE: 1973

SUMMARY: The heat conduction process in the bottom sediments tends to generate a vertical temperature distribution which is increasingly smoothed in time as one penetrates into deeper layers. Thermal outfall areas generate a hot plume which is often variable in both location and intensity. Thus one would expect that bottom-sediment temperatures would yield more reliable estimates of sustained thermal stress on benthic communities than instantaneous observations in the water column.

KEY WORDS: Thermal plumes, Thermal pollution, Sediment temperature, Turkey Point

602

Gerchakov, S. M., D. A. Segar, and R. D. Stearns (1971) Chemical and hydrological investigations in the vicinity of a thermal discharge into a tropical marine estuary. In: Radionuclides in ecosystems. Proc. 3rd Natl. Symp. on Radioecology. D. J. Nelson, (ed.). Oak Ridge, TN, 1971. Oak Ridge National Laboratory, US Atomic Energy Commission, Oak Ridge, TN. 603-618.

TIME COVERAGE: 1969 - 1970

SUMMARY: Chemical and hydrological investigations were conducted in the vicinity of the thermal discharge from the Turkey Point plant. Major changes in the chemical parameters were not apparent. Profiles of the bottom sediment temperatures were found to closely correlate with the average thermal plume observed in the overlying water.

KEY WORDS: Thermal plumes, Thermal pollution, Chemical analysis, Salinity measurement, Water temperature, Turkey Point, Nutrients, Fe, Cu, Water quality

603

Getter, C. D. (1982) Temperature limitations to the distribution of mangrove mosquitofish in Florida. Florida Scient., 45(3):196-200.

TIME COVERAGE: 1973 - 1980

SUMMARY: An intensive survey of southern Florida revealed a limited coastal distribution of the mangrove mosquitofish. Temperature limitations to distribution may be controlled by fertility which, for this species, is known to be correlated with temperature.

KEY WORDS: Mangrove mosquitofish, *Gambusia rhizophorae*, Temperature tolerance, Geographical distribution, Florida

604

Getter, C. D., J. F. Michel, G. I. Scott, and J. L. Sadd (1981) The sensitivity of coastal environments and wildlife to spilled oil in South Florida. RPI/R/81/9-1. South Florida Regional Planning Council, Miami, FL. 126 pp.

TIME COVERAGE: 1981

SUMMARY: A shoreline assessment was conducted throughout Florida by means of overflights, ground stations and literature reviews. A series of maps, this report, and six data supplements were produced. The maps show Environmental Sensitivity Index values which are an indication of shoreline and wildlife sensitivity to spilled oil.

KEY WORDS: Oil spills, Shore protection, Nature conservation, Florida Keys, South Florida

605

Getter, C. D., J. F. Michel, and T. G. Ballou (1983) The sensitivity of coastal environments and wildlife to spilled oil in Florida. RPI/R/83/3/18-8. Research Planning Institute, Columbia, SC. 331 pp.

TIME COVERAGE: 1983

SUMMARY: [THIS REPORT IS AN UPDATE OF GETTER *ET AL.* (1981).]

KEY WORDS: Oil spills, Shore protection, Nature conservation, Florida

606

Getter, L. (1992) What went wrong: a disaster long in the making. The Miami Herald, Miami, FL. December 20. Special Report.

TIME COVERAGE: 1992

SUMMARY: This article examined Hurricane Andrew's wind damage to dwellings and the building practices in Dade County with an emphasis on the inadequacies of the building codes and inspection programs.

KEY WORDS: Hurricane Andrew

607

Getter, L. (1993) What went wrong: a disaster long in the making. In: Excerpts, 15th Ann. National Hurricane Conf. L. S. Tait, (compiler). Orlando, FL, April 13 - 16, 1993. National Hurricane Conference, Tallahassee, FL.

TIME COVERAGE: 1992

SUMMARY: [THIS IS ARE EXCERPTS OF THE MIAMI HERALD ARTICLE.]

KEY WORDS: Hurricane Andrew

608

Gifford, C. A. (1962) Some observations on the general biology of the land crab, *Cardisoma guanhum* (Latreille), in south Florida. Biol. Bull., 123(1):207-223.

TIME COVERAGE: 1962

SUMMARY: This citation describes the biology of land crabs from South Florida.

KEY WORDS: Land crab, *Cardisoma guanhum*, Life cycle, Habitat

609

Gilbert, C. (1986) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - Florida pompano. Biological rep. 82 (11.42). US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 14 pp.

TIME COVERAGE: 1986

SUMMARY: The nomenclature, taxonomy, life history, growth characteristics, fishery, ecological role, and environmental requirements of the Florida pompano are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Florida pompano, Pompano, *Trachinotus carolinus*, South Florida

610

Gilbert, C. R. (1986) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - southern, gulf, and summer flounders. Biological report 32 (11.54). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 27 pp.

TIME COVERAGE: 1986

SUMMARY: The life history, growth characteristics, fishery, ecological role, environmental requirements, and morphology of three species of flounder are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Flounders, Southern flounder, *Paralichthys lethostigma*, Gulf flounder, *Paralichthys albigutta*, Summer flounder, *Paralichthys dentatus*, South Florida

611

Gillio, J. L., and D. A. Segar (1976) Biogeochemistry of trace elements in Card Sound, Florida: inventory and annual turnover. NTIS, PB-257 522. NOAA Office of Sea Grant, Rockville, MD. 17 pp.

TIME COVERAGE: 1976

SUMMARY: Concentrations of V, Fe, Cu, Cd, Zn and Pb were determined in organisms, water and sediment of Card Sound. Multiplication of these specific concentrations by the amount of organisms, water and sediment led to an inventory of Card Sound for these elements. Highest amounts of each element were found in sediment, followed by water and living organisms. *Thalassia* had the highest inventory for all the elements, followed closely by sponges, with large rooted algae approximately an order of magnitude lower. Phytoplankton, epiphytes and invertebrates constituted a minor part of the biological trace element inventory.

KEY WORDS: V, Fe, Cu, Cd, Zn, Pb, Biogeochemical cycle, Sediment chemistry, Card Sound, South Bay, Flora, *Thalassia testudinum*

612

Gill, A. M. (1971) The literature on mangroves: an incomplete compilation of titles. Bibliography. Fairchild Tropical Garden, Miami, FL. 62 pp.

TIME COVERAGE: 1971

SUMMARY: This is a compilation of citations on mangroves worldwide.

KEY WORDS: Mangrove swamps, Bibliographies

613

Gillette, D. A., and A. T. Steele (1983) Selection of CO<sub>2</sub> concentration data from whole-air sampling at three locations between 1968 and 1974. J. Geophys. Res., 88(C2):1349-1359.

TIME COVERAGE: 1968 - 1973

SUMMARY: Three methods for rejection of carbon dioxide data were used to obtain concentration versus time at three stations including one in Key Biscayne. From examination of the results it was concluded that short-term variation and error were not large for the station North Atlantic station. There was suggestion of occasional contamination at Key Biscayne, and more frequent contamination at Niwot Ridge.

KEY WORDS: Key Biscayne, Air pollution, Carbon dioxide, Marine pollution, Pollution monitoring, Shipboard analysis, North Atlantic, Niwot Ridge, Station Charlie

614

Gimble, E. (1986) West Indian manatees in Florida: a case study of endangered species conservation. Report. Yale School of Forestry and Environmental Studies, New Haven, CT. 77 pp.

TIME COVERAGE: 1986

SUMMARY: This report provides a history of manatee conservation in South Florida.

KEY WORDS: Manatees, *Trichechus manatus*, Rare species, Nature conservation, Florida

615

Ginsburg, R. N. (1953) Intertidal erosion on the Florida Keys. Bull. Mar. Sci. Gulf Caribb., 3(1):55-69.

TIME COVERAGE: 1953

SUMMARY: Intense erosion of calcareous shore rocks produced honeycombed brittle rock. Examples of this erosion in South Florida were described. Physio-chemical solution of calcium carbonate was considered only of local importance in intertidal erosion. It was suggested that the activities of boring and burrowing organisms were a major factor in this erosion.

KEY WORDS: Carbonate rocks, Intertidal environment, Erosion, Florida Keys

616

Ginsburg, R. N. (1990?) South Florida Quaternary carbonates. Comparative Sedimentology Laboratory, Division of Marine Geology and Geophysics, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1990

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Carbonates, Quaternary, Coral reefs, Sedimentary structures, South Florida, Florida Keys, Florida Bay

617

Ginsburg, R. N. (1987) Structural control of the morphology of southeast Florida. In: Symposium on South Florida Geology. F. J. R. Maurrasse, (ed.). Memoir 3. Miami Geological Society, Coral Gables, FL. 8.

TIME COVERAGE: 1987

SUMMARY: The striking feature of terrestrial and submarine morphology of Southeast Florida is the family of arcuate trends that are convex towards the southeast. From northwest to

southeast, these trends are: 1) the southern extension of the Atlantic Coastal Ridge composed of oolitic limestone of the Lake Pleistocene Miami Formation; 2) the Upper Florida Keys, a chain of islands composed of the Late Pleistocene Key Largo Limestone; 3) the break in slope of the Florida Reef Track marked by discontinuous living reefs, rocky shoals, and piles of coral rubble; 4) the Pourtales Escarpment of the Late Tertiary age that marks the edge of the Pourtales Terrace in depths of 360 to 540 m; and 5) the Mitchell Escarpment in depths from 720 - 1000 m that is probably early Tertiary.

KEY WORDS: Geomorphology, Southeast Florida

618

Ginsburg, R. N., and H. A. Lowenstam (1958) The influence of marine bottom communities on the depositional environment of sediments. J. Geol., 66(-):310-318.

TIME COVERAGE: 1958

SUMMARY: Physical forces and topography control the depositional environments of shelf and shallow-water sediments. However, certain bottom communities are capable of modifying water circulation and bottom conditions sufficiently to produce recognizably different sediments than those deposited without the organisms. The organisms responsible for such modifications may or may not be sediment contributors, and their sphere of influence can be limited to their habitat or can extend well beyond it.

KEY WORDS: Reefs, Shelf sedimentation, Shallow water, Algal mats, Sedimentary environments

619

Ginsburg, R. N., and E. A. Shinn (1994) Preferential distribution of reefs in the Florida Reef Tract: the past is the key to the present. In: Proc., Colloquium on Global Aspects of Coral Reefs: Health, Hazards and History. R. N. Ginsburg, (comp.). Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. H21-H26.

TIME COVERAGE: 1994

SUMMARY: In the Florida Reef tract, shelf-margin and patch reefs occur preferentially seaward of islands of Pleistocene limestone. Where these islands are absent or separated by wide passes, the shelf is open and reefs are absent or poorly developed. The principal reason for the lack of reefs where there are not islands is the inimical effect of water from restricted Florida Bay that moves out across the open shelf areas. A secondary reason is that the open shelf areas have extensive areas of mobile calcareous sands.

KEY WORDS: Coral reefs, Geological distribution, Islands, Reef Tract, Florida Keys, Florida Bay

620

Ginsburg, R. N., and E. A. Shinn (1994) South Florida's environments are geological inheritances: the past is the key to the present. Bull. Mar. Sci., 54(3):1075-1076.

TIME COVERAGE: 1994

SUMMARY: The geography and bathymetry of South Florida's marine and terrestrial environments are inherited from geologic events extending back millions of years. This abstract describes these events.

KEY WORDS: Geomorphology, Reef tract, Shoals, Topographic features, Florida Bay, Florida Keys

621

Gleason, D. K. (1990) Over Miami. Louisiana State University Press, Baton Rouge, LA. 136 pp.

TIME COVERAGE: 1990

SUMMARY: This is a book of aerial photographs of Miami and nearby areas.

KEY WORDS: Aerial photography, Miami, Florida Keys, Key Biscayne, Miami Beach, Government Cut

622

Gleason, P. J., and W. Spackman (1974) Calcareous periphyton and water chemistry in the Everglades. In: *Environments of South Florida: Present and Past*. P. J. Gleason (ed.). Miami Geological Society memoir 2. Miami Geological Society, Miami, FL. 146-181.

TIME COVERAGE: 1974

SUMMARY: Calcareous blue-green algal periphyton covers large areas of wetland within South Florida, and appears to give rise to the fresh water calcitic marl within the lower Everglades as indicated by numerous crystal-algal filament relationships.

KEY WORDS: Periphyton, Algae, Cyanophyta, Carbonate sediment, Calcium carbonates, Everglades

623

Glynn, P. W., A. M. Szmant, E. F. Corcoran, and S. V. Cofer-Shabica (1989) Condition of coral reef cnidarians from the northern Florida Reef Tract: pesticides, heavy metals, and histopathological examination. *Mar. Pollut. Bull.*, 20(11):568-576.

TIME COVERAGE: 1985

SUMMARY: Scleractinian corals and octocorals from two reefs within Biscayne National Park were compared with respect to relative abundance, gross field condition, concentrations of pesticides and heavy metals, and histopathological condition. The northern most site, Bache Shoal, is near Miami and potentially receives pollutants from that source. The southern most site, Alina's Reef, is less likely to be influenced by Miami but may receive runoff from agricultural activities in Homestead. No consistent differences between the communities were found. High frequencies of blemishes and abnormalities, and of pesticides, As, Cu and Pb were detected in several of the reef coelenterates at both sites.

KEY WORDS: Coral reefs, Scleractinians, Octocorals, Pesticides, As, Cu, Pb, Cd, Fe, Hg, Pollution, Histopathology, Biscayne National Park, Bache Shoal, Alina's Reef, Reef Tract, DDTs

624

Godcharles, M. F., and M. D. Murphy (1986) Species profiles: life history and environmental requirements of coastal fishes and invertebrates (South Florida) - king mackerel and Spanish mackerel. Biological report 82 (11.58). US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 18 pp.

TIME COVERAGE: 1986

SUMMARY: The life history, growth characteristics, fishery, ecological role, environmental requirements, and morphology of two species of mackerel are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Mackerel, King mackerel, *Scomberomorus cavalla*, Spanish mackerel, *Scomberomorus maculatus*, South Florida

625

Goldstein, S. T. (1976) The distribution and ecology of benthic foraminifera in a south Florida mangrove environment. M.Sc. thesis. University of Florida, Gainesville, FL. 111 pp.

TIME COVERAGE: 1974

SUMMARY: The ecology and distribution of benthic foraminifera in a mangrove and salt marsh environment in the vicinity of Turkey Point were investigated. Samples of sediment and epiphytic algae were collected along a transect and a total of 67 species belonging to 37 genera of foraminifera were found. Diversity, equitability and density of living individuals followed the increase in water depth, salinity, pH and organic carbon in the seaward direction.

KEY WORDS: Foraminifera, Benthos, Ecological distribution, Mangrove swamps, Salt marshes, Turkey Point

626

Gomon, M. F. (1971) Comparative osteology of the western Atlantic species of *Halichoeres* (Pisces, Labridae). M.Sc. thesis. University of Miami, Coral Gables, FL. 193 pp.

TIME COVERAGE: 1971

SUMMARY: The purpose of this study was to compare the osteology of grasses to obtain a clearer picture of phylogenetic relationships. These relationships are further supported by similar patterns in distribution and ecology.

KEY WORDS: Wrasses, Halichoeres, Osteology

627

Gongora, A., and R. Jaffe (1997) Characterization and speciation of organic pollutants in the Miami River. In: Conf. program and abstracts, First annual conference of the Walt Dineen Society. 1997. Florida International University, Miami, FL. 15.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Miami River, Pollution

628

Goodman, L. R., M. A. Lewis, J. M. Macauley, R. Smith, and J. C. Moore (1999) Preliminary survey of chemical contaminants in water, sediment, and aquatic biota at selected sites in northeastern Florida Bay and Canal C-111. Gulf of Mexico Sci., 17(1):1-16.

TIME COVERAGE: 1995

SUMMARY: Contaminant concentrations in surface water, sediment and biota were determined prior to major changes in water management at the C-111 canal. Water samples were analyzed for selected organochlorine pesticides and metals; sediments for those compounds and PAHs; and fish filets and oysters for selected organochlorine pesticides, PCBs and metals. Concentrations in sediments were generally low.

KEY WORDS: Florida Bay, Canal C-111, Sediment, Water, Biota, Chemistry, Barnes Sound, Organochlorine pesticides, Metals, PAHs, Oysters, Fish, PCBs, Chemical pollutants, Water analysis, Sediment pollution, Biota, Manatee Bay

629

Gordon, D. P. (1942) Plankton at Miami Beach, Florida. M.Sc. thesis. Duke University, Durham, NC. 77 pp.

TIME COVERAGE: 1941 - 1942

SUMMARY: The purpose of this thesis was to provide a list of plankters in Miami Beach waters. Drawings and species lists are provided.

KEY WORDS: Plankton, Miami Beach, Species list

630

Gordon, H. R., and J. Dera (1969) Irradiance attenuation measurements in sea water off southeast Florida. Bull. Mar. Sci., 19(2):279-285.

TIME COVERAGE: 1969

SUMMARY: The irradiance attenuation was measured in Biscayne Bay and other locations. The results of these measurements and their temporal variations were discussed.

KEY WORDS: Irradiance, Light attenuation, Sea water, Optical properties

631

Gordon, H. R., and J. M. Smith (1972) A time series study of beam transmittance in Biscayne Bay. Eos, 53(4):400.

TIME COVERAGE: 1970

SUMMARY: Continuous observation of beam transmittance at 530 nm over a 23-day period was carried out in Bear Cut. Pressure filtration through a 0.47  $\mu$  filter was used to determine

suspended particle loads. Power spectra showed strong diurnal and semidiurnal peaks. Using current velocity at the study location, net transport of particulate matter was estimated.  
KEY WORDS: Beam transmittance, Time series analysis, Bear Cut, Suspended particulates

632

Gore, R. (1993) Andrew aftermath. National Geographic, 183(April):2-37.

TIME COVERAGE: 1992

SUMMARY: This is a pictorial account of the aftermath of Hurricane Andrew.

KEY WORDS: Hurricane Andrew, Hurricanes

633

Gore, R. H. (1972) A comparative study of larval characters in the family Porcellanidae (Crustacea: Decapoda: Anomura). Ph.D. dissertation University of Miami, Coral Gables, FL. 249 pp.

TIME COVERAGE: 1968

SUMMARY: The larval development of the crab family *Porcellanidae* was described. Specimens were reared from ovigerous females collected in Norris Cut.

KEY WORDS: Crabs, Porcellanidae, Crustacean larvae, Zoeae, Larval development, Norris Cut

634

Gore, R. H. (1967) The larval development of *Polyonyx gibbesi* (Crustacea: Porcellanidae) with investigations of the initial establishment of the commensal relationship with the polychaete worm *Chaetopterus variopedatus*. M.Sc. thesis University of Miami, Coral Gables, FL. 99 pp.

TIME COVERAGE: 1967

SUMMARY: Worm tubes most containing crabs were collected in the Bay and studied in aquariums. Ovigerous female crabs were also collected and crabs reared in aquariums. Studies were made of the relationship and behavior of the worm and the crabs.

KEY WORDS: Crabs, *Polyonyx gibbesi*, Crustacean larvae, Larval development, Commensals, Polychaetes, *Chaetopterus variopedatus*, Hurricane Harbor, Virginia Key

635

Gore, R. H. (1968) The larval development of the commensal crab *Polyonyx gibbesi* Haig, 1956 (Crustacea: Decapoda). Biol. Bull., 135(1):111-129.

TIME COVERAGE: 1968

SUMMARY: The larval development of this crab species was described based on the larvae produced by ovigerous females collected in Biscayne Bay.

KEY WORDS: Crabs, *Polyonyx gibbesi*, Larval development, Crustacean larvae, Cape Florida, Key Biscayne

636

Gore, R. H. (1970) *Petrolisthes armatus*: a redescription of larval development under laboratory conditions (Decapoda, Porcellanidae). Crustaceana, 18(1):75-89.

TIME COVERAGE: 1970

SUMMARY: The larval development of this species of crab was described based on the larvae produced by ovigerous females collected in Norris Cut.

KEY WORDS: Crabs, *Petrolisthes armatus*, Larval development, Crustacean larvae, Norris Cut

637

Gotto, J. W. (1976) Nitrogen fixation in the red mangrove (*Rhizophora mangle*) leaf detrital system. M.Sc. thesis. University of Miami, Coral Gables, FL. 67 pp.

TIME COVERAGE: 1976

SUMMARY: The objective of this study was to investigate the occurrence of nitrogen fixation associated with decaying leaves of the red mangrove in order to estimate possible importance of this activity in the estuarine food web based on mangrove detritus.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Nitrogen fixation, Leaves, Detritus, Key Biscayne

638

Gould, W. R. (1965) The biology and morphology of *Acyrtops beryllinus*, the emerald clingfish. Bull. Mar. Sci., 15(1):165-188.

TIME COVERAGE: 1962 - 1963

SUMMARY: The taxonomy and biology of the emerald clingfish, a little known member of *Thalassia* communities, are described in this paper. Specimens were collected during the various studies conducted by the University of Miami in Biscayne Bay and in other areas of Florida, Bimini and The Bahamas.

KEY WORDS: Emerald clingfish, *Acyrtops beryllinus*, Life cycle, Taxonomy

639

Graber, H. G. (1995) Measurement and detection of ocean surface features with an HF Doppler radar. In: Proc., WMO/IOC Workshop on Operational Ocean Monitoring using Surface Based Radars. Geneva, Switzerland, 1995. Report no. 32; WMO/TD-No. 694. World Meteorological Organization, Geneva, Switzerland. 53-59.

TIME COVERAGE: 1994

SUMMARY: An exploratory deployment of the OSCAR system in the VHF mode was conducted in Biscayne Bay to assess the usefulness of this radar to measure surface flow patterns in shallow bays and estuaries which often have low amplitude Bragg waves and numerous shoals and small islands.

KEY WORDS: Surface currents, Doppler effect, Radar, Current measurement, Cape Hatteras, Florida Keys, Bear Cut

640

Gray, R. W. (1916) Summer temperatures at Miami. The Tropic Magazine, 4(6):158-160.

TIME COVERAGE: 1911 - 1916

SUMMARY: This article described summer temperatures in Miami and compares them to those in the midwest.

KEY WORDS: Temperature, Weather

641

Greater Miami Chamber of Commerce (1974) A rational plan for the development and conservation of Biscayne Bay. Part I. An environmental description. Draft. Greater Miami Chamber of Commerce. Environmental Quality Committee, Miami, FL. Various paging.

TIME COVERAGE: 1974

SUMMARY: This is a draft plan for development and conservation activities in Biscayne Bay.

KEY WORDS: Conservation

642

Greater Miami Chamber of Commerce (1975) Who manages Biscayne Bay? Report. Greater Miami Chamber of Commerce. Environmental Quality Action Committee, Miami, FL. 71 pp.

TIME COVERAGE: 1975

SUMMARY: These are the proceedings of a summit meeting that revealed that there was an excess of bureaucracy in the management of the Bay.

KEY WORDS: Resource management, Environmental protection, Pollution monitoring

643

Green, F. M. (1877) The navigation of the Caribbean Sea and the Gulf of Mexico. Vol. I. The West India Islands, including the Bahama Banks and island and the Bermuda Islands. No. 63. US Hydrographic Office, Government Printing Office, Washington, DC.

TIME COVERAGE: 1877

SUMMARY: This is a description of navigation beacons, hazards and such for the Caribbean, the Gulf of Mexico and the east coast of Florida.

KEY WORDS: Navigation

644

Green, J. M. (1964) Studies on the swim bladder of *Eucinostomus gula* and *E. argenteus* (Pisces: Gerridae). M.Sc. thesis. University of Miami, Coral Gables, FL. 70 pp.

TIME COVERAGE: 1964

SUMMARY: This study presented a description of the swim bladder of the mojarra and of its physiology.

KEY WORDS: Mojarra, *Eucinostomus gula*, *Eucinostomus argenteus*, Swim bladder

645

Green, J. T. (1979) A survey of habitat of *Crocodylus acutus* in south Florida. In: Marine science teachers research experience. B. Burke, and A. Volker (eds.). Sea Grant special rep. no. 17. University of Miami Sea Grant, Coral Gables, FL. 1-33.

TIME COVERAGE: 1979

SUMMARY: A six-month survey of South Florida determined that there is potentially more suitable habitat for crocodiles than the limited number of individuals occupied.

KEY WORDS: Crocodiles, *Crocodylus acutus*, Florida Bay, Interama, Black Point, Turkey Point

646

Greenberg, I. (1977) Guide to Corals & Fishes of Florida, the Bahamas and the Caribbean. Seahawk Press, Miami, FL. 64 pp.

TIME COVERAGE: 1977

SUMMARY: This is a field guide to corals and fishes.

KEY WORDS: Coral, Reef fish, Florida, Bahamas, Caribbean, Guide

647

Greene, J. (1982) Biscayne Bay is alive and, well, not doing so badly. The Miami Herald, Miami, FL. October 3. B-1.

TIME COVERAGE: 1982

SUMMARY: This article discusses the state of Biscayne Bay.

KEY WORDS: Pollution

648

Greenfield, L. J. (1951) The distribution of marine borers in the Miami area in relation to ecological conditions. M.Sc. thesis. University of Miami, Coral Gables, FL. 81 pp.

TIME COVERAGE: 1950 - 1951

SUMMARY: Attempts were made to identify all organisms attacking test piles and panels deployed at the study sites. The distribution of the attacking organisms was dependent upon time of the year, salinity, amount of wood available and other factors.

KEY WORDS: Boring organisms, Bankia, Teredo, Limnoria, Ecological distribution, Miami, Northern Bay, Key Biscayne, Hurricane Harbor, Chicken Key, Elliott Key

649

Greenfield, L. J. (1953) The distribution of marine borers in the Miami area in relation to ecological conditions. Bull. Mar. Sci. Gulf Caribb., 2(2):448-464.

TIME COVERAGE: 1948 - 1951

SUMMARY: Ecological observations were made on marine wood-borers found in the Miami area. The most abundant organism was *Teredo pedicellata*. An increase in attack was noted in early summer and early autumn. Maximum growth rate was observed in midsummer. Variation in *Limnoria lignorum* attack was the same as that *T. pedicellata* during the first period but occurred in bi-monthly cycles in the second period of study. High seawater summer temperatures increase the growth and boring rates of *T. pedicellata*. In stations of uniform high salinity, *L. lignorum* was concentrated near the bottom because of a negative photic response.

KEY WORDS: Boring organisms, Bankia, Limnoria, Ecological distribution, Miami, *Teredo pedicellata*, *Limnoria lignorum*

650

Greenfield, L. J. (1953) Observations on the nitrogen and glycogen content of *Teredo* (Lyrodus) *pedicellata* De Quatrefages at Miami, Florida. Bull. Mar. Sci. Gulf Caribb., 2(3):486-496.

TIME COVERAGE: 1951 - 1952

SUMMARY: Monthly rates of glycogen and nitrogen content of *Teredo* were determined and changes in body composition with body weight noted. No seasonal change was noted.

KEY WORDS: Shipworms, *Teredo pedicellata*, Boring organisms, Nitrogen, Glycogen, Miami

651

Greenleaf/Telesca Planners, Engineers, Architects, Inc. (1979) Comprehensive marina development study, City of Miami. Report. Greenleaf/Telesca Planners, Engineers, Architects, Inc., Miami, FL.

TIME COVERAGE: 1979

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marinas, Recreational waters, Miami

652

Greenleaf/Telesca Planners, Engineers, Architects, Inc. (1973) Proposed marina feasibility study and master plan, Miami Beach, Fla. Report. Greenleaf/Telesca Planners, Engineers, Architects, Inc., Miami, FL.

TIME COVERAGE: 1973

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marinas, Recreational waters, Miami Beach

653

Greenleaf/Telesca Planners, Engineers, Architects, Inc. (1974) Utility study for Elliott Key, Biscayne National Monument. Report. Greenleaf/Telesca Planners, Engineers, Architects, Inc., Miami, FL.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water supply, Waste disposal, Sewage disposal, Elliott Key, Biscayne National Monument

654

Greer, B. F., and I. J. Cohen (1954) Summary of Florida commercial marine fish landings for 1953. Mimeographed reports. Marine Laboratory, University of Miami, Coral Gables, FL. 28 pp.

TIME COVERAGE: 1954

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Florida

655

Gregg, W. H., and J. Gardner (1902) Where, when, and how to catch fish on the east coast of Florida. Matthews-Northrup, Buffalo, NY. 268 pp.

TIME COVERAGE: 1902

SUMMARY: This is a fishing guide to the east coast of Florida.

KEY WORDS: Fish, Sport fishing, Angling, East Florida, Guide

656

Gruber, M. A. (1971) The development of the brain in *Octopus briareus* Robson. M.Sc. thesis. University of Miami, Coral Gables, FL. 60 pp.

TIME COVERAGE: 1971

SUMMARY: This is a study of the development of the brain in the octopus. All embryos used came from the eggs of a single female captured at Soldier Key.

KEY WORDS: Brain, *Octopus briareus*, Biological development, Soldier Key

657

Gruber, S. H. (1969) The physiology of vision on the lemon shark, *Negaprion brevirostris* (Poey): a behavioral analysis. Ph.D. dissertation. University of Miami, Coral Gables, FL. 104 pp.

TIME COVERAGE: 1969

SUMMARY: This is a study of the physiology of sight in the lemon shark. Specimens used were captured in Biscayne or Florida Bays.

KEY WORDS: Lemon shark, *Negaprion brevirostris*, Vision, Visual stimuli

658

Grymes, J. M., and G. W. Stone (1995) A review of key meteorological and hydrological aspects of Hurricane Andrew. In: Impacts of Hurricane Andrew on the Coastal Zones of Florida and Louisiana: 22-26 August 1992 (J. Coastal Res. Spec. Issue 21). G. W. Stone, and C. W. Finkl (eds.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 364 pp.

TIME COVERAGE: 1995

SUMMARY: This citation is a description of the meteorological and hydrological characteristics of Hurricane Andrew.

KEY WORDS: Beach erosion, Coastal erosion, Shore protection, Sand, Environmental monitoring, Southeast Florida

659

Guala, G. F. (1993) The flora of Chicken Key, Dade County, Florida; before and after Hurricane Andrew. SIDA, 15(3):519-526.

TIME COVERAGE: 1992

SUMMARY: Complete lists of the species of vascular plants in the flora of Chicken Key were generated during surveys on five occasions over a period of five years, including surveys just before and after Hurricane Andrew. The short term effect on the species richness was dramatic, the post hurricane species richness was still well within the known range for the island, indicating that the long term effects on the species composition may not be significant.

KEY WORDS: Vegetation, Hurricane Andrew, Chicken Key

660

Guarin, H. (1996) Phased array sonar for three dimensional near field acoustic imaging. Ph.D. dissertation. University of Miami, Coral Gables. 152 pp.

TIME COVERAGE: 1996

SUMMARY: A technique was developed and its hardware constructed to generate three-dimensional images of targets located in the near field. By merging a planar phase array of omnidirectional hydrophones with a beamformer and a back projection technique, it was

possible to generate a volumetric representation of the targets. Field tests were done in Bear Cut.

KEY WORDS: Acoustic imagery, Sonar arrays, Virginia Key, Bear Cut

661

Guertin, L. A., D. F. McNeill, B. H. Lidz, and K. J. Cunningham (1999) Chronologic model and transgressive-regressive signatures in the late Neogene siliciclastic foundation (Long Key Formation) of the Florida Keys. J. Sedimentary Res., 69(3):653-66.

TIME COVERAGE: 1999

SUMMARY: The biostratigraphy of the area was described using two sediment cores.

KEY WORDS: Biostratigraphy, Clastics, Neogene, Cores, Lake Surprise, Long Key, Card Sound

662

Gulick, L., and R. W. Alleman (1993) Ammonia levels in the Biscayne Bay watershed. Florida Scient., 56(Suppl. 1):39.

TIME COVERAGE: 1993

SUMMARY: A network of sampling stations was established and samples collected monthly for ammonia analyses. Elevated ammonia concentrations were found in the western reaches of the Bay tributary canals, lower levels in the middle reaches, and highest concentrations in the eastern reaches near the highly developed mouths of the canals. This pattern suggested two ammonia sources: one associated with drainage from the Everglades and the other associated with urban development.

KEY WORDS: Water quality, Ammonia, SWIM Plan

663

Ha, S. J. (1968) Masking effects on the hearing of the lane snapper, *Lutjanus synagris* (Linneus). M.Sc. thesis University of Miami, Coral Gables, FL. 51 pp.

TIME COVERAGE: 1968

SUMMARY: The purpose of this study was to determine whether ambient noise can mask the hearing of fishes. All tests were done in the laboratory using fish collected by rod and reel.

KEY WORDS: Lane snapper, *Lutjanus synagris*, Audition, Noise (Sound)

664

Haag, K. H., R. L. Miller, L. A. Bradner, and D. S. McCulloch (1996) Water-quality assessment of southern Florida: an overview of available information on surface- and ground-water quality and ecology. Water-resources investigation rep. 96-4177. USGS, Tallahassee, FL. 42 pp.

TIME COVERAGE: 1996

SUMMARY: This report summarized water quality conditions, issues of concern, and management efforts underway in southern Florida.

KEY WORDS: Water quality, Florida, Nutrients, Ground water, Surface water, Biscayne Aquifer, Everglades

665

Hagan, J. E. (1972) Estuarine surveys in the Southeast. In: Proc. Symp., Coastal Zone Pollution Management. B. L. Edge, (ed.). Charleston, SC, 1972. Clemson University, Clemson, SC. 155-174.

TIME COVERAGE: 1972

SUMMARY: A brief description of the environmental condition of southern Biscayne Bay is included in this paper.

KEY WORDS: Estuaries, Water pollution, Water quality, Coastal zone management, Florida, Georgia, South Carolina, Alabama

666

Hale, K. K. (1993) Biscayne Bay: a bibliography of the marine environment. Tech. paper no. 67. Florida Sea Grant College Program, Gainesville, FL. 115 pp.

TIME COVERAGE: 1700 - 1992

SUMMARY: This bibliography covers from the earliest accounts of Biscayne Bay to 1992.

KEY WORDS: Marine environment, Bibliographies

667

Hale, K. K. (1996) Biscayne Bay: a bibliography of the marine environment. Supplement May 1993 - December 1996. Unpublished report. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 115 pp.

TIME COVERAGE: 1700 - 1992

SUMMARY: This bibliography covers literature about Biscayne Bay from 1993 to 1996.

KEY WORDS: Marine environment, Bibliographies

668

Halley, R. B., T. M. Cronin, G. L. Wingard, and S. E. Ishman (1998) Increased salinity of Florida Bay and saltwater intrusion of the Biscayne Aquifer during the early 20th century: simultaneous consequences of falling water tables along the margins of the Everglades. Proc., 1998 Florida Bay Science Conf. Miami, FL, May 12-14, 1998. University of Florida, Gainesville, FL.

TIME COVERAGE: 1904-1950s?

SUMMARY: Saltwater intrusion along the southeastern boundary of the Biscayne Aquifer has been documented since 1904. The salt water front exhibits timing similar to that of the salinity increase in Florida Bay. Since World War II, intrusion has been regionally arrested although local problems exist.

KEY WORDS: Paleoecology, Biscayne Aquifer, Salt water intrusion, Florida Bay

669

Halley, R. B., and C. C. Evans (1983) The Miami Limestone. A guide to selected outcrops and their interpretation (with a discussion of diagenesis in the formation). Miami Geological Society, Miami, FL. 67 pp.

TIME COVERAGE: 1983

SUMMARY: This is a field guide to outcrops of the Miami Limestone in Dade County. The report includes historical photographs of features no longer existing in the area.

KEY WORDS: Ooids, Miami Limestone, Field guide

670

Halley, R. B., E. A. Shinn, J. H. Hudson, and B. H. Lidz (1977) Pleistocene barrier bar seaward of ooid shoal complex near Miami, Florida. AAPG Bull., 61(4):519-526.

TIME COVERAGE: 1977

SUMMARY: An ooid sand barrier bar of Pleistocene age was deposited along the seaward side of an ooid shoal complex southwest of Miami at Black Creek.

KEY WORDS: Nearshore bars, Pleistocene, Ooids, Miami Limestone, Shoals, Black Creek, Miami

671

Hamilton, R. D., and L. J. Greenfield (1965) Observations on the entrapment of organic matter within the particle structure of calcareous sediments. Nature, 207(4997):627-628.

TIME COVERAGE: 1965

SUMMARY: Calcareous sediments have been shown to possess weak affinities for certain nitrogen compounds of low molecular weight. This weak ability of act as adsorbents, retardants or concentrators of organic matter is probably due to other classes of organic compounds

rather than the mineral itself. The calcareous sediment used for this study were collected in Biscayne Bay.

KEY WORDS: Carbonate sediment, Particulate organic matter

672

Handbury, T. H. (1896) Report on a preliminary examination of Biscayne Bay. In: H. M. Smith Notes on Biscayne Bay, Florida, with reference to its adaptability as the site of a marine hatching and experiment station. Report of the Commissioner [US Commission of Fish and Fisheries] for the year ending June 30, 1895. 189-191.

SUMMARY: 21

KEY WORDS: Geographical exploration, Bear Cut, Norris Cut, Shipping, Navigational channels

673

Hanlon, R. T. (1975) A study of growth in *Octopus briareus*, with notes on its laboratory rearing, mating, and field behavior. M.Sc. thesis. University of Miami, Coral Gables, FL. 111 pp.

TIME COVERAGE: 1972 - 1974

SUMMARY: Individuals of *Octopus briareus* were collected in the field and maintained until they mated and laid eggs. The hatchlings were reared through a complete life cycle. Descriptions of the rearing method, growth and development of the octopi, and field observations were described.

KEY WORDS: *Octopus briareus*, Growth, Rearing, Reproduction, Behavior, Soldier Key, Card Sound

674

Hanlon, R. T., F. M. Bayer, and G. L. Voss (1975) Guide to the mangroves, buttonwood, and poisonous shoreline trees of Florida, the Gulf of Mexico, and the Caribbean region. Sea Grant field guide series 3. University of Miami Sea Grant College Program, Coral Gables, FL. 29 pp.

TIME COVERAGE: 1975

SUMMARY: This is a field guide to mangroves, buttonwood, and poisonous shoreline trees.

KEY WORDS: Mangrove swamps, Buttonwood, Poisonwood, Manchineel, Trees, Identification keys, Florida, Gulf of Mexico, Caribbean, Field guide

675

Hannan, E. M., C. W. Harrington, S. C. Harstrom, G. F. Nowak, and R. D. Rosenbaum (1972) Sedimentation history of Fisher Island, Biscayne Bay, Florida. Geology of Tropical Environments, contribution no 1. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 26 pp.

TIME COVERAGE: 1848 - 1967

SUMMARY: Fisher Island was once the southern-most part of Miami Beach before it was severed by the construction of Government Cut in 1905. The present form of the island is the result of bulkheading and filling during the 1920s. This study is a survey of the geological history of the island.

KEY WORDS: Sediment analysis, Beach profiles, Sedimentation, Fisher Island

676

Hannan, J. V. (1973) Aspects of osmoregulation in selected crustaceans and *Limulus*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 57 pp.

TIME COVERAGE: 1973

SUMMARY: This is a study of the osmoregulation mechanisms of some crustaceans. Specimens were collected in North Carolina and Biscayne Bay and maintained in aquaria.

KEY WORDS: Marine crustaceans, *Limulus polyphemus*, *Uca minax*, *Uca rapax*, *Uca pugilator*, *Penaeus duorarum*, Osmoregulation

677

Hanson, P. J., and D. W. Evans (1991) Metal contaminant assessment for the southeast Atlantic and Gulf of Mexico coasts: results of the National Surveillance Project over the first four years 1984-87. NOAA technical memorandum NMFS-SEFC 284. NOAA/NMFS, Beaufort Laboratory, Beaufort, NC. 18 pp.

SUMMARY: 1984 - 1987

KEY WORDS: Trace metals, Sediment analysis, Fish liver, National Status and Trends Program, Southeast Atlantic, Gulf of Mexico

678

Harlem, P. W. (1979) Aerial photographic interpretation of the historical changes in northern Biscayne Bay, Florida: 1925 to 1976. Sea Grant tech. bull. 40. University of Miami Sea Grant Program, Coral Gables, FL. 155 pp.

TIME COVERAGE: 1925 - 1976

SUMMARY: This report documents recent environmental history of northern Biscayne Bay using aerial photography combined with field studies.

KEY WORDS: Aerial photography, Coastal morphology, Land use, Resource development, Dredging, Environmental impact, History, Mangrove swamps, Spoil, Waste disposal, Turbidity, North Bay, Hurricane of 1926, Hurricane of 1929, Hurricane of 1935

679

Harlem, P. W. (1979) Aerial photographic interpretation of the historical changes in northern Biscayne Bay, Florida: 1925 to 1976. M.Sc. thesis. University of Miami, Coral Gables, FL. 152 pp.

TIME COVERAGE: 1925 - 1976

SUMMARY: The purpose of this study was to document historical changes in the terrestrial, shoreline and submerged environments of northern Biscayne Bay. [Reprinted as Sea Grant Tech. Bull. no. 40.]

KEY WORDS: Aerial photography, Coastal morphology, Land use, Resource development, Dredging, Environmental impact, History, Mangrove swamps, Spoil, Waste disposal, Turbidity, North Bay

680

Harper, R. M. (1927) Natural resources of southern Florida. 18th ann. rep. Florida State Geological Survey, Tallahassee, FL. 206 pp.

TIME COVERAGE: 1927

SUMMARY: This is a comprehensive report on the natural resources of south Florida. Included are geological and biological resources. A bibliography of pre-1925 materials is included.

KEY WORDS: Geology, Climate, Vegetation, Fauna, Bibliographies

681

Harrington, M. E. (1997) Behavior patterns and sexual dimorphism in the spotted dragonet, *Diplogrammus pauciradiatus* (Pisces: Callionymidae). Bull. Mar. Sci., 60(3):872-893.

TIME COVERAGE: 1993 - 1994

SUMMARY: Dragonets exhibit high degrees of sexual dimorphism. This study presented a detailed description of sexual dimorphism in the spotted dragonet and of the behavior patterns involved in courtship, spawning and agonistic interactions.

KEY WORDS: Sexual dimorphism, Behavior, Spotted dragonet, *Diplogrammus pauciradiatus*, Key Biscayne, Virginia Key

682

Harrington, M. E. (1996) Sexual selection in the spotted dragonet, *Diplogrammus pauciradiatus* (Pisces: Callionymidae). University of Miami, Coral Gables, FL. 154 pp.

TIME COVERAGE: 1993 - 1994

SUMMARY: Results from the first study of sexual selection in dragonets were presented. Males have longer bodies and longer first dorsal fins than females. Males also obtain black pigment on the lower jaw and orange pigmentation on the head, two color patterns not observed in the female.

KEY WORDS: Dragonet, *Diplogrammus pauciradiatus*, Virginia Key, Key Biscayne, Bear Cut

683

Harrington, M. E., and J. E. Serafy (1998) An apparatus for testing the effects of episodic stressors on juvenile and adult fishes. Mar. Freshwater Behaviour Physiol., 31(2):81-91.

TIME COVERAGE: 1998

SUMMARY: We describe an apparatus designed to deliver pulsed changes in water quality with variable (and controlled) magnitudes, rates and durations used to simulate the dramatic changes in salinity associated with freshwater canal discharge into Biscayne Bay. Its application on juvenile bluestriped grunts is presented.

KEY WORDS: Water quality, Salinity, Canals, Osmoregulation, Apparatus, Bluestriped grunts, *Haemulon sciurus*

684

Harris, D. L. (1982) The prediction of hurricane storm surges: a state-of-the-art survey. Florida Sea Grant report SGR-49. Florida Sea Grant College Program, Gainesville, FL. 42 pp.

TIME COVERAGE: 1982

SUMMARY: This document was prepared to give a non-specialist an understanding of the problems involved in the prediction of coastal floods resulting from storm surge in Florida, the available technology for solving those problems, and ongoing efforts to improve technology.

KEY WORDS: Hurricanes, Storm surge prediction, Florida

685

Harris, L. E., B. J. Mostkoff, and G. Zadikoff (1996) Artificial reefs: from waste to resources. Proc., Oceans 96: Prospects for the 21st century. Fort Lauderdale, FL, 1996. Marine Technology Society, Washington, DC. 754-759.

TIME COVERAGE: 1996

SUMMARY: Waste materials have been the primary components used in the construction of artificial reefs. Ships, barges, airplanes, automobiles, concrete debris, tires and other waste items have been used successfully. The latest development is the use of custom designed reef units. Examples of these units are described.

KEY WORDS: Artificial reefs, Waste utilization

686

Harshbarger, J. C., and J. B. Clark (1990) Epizootiology of neoplasms in bony fish of North America. Sci. Total Environ., 94(1):1-32.

TIME COVERAGE: 1990

SUMMARY: This citation is a compilation of fish tumor epizootics in North America. The locations, fish species and types of tumor are listed.

KEY WORDS: Tumors, Fish diseases, Chemical pollution

687

Harshberger, J. W. (1914) The vegetation of south Florida, south of 27° 30' north, exclusive of the Florida Keys. Trans., Wagner Free Inst. Sci. Phila., 7(3):51-189.

TIME COVERAGE: 1914

SUMMARY: This is a comprehensive study of the vegetation of South Florida including the area surrounding Biscayne Bay.

KEY WORDS: Vegetation, Botanical resources, Biogeography, South Florida

688

Harwell, M. A. (1997) Ecosystem management of south Florida; developing a shared vision of ecological and societal sustainability. BioScience, 47(8):499-512.

TIME COVERAGE: 1997

SUMMARY: A case study of ecosystem management practices needed to achieve ecological sustainability of the South Florida ecosystem has been underway for the past five years as part of the U.S. Man and the Biosphere effort. This paper describes the results.

KEY WORDS: Ecosystem management, Sustainability, Everglades, South Florida

689

Harwell, M. C. (1993) Reciprocal transplants of *Thalassia testudinum* and *Halodule wrightii* in Biscayne Bay, Florida. Honors thesis. University of South Florida, Tampa, FL. 44 pp.

TIME COVERAGE: 1993

SUMMARY: The primary objective of this study was to determine if *Thalassia* was the dominant species in the region since it out-competes *Halodule* for light.

KEY WORDS: Seagrass, Transplantation, *Thalassia testudinum*, *Halodule wrightii*, Biscayne National Park

690

Harwell, M. A. (1998) Science and environmental decision making in south Florida. Ecological Applications, 8(3):580-590.

TIME COVERAGE: 1998

SUMMARY: The dominant anthropogenic stressor to the South Florida environment has been hydrological modifications instituted to provide flood protection for land selected for agriculture and urban development. Thus major re-design of the hydrologic system is necessary to restore and sustain the ecosystem.

KEY WORDS: Ecosystem management, Risks, Decision making, Sustainability, Everglades, South Florida

691

Harwell, M. A., V. Myers, T. Young, A. Bartuska, N. Gassman, J. H. Gentile, C. C. Harwell, S. Appelbaum, J. Barko, B. Causey, C. Johnson, A. McLean, R. Smola, P. Templet, and S. Tosini (1999) A framework for an ecosystem integrity report card; examples from south Florida show how an ecosystem report card links societal values and scientific information. BioScience, 49(7):543-556.

TIME COVERAGE: 1999

SUMMARY: This paper discusses ways of determining the effectiveness of management decisions by ecosystem managers.

KEY WORDS: Ecosystem management, Performance assessment, Sociological aspects, Environmental monitoring, South Florida

692

Hatfield, E. B. (1977) Aspects of the population ecology of *Anachis avara* (Say) (Gastropoda: Prosobranchia) from Bear Cut, Miami, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 183 pp.

TIME COVERAGE: 1977

SUMMARY: This study examined feeding, growth and longevity of individuals, reproduction, abundance, size structure, demography and productivity of snails collected from seagrass flats in Bear Cut.

KEY WORDS: Snails, *Anachis avara*, Population dynamics, Bear Cut

693

Hatfield, E. B. (1979) Food sources for *Anachis avara* (Columbellidae) and a discussion of feeding in the family. Nautilus, 93(-):40-43.

TIME COVERAGE: 1979

SUMMARY: Snails specimens collected in Bear Cut were maintained in the laboratory on carrion, epibiota of seagrass, organics in sediment and organics in a flow through system. Snails grew best on a diet of epibiota.

KEY WORDS: Snails, Columbellidae, *Anachis avara*, Food consumption, Bear Cut

694

Hatfield, E. B. (1980) Natural history and population fluctuation of the gastropod *Anachis avara* (Say) in a tropical seagrass habitat, Miami, Florida. Bull. Mar. Sci., 30(3):604-612.

TIME COVERAGE: 1970 - 1975

SUMMARY: Seasonal fluctuations of the population of *Anachis avara* at Bear Cut were studied. Periodic differences could be due to predation by mobile species present in Bear Cut. Results of temperature and salinity tolerances suggest *A. avara* was not under physiological stress during the duration of the work. Shoaling of the *Thalassia* bed towards the end of the study probably contributed to the drastic decrease in abundance of *A. avara*.

KEY WORDS: Snails, *Anachis avara*, Population dynamics, Turtle grass, *Thalassia testudinum*, Bear Cut

695

Haus, B. K., and R. Lhermitte (1996) Coherent sonar measurements of water motion and turbulence in a tidal inlet. In: Proc., Oceans 96: Prospects for the 21st Century. MTS/IEEE, Fort Lauderdale, FL, 1996. Marine Technology Society, Washington, DC. 436-441.

TIME COVERAGE: 1996

SUMMARY: Vertical profiles of water motion and turbulence were obtained using Doppler sonar installed in Bear Cut.

KEY WORDS: Doppler sonar, Vertical water movement, Turbulence measurement, Bear Cut

696

Heald, E. J., and W. E. Odum (1970) The contribution of mangrove swamps to Florida fisheries. Proc., Gulf Caribb. Fisheries Institute, 22nd annual session. Miami Beach, FL, 1969. University of Miami, Coral Gables, FL. 130-135.

TIME COVERAGE: 1970

SUMMARY: This citation describes the biological pathways of energy flow in the mangrove community and assessed the value of mangrove material to the ecosystem.

KEY WORDS: Mangrove swamps, Detritus, Fisheries, Energy flow

697

Heald, E. J., W. E. Odum, and D. C. Tabb (1974) Mangroves in the estuarine food chain. In: Environments of South Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 182-189.

TIME COVERAGE: 1974

SUMMARY: This citation discusses the different roles of red and black mangroves in estuarine food chains. Red mangroves produce a large quantity of detrital material upon which is based a food chain from microorganisms to top carnivores of sport and commercial value. Black mangroves, by virtue of their location, are probably not significant exporters of detritus to adjacent estuaries. Their importance lies apparently in the mosquito-killifish food chain culminating in the same top level carnivores as the red mangrove-based system.

KEY WORDS: Mangrove swamps, Food chains, Estuaries, Estuarine organisms

698

Heald, E. J., W. E. Odum, and D. C. Tabb (1984) Mangroves in the estuarine food chain. In: Environments of South Florida: Present and Past II. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL. 551 pp.

TIME COVERAGE: 1984

SUMMARY: This citation describes the seemingly different roles of red and black mangroves in estuarine food chains. Red mangroves produce large amounts of detrital material upon which is based a food chain. Many black mangrove communities by virtue of their location are not significant exporters of detritus to adjacent estuaries. Their importance lies apparently in the mosquito-killifish food chain culminating in the same top level carnivores as the red mangrove-based system.

KEY WORDS: Mangrove swamps, Food chains, Estuaries, Estuarine organisms

699

Heath, R. C., and C. S. Conover (1981) Hydrologic almanac of Florida. Open file report 81-1107. US Geological Survey, Tallahassee, FL. 239 pp.

TIME COVERAGE: 1981

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water resources, Hydrology, Florida

700

Heemstra, P. C. (1965) A field key to the Florida sharks. Florida Board of Conservation technical series 45. Florida Board of Conservation Marine Laboratory, St. Petersburg, FL. 11 pp.

TIME COVERAGE: 1965

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sharks, Identification keys, Florida, Guide

701

Heinrich, M. K. (1997) Airport plans affect parks: international airports proposed near Florida, Hawaii parks. National Parks, 71(3-4):24-25.

TIME COVERAGE: 1997

SUMMARY: This paper describes the proposed conversion of the Homestead Air Force Base airport to accommodate international commercial air traffic.

KEY WORDS: Environmental impact, Homestead Air Force Base, Military Canal, Biscayne National Park, Everglades National Park, Kahului Airport, Haleakala National Park, Noise abatement

702

Hela, I. (1951) Remarks on the climate of southern Florida. Bull. Mar. Sci. Gulf Caribb., 2(2):438-447.

TIME COVERAGE: 1951

SUMMARY: The climate of the state was discussed and the distribution of continentally analyzed, The unexpectedly high degree of continentality of the Florida Keys is explained in terms of the prevailing winds.

KEY WORDS: Climate, Tropical environment, South Florida

703

Hela, I., C. A. Carpenter, and J. K. McNulty (1957) Hydrography of a positive, shallow, tidal bar-built estuary (report on the hydrography of the polluted area of Biscayne Bay). Bull. Mar. Sci. Gulf Caribb., 7(1):47-99.

TIME COVERAGE: 1957

SUMMARY: The summer pollution situation in the Bay north of Rickenbacker Cswy. during the summer of 1954 was compared to that of 1949, it was found that due to abnormally high river water discharge in 1954, pollution was less severe than expected.

KEY WORDS: Hydrography, Tidal inlets, Estuarine dynamics, Flushing, Water circulation, River discharge, Miami River, Water pollution

704

Hela, I., C. A. Carpenter, and J. K. McNulty (1955) Water exchange studies. In: Report on preliminary studies of pollution in Biscayne Bay. H. B. Moore, I. Hela, E. S. Reynolds, J. K. McNulty, S. M. Miller, and C. A. Carpenter Progress report 55-3. Report to Federal Security Agency, Public Health Service, National Institutes of Health, under grant E-510. Marine Laboratory, University of Miami, Coral Gables, FL. Various paging.

TIME COVERAGE: 1955

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Hydrography, Water exchange, Estuarine dynamics, Miami River, Tidal dynamics, Water pollution, Salinity

705

Henderson-Rosenberg & Associates (1974) Status of environmental management and planning in south Florida's coastal zone. Henderson-Rosenberg & Associates, Miami, FL. 77 pp.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Environment management, Coastal zone management, Regional planning, South Florida

706

Hendrix, G. Y. (1968) A review of the genus Phascolion (Sipuncula) in the tropical western Atlantic and Caribbean with the descriptions of three new species. M.Sc. thesis. University of Miami, Coral Gables, FL. 77 pp.

TIME COVERAGE: 1968

SUMMARY: This is a taxonomic study of Phascolion worms. Some specimens were collected in Biscayne Bay.

KEY WORDS: Sipunculids, *Phascolion cryptus*, *Phascolion grastis*, *Phascolion caupo*, *Phascolion strombus*, Taxonomy, Virginia Key, Key Biscayne

707

Hendrix, G. Y. (1971) A systematic study of the genus *Alpheus* (Crustacea: Decapoda: Alpheidae) in south Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 184 pp.

TIME COVERAGE: 1971

SUMMARY: This is a systematics study of caridean shrimp. Some specimens were collected in Biscayne Bay.

KEY WORDS: Caridean shrimp, *Alpheus*, Taxonomy, Identification keys, Key Biscayne, Florida Keys

708

Henry, H. R., and F. A. Kohout (1972) Circulation patterns of saline groundwater affected by geothermal heating - as related to waste disposal. In: Proc. Symp., Underground Waste Management and Environmental Implications. T. D. Cook, (ed.). Houston, TX, 1971. American Association of Petroleum Geologists memoir 18. American Association of Petroleum Geologists, Tulsa, OK. 201-221.

TIME COVERAGE: 1972

SUMMARY: This paper discusses the potential use of deep saline aquifers as reservoirs for the disposal of liquid wastes. Mathematical models of the Floridan aquifer were under development.

KEY WORDS: Saline water, Ground water, Geothermal gradient, Waste disposal, Floridan Aquifer

709

Henshall, J. H. (1888) Camping and Cruising in Florida: an Account of Two Winters Passed in Cruising Around the Coasts of Florida as Viewed from the Standpoint of an Angler, a Sportsman, a Yachtsman, a Naturalist and a Physician. R. Clarke, Cincinnati, OH. 248 pp.

TIME COVERAGE: 1888

SUMMARY: This is an account of two winters spent by the author in Florida. The book includes a brief description of Biscayne Bay.

KEY WORDS: Cruises, Natural resources, Biota, Florida

710

Henshall, J. A. (1891) Report upon a collection of fishes made in southern Florida during 1889. Bulletin of the U.S. Fish Commission, 9(-):371-389.

TIME COVERAGE: 1889

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marine fish

711

Herreid, C. F. (1963) Observations on the feeding behavior of *Cardisoma guanhum* (Latreille) in southern Florida. Crustaceana, 5(3):176-180.

TIME COVERAGE: 1963

SUMMARY: This citation describes the feeding behavior and some of the plants eaten by land crabs at the Miami Plant Introduction Station.

KEY WORDS: Land crab, *Cardisoma guanhum*, Feeding behavior

712

Herreid, C. F. (1967) Skeletal measurements and growth of the land crab, *Cardisoma guanhum* Latreille. Crustaceana, 13(1):39-44.

TIME COVERAGE: 1961 - 1962

SUMMARY: This citations describes the skeletal measurements, color variations and sexual dimorphism of land crab collected in Biscayne Bay.

KEY WORDS: Land crab, *Cardisoma guanhum*, Growth, Skeleton

713

Herrnkind, W. F. (1968) Ecological and ontogenetic aspects of visual orientation in the sand fiddler crab, *Uca pugilator* (Bosc). Ph.D. dissertation. University of Miami, Coral Gables, FL. 144 pp.

TIME COVERAGE: 1968

SUMMARY: Extensive observations at the study site revealed specific behavior patterns involving directional orientation including responses to polarized and sunlight and landmarks.

KEY WORDS: Sand fiddler crab, *Uca pugilator*, Orientation behavior, Vision, Life cycle, Virginia Key, Key Biscayne

714

Herrnkind, W. F. (1965) Investigations concerning homing, directional orientation, and insight in the sand fiddler crab, *Uca pugilator* (Bosc). M.Sc. thesis. University of Miami, Coral Gables, FL. 146 pp.

TIME COVERAGE: 1965

SUMMARY: Homing activities of the sand fiddler crab were observed in several habitats. Crabs moved either singly for short distances or in large groups traveling as far as 50 yds from the

burrow area. Individual crabs would move up to two yards away from the burrow and return directly to it.

KEY WORDS: Sand fiddler crab, *Uca pugilator*, Homing behavior, Orientation behavior, Virginia Key

715

Herrnkind, W. (1994) Spiny lobster recruitment. Unpublished final report and addendum. Florida State University, Tallahassee, FL.

TIME COVERAGE: 1994

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Spiny lobster, *Panulirus argus*, Recruitment, Florida Bay, Florida Keys

716

Herrnkind, W. F., and W. C. Cummings (1964) Single file migrations of the spiny lobster, *Panulirus argus* (Latreille). Bull. Mar. Sci. Gulf Caribb., 14(1):123-125.

TIME COVERAGE: 1961, 1963

SUMMARY: Underwater observations were made of mass movements of spiny lobsters in single file chains.

KEY WORDS: Spiny lobster, *Panulirus argus*, Migrations

717

Hess, S. C. (1978) Guide to the commoner shallow-water asteroids (starfish) of Florida, the Gulf of Mexico, and the Caribbean region. Sea Grant field guide series 7. University of Miami Sea Grant College Program, Coral Gables, FL. 37 pp.

TIME COVERAGE: 1978

SUMMARY: This is a field guide to shallow water starfish of Florida.

KEY WORDS: Asteroids, Starfish, Identification keys, Florida, Gulf of Mexico, Caribbean, Guide

718

Hessinger, D. A., H. M. Lenhoff, and L. B. Kahan (1973) Haemolytic, phospholipase A and nerve-affecting activities of sea anemone nematocyst venom. Nature New Biology, 241(-):125-127.

TIME COVERAGE: BB 491

SUMMARY: Specimens of sea anemone were cultured in the laboratory from original specimens collected in Biscayne Bay. Undischarged nematocysts were collected and the venom released. The venom was found to be extremely effective in lysing red blood cells. Two proteins were isolated from the venom and the physiological effects of these compounds was studied.

KEY WORDS: Stinging organs, Sea anemone, *Aiptasia pallida*, Biological poisons

719

Haaasen, C. (1999) Stiltsville is useful. The Miami Herald, Miami, FL. June 17.

TIME COVERAGE: 1999

SUMMARY: This article describes the usefulness of Stiltsville as a navigation aid to the inexperienced boater.

KEY WORDS: Stiltsville, Navigation aid

720

Hibler, J. (1995) Temperature dependent emergence and social behavior in loggerhead sea turtle (*Caretta caretta*) hatchlings. Florida Scientist, 58(Suppl. 1):30.

TIME COVERAGE: 1994

SUMMARY: Hatchling loggerhead sea turtles were observed at a beach in Key Biscayne. A correlation was found between nest temperature and emergence events. Potential vocal communication among the hatchlings was observed.

KEY WORDS: Loggerhead turtle, *Caretta caretta*, Hatching, Temperature effects, Key Biscayne

721

Hicks, D. B. (1989) Water quality and toxic assessment study, mangrove preserve, Munisport Landfill site, North Miami, Florida. Report. EPA, Environmental Services Division, Athens, GA. Various paging.

TIME COVERAGE: 1989

SUMMARY: The purpose of this study was to determine whether leachates from the Munisport landfill would affect the Florida State Mangrove Preserve located near the landfill site. The toxicity of the leachates will severely impair the ecological functions of the preserve and preclude development and maintenance of a balance aquatic community.

KEY WORDS: Water quality, Chemical pollutants, Ammonia, Mangroves, Tides, Toxicity, Groundwater pollution, Munisport Landfill, Florida State Mangrove Preserve, North Miami, Munisport, Black Point, Biscayne Creek, Dania Cutoff Canal

722

Higer, A. L., and M. C. Kolipinski (1970) Sources of pesticides in Florida waters. Open file rep. 70005. US Geological survey, Water Resources Division, Tallahassee, FL. 20 pp.

TIME COVERAGE: 1966 - 1967

SUMMARY: Information on pesticide use was assembled for use in designing programs to monitor the hydrobiological system of Florida.

KEY WORDS: Pesticides, Ground water, Surface water, Florida

723

Higer, A. L., M. C. Kolipinski, N. S. Thomson, and L. Purkerson (1971) Use of processed multispectral scanner data with a digital simulation model for forecasting thermally induced changes in benthic vegetation in Biscayne Bay, Florida. In: Proc., 7th International Symp. on Remote Sensing of Environment,. 1971. Infrared and Optics Laboratory, Institute of Science and Technology, University of Michigan, Ann Arbor, MI. 2055-2056.

TIME COVERAGE: 1971

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Multispectral scanners, Simulators, Thermal pollution, Seagrass, Card Sound, Turkey Point, South Bay

724

Higman, J. B. (1955) The behavior of pink shrimp, *Penaeus duorarum* Burkenroad, in a direct current electrical field. M.Sc. thesis. University of Miami, Coral Gables, FL. 49 pp.

TIME COVERAGE: 1955

SUMMARY: The purpose of this study was to determine if shrimp could be made to react directionally to an electric current and if so, what the optimum electrical conditions would be. No attempt was made to determine the physiological basis for this behavior. Specimens were collected in Biscayne and Florida Bays.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Electric fields, Behavioral responses, Florida Bay

725

Higman, J. B. (1952) Preliminary investigation of the live bait shrimp fishery of Florida Bay and the Keys. Mimeographed report 52-20. Marine Laboratory, University of Miami, Coral Gables, FL. 7 pp.

TIME COVERAGE: 1952

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Bait, Shrimp fisheries, Florida Bay, Florida Keys

726

Hildebrand, E. L. (1977) Mangrove sediments in south Florida: soluble organic carbon and the growth physiology of an epipelagic diatom. M.Sc. thesis. University of Miami, Coral Gables, FL. 171 pp.

TIME COVERAGE: 1974 - 1975

SUMMARY: Levels of dissolved organic carbon (DOC) in shallow waters and pore waters were determined and found to be high relative to values in other natural waters. In general, an increase of DOC levels was found with increasing distance from the shoreline. An epipelagic diatom was isolated from peat sediments. It has a very low light saturation intensity and is euhaline. The potential ability of this diatom species to use organic compounds for growth in the dark or more luxuriant growth in the light was investigated.

KEY WORDS: Mangrove swamps, Sediment, Organic carbon, Diatoms, Amphora, Little Card Sound

727

Hine, A. E. (1971) Reproduction of *Caulerpa* Lamouroux with notes on the life history of certain American species. Ph.D. dissertation. University of Miami, Coral Gables, FL. 236 pp.

TIME COVERAGE: 1971

SUMMARY: Reproduction and life histories of some of the American species of this algal genus were described. Some specimens were collected in Biscayne Bay.

KEY WORDS: Algae, *Caulerpa*, Reproduction, Life history

728

Hiser, H. W., S. S. Lee, T. N. Veziroglu, and S. Sengupta (1975) Application of remote sensing to thermal pollution analysis. In: Remote Sensing of Earth Resources. Proc., 4th annual Conf. on Earth Resources. Tullahoma, TN, 1975. University of Tennessee, Tullahoma, TN. 481-497.

TIME COVERAGE: 1975

SUMMARY: A comprehensive numerical model development program for near-field thermal plume discharge and far field general circulation in coastal regions was developed with the objective of developing a generalized, three-dimensional, predictive model for thermal pollution studies. One of the regions of specific application was the power plant site in Biscayne Bay.

KEY WORDS: Remote sensing, Thermal pollution, Infrared detectors, Power plants, Hutchinson Island

729

Hixon, R. (1976) Studies on the abundance of animals captured in artificial habitats in Card Sound, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 116 pp.

TIME COVERAGE: 1971 - 1972

SUMMARY: An artificial habitat (cage) was designed to simultaneously sample small invertebrates, fishes and lobsters and deployed in Card Sound. All animals collected were identified and counted.

KEY WORDS: Abundance, Benthos, Marine mollusks, Marine crustaceans, Fish, Spiny lobster, *Panulirus argus*, Waste disposal, Card Sound, Turkey Point, Species list

730

Ho, W. (1998) FP&L: the history of Florida Power and Light. South Florida History Mag., 26(4):Various paging.

TIME COVERAGE: 1925 -

SUMMARY: This article describes the history of Florida Power and Light.

KEY WORDS: Florida Power and Light, Turkey Point

731

Hobbs, A. (1988) Historical overview of federal beach nourishment projects in Florida. In: Proc., Beach Preservation Technology 88: Problems and Advancements in Beach Nourishment. L. S. Tait, (comp.). Florida Shore & Beach Preservation Association, Tallahassee, FL. 41-46.

TIME COVERAGE: 1988

SUMMARY: This paper is a compilation and update of previous papers presented to the Florida Shore & Beach Preservation Association on beach nourishment projects.

KEY WORDS: Beach nourishment, Government policy, Florida

732

Hoberg, C. M. (1975) Responses of mature male blue crabs, *Callinectes sapidus* Rathbun, to laboratory thermal gradients, with notes on mature female stone crabs, *Menippe mercenaria* (Say). M.Sc. thesis. University of Miami, Coral Gables, FL. 134 pp.

TIME COVERAGE: 1975

SUMMARY: Crabs were exposed to thermal gradients and thermal avoidance, preference, sensitivity, differentiation and control responses examined.

KEY WORDS: Blue crab, *Callinectes sapidus*, Stone crab, *Menippe mercenaria*, Temperature effects, Ft. Myers, Card Sound

733

Hoffman, K. (1997) Institutional framework. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Environmental legislation, Legal aspects, Water use regulations, Virginia Key

734

Hoffmeister, J. E. (1974) Land From the Sea: the Geologic Story of South Florida. University of Miami Press, Coral Gables, FL. 143 pp.

TIME COVERAGE: 1974

SUMMARY: This is a concise description of the geology of South Florida including the Key Biscayne petrified mangrove forest.

KEY WORDS: Geology, Oolites, Ooids, Barrier islands, Coral, Coral reefs, Reef tract, Florida Bay, Florida Keys, Water resources, Key Biscayne

735

Hoffmeister, J. E., J. I. Jones, J. D. Milliman, D. R. Moore, and H. G. Multer (1964) Living and fossil reef types of south Florida. Guidebook for the Geological Society of America convention field trip no. 3, November 1964. Miami Geological Society, Miami, FL. 28 pp.

TIME COVERAGE: 1964

SUMMARY: This is a field guide to living and fossil reefs. Biscayne Bay is briefly discussed.

KEY WORDS: Reefs, Limestone, Oolites, Coral reefs, Reef tract, Florida Keys, Field guide, Florida Bay

736

Hoffmeister, J. E., and H. G. Multer (1965) Fossil mangrove reef of Key Biscayne, Florida. Geological Soc. America Bull., 76(-):845-852.

TIME COVERAGE: 1965

SUMMARY: A small rock reef along the north shore of Key Biscayne was found to be composed of a frame-work of fossilized black mangrove roots. The roots, now turned into calcareous rods, are embedded in a friable calcareous-quartzitic sand which may be quickly washed away by wave action along the seaward edge of the reef. Radiocarbon dating indicates the age of the rods to be between 1000 and 2000 years.

KEY WORDS: Mangrove swamps, Fossils, Roots, Avicennia nitida, Reefs, Key Biscayne

737

Hoffmeister, J. E., and H. G. Multer (1968) Geology and origin of the Florida Keys. Geological Soc. America Bull., 79(11):1487-1501.

TIME COVERAGE: 1968

SUMMARY: The Florida Keys are composed of two main formations of Pleistocene age - the Key Largo Limestone and the Miami Limestone. The former is an elevated coral reef rock, and the latter is an oolitic limestone. The Key Largo Limestone is the surface rock of the Upper Keys, and the Miami Limestone covers the Lower Keys. The Key Largo extends for the total length of the Keys, underlying the Miami Limestone in the Lower Keys. The Keys may have formed as a line patch reef in a back reef area which was bordered on its seaward edge by an outer reef which has since been lowered, chiefly by erosion, and covered by more recent material.

KEY WORDS: Geology, Limestone, Oolites, Reef tract, Florida Keys, Elliott Key

738

Hoffmeister, J. E., K. W. Stockman, and H. G. Multer (1967) Miami limestone of Florida and its recent Bahamian counterpart. Geological Soc. America Bull., 78(-):175-189.

TIME COVERAGE: 1967

SUMMARY: A large underwater mound of unstable oölite is forming in the Bahamas and east of the mound in the shallow lagoon, massive, tubular bryozoans are growing. The oölite from the mound is slowly encroaching over the bryozoan beds. The bathymetric and ecologic conditions now extant in this area are probably similar to those which existed during the Pleistocene to form the units of the Miami Limestone.

KEY WORDS: Geology, Limestone, Oolites, Bryozoa, Great Bahama Bank

739

Hofstetter, R. H. (1974) The effect of fire on the pineland and sawgrass communities of southern Florida. In: Environments of South Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 201-212.

TIME COVERAGE: 1974

SUMMARY: This citation discusses the role of fire in terrestrial and wetland communities of South Florida.

KEY WORDS: Fire, Marshes, Wetlands, Pinelands, Sawgrass, *Cladium jamaicense*, Everglades

740

Holder, J. B. (1987) Along the Florida reef. In: Tales of Old Florida. Castle, Secaucus, NJ. 477 pp.

TIME COVERAGE: 1890s

SUMMARY: This is a series of articles describing the adventures of the author during the reconnaissance of South Florida for the purpose of installing the telegraph cable to Cuba.

KEY WORDS: Natural resources, History, South Florida, Florida Keys

741

Hollingsworth, T. (1936) History of Dade County, Florida. Glade House, Coral Gables, FL. 151 pp.

TIME COVERAGE: 1936

SUMMARY: This book is a history of Dade County. Development along Biscayne Bay is discussed briefly.

KEY WORDS: Dade County, History, Biographies

742

Hollingsworth, T. (1949) History of Dade County, Florida. Miami Post, Miami, FL. 192 pp.

TIME COVERAGE: 1949

SUMMARY: This book contains short descriptions of major aspects of the history of Dade County such as the Perrine Grant, early industries and settlements, aviation, and the 1920s Boom. Also included are short biographies of important people in Dade County.

KEY WORDS: Dade County, History, Biographies, Perrine Grant, Aviation, 1920s Boom

743

Holm, R. F. (1975) The community structure and diversity of a nearshore tropical marine lagoon. Ph.D. dissertation. Northwestern University, Evanston, IL. 305 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: The community structure and diversity of a near-shore tropical marine lagoon in the Upper Florida Keys was examined. Two areas along the intertidal-subtidal gradients were examined.

KEY WORDS: Lagoons, Benthos, Biota, Community composition, Old Rhodes Key, Species list

744

Holm, R. F. (1978) The community structure of a tropical marine lagoon. Est. Coastal Mar. Sci., 7(4):329-345.

TIME COVERAGE: 1973 - 1974

SUMMARY: The structure of the benthic community in Old Rhodes Key was examined. Water depth, tides, current, water temperature, salinity, pH, sediment depth and particle size were monitored. The amount of vegetation present and the stability of the sediment modified the abundance and diversity of the benthic macrofauna.

KEY WORDS: Lagoons, Benthos, Biota, Community composition, Old Rhodes Key, Species list

745

Holm, R. F. (1981) Snapper Creek Canal discharge monitoring program. Report. Dade County. Department of Environmental Resources Management, Miami, FL. 52 pp + maps.

TIME COVERAGE: 1980

SUMMARY: Discharge from Snapper Creek was monitored to examine its effect on water quality of Biscayne Bay. Of all the parameter examined, bacteria from the canal had the major influence on the Bay.

KEY WORDS: Water quality, Stormwater runoff, Drainage water, Pollution monitoring, Snapper Creek Canal, Salinity, Coliform bacteria, Turbidity, Color, Nutrients, Oil and grease, BOD, Cd, Cu, Pb, Zn, Suspended solids

746

Holmes, D. S. (1969) A contribution to the ecology of *Cardita floridana*. M.Sc. thesis. University of Miami, Coral Gables, FL. 47 pp.

TIME COVERAGE: 1969

SUMMARY: The general biology of *Cardita* was examined. Samples of this clam species were collected off Rickenbacker Cswy.

KEY WORDS: Clams, *Cardita floridana*, Life history, Florida Bay, Rickenbacker Causeway

747

Hoover, H. W. (1969) Results of the coliform sampling program for Biscayne Bay, December 7, 1969. Unpublished manuscript. Hoover Environmental Legal Defense Fund, Miami, FL. 4 pages + remarks.

TIME COVERAGE: 1969

SUMMARY: This report contains the results of coliform determination in many sites in Biscayne Bay.

KEY WORDS: Bacteria, Sewage, Water pollution, Bear Cut, Turkey Point, Key Biscayne, Crandon Park, Cape Florida State Park, Miami River, Matheson Hammock

748

Hopkins, T. E., J. E. Serafy, and P. J. Walsh (1997) Field studies on the ureogenic gulf toadfish, in a subtropical bay. II. Nitrogen excretion physiology. J. Fish Biol., 50(6):1271-1284.

TIME COVERAGE: 1993 - 1994

SUMMARY: Several biochemical and physiological measurements relating to urea synthesis and excretion were measured in samples taken from freshly collected gulf toadfish from a subtidal population of Biscayne Bay. This indirect approach was used instead of direct measurements of nitrogen excretion because excretion patterns of gulf toadfish are altered markedly during the first 24 hrs of capture disturbance or laboratory confinement.

KEY WORDS: Ornithine-urea cycle, Urea, Gulf toadfish, *Opsanus beta*, Turkey Point, Black Point, Matheson Hammock, Rickenbacker Causeway

749

Hopkins, T. E., C. M. Wood, and P. J. Walsh (1999) Nitrogen metabolism and excretion in the intertidal population of the gulf toadfish (*Opsanus beta*). Marine and Freshwater Behaviour and Physiology, 33(1):21-34.

TIME COVERAGE: 1993 - 1994

SUMMARY: This study was undertaken to assess the ability of toadfish to make and excrete urea as nitrogenous waste products. Some specimens used in the study were collected off Turkey Point.

KEY WORDS: Toadfish, *Opsanus beta*, Urea, Excretion, Panacea, Turkey Point

750

Hopper, B. E. (1967) Free-living marine nematodes from Biscayne Bay, Florida, II. Oncholaimidae: descriptions of five new species and one new genus (*Meyersia*). Mar. Biol., 1(-):145-151.

TIME COVERAGE: 1965

SUMMARY: A new genus and five species of the nematode family Oncholaimidae were described from Biscayne Bay.

KEY WORDS: Nematodes, Oncholaimidae, *Metoncholaimus pelor*, *Metoncholaimus amplus*, *Meyersia major*, *Meyersia minor*, *Filoncholaimus prolatus*, Taxonomy, Key Biscayne

751

Hopper, B. E. (1970) Free-living marine nematodes from Biscayne Bay, Florida, III. Eurystominidae: *Pareurystomina bissonettei* sp. n. from Biscayne Bay and other locations. Proc. Helminthological Soc. Washington, 37(2):175-178.

TIME COVERAGE: 1970

SUMMARY: The nematode, *Pareurystomina bissonettei*, is described from sandy locations in Biscayne Bay and other locations.

KEY WORDS: Nematodes, *Pareurystomina bissonettei*, Taxonomy

752

Hopper, B. E. (1972) Free-living marine nematodes from Biscayne Bay, Florida. IV. Cyatholaimidae: on the occurrence of *Marilynia* n. gen. and *Longicyatholaimus* Micoletzky, 1924 in Biscayne Bay, with a description of *L. longicaudatus* (de Man, 1876) from the type locality. Zoologischer Anzeiger, 189(1/2):64-88.

TIME COVERAGE: 1972

SUMMARY: This paper is a discussion of nematode species identification.

KEY WORDS: Nematodes, Cyatholaimidae, *Marilynia*, *Longicyatholaimus longicaudatus*

753

Hopper, B. E. (1973) Free-living marine nematodes from Biscayne Bay, Florida, VI. Ceramonematidae: systematics of *Pselionema annulatum* var. *beauforti* Chitwood, 1936, and a note on the production and transport of an egg capsule. Proc. Helminthological Soc. Washington, 40(2):265-272.

TIME COVERAGE: 1973

SUMMARY: *Pselionema annulatum* is redescribed from specimens collected from Card Sound and Biscayne Bay.

KEY WORDS: Nematodes, *Pselionema annulatum* var. *beauforti*, Eggs, Taxonomy, Card Sound

754

Hopper, B. E., and R. C. Cefalu (1973) Free-living marine nematodes from Biscayne Bay, Florida, V. Stilbonematinae: contributions to the taxonomy and morphology of the genus *Eubostrichus* Greeff and related genera. Trans. Amer. Micros. Soc., 92(4):578- 591.

TIME COVERAGE: 1973

SUMMARY: Four species of stilbonematid nematodes were recorded in Florida waters, two of which were new to science.

KEY WORDS: Nematodes, Stilbonematinae, *Eubostrichus dianee*, *Eubostrichus parasitiferus*, *Catanema porosum*, *Robbea tenax*, Taxonomy

755

Hopper, B. E., and R. C. Cefalu (1973) Free-living marine nematodes from Biscayne Bay, Florida. VII. Enoplidae: Enoplus species in Biscayne Bay with observations on the culture and bionomics of *E. paralittoralis* Wieser, 1953. Proc. Helminthological Soc. Washington, 40(2):275-280.

TIME COVERAGE: 1973

SUMMARY: Two species of nematodes are described from species collected in Biscayne Bay.

KEY WORDS: Nematodes, *Enoplus geminivelatus*, *Enoplus paralittoralis*, Taxonomy

756

Hopper, B. E., J. W. Fell, and R. C. Cefalu (1973) Effect of temperature on life cycles of nematodes associated with the mangrove (*Rhizophora mangle*) detrital system. Mar. Biol., 23(-):293-296.

TIME COVERAGE: 1973

SUMMARY: The effect of temperature on the life history of various representatives of the meiofauna associated with decaying mangrove leaves was investigated. In general, life cycles of nematodes become shorter with increased temperatures. However, as temperatures approach the upper limits which support reproduction, life cycles become slightly lengthened.

KEY WORDS: Temperature effects, Nematodes, Mangrove swamps, *Rhizophora mangle*, Detritus, *Rhabditis marina*, *Diplolaimelloides*, *Diplolaimella ocellata*, *Enoplus paralittoralis*, *Oncholaimus*, *Haliplectus dorsalis*

757

Hopper, B. E., and S. P. Meyers (1966) Aspects of the life cycle of marine nematodes. Helgolander wissenschaftliche Meeresuntersuchungen, 13(-):444-449.

TIME COVERAGE: 1966

SUMMARY: The life cycles of six species of marine nematodes collected from a seagrass community were studied.

KEY WORDS: Nematodes, Life cycle

758

Hopper, B. E., and S. P. Meyers (1967) Follicolous marine nematodes on turtle grass, *Thalassia testudinum* König, in Biscayne Bay, Florida. Bull. Mar. Sci., 17(2):471-517.

TIME COVERAGE: 1964

SUMMARY: The ecology and taxonomy of foliicolous nematodes living in *Thalassia* were studied at four sites in Biscayne Bay. Differences in speciation and population levels between sites and within individual sites as affected by physical and seasonal factors are noted.

KEY WORDS: Nematodes, Turtle grass, *Thalassia testudinum*, Population dynamics, Taxonomy

759

Hopper, B. E., and S. P. Meyers (1966) Observations on the bionomics of the marine nematode, *Metoncholaimus* sp. Nature, 209(-):899-900.

TIME COVERAGE: 1964 - 1965

SUMMARY: The bionomics of the nematode *Metoncholaimus* found in *Thalassia testudinum* communities in Biscayne Bay was studied. Data on biological characteristics of the animal, including movement, egg deposition and development are discussed.

KEY WORDS: Nematodes, Metoncholaimus, Ecology, *Thalassia testudinum*

760

Hopper, B. E., and S. P. Meyers (1967) Population studies on benthic nematodes within a subtropical seagrass community. Mar. Biol., 1(-):85-96.

TIME COVERAGE: 1965 - 1966

SUMMARY: This is a study of the benthic nematode fauna of the soft surface sediments of a *Thalassia* bed in Bear Cut. A high degree of homogeneity was exemplified by the dominance of four species out of approximately 100 nematode taxa in the area. Physiographic changes in the environment were reflected in species composition. Population densities were found to vary during the year.

KEY WORDS: Nematodes, Benthos, Turtle grass, *Thalassia testudinum*, Population dynamics, Key Biscayne, Bear Cut

761

Horvitz, C. C., S. McMann, and A. Freedman (1995) Exotics and hurricane damage in three hardwood hammocks in Dade County parks, Florida. In: Impacts of Hurricane Andrew on the Coastal Zones of Florida and Louisiana: 22-26 August 1992 (J. Coastal Res. Spec. Issue 21). G. W. Stone, and C. W. Finkl (eds.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 364 pp.

TIME COVERAGE: 1992

SUMMARY: This citation discussed the effects of Hurricane Andrew on three hammocks in South Florida: Matheson Hammock, the Deering Estate, and the Castellow Park.

KEY WORDS: Hammocks, Trees, Vegetation, Hurricane Andrew, Dade County

762

Houde, E. D. (1971) Developmental abnormalities of the flatfish *Achirus lineatus* reared in the laboratory. Fishery Bull., 69(1):537-544.

TIME COVERAGE: 1971

SUMMARY: Of 31 specimens of lined sole reared in the laboratory, 26 were found to be have abnormalities which are rare in nature. The rearing tank environment may have resulted in the abnormal development.

KEY WORDS: Lined sole, *Achirus lineatus*, Flatfishes, Abnormalities, Biological development, Laboratory culture

763

Houde, E. D. (1989) Subtleties and episodes in the early life of fishes. J. Fish Biol., 35(Suppl. A):29-38.

TIME COVERAGE: 1989

SUMMARY: Fluctuations in abundance of fishes may be caused by episodic mortalities or by more subtle variabilities in the daily growth and mortality rates of eggs and larvae. This paper is based on data from Biscayne and Chesapeake Bays.

KEY WORDS: Mortality, Fish eggs, Fish larvae, Variability, Bay anchovy, *Anchoa mitchilli*, Chesapeake Bay

764

Houde, E. D. (1971) Survey of the literature relating to sport and commercial fishes of South Florida. Final report to NOAA NMFS, St. Petersburg Beach, FL. Contract no. NOAA NO42 2 71 N. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 95 pp.

TIME COVERAGE: 1971

SUMMARY: This report is an annotated bibliography of papers on sport and commercial fishes of South Florida.

KEY WORDS: Fish, Fisheries, South Florida, Bibliographies

765

Houde, E. D., S. A. Berkeley, J. J. Klinovsky, and R. C. Schekter (1976) Culture of larvae of the white mullet, *Mugil curema Valenciennes*. Aquaculture, 8(4):365-370.

TIME COVERAGE: 1975

SUMMARY: Planktonic eggs were collected in Biscayne Bay and successfully reared in the laboratory demonstrating the feasibility of aquaculture of the species.

KEY WORDS: White mullet, *Mugil curema*, Larvae, Rearing

766

Houde, E. D., C. R. Futch, and R. Detwyler (1970) Development of the lined sole, *Achirus lineatus*, described from laboratory-reared and Tampa Bay specimens. Technical series no. 62. Florida Department of Natural Resources, Division of Marine Resources, St. Petersburg, FL. 43 pp.

TIME COVERAGE: 1969

SUMMARY: Larvae of lined sole were collected in Bear Cut and reared in the laboratory. The reared specimens were compared with larvae collected in Tampa Bay and the juveniles with those collected in Tampa and Biscayne Bays.

KEY WORDS: Lined sole, *Achirus lineatus*, Biological development, Laboratory culture, Tampa Bay, Bear Cut

767

Houde, E. D., and J. D. A. Lovdal (1985) Patterns of variability in ichthyoplankton occurrence and abundance in Biscayne Bay, Florida. Est. Coastal Shelf Sci., 20(1):79-103.

TIME COVERAGE: 1976 - 1979

SUMMARY: Within-day variability in ichthyoplankton and microzooplankton abundances was examined at a single station in Biscayne Bay using replicate tows and Niskin bottles to determine the time (minutes to hours) and space (10 - 1000 m) characteristics of patchiness.

KEY WORDS: Ichthyoplankton surveys, Anchovy, *Anchoa mitchilli*, Copepod nauplii, Fish eggs, Fish larvae, Stock assessment, Population dynamics, Abundance, Diurnal variations

768

Houde, E. D., and J. D. A. Lovdal (1984) Seasonality of occurrence, foods and food preferences of ichthyoplankton in Biscayne Bay, Florida. Est. Coastal Shelf Sci., 18(4):403-419.

TIME COVERAGE: 1976 - 1977

SUMMARY: Ichthyoplankton and microzooplankton were collected twice a month at a single station in Biscayne Bay. High microzooplankton densities combined with low seasonal variability indicated that feeding conditions for fish larvae were usually good in the Bay. Copepods were the predominant food for fish larvae.

KEY WORDS: Bay anchovy, *Anchoa mitchilli*, Spotted dragonet, *Callionymus pauciradiatus*, Thread herring, *Opisthonema oglinum*, Gobies, Gobiidae, Copepods, Tintinnids, Ichthyoplankton surveys, Population density, Food availability, Seasonal variations

769

Houde, E. D., and J. D. A. Lovdal (1982) Variability in ichthyoplankton and microzooplankton abundances and feeding by fish larvae in Biscayne Bay, Florida. International Council for the Exploration of the Sea, Council meeting 1982/L:521-22.

TIME COVERAGE: 1982

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ichthyoplankton surveys, Food preferences, *Anchoa mitchilli*, *Callionymus pauciradiatus*, Gobiidae, *Opisthonema oglinum*, *Orthopristis chrysoptera*

770

Houde, E. D., and L. J. Swanson (1975) Description of eggs and larvae of yellowfin menhaden, *Brevoortia smithi*. Fishery Bull., 73(-):660-673.

TIME COVERAGE: 1972

SUMMARY: Development of yellowfin menhaden was described from egg and larvae reared in the laboratory from eggs collected in Biscayne Bay.

KEY WORDS: Yellowfin menhaden, *Brevoortia smithi*, Larvae, Eggs

771

Houston, J. R. (1996) The economic value of beaches. In: Proc., 9th Natl. Conf. on Beach Technology, The Future of Beach Nourishment. L. S. Tait, (comp.). St. Petersburg, FL, 1996. Florida Shore & Beach Preservation Association, Tallahassee, FL. 271-280.

TIME COVERAGE: 1996

SUMMARY: The economic value of beaches is discussing using Miami Beach as an example.

KEY WORDS: Economic analysis, Beaches, Tourism, Miami Beach

772

Houston, R. S., and E. B. Hatfield (1981) The reproductive system of the Western Atlantic *Anachis avara* (Gastropods:Columbellidae). Nautilus, 95(3):136-139.

TIME COVERAGE: 1981

SUMMARY: The reproductive system of dove shells were studied using specimens collected in Biscayne Bay.

KEY WORDS: Dove-shells, Reproductive organs, Histology, Anatomy, *Anachis avara*, *Anachis brasiliiana*

773

Houston, S. H., and M. D. Powell (1994) Hurricane Andrew and related research issues. In: Florida Coastal Ocean Sciences Symposium (FCOSS). Miami, FL, 1994. Coastal Ocean Pollution Center, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 25.

TIME COVERAGE: 1992

SUMMARY: Research related to wind measurements during the passage of Hurricane Andrew is discussed.

KEY WORDS: Wind speed, Hurricane Andrew

774

Houston, S. H., W. A. Shaffer, M. A. Powell, and J. Chen (1999) Comparisons of HRD and SLOSH surface wind fields in hurricanes: implications for storm surge modeling. Weather and Forecasting, 14(5):671-86.

TIME COVERAGE: 1992

SUMMARY: Surface winds observations were compared to those computed by the parametric wind model's storm surge computations for seven storms including Hurricane Andrew.

KEY WORDS: Hurricane Andrew, Modeling, Storm surge

775

Howe, M. A. (1904) Collections of marine algae from Florida and the Bahamas. J. New York Botanical Garden, 5(-):164-166.

TIME COVERAGE: 1904

SUMMARY: This paper is an account of a botanical expedition to Biscayne Bay and the Bahamas.

KEY WORDS: Algae, Acetabulum, Coccocladus, Bahamas, New Providence Island, Virginia Key, Key Biscayne, Soldier Key, Sandy Key, Elliott Key, Caesar's Key, Bahamas

776

Howze, J. A. (1950) A study of beach erosion in Florida. M.Sc. thesis. University of Florida, Gainesville. pp.

SUMMARY: Borrowed from Univ. Florida

KEY WORDS: Beach erosion, Shore protection, Florida

777

Hoy, N. D., and M. C. Schroeder (1952) Age of subsurface "Tamiami" formation near Miami, Florida. J. Geol., 60(3):283-286.

TIME COVERAGE: 1952

SUMMARY: This paper discusses the age of the Tamiami formation near Biscayne Bay.

KEY WORDS: Limestone, Tamiami formation, Oolites, Pleistocene, Miami

778

Huck, R. B. (1995) A centennial review: the historic natural landscape of Key Biscayne, Dade County, Florida. Florida Scient., 58(4):335-351.

TIME COVERAGE: 19th and 20th C

SUMMARY: Patterns of historic native vegetation and vascular flora of Key Biscayne were reviewed from 19th and 20th century documents. A recently discovered hardwood hammock was inventoried.

KEY WORDS: Vegetation, History, Key Biscayne, Species list, Flora

779

Huck, R. B., and J. G. Blank (1994) Historic native flora and early settlement agriculture of Cape Florida, Key Biscayne, Florida. ASB Bull., 41(2):91-92.

TIME COVERAGE: 1992

SUMMARY: After the passage of Hurricane Andrew, an effort was made to determine the composition of the native flora of Cape Florida. During this assessment, it was discovered that Key Biscayne had been covered with three to five feet of fill during the 1950s. A dune-and-swale topography typical of barrier spits, a fresh-water spring and what appears to be a large mound at the end of the Cape suggest a diverse flora far richer and more tropical than the 116 species documented for the Upper Sandy Keys in 1913 for the Keys and the more than 200 species for Key Biscayne in 1935 - 1938. The historic vegetation profile can be reconstructed to include beach-dune, coastal strand, maritime hammock and marine tidal swamp communities, with *Coccoloba uvifera*, *Metopium toxiferum*, *Serenoa repens*, *Annona glabra*, and mangroves *Avicennia germinans* and *Rhizophora mangle* important.

KEY WORDS: Vegetation, Agriculture, Cape Florida, Key Biscayne, Mangroves, Flora

780

Hudson, J. H., K. J. Hanson, R. B. Halley, and J. L. Kindinger (1994) Environmental implications of growth rate changes in *Montastrea annularis*: Biscayne National Park, Florida. Bull. Mar. Sci., 54(3):647-669.

TIME COVERAGE: 1986

SUMMARY: Long-term annual growth rates were determined in 25 *Montastrea annularis* colonies at eight sites in Biscayne Bay. Chronologies averaged 113 years in length. Waxing and waning growth rates were discussed in relation to natural and anthropogenic perturbations that impact this high latitude reef ecosystem.

KEY WORDS: Coral, *Montastrea annularis*, Growth, Environmental effects, Biscayne National Park

781

Hull, F. E. (1972) Hydrologic conditions during 1970 in Dade County, Florida. Report. US Geological Survey, Water Resources Division, Tallahassee, FL. 80 pp.

TIME COVERAGE: 1970

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Rainfall, Ground water, Surface water, Water quality, Saline intrusion, Dade County, Snake Creek Canal, Miami Canal, Snapper Creek Canal, Little River Canal, Biscayne Canal, Taylor Slough, Tamiami Canal

782

Hull, J. E. (1971) Hydrologic conditions during 1969 in Dade County, Florida. US Geological Survey, Tallahassee, FL. 50 pp.

TIME COVERAGE: 1969

SUMMARY: This report is one in a series describing annual hydrological conditions in Dade County.

KEY WORDS: Hydrology, Rainfall, Ground water, Surface water, Water quality, Saline intrusion, Snake Creek Canal, Miami Canal, Snapper Creek Canal, Little River Canal, Biscayne Canal, Taylor Slough, Tamiami Canal

783

Hull, J. E. (1975) Summary of hydrologic data collected during 1974 in Dade County, Florida. Open file report FL-75012. US Geological Survey, Tallahassee, FL. 128 pp.

TIME COVERAGE: 1974

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Rainfall, Ground water, Surface water, Saline intrusion, Water quality, Dade County, Snake Creek Canal, Miami Canal, Snapper Creek Canal, Biscayne Canal, Little River Canal, Taylor Slough, Tamiami Canal

784

Hull, J. E. (1978) Summary of hydrologic data collected during 1976 in Dade County, Florida. Open file report 78-833. US Geological Survey, Tallahassee, FL. 83 pp.

TIME COVERAGE: 1976

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Water supply, Ground water, Surface water, Water quality, Dade County

785

Hull, J. E. (1979) Summary of hydrologic data collected during 1977 in Dade County, Florida. Open file report 79-514. US Geological Survey, Tallahassee, FL. 91 pp.

TIME COVERAGE: 1977

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Water supply, Ground water, Surface water, Water quality, Dade County

786

Hull, J. E., and T. R. Beaven (1977) Summary of hydrologic data collected during 1975 in Dade County, Florida. Open file report 77-803. US Geological Survey, Tallahassee, FL. 120 pp.

TIME COVERAGE: 1975

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Water supply, Ground water, Surface water, Water quality, Dade County

787

Hull, J. E., D. J. McKenzie, and F. W. Meyer (1973) Summary of hydrologic data collected during 1972 in Dade County, Florida. Open file report 73032. US Geological Survey, Tallahassee, FL. 109 pp.

TIME COVERAGE: 1972

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Water supply, Ground water, Surface water, Water quality, Dade County

788

Hull, J. E., and D. J. McKenzie (1974) Summary of hydrologic data collected during 1973 in Dade County, Florida. Open file report 74029. US Geological Survey, Tallahassee, FL. 122 pp.

TIME COVERAGE: 1973

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Water supply, Ground water, Surface water, Water quality, Dade County

789

Hull, J. E., and F. W. Meyer (1973) Salinity studies in East Glades Agricultural Area, southeastern Dade County, Florida. Open file report 73005. US Geological Survey, Tallahassee, FL. 84 pp.

TIME COVERAGE: 1973

SUMMARY: Saline soils in the East Everglades Agricultural Area are caused chiefly by brackish ground water moving upward from the water table during dry periods. Brackish ground water is caused by infiltration of salt water from nearby coast-normal canals and by inland movement of salt water through the deep parts of the Biscayne Aquifer.

KEY WORDS: Saline intrusion, Soils, Groundwater pollution, East Glades Agricultural Area, Biscayne Aquifer

790

Hull, J. E., and E. T. Wimberly (1972) Hydrologic conditions during 1971 in Dade County, Florida. US Geological Survey, Tallahassee, FL. 104 pp.

TIME COVERAGE: 1971

SUMMARY: This report is one in a series describing hydrological conditions in Dade County.

KEY WORDS: Hydrology, Rainfall, Ground water, Surface water, Water quality, Saline intrusion, Snake Creek Canal, Miami Canal, Snapper Creek Canal, Biscayne Canal, Taylor Slough, Tamiami Canal

791

Humm, H. J. (1944) Agar resources of the south Atlantic and east Gulf coasts. Science, 100(-):209-212.

TIME COVERAGE: 1942 - 1943

SUMMARY: This citation is an evaluation of sources of agar in the south Atlantic and Gulf coasts sponsored by the War Production Board.

KEY WORDS: Seaweeds, Gracilaria, *Hypnea musciformis*, *Eucheuma isiforme*, *Agardhiella tenera*, *Digenea simplex*, Florida, North Carolina, Gulf Coast

792

Humm, H. J. (1976) The benthic algae of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1976

SUMMARY: Benthic algal habitats in Biscayne Bay support more than 330 species representing a tropical shallow water year around flora and a small group of winter-spring species. There were 46% red algae, 30% greens, 14% browns and 11% bluegreens.

KEY WORDS: Algae, Bluegreen algae, Red algae, Brown algae, Green algae, Species list

793

Humm, H. J. (1969) Distribution of marine algae along the Atlantic coast of North America. Phycologia, 7(1):43-53.

TIME COVERAGE: 1969

SUMMARY: Inshore waters of continental North America in the western Atlantic are populated by only two major geographical floral units. One of these originated and is centered in the tropics and the upper boundary is Cape Canaveral.

KEY WORDS: Algae, Geographical distribution, Atlantic coast

794

Humm, H. J. (1964) Epiphytes of the sea grass, *Thalassia testudinum*, in Florida. Bull. Mar. Sci. Gulf Caribb., 14(2):306-341.

TIME COVERAGE: 1964

SUMMARY: One hundred and thirteen species of algae were reported occurring as epiphytes on *Thalassia*. Each species listed is annotated and a key to the species known to occur as epiphytes on *Thalassia* in South Florida is provided.

KEY WORDS: Epiphytes, Algae, *Thalassia testudinum*, Seagrass, Identification keys, Taxonomy, Species list

795

Humm, H. J. (1963) Some new records and range extensions of Florida marine algae. Bull. Mar. Sci. Gulf Caribb., 13(4):516-526.

TIME COVERAGE: 1963

SUMMARY: Nineteen species of marine algae were newly reported for Florida and the known range of eight others expanded.

KEY WORDS: Algae, Cyanophyta, Chlorophyta, Phaeophyta, Rhodophyta

796

Humphreys, J., S. Franz, and W. Seaman (1993) Florida's estuaries: a citizen's guide to coastal living and conservation. Extension bulletin SGEB-23. Florida Sea Grant College Program, Gainesville, FL. 25 pp.

TIME COVERAGE: 1993

SUMMARY: This is a guide to Florida estuaries written for the general public.

KEY WORDS: Estuaries, Shore protection, Environment management, Florida

797

Hunt, E. B. (1864) On the origin, growth, substructure, and chronology of the Florida reef. In: Report 1862. House of Representatives, Executive document 22, 37th Congress, 3rd session. The US Coast Survey. US Government Printing Office, Washington, DC. 241-248.

TIME COVERAGE: 1864

SUMMARY: This report is a description of navigation from Key Biscayne to the Florida Keys and the Dry Tortugas including Florida Bay.

KEY WORDS: Coral reefs, Florida Keys, Florida Bay, Cape Florida, Card Sound, Barnes Sound, Dry Tortugas

798

Hurley, N. E. (1989) An Illustrated History of Cape Florida Lighthouse. Historic Lighthouse Publishers, Camino, CA. 37 pp.

TIME COVERAGE: 1825 - 1989 (time of publication)

SUMMARY: This is a history of the Cape Florida Light, located on the southern tip of Key Biscayne.

KEY WORDS: History, Lighthouses, Cape Florida

799

Hurst, J. T. (1948) Interim report on the Florida crawfish investigations. Mimeographed report 48-3. Marine Laboratory, University of Miami, Miami, FL. 4 pp.

TIME COVERAGE: 1948

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Spiny lobster, *Panulirus argus*, Tagging, Florida

800

Husar, S. L. (1977 ) The West Indian manatee ( *Trichechus manatus*). Wildlife research rep. 7. Fish and Wildlife Service, Washington, DC. 22 pp.

TIME COVERAGE: 1977

SUMMARY: This report discusses the biology and distribution of the West Indian manatee.

KEY WORDS: West Indian manatee, *Trichechus manatus*

801

Hutton, R. F. (1951) An investigation of the seabather's eruption problem. M.Sc. thesis. University of Miami, Coral Gables, FL. 125 pp.

TIME COVERAGE: 1951

SUMMARY: This investigation was carried out by determining the geographical distribution and seasonal occurrence of this dermatitis which is produced by *Cercaria J*.

KEY WORDS: Bathing, Cercariae, Trematodes, Dermatitis, Species list

802

Hutton, R. F. (1952) *Schistosoma cercariae* as the probable cause of seabather's eruption. Bull. Mar. Sci. Gulf Caribb., 2(2):346-359.

TIME COVERAGE: 1952

SUMMARY: Seabather's eruption is an acute form of dermatitis occurring in people bathing in certain beaches. It was demonstrated that a species of marine *Schistosoma cercaria* was capable of producing dermatitis.

KEY WORDS: Bathing, Cercariae, Trematodes, Dermatitis

803

Idyll, C. P. (1968) Economically important marine organisms in Biscayne Bay. Unpublished manuscript. Institute of Marine Sciences, University of Miami, Miami, FL.

TIME COVERAGE: 1968

SUMMARY: This report describes the economically important marine organisms of Biscayne Bay and include landing statistics

KEY WORDS: Commercial species, Marine fish, Marine invertebrates, Landing statistics, Species list

804

Idyll, C. P. (1968?) In defense of the Islandia National Monument. Unpublished manuscript. Institute of Marine Sciences, University of Miami, Miami, FL. 15 pp.

TIME COVERAGE: 1968

SUMMARY: This report discusses the advantages of creating a national monument in what is now the Biscayne National Park.

KEY WORDS: Protected resources, Resource conservation, Recreational waters, Islandia, Biscayne National Park

805

Idyll, C. P., D. C. Tabb, B. Yokel, R. A. Wade, and D. R. Moore (1965) Conservation in Biscayne Bay. Faculty file. Institute of Marine Sciences, University of Miami, Miami, FL. 13 pp.

TIME COVERAGE: 1965

SUMMARY: The ideal condition of Biscayne Bay is described in this paper. Such a description would be useful in determining conservation measures for the Bay.

KEY WORDS: Resource conservation, Environment management

806

Idyll, C. P., D. C. Tabb, and B. Yokel (1967) Conservation in Biscayne Bay. Florida Naturalist, 40(-):77-81.

TIME COVERAGE: 1967

SUMMARY: [THIS ARTICLE IS SIMILAR TO IDYLL ET AL, 1965.]

KEY WORDS: Resource conservation, Environment management

807

Incze, M. L. (1981) Episodic detrital organic carbon export from south Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 84 pp.

TIME COVERAGE: 1979 - 1980

SUMMARY: Seasonal high wind energy events appear to play an important role in the export of detrital organic carbon from shallow subtropical lagoons by altering circulation and tidal flushing patterns coincident with increased resuspension, erosion and saltation. Detrital organic carbons accumulates in the sediments during the summer months.

KEY WORDS: Organic carbon, Detritus, Seasonal variations, Estuarine dynamics, South Bay

808

Incze, M. L., and M. R. Roman (1983) Carbon production and export from Biscayne Bay, Florida. II. Episodic export of organic carbon. Est. Coastal Shelf Sci., 17(1):61-72.

TIME COVERAGE: 1979 - 1980

SUMMARY: Seasonal meteorological events of high wind energy are important in the export of organic carbon from the Bay by altering circulation and tidal flushing patterns coincident with high resuspension. The accumulation of detrital organic carbons in the Bay during the summer months was reversed at the onset of the winter months, resulting in an outwelling of dissolved and particulate organic carbon.

KEY WORDS: Suspended particulate matter, Particulate organic carbon, Dissolved organic carbon, Nearshore dynamics, Transport processes

809

Ingle, R. M., and F. G. W. Smith (1949) Sea turtles and the turtle industry of the West Indies, Florida and the Gulf of Mexico, with annotated bibliography. A special publication of the Marine Laboratory, University of Miami in cooperation with the Caribbean Research Council. University of Miami Press, Coral Gables, FL. 107 pp.

TIME COVERAGE: 1949

SUMMARY: This report describes sea turtle biology and fisheries, and includes a brief mention of sea turtle fisheries in Biscayne Bay at the turn of the century.

KEY WORDS: Turtles, Turtle fisheries, West Indies, Florida, Gulf of Mexico, Bibliographies

810

Irlandi, E. A. (1998) Interactions between seagrass, drift algae, and epiphytes in subtropical seagrass meadows of Biscayne Bay, FL. Proc., Ann. Mtg., American Society of Limnology and Oceanography Ecological Society of America. St. Louis, MO, 1998. American Society of Limnology and Oceanography, Waco, TX.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sea grass, *Thalassia testudinum*, Algae, Epiphytes, Biological drift

811

Irlandi, E. A. (1999) Potential consequences of eutrophication to *Thalassia* meadows in Biscayne Bay, FL. 15th Biennial Internal. Conf. Estuarine Research Federation. New Orleans, LA, 1999. Estuarine Research Federation, Lafayette, LA.

TIME COVERAGE: 1999

SUMMARY: The short term consequences of increased sediment nutrients and macroalgal cover on the structure and function of *Thalassia* were investigated. Nutrient additions to the sediment produced no short term changes but resulted in increased leaf elongation rates. Drift algal cover had to impact on short term growth rates.

KEY WORDS: Eutrophication, Sea grass, *Thalassia testudinum*

812

Irlandi, E. A., and M. A. Harwell (1996) Mesocosm studies of Biscayne Bay seagrass communities and the relevance to Florida Bay seagrass dynamics. In: Florida Bay Science Conf. Key Largo, FL, 1996. University of Florida, Institute of Food and Agricultural Sciences, Gainesville. 39-41.

TIME COVERAGE: 1996

SUMMARY: The mesocosm facility located at the Rosenstiel School of Marine and Atmospheric Science sustains an ecosystem similar to that of Biscayne Bay. The mesocosm is described.

KEY WORDS: Sea grass, *Thalassia testudinum*, Mesocosms, Florida Bay

813

Irlandi, E., S. Macia, and J. Serafy (1997) Salinity reduction from freshwater canal discharge: effects on mortality and feeding of an urchin (*Lytechinus variegatus*) and a gastropod (*Lithopoma tectum*). Bull. Mar. Sci., 61(3):869-79.

TIME COVERAGE: 1997

SUMMARY: Laboratory experiments were conducted to study the effects of rapid salinity fluctuations associated with canal discharge on survival and feeding of a common gastropod and a sea urchin. Urchins suffered 100% mortality when subjected to a salinity change of 36 to 2 to 36 ‰. Gastropod survival was unaffected.

KEY WORDS: Salinity effects, Fresh water, Canals, Sea urchin, *Lytechinus variegatus*, *Lithopoma tectum*

814

Irvine, A. B., and H. W. Campbell (1978) Aerial census of the West Indian manatee, *Trichechus manatus*, in the southeastern United States. J. Mammalogy, 59(-):613-617.

TIME COVERAGE: 1976

SUMMARY: An aerial census was taken covering mostly south Florida. The winter focus of abundance was found to be further south than previously determined. Approximately 26% of the sightings were in Palm Beach, Broward and Monroe Counties, and almost 18% in Monroe County.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Aerial surveys, Census, Florida

815

Isham, L. B. (1952) The marine algae of Dade County, Florida. I. Chlorophyceae. II. Phaeophyceae. M.Sc. thesis. University of Miami, Coral Gables, FL. 44 pp.

TIME COVERAGE: 1952

SUMMARY: The taxonomy of the Chlorophyceae and Phaeophyceae algae were described.

KEY WORDS: Algae, Chlorophyceae, Phaeophyceae, Identification keys, Taxonomy

816

Isham, L. B., H. B. Moore, and F. G. W. Smith (1951) Growth rate measurement of shipworms. Bull. Mar. Sci. Gulf Caribb., 1(2):136-147.

TIME COVERAGE: 1949 - 1950

SUMMARY: Measurements of *Teredo* worms were used to compare burrow length and body weight as indices of seasonal growth rate fluctuation. Growth was shown to be more rapid during midsummer, with a secondary maximum in March.

KEY WORDS: Shipworms, *Teredo pedicellata*, *Bankia fimbriatula*, Phyloteredo, Boring organisms, Growth, Miami Beach

817

Isham, L. B., F. G. W. Smith, and V. G. Springer (1952) Marine borer attack in relation to conditions of illumination. Bull. Mar. Sci. Gulf Caribb., 1(1):46-63.

TIME COVERAGE: 1952

SUMMARY: Experiments carried out upon *Teredo* larvae indicated that in darkness, the larvae are negatively geotropotactic. When illuminated the behavior was modified by a weak negative phototropotaxis and a stronger negative photokinesis.

KEY WORDS: Shipworms, *Teredo pedicellata*, Boring organisms, Light effects

818

Isham, L. B., and J. O. Tierney (1953) Some aspects of the larval development and metamorphosis of *Teredo* (Lyrodus) *pedicellata* De Quatrefages. Bull. Mar. Sci. Gulf Caribb., 2(4):574-589.

TIME COVERAGE: 1953

SUMMARY: The anatomy of *Teredo* worms studied and the free-swimming and crawling stages described. The speed of swimming and crawling was measured, and descriptive data concerning locomotion noted.

KEY WORDS: Shipworms, *Teredo pedicellata*, Larval development, Metamorphosis, Boring organisms

819

Ishman, S. E. (1997) Ecosystem history of South Florida: Biscayne Bay sediment core descriptions. USGS open-file report 97-437. US Geological Survey, Reston, VA. 13 pp.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sediment cores

820

Ishman, S. E. (1997) A paleosalinity record from Manatee Bay, Barnes Sound, Florida. In: Proc., US Geological Survey Program on the South Florida Ecosystem. Ft. Lauderdale, FL, August 25-27, 1997. US Geological Survey open file report 97-385. US Geological Survey, Tallahassee, FL. 38-39.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Paleosalinity, Manatee Bay, Barnes Sound

821

Ishman, S. E., G. L. Brewster-Wingard, T. M. Cronin, and D. A. Willard (1999) Temporal salinity and seagrass changes in Biscayne Bay. Proc., South Florida Restoration Science Forum. S. Gerould, and A. Higer, (eds.). Boca Raton, FL, May 17-19, 1999. Open-file report 99-181. US Geological Survey Program on the South Florida Ecosystem, Tallahassee, FL.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Salinity, Seagrass

822

Ishman, S. E., T. M. Cronin, G. L. Brewster-Wingard, D. A. Willard, and D. J. Verardo (1998) A record of ecosystem change, Manatee Bay, Barnes Sound, Florida. J. Coastal Res., Spec. Issue 26(Proc., Palm Beach Coastal Symp.):125-138.

TIME COVERAGE: 1998

SUMMARY: This paper presents the results of analyses of a 120-cm core collected in Manatee Bay to infer environmental changes. Three stages of ecosystem change were interpreted from the data. The mid-1800s represented a time of oligohaline transgressing to mesohaline conditions. The turn of the century was marked by a significant faunal and floral shift to more euhaline to polyhaline conditions and shows an early predominance of seagrass. At about 1940, another faunal shift occurred indicating change to a highly fluctuating annual salinity conditions with episodic periods of hypersalinity. Seagrasses remained persistent during this period. From the 1980s to the present, a slight increase in relative annual salinity and reduced seagrass density was noted. The faunal and floral events observed indicate a progressive increase in salinity through time related to sea level rise. The trend is punctuated by discrete events attributed to the construction of the Flagler Railway, and water management practices in South Florida.

KEY WORDS: Manatee Bay, Barnes Sound, Ecosystem assessment, Flagler Railroad, Seagrasses, Salinity, Sediment cores

823

Ishman, S. E., I. Graham, and J. D'Ambrosio (1997) Modern benthic foraminifer distributions in Biscayne Bay: analogs for historical reconstructions. USGS open-file report 97-34. US Geological Survey, Reston, VA. 22 pp.

TIME COVERAGE: 1997

SUMMARY: Twenty-three sampling sites were sampled for surficial sediments and water quality. A sediment grab sample collected in the Bay typically represents accumulation of the past 5 years or less. A total of 72 taxa of benthic foraminifera were identified in the sediments samples. Three dominant foraminiferal assemblages were identified and these were dominated by calcareous forms with agglutinated taxa constituting a minor component in most of the assemblages.

KEY WORDS: Foraminifera, Benthos, Barnes Sound, Sediment, Water quality

824

Iversen, E. S. (1969) Preliminary description of the biological zones of Card Sound, lower Biscayne Bay, Florida. Preliminary report to Florida Power and Light Company. Institute of Marine Sciences, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1969

SUMMARY: This citation is a preliminary study of the ecology of Card Sound based on diving observations and aerial photographs. Based on the estimates of number of species present and abundance of individuals, Card Sound appeared to be an area of relatively low productivity compared to other Florida ecosystems. Five major ecological zones were identified and described.

KEY WORDS: Ecological distribution, Community composition, Card Sound

825

Iversen, E. S., and S. P. Bannerot (1984) Artificial reefs under marina docks in southern Florida. North Amer. J. Fisheries Management, 4(-):294-299.

TIME COVERAGE: 1981 - 1982

SUMMARY: Placement of large rocks under three recently constructed docks at a new marina provided additional habitat to a stressed area. The bottom consisted of an accumulation of black, flocculent mud supporting few or no fish or macroinvertebrates prior to placing the habitat under the docks. After placement, numerous fish and macroinvertebrates became associated with the habitat.

KEY WORDS: Artificial reefs, Marinas, Attracting techniques

826

Iversen, E. S., and G. L. Beardsley (1974) Impact of sand dredging on the fauna of a submerged bar south of Key Biscayne, Florida. Unpublished manuscript. Report to the Des Rocher Sand Co., Inc. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 14 pp.

TIME COVERAGE: 1973

SUMMARY: This study examined the site of a dredging operation south of Cape Florida and evaluated the impact on the biota.

KEY WORDS: Dredging, Environmental impact, Marine organisms, Nearshore bars, Key Biscayne, Cape Florida

827

Iversen, E. S., and J. F. Kelly (1976) Microsporidiosis successfully transmitted experimentally in pink shrimp. J. Invertebrate Pathology, 27(3):407-408.

TIME COVERAGE: 1976

SUMMARY: Microsporidiosis infections are responsible for the "cotton" or "milk" syndrome in common shrimp. The objective of this study was to find a method of transmission of microsporidiosis infection parasitizing shrimp in Biscayne Bay. Spotted seatrout seem to prime spores for infection during passage of the spores through the gut after eating infected shrimp. Shrimp fed seatrout feces became infected with the parasites. Shrimp specimens were obtained from a hatchery.

KEY WORDS: Disease transmission, Parasitic diseases, "Milk" shrimp, *Thelohania duorara*, *Thelohania penaei*, Pleistophora, Pink shrimp, *Penaeus duorarum*

828

Iversen, E. S., J. F. Kelly, and D. Alzamora (1987) Ultrastructure of *Thelohania duorara* Iversen & Manning, 1959 (Microspora, Thelohaniidae) in the pink shrimp, *Penaeus duorarum* Burkenroad. J. Fish Diseases, 10(4):299-307.

TIME COVERAGE: 1987

SUMMARY: The structure of early development stages of this pink shrimp parasite were described.

KEY WORDS: Parasites, "Milk" shrimp, *Thelohania duorara*, Pink shrimp, *Penaeus duorarum*

829

Iversen, E. S., and M. A. Roessler (1969) Survey of the biota of Card Sound. Report to the Florida Power and Light Company. Institute of Marine and Atmospheric Sciences, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1969

SUMMARY: The purpose of this study was to map the Card Sound ecological zones and to estimate the relative abundance of the more obvious and ecologically important plants and animals. Results of this survey indicated that Card Sound was an area with a relatively low standing crop compared with other south Florida ecosystems.

KEY WORDS: Ecological distribution, Biota, Community composition, Card Sound, Species list

830

Iversen, E. S., D. C. Tabb, and R. Hixon (1972) Dinner Key master plan study: marine ecological survey. Faculty file. Includes P. W. Larsen, "Preliminary investigation of Dinner Key circulation", 1972, 8 pp. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1971 - 1972

SUMMARY: The biota, water quality, sediments and currents around Dinner Key were investigated as part of the preliminary study of a proposed dredge and fill operation in the area. The number of species and abundance of plants and animals were very low close to the marina. Bottom sediments near the marina suggested organic overloading conditions and resultant decomposition which does not allow the attachment of sessile plants and animals. Water quality was poorer near the marina. Any alteration of the spoil bank islands involving increasing their size at the expense of the grass flats will further reduce the biological productivity of the area. The fine mud associated with future dredging and filling will endanger the *Thalassia* and *Diplanthera* flats just outside the marine area.

KEY WORDS: Ecological distribution, Water quality, Pollution, Water circulation, Marinas, Dinner Key, Species list, Nutrients, Currents, Sediment, Biota

831

Iversen, E. S., and N. N. Van Meter (1967) A new myxosporidian (Sporozoa) infecting the Spanish mackerel. Bull. Mar. Sci., 17(2):268-273.

TIME COVERAGE: 1967

SUMMARY: This citation contains a description of a new species of myxosporidian parasite found in the musculature of the Spanish mackerel.

KEY WORDS: Parasitic diseases, *Kudoa crumena*, Spanish mackerel, *Scomberomorus maculatus*, Myxosporidia, Sporozoa

832

Iversen, E. S., and N. N. Van Meter (1964) A record of the microsporidian, *Thelohania duorara*, parasitizing the shrimp, *Penaeus brasiliensis*. Bull. Mar. Sci. Gulf Caribb., 14(4):549-553.

TIME COVERAGE: 1964

SUMMARY: A microsporidian parasite, *Thelohania duorara*, on the grooved shrimp, *Penaeus brasiliensis*, was found in Biscayne Bay. This was a new recorded host for *P. brasiliensis*.

KEY WORDS: Parasites, Microsporidians, *Thelohania duorara*, Shrimp, *Penaeus brasiliensis*

833

Iverson, E. (1979) Preserve the Bay? How, and for whom? The Miami Herald, Miami, FL. April 22. A.

TIME COVERAGE: 1979

SUMMARY: This article discusses preservation of Biscayne Bay.

KEY WORDS: Pollution, Preservation

834

Jaap, W. C. (1984) The ecology of the south Florida coral reefs: a community profile. FWS/OBS-82/08. Minerals Management Service, Gulf of Mexico OCS Region, Metairie, LA. 138 pp.

TIME COVERAGE: 1984

SUMMARY: This citation describes the South Florida coral reef community. The coral reefs closest to Biscayne Bay are to the east of the barrier islands (Soldier Key, Elliott Key, etc.).

KEY WORDS: Coral reefs, Community composition, Ecosystems, Reef fish, Aquatic animals, South Florida

835

Jaap, W. C., and P. Hallock (1990) Coral reefs. In: Ecosystems of Florida. University of Central Florida, Orlando, FL.

TIME COVERAGE: 1990

SUMMARY: This citation describes coral reefs of Florida.

KEY WORDS: Florida Keys, Biscayne Bay, Ecosystems, Florida, Coral reefs

836

Jachowski, R. L. (1967) Reproductive behavior of the emerald clingfish, *Acyrtops beryllinus*. M.Sc. thesis. University of Miami, Coral Gables, FL. 37 pp.

TIME COVERAGE: 1966 - 1967

SUMMARY: The reproductive behavior of the emerald clingfish was studied using specimens collected in Biscayne Bay and kept in aquariums.

KEY WORDS: Emerald clingfish, *Acyrtops beryllinus*, Reproductive behavior

837

Jewett-Smith, J., C. McMillan, W. J. Kenworthy, and K. Bird (1997) Flowering and genetic banding patterns of *Halophila johnsonii* and conspecifics. Aquatic Botany, 59(3-4):323-331.

TIME COVERAGE: 1997

SUMMARY: *Halophila johnsonii* is a seagrass that is restricted from Sebastian Inlet on the north to Biscayne Bay on the south, and currently being considered for listing as a rare/endangered species. At the time it was described as a new species in 1980, no staminate flowers had been reported. After numerous searches in the Indian River in the late 1980s and early 1990s and after culture in the laboratory, only pistillate flowers are known. DNA testing indicates that *H. johnsonii* is distinct from *H. decipiens* Ostenfeld. *H. johnsonii* may represent the vegetative development of a single pistillate clone.

KEY WORDS: Chromosomes, Population genetics, Plant reproductive structures, Seagrass, Sexual reproduction, Random amplified polymorphic DNA, *Halophila johnsonii*, *Halophila decipiens*

838

Jilek, R., and J. L. Crites (1982) Comparative morphology of the North American species of *Spinitectus* (Nematoda:Spirurida) analyzed by scanning electron microscopy. Trans. Amer. Microscopical Soc., 101(2):126-134.

TIME COVERAGE: 1982

SUMMARY: Morphological examination by SEM of the surface of four species of nematodes revealed distinct patterns of structures which may be useful in identification and differentiation of members of this genus. Some specimens were obtained from bonefish collected in Biscayne Bay.

KEY WORDS: Nematodes, Spinitectus, Animal morphology, Bonefish, *Albula vulpes*

839

Johnson, D. R., and T. N. Lee (1977) Density-induced motions in shallow lagoons. Sea Grant technical bulletin 38. University of Miami Sea Grant Program, Coral Gables, FL. 29 pp.

TIME COVERAGE: 1977

SUMMARY: This report uses simple mathematical models to investigate the influence of horizontal density gradients on the residence time in shallow well-stirred lagoons such as Biscayne Bay and Card Sound. It was determined that density-induced motions do not contribute substantially to the flushing of lagoon waters.

KEY WORDS: Density gradients, Lagoons, Estuarine dynamics, Tidal mixing, Water motion, Card Sound

840

Johnson, D. R., and W. Seaman (1986) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - spotted seatrout. Biological rep. 82 (11.43). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 18 pp.

TIME COVERAGE: 1986

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of spotted seatrout are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Spotted seatrout, *Cynoscion nebulosus*, South Florida

841

Johnson, R. A. (1992) Lithologic variation in the Miami Limestone of Florida. Open file report no. 48. Florida Geological Survey, Tallahassee, FL. 25 pp.

TIME COVERAGE: 1992

SUMMARY: The six lithofacies characteristics of the oolitic Miami Limestone are described.

KEY WORDS: Limestone, Miami Limestone, Oolites, South Florida

842

Johnson, R. A. (1993) Stratigraphy of the upper Pleistocene Miami limestone of Florida. Abstracts with programs (Geological Society of America), 25(4):24-25.

TIME COVERAGE: 1993

SUMMARY: The upper Pleistocene Miami limestone is probably the most stratigraphically-complex formation in the Cenozoic of Florida. The Miami overlies and vertically/laterally grades into the upper Pleistocene Ft. Thompson Formation to the west in southeast Palm Beach County; to the west in Broward County and to the north in south Broward County. The Miami overlies and very locally vertically grades into the Ft. Thompson in all of Dade County.

KEY WORDS: Stratigraphy, Pleistocene, Miami limestone, South Florida

843

Johnson, T. S., and Thomas D. Pemble (1974) Preoperational levels of environmental radioactivity in water sediment around Turkey Point nuclear power plants, Card Sound, Florida. Radiation Data and Reports, 15(3):117-123.

TIME COVERAGE: 1971 - 1972

SUMMARY: An investigation of the levels and distribution of gross alpha, gross beta and selected gamma-emitting radioisotopes present in water and sediment samples from Card Sound was performed. This was a baseline study prior to discharge into the Sound from the Turkey Point Nuclear Power Plant.

KEY WORDS: Radioactivity, Sea water, Sediment analysis, Turkey Point, Card Sound

844

Johnston, G. (1987) Diving and Snorkeling Guide to Florida's East Coast: Including Palm Beach, Ft. Lauderdale and Miami Areas. Pisces Books, New York, NY. 96 pp.

TIME COVERAGE: 1987

SUMMARY: This is a diving guide to the east coast of Florida. Descriptions and photographs of some of the wrecks in Biscayne Bay are included.

KEY WORDS: Diving, Underwater exploration, Artificial reefs, Palm Beach, Fort Lauderdale, Miami, Southeast Florida

845

Jones, G. A. (1985) Health assessment for Munisport Landfill. CERCLIS no. FLD084535442, Miami, Florida. US Public Health Service, Agency for Toxic Substances and Disease Registry,, Atlanta, GA. 4 pp.

TIME COVERAGE: 1985

SUMMARY: This citation is a description of the Munisport Landfill and a discussion of de-listing of the site from the EPA Superfund list.

KEY WORDS: Munisport Landfill, Hazard assessment

846

Jones, J. A. (1968) Primary productivity by the tropical marine turtle grass, *Thalassia testudinum* Konig, and its epiphytes. Ph.D. dissertation. University of Miami, Coral Gables, FL. 196 pp.

TIME COVERAGE: 1966 - 1967

SUMMARY: The primary purpose of this study was the measurement of the rates of photosynthesis and respiration by *Thalassia* and its epiphytes. Other objectives included measuring and relating ecological conditions to the metabolic rates and establishing seasonal patterns for each.

KEY WORDS: Primary production, Turtle grass, *Thalassia testudinum*, Seagrass, Epiphytes, Bear Cut, Matheson Hammock, Caribbean

847

Jones, R. D., J. N. Boyer, and N. Black (1997?) The south Florida estuarine water quality monitoring network Florida Bay, Whitewater Bay, Ten Thousand Islands, Biscayne Bay, Southwest Florida Shelf. Part 2 - Appendices.1997 cumulative report to Everglades National Park and South Florida Water Management District. Florida International University, Unpaged.

TIME COVERAGE: 1991-1996

SUMMARY: [This is a companion volume to the report by Jones and Boyer (1997?).]

KEY WORDS: Florida Bay, Whitewater Bay, Ten Thousand Islands, Florida Shelf, Water quality, Nutrients, Salinity, Temperature, Dissolved oxygen

848

Jones, R. D., and J. N. Boyer (1998?) The south Florida estuarine water quality monitoring network Florida Bay, Whitewater Bay, Ten Thousand Islands, Biscayne Bay, Southwest Florida Shelf. 1997 cumulative report to Everglades National Park and South Florida Water Management District. Florida International University, Unpaged.

TIME COVERAGE: 1991-1996

SUMMARY: This report summarizes existing water quality data from the South Florida Estuarine Water Quality Monitoring Network. The most extensive dataset is for Florida Bay. Twenty-seven stations were samples in Biscayne Bay.

KEY WORDS: Florida Bay, Whitewater Bay, Ten Thousand Islands, Florida Shelf, Water quality, Nutrients, Salinity, Temperature, Dissolved oxygen

849

Jones, R. D., and J. N. Boyer (1999) The south Florida estuarine water quality monitoring network Florida Bay, Whitewater Bay, Ten Thousand Islands, Biscayne Bay, Southwest Florida Shelf. 1998 cumulative report to Everglades National Park and South Florida Water Management District. Florida International University, Unpaged.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Florida Bay, Whitewater Bay, Ten Thousand Islands

850

Jory, D. E., and E. S. Iversen (1989) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - black, red, and Nassau groupers. Biological report 82 (11.110). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 21 pp.

TIME COVERAGE: 1989

SUMMARY: The life history, growth characteristics, fishery, ecological role, environmental requirements, and morphology of three species of groupers are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Groupers, Black grouper, *Mycteroperca bonaci*, Red grouper, *Epinephelus morio*, Nassau grouper, *Epinephelus striatus*, South Florida

851

Joseph, E. B., and F. E. Nichy (1955) Literature survey of the Biscayne Bay area. Part II: Algae, marine fouling and boring organisms. Supplement to "A literature survey of the Biscayne Bay area" by J. B. Morrill and F. C. W. Olson. Florida State University, Oceanographic Institute, Tallahassee, FL.

TIME COVERAGE: 1955

SUMMARY: This is a bibliographical supplement to a literature survey of Biscayne Bay emphasizing algae, and marine boring and fouling organisms.

KEY WORDS: Algae, Boring organisms, Fouling organisms, Bibliographies

852

Josselyn, M. N. (1975) The growth and distribution of two species of *Laurencia*, a red macroalga, in Card Sound, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 121 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: The seasonal changes in biomass and growth rates for two species of *Laurencia* were studied in Card Sound. Seasonal abundance and distribution was dependent upon actual plant growth, plant movement, fragmentation, and losses to other trophic levels.

KEY WORDS: Seaweeds, *Laurencia poitei*, *Laurencia obtuse*, Growth, Ecological distribution, Card Sound

853

Josselyn, M. N. (1977) Seasonal changes in the distribution and growth of *Laurencia poitei* (Rhodophyceae, Ceramiales) in a subtropical lagoon. Aquatic Botany, 3(3):217-229.

TIME COVERAGE: 1977

SUMMARY: Seasonal changes in biomass and growth rates of *Laurencia* were studied in Card Sound. Algal biomass increased late in spring and April and declined during the summer. Local distribution was found to be dependent upon water circulation patterns in the Sound.

KEY WORDS: Seaweeds, Biomass, Growth, Biological production, Seasonal variations, Card Sound, *Laurencia poitei*, Ecological distribution

854

Judge, R. M. (1976) A preliminary water quality reconnaissance of Fisher Island, Dade County, Florida. Report #1 Potamological Laboratory. Florida International University, Miami, FL.

TIME COVERAGE: 1976

SUMMARY: This is a preliminary analysis of water quality adjacent to Fisher Island. Water quality was found to be high.

855

Judge, R. M., and F. W. Curtis (1977) Heavy metal accumulation in mid-Biscayne Bay, Dade County, Florida. Unpublished manuscript. Florida International University, Miami, FL. 251 pp.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Heavy metals, Cd, Pb, Hg, Zn, Central Bay

856

Judge, R. M., and F. W. Curtis (1979) Heavy metal distribution in Biscayne Bay sediments. Florida Scient., 42(-):242-248.

TIME COVERAGE: 1979

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Heavy metals, Sediment pollution, Marine pollution, Cd, Pb, Hg, Zn, Pollution surveys, Sediment, Pollution monitoring

857

Judge, R. M., and F. W. Curtis (1979) Heavy metal concentration in mid-Biscayne Bay sediments. Florida Scient., 42(Suppl. 1):40.

TIME COVERAGE: 1979

SUMMARY: The hypothesis that the environmental condition of the north Biscayne Bay is polluted, while the south bay is relatively clean, was examined by studying the distribution of Cd, Pb, Hg and Zn in the bottom sediments. Sediment samples were collected from the mid-Bay boundary area and the Intercoastal Waterway and analyzed for Cd, Pb, Hg and Zn. Samples were also collected on the Intercoastal Waterway. The concentrations showed no significant differences between the northern and southern samples.

KEY WORDS: Cd, Pb, Hg, Zn, Sediment

858

Jutare, T. V. (1962) Studies on the biology of *Bothus ocellatus* with a description of a related new species. M.Sc. thesis. University of Miami, Coral Gables, FL. 97 pp.

TIME COVERAGE: 1962

SUMMARY: This is a study of the biology of the eyes flounder. Some specimens were collected in Biscayne Bay.

KEY WORDS: Eyed flounder, *Bothus ocellatus*, *Bothus robinsi*, Biological development, Taxonomy

859

Kadel, B. C. (1926) An interpretation of the wind velocity record at Miami Beach, Fla., September 17-18, 1926. Mon. Weather Rev., 54(-):414-416.

TIME COVERAGE: 1926

SUMMARY: This citation describes the wind velocity measurements made during the passage of the Hurricane of 1926 over Miami. The maximum recorded velocity was 132 mph.

KEY WORDS: Hurricane of 1926, Wind speed, Miami Beach

860

Kalber, F. A. (1955) Some effects of extracts of the eyestalk of *Panulirus argus* on oxygen uptake by *Uca pugilator*. M.Sc. thesis. University of Miami, Coral Gables, FL. 128 pp.

TIME COVERAGE: 1954 - 1955

SUMMARY: Physical evidence suggests that neurosecretion exists within the brain and nervous tissue of the eyestalk of crustaceans. The effects of extracts of the eyestalks of lobsters on fiddler crabs were studied.

KEY WORDS: Neurosecretory system, Spiny lobster, *Panulirus argus*, Fiddler crab, *Uca pugilator*, Eyestalks, Endocrinology

861

Kapadia, A., and E. D. Swain (1996) South Florida Ecosystem Program: quantifying freshwater discharge for coastal hydraulic control structures in eastern Dade County, Florida. USGS fact sheet FS-123-96. US Geological Survey, Reston, VA. 3 pp.

TIME COVERAGE: 1996

SUMMARY: This is a fact sheet describing the USGS involvement in the South Florida Ecosystem Restoration Program.

KEY WORDS: Fresh water, Hydraulic structures, Coastal structures, Dade County

862

Kaplan, M. N. (1937) Big Game Anglers' Paradise. Liveright, New York, NY.

TIME COVERAGE: 1937

SUMMARY: This is a fishing guide to South Florida. Included are description of large game fish and a manatee.

KEY WORDS: Game fish, Sport fishing, Florida, Florida Keys, Dry Tortugas, Manatees

863

Karplus, I. (1992) Obligatory and facultative goby-shrimp partnerships in the western tropical Atlantic. Symbiosis, 12(3):275-91.

TIME COVERAGE: 1981

SUMMARY: Goby-shrimp partnerships were studied. Continuous antenna contact was maintained between the shrimp and the gobies while outside the burrow. The shrimp retreated into the burrow in response to tail flick warning signals from the gobies. Free-living shrimp behaved differently than those associated with gobies.

KEY WORDS: Symbiosis, Associated species, Interspecific relationships, Goby, *Nes longus*, *Bathygobius curacao*, Shrimp, *Alpheus floridanus*, Key Biscayne

864

Kelly, J. F. (1975) A description of the histological structure of normal and microsporidan-infected pink shrimp, *Penaeus duorarum* Burkenroad. Ph.D. dissertation. University of Miami, Coral Gables, FL. 88 pp.

TIME COVERAGE: 1974 -1975

SUMMARY: The histological structure of post larval and juvenile pink shrimp and pathologies of pink shrimp infested with Microsporidia were described.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Histology, Histopathology, Microsporidia, Parasitic diseases, *Thelohania duorara*, *Thelohania penaei*, Pleistophora

865

Kelly, J. F. (1979) Tissue specificities of *Thelohania duorara*, *Agmasoma penaei*, and Pleistophora sp., microsporidian parasites of pink shrimp, *Penaeus duorarum*. J. Invertebrate Pathology, 33(-):331-339.

TIME COVERAGE: 1979

SUMMARY: The pathology of shrimp infected with microsporidian parasites was described.

KEY WORDS: Microsporidians, *Thelohania duorara*, *Agmasoma penaei*, Pleistophora, Parasitic diseases, "Milk" shrimp, Pink shrimp, *Penaeus duorarum*

866

Kelly, M. G. (1969) Applications of remote photography to the study of coastal ecology in Biscayne Bay, Florida. Contribution to the Department of Biology. University of Miami, Coral Gables, FL. 24 pp.

TIME COVERAGE: 1968

SUMMARY: This report describes the use of aerial photography to the study of synoptic distribution of bottom biotic cover. The illustrations in the report are difficult to interpret.

KEY WORDS: Aerial photography, Bottom photographs, Coastal zone, Hydrography

867

Kelly, M. G. (1970) Patterns of distribution of coastal biota, remote sensing, and conservation of resources. In: Proc., Natl. Symp. on Hydrobiology, Bioresources of Shallow Water Environments. W. G. Wiest, and P. E. Greeson, (eds.). Miami Beach, FL, 1970. American Water Resources Association proceedings series 8. American Water Resources Association, Urbana, IL. 105-113.

TIME COVERAGE: 1970

SUMMARY: This citation explored the use of high altitude photography in the study of coastal biota and processes.

KEY WORDS: Coastal zone, Biota, Ecological distribution, Remote sensing, Aerial photography, Bottom photographs, Bahamas, Florida Keys

868

Kennedy, C. J., N. J. Gassman, and P. J. Walsh (1992) The fate of benzo[a]pyrene in the scleractinian corals *Favia fragum* and *Montastrea annularis*. Mar. Biol., 113(2):313-318.

TIME COVERAGE: 1990

SUMMARY: Corals collected in patch reefs in Biscayne Bay were exposed to labeled benzo[a]pyrene and uptake estimated from the rate of disappearance of benzo[a]pyrene from the water. Zooxanthellae were found to accumulate more than 50% of the benzo[a]pyrene present in the corals. Both corals metabolized benzo[a]pyrene slowly into various tetrols, triols, dihydrodiols, quinones and phenols. The pattern of metabolites differed between the species. Tetrols and triols were not present in the zooxanthellae. Elimination of benzo[a]pyrene from these corals was slow.

KEY WORDS: Aromatic hydrocarbons, Benzo[a]pyrene, Coral, Scleractinia, *Favia fragum*, *Montastrea annularis*, Biscayne National Park, Alina's Reef

869

Kennedy, C. J., and P. J. Walsh (1994) The effects of temperature on the uptake and metabolism of benzo[a]pyrene in isolated gill cells of the gulf toadfish, *Opsanus beta*. Fish Physiology Biochem., 13(2):93-103.

TIME COVERAGE: 1990

SUMMARY: The effects of acclimation temperature and acute temperature change on the uptake and metabolism of benzo[a]pyrene by gills cells of toadfish were studied. Benzo[a]pyrene accumulates in fill cells in direct proportion to the concentration of this chemical in the medium. Uptake rates, biotransformation enzymes and possible biochemical mechanisms were discussed.

KEY WORDS: Temperature effects, Metabolism, Benzo[a]pyrene, Gills, Toadfish, *Opsanus beta*

870

Kern, R. (1997) The Wonders of Biscayne National Park and the Florida Keys. Rich Kern's Nature Series. Film Ideas, Inc., Northbrook, IL. Videorecording, VHS, 45 min.

TIME COVERAGE: 1997

SUMMARY: This videorecording describes wildlife in the Biscayne National Park and the Florida Keys.

KEY WORDS: Protected resources, Rare species, Biscayne National Park, John Pennekamp Coral Reef State Park, Florida Keys

871

Kesselman, M. N. (1981) 1941 - 1950 decade: hurricanes. South Florida History Mag., 8(3):7-11.

TIME COVERAGE: 1941 - 1950

SUMMARY: This article describes hurricanes passing over South Florida during the decade of the 1940s.

KEY WORDS: Hurricanes, Hurricane of 1945

872

Key, K. W., G. H. Born, K. D. Leaman, and P. Vertes (1999) A new GPS data processing algorithm for the positioning of oceanographic experiments. J. Atmos. Oceanic Technol., 16(8):1127-37.

TIME COVERAGE: 1996

SUMMARY: New GPS algorithms were tested in Biscayne Bay by sinking a velocity profiler. Acoustic data were collected for a zero velocity profile.

KEY WORDS: GPS testing

873

Kieber, D. J. (1988) Marine biogeochemistry of [alpha]-keto acids. Ph.D. dissertation. University of Miami, Coral Gables, FL. 226 pp.

TIME COVERAGE: 1988

SUMMARY: -Keto acids represent a potentially important component of dissolved organic carbon. A detailed investigation of processes affecting cycling of -keto acids was described in this work.

KEY WORDS: Organic acids, Dissolved organic matter, Sea water, Biogeochemical cycle, Florida Bay

874

Kieber, D. J., and K. Mopper (1987) Photochemical formation of glyoxylic and pyruvic acids in seawater. Mar. Chem., 21(-):135-149.

TIME COVERAGE: 1987

SUMMARY: Cycling of alpha-keto acids and other organic metabolites in seawater is discussed. Production rates varied at sampling sites. Humic acid-rich Florida Bay waters exhibited rates higher than those of humic acid-poor Gulf Stream seawater.

KEY WORDS: Organic acids, Glyoxylic acid, Pyruvic acid, Sea water, Photochemical reactions, Florida Bay

875

Kieber, D. J., and K. Mopper (1986) Trace determination of [alpha]-keto acids in natural waters. Anal. Chim. A., 183(-):129-140.

TIME COVERAGE: 1986

SUMMARY: A procedure for the determination of [alpha]-keto acids in seawater and sediment interstitial waters was described and tested using samples collected in Biscayne Bay.

KEY WORDS: Organic acids, Sea water, Dissolved organic matter, Biogeochemical cycle

876

Kieber, D. J., G. M. Vaughan, and K. Mopper (1988) Determination of formate in natural waters by a coupled enzymatic/high-performance liquid chromatographic technique. Anal. Chem., 60(17):1654-1659.

TIME COVERAGE: 1988

SUMMARY: A procedure for the determination of formate in seawater and sediment interstitial waters was described and tested using samples collected in Biscayne Bay.

KEY WORDS: Formic acid, Dehydrogenases, Chemical analysis, Water samples, Chromatographic techniques

877

Kiene, R. P. (1991) Evidence for the biological turnover of thiols in anoxic marine sediments. Biogeochem., 13(2):117-135.

TIME COVERAGE: 1991

SUMMARY: Thiols bound in sediments may be exchangeable and pass to the interstitial water phase and therefore potentially available for microbial consumption. Slurries of anoxic sediments collected in Biscayne Bay were used in this study.

KEY WORDS: Thiols, Methanethiol, Mercaptans, Sulfate reduction, Bacteria, Anoxic sediment

878

Kiene, R. P., K. D. Malloy, and B. F. Taylor (1990) Sulfur-containing amino acids as precursors of thiols in anoxic coastal sediments. Applied Environ. Microbiol., 56(1):156-161.

TIME COVERAGE: 1990

SUMMARY: Sulfur-containing amino acids were examined as precursors for thiols, and were found to contribute to the range of thiols that occur in anoxic coastal sediments. New metabolic and environmental transformations were identified.

KEY WORDS: Amino acids, Sulfur compounds, Thiols, Anoxic sediment

879

Kiene, R. P., and B. F. Taylor (1988) Biotransformations of organosulphur compounds in sediments via 3-mercaptopropionate. Nature, 332(6160):148-150.

TIME COVERAGE: 1988

SUMMARY: 3-Mercaptopropionate is a major organic sulfur compound detected in anoxic pore waters of marine sediments from Bear Cut. This paper presented evidence that 3-mercaptopropionate is generated from the biotransformation of dimethylsulphoniopropionate. Findings suggested that 3-mercaptopropionate is a central metabolite in both catabolic and assimilatory metabolism in general.

KEY WORDS: Thiols, Organic sediment, Sulfur compounds, Sediment analysis, Bear Cut

880

Kilby, J. D., and D. K. Caldwell (1955) A list of fishes from the southern tip of the Florida peninsula. Quart. J. Fla. Acad. Sci., 18(3):195-206.

TIME COVERAGE: 1955

SUMMARY: This paper describes the fishes found in south Florida.

KEY WORDS: Fish, Florida Keys, Everglades, Species list

881

Kimball, M. C., and H. J. Teas (1975) Nitrogen fixation in mangrove areas of southern Florida. In: Proc., Internatl. Symp. on Biol. and Management of Mangroves. G. E. Walsh, S. C. Snedaker, and H. J. Teas, (eds.). Honolulu, HI, 1974. University of Florida, Institute of Food and Agricultural Sciences, Gainesville. 654-660.

TIME COVERAGE: 1974

SUMMARY: Nitrogen fixation by the soils of five mangrove communities was determined by the acetylene method. Nitrogen fixation was found to be low for all communities, and decreased with depth in the soil.

KEY WORDS: Mangrove swamps, Nitrogen fixation, Soils

882

King, D. B. (1997) Biogeochemical cycling of methyl bromide in the surface ocean. Ph.D. dissertation. University of Miami, Coral Gables, FL. 126 pp.

TIME COVERAGE: 1997

SUMMARY: The objective of this dissertation was to increase the current base of knowledge of the biogeochemical cycling of methyl bromide in the surface ocean and its impact on the atmospheric methyl bromide cycle.

KEY WORDS: Methyl bromide, Biogeochemical cycle, Sea water, Bromide

883

King, D. B., and E. S. Saltzman (1997) Removal of methyl bromide in coastal seawater: chemical and biological rates. J. Geophys. Res., 102(C8):18715-18721.

TIME COVERAGE: 1997

SUMMARY: A stable isotope tracer technique was used to investigate the loss rate of methyl bromide in Biscayne Bay surface seawater. Removal rates in unfiltered seawater were significantly higher than in the 0.2- $\mu\text{m}$  filtered or autoclaved aliquants, indicating an association with particulate matter. Filtration experiments indicated bacteria may be responsible.

KEY WORDS: Methyl bromide, Coastal waters, Sea water

884

Kirtley, D. W. (1966) Intertidal reefs of sabellariidae (Annelida polychaeta) along the coasts of Florida. M.Sc. thesis. Florida State University, Tallahassee, FL. 96 pp.

TIME COVERAGE: 1966

SUMMARY: Sabellariid worms build extensive wave-deforming reefs along tropical and subtropical coasts. A stretch of worm reefs was studied in detail along the southeast coast of Florida as far south as Key Biscayne.

KEY WORDS: Tube dwellers, Honeycomb worm, Sabellariids, Reef formation, Key Biscayne

885

Kirtley, D. W. (1971) Reef-building worms. Sea Frontiers, 17(2):102-107.

TIME COVERAGE: 1971

SUMMARY: This article describes the reef-building activities of Sabellariid worms.

KEY WORDS: Tube dwellers, Honeycomb worm, Sabellariids, Reef formation

886

Kirtley, D. W., and W. F. Tanner (1968) Sabellariid worms: builders of a major reef type. J. Sed. Petrol., 38(1):73-78.

TIME COVERAGE: 1968

SUMMARY: Sabellariid worms build extensive wave-deforming reefs along tropical and subtropical coasts. A stretch of worm reefs was studied in detail along the southeast coast of Florida.

KEY WORDS: Polychaetes, *Phragmatopoma lapidosa*, Sabellariid worms, Reef formation

887

Klein, H. (1957) Interim report on salt-water encroachment in Dade County, Florida. Florida Geological Survey information circular 9. US Geological Survey, Tallahassee, FL. 17 pp.

TIME COVERAGE: 1957

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Saline intrusion, Canals, Groundwater pollution, Dade County

888

Klein, H. (1970) Preliminary evaluation of availability of potable water on Elliott Key, Dade County, Florida. USGS open file report 70-188 (Microfiche). US Geological Survey, Tallahassee, FL. 15 pp.

TIME COVERAGE: 1970

SUMMARY: This paper describes fresh water sources in Elliott Key.

KEY WORDS: Water resources, Ground water, Geology, Elliott Key

889

Klein, H. (1965) Probable effect of Canal 111 on salt-water encroachment, southern Dade County, Florida. Open file report 65002. US Geological Survey, Tallahassee, FL. 26 pp.

TIME COVERAGE: 1965

SUMMARY: The C-111 canal is one of the main canals of the Central and Southern Flood Control Project and discharges into southern Biscayne Bay. It was constructed in 1964 - 1965 and has a gated control structure. This report is a evaluation of possible salt water intrusion as the result of this canal.

KEY WORDS: Ground water, Saline intrusion, Water table, Canal C-111, Dade County

890

Klein, H., J. T. Armbruster, B. F. McPherson, and H. J. Freiburger (1974) Water and the south Florida environment. Report. US Geological Survey, Miami, FL. 265 pp.

TIME COVERAGE: 1971 (and other years)

SUMMARY: National attention was focused on the ecological problems of south Florida when the Port Authority of Dade County began the construction of the Jetport at a 39-sq. mile tract 6 mi north of the Everglades National Park. A primary objective of the ecological study regarding the Jetport is to provide information that will assist in the formulation of land-use policy. As part of that investigation, the surface water and ground water resources were evaluated.

KEY WORDS: Water management, Land use, Environmental effects, South Florida, Jetport, Ground water, Surface water, Florida Bay, Florida Keys, Everglades National Park

891

Klein, H., and J. E. Hull (1978) Biscayne aquifer, southeast Florida. Water-resources investigation 78-107. US Geological Survey, Tallahassee, FL. 52 pp.

TIME COVERAGE: 1978

SUMMARY: Recharge of the Biscayne Aquifer is primarily by local rainfall. Discharge is by evaporation, canal drainage, coastal seepage and pumping. Pollutants can enter the aquifer by direct infiltration from land surface or controlled canals, septic tanks and other drainfields, drainage wells, and solid waste dumps. Most of the pollutants are concentrated in the upper 20 to 30 feet of the aquifer.

KEY WORDS: Hydrology, Water supply, Water quality, Groundwater pollution, Biscayne Aquifer

892

Klein, H., and C. B. Sherwood (1961) Hydrologic conditions in the vicinity of Levee 30, northern Dade County, Florida. Report of investigations no. 24, part 1. US Geological Survey and Florida Geological Survey, Tallahassee, FL. 24 pp.

TIME COVERAGE: 1961

SUMMARY: The thin layers of dense limestone of low permeability that occur near the top of the Biscayne Aquifer are of hydrologic importance because they retard the downward infiltration of ponded water in Conservation Area 2.

KEY WORDS: Hydrology, Ground water, Saline intrusion, Water quality, Levee 30, Biscayne Aquifer

893

Klein, H., and B. G. Waller (1985) Synopsis of saltwater intrusion in Dade County, Florida, through 1984. Water resources investigations report 85-4101. US Geological Survey, Tallahassee, FL. 1 sheet.

TIME COVERAGE: 1904, 1943, 1946, 1953, 1962, 1949-1984

SUMMARY: This paper contains the salt water intrusion charts for Dade County.

KEY WORDS: Saline intrusion, Biscayne Aquifer, Canals, Dade County

894

Kleinberg, H. (1997) Biscayne Bay islands, born of grains of sand. The Miami Herald, Miami, FL. Apr. 15.

TIME COVERAGE: 1997

SUMMARY: This article describes the creation of artificial islands in Biscayne Bay.

KEY WORDS: Artificial islands

895

Kleinberg, H. (1989) Miami: The Way We Were. Surfside Publishing, Tampa, FL. 176 pp.

TIME COVERAGE: 1770s - 1940s

SUMMARY: This book is a compilation of articles from the Miami News about the history of South Florida, specially Miami, Miami Beach and Coconut Grove.

KEY WORDS: Hurricane of 1926, Hurricane of 1906, Flagler Railroad, Coconut Grove, Punch Bowl, History, World War II, Arch Creek, Miami River

896

Klima, E. F. (1959) Aspects of the biology and the fishery for Spanish mackerel, *Scomberomorus maculatus* (Mitchill) of southeast Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 96 pp.

TIME COVERAGE: 1959

SUMMARY: This is a study of the biology of the Spanish mackerel. Specimens were obtained from commercial fishermen.

KEY WORDS: Spanish mackerel, *Scomberomorus maculatus*, Fishery biology, Fisheries

897

Kline, G. (1968) A study of the distribution of the interstitial fauna of three beaches. M.Sc. thesis. University of Miami, Coral Gables, FL. 95 pp.

TIME COVERAGE: 1966 - 1967

SUMMARY: Sediment cores were taken at three beach sites in Virginia Key and the animals identified and counted. Interstitial water chemistry and sediment characteristics were also determined.

KEY WORDS: Interstitial environment, Benthos, Virginia Key, Bear Cut

898

Klontz, S. W. (1989) Florida's aquatic preserves. Florida Environmental and Urban Issues, 15(-):14-18.

TIME COVERAGE: 1989

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Submerged shorelines, Resource management, Resource conservation, Aquatic Preserve Program, Florida

899

Knetsch, J., and P. S. George (1995) Flagler sets his sights on Biscayne Bay. South Florida History Mag., 23(1):20-25.

TIME COVERAGE: 1892 - 1899

SUMMARY: This paper describes the extension of Henry Flagler's railroad to Dade County.

KEY WORDS: Natural resources, Resource development, Shipping lanes, Florida East Coast Railway, Flagler, H. M.

900

Kohout, F. A. (1987) Aquifer-estuary fresh-salt water balance, Miami, Florida. In: Groundwater Problems in Coastal Areas. E. Custodio and G. A. Bruggeman (eds.). Unesco studies and reports in hydrology 45. Unesco, Paris, France. 582-596.

TIME COVERAGE: 1987

SUMMARY: This paper discusses the salt water intrusion that has taken place in the Biscayne aquifer.

KEY WORDS: Ground water, Fresh water, Salinity, Estuarine dynamics, Chlorinity, Hydrologic cycle, Water mixing, Biscayne Aquifer

901

Kohout, F. A. (1961) A case history of salt-water encroachment caused by a storm sewer in the Miami area, Florida. Am. Water Works Assoc. J., 53(11):1406-1416.

TIME COVERAGE: 1909 - 1930

SUMMARY: From 1909 to 1930 canals were constructed westward from the coast to drain low lying areas for urban and agricultural use. The canals have been the primary cause of salt water encroachment into the Biscayne Aquifer.

KEY WORDS: Biscayne Aquifer, Seawater encroachment, Canals

902

Kohout, F. A. (1960) Cyclic flow of salt water in the Biscayne aquifer of southeastern Florida. J. Geophys. Res., 67(7):2133-2141.

TIME COVERAGE: 1960

SUMMARY: Observations over a period of 20 yrs confirmed the fact that the salt-water front of the Biscayne Aquifer is dynamically stable at a position seaward of that computed according to the Ghyben-Hersberg principle.

KEY WORDS: Hydrologic cycle, Sea water, Fresh water, Water mixing, Biscayne Aquifer

903

Kohout, F. A. (1960) Flow pattern of fresh and salt water in the Biscayne aquifer of the Miami area, Florida. Internatl. Assoc. Scientific Hydrology, 52(-):440-448.

TIME COVERAGE: 1960

SUMMARY: Investigations showed that the dynamically stable salt-water front is as much as 8 mi seaward of the position computed according to the Ghyben-Hersberg principle. The discrepancy results largely from the fact that the salt water in the Biscayne aquifer is not static.

KEY WORDS: Biscayne Aquifer, Ground water, Saline intrusion, Fresh water, Sea water

904

Kohout, F. A. (1967) Ground-water flow and the geothermal regime of the Floridian Plateau. Trans. Gulf Coast Association of Geological Societies, 17(-):339-354.

TIME COVERAGE: 1967

SUMMARY: Temperature surveys done during oil exploration indicated an anomalous geothermal profile for the Floridian Plateau. The geothermal gradient is negative (ground water becomes colder) to a depth of 3000 ft below sea level. The geothermal regime is modified by cold seawater.

KEY WORDS: Ground water, Geothermal gradient, Saline water, Floridian Plateau

905

Kohout, F. A. (1965) A hypothesis concerning cyclic flow of salt water related to geothermal heating in the Floridan Aquifer. Trans. New York Academy of Sciences, Ser. 2, 28(2):249-271.

TIME COVERAGE: 1965

SUMMARY: This paper summarizes the hydrogeology of the thick carbonate-evaporate sequence that extends from the land surface to the oil horizons at depths of approximately 11500 ft.

KEY WORDS: Ground water, Geothermal gradient, Saline water, Floridan Aquifer

906

Kohout, F. A. (1962) Relation of seaward and landward flow of ground water to the salinity of Biscayne Bay at Miami, Florida. In: Proc., First Natl. Coastal and Shallow Water Research Conference,. D. S. Gorsline, (ed.). 1961. National Science Foundation and Office of Naval Research, Tallahassee, FL. 44.

TIME COVERAGE: 1961

SUMMARY: [SEE NEXT CITATION FOR DESCRIPTION OF WORK.]

KEY WORDS: Ground water, Water currents, Salinity, Saline intrusion, Biscayne Aquifer, Water mixing

907

Kohout, F. A. (1967) Relation of seaward and landward flow of ground water to the salinity of Biscayne Bay. M.Sc. thesis. University of Miami, Coral Gables, FL. 98 pp.

TIME COVERAGE: 1958, 1963 - 1966

SUMMARY: Ground water discharge contributed significantly to the offshore chlorinity gradient of Biscayne Bay. The seaward flow of relatively fresh ground water dilutes the Bay water to a distance greater than 2 mi from shore.

KEY WORDS: Ground water, Water currents, Salinity, Saline intrusion, Water mixing, Biscayne Aquifer

908

Kohout, F. A. (1966) Submarine springs: a neglected phenomenon of coastal hydrology. In: Central Treaty Organization Symposium on Hydrology and Water Resources Development. Ankara, Turkey, 1966. Office of United States Economic Coordinator for CENTO Affairs, Ankara, Turkey. 391-413.

TIME COVERAGE: 1966 °

SUMMARY: Fresh water spring found in several coastal areas worldwide, including Biscayne Bay, are described.

KEY WORDS: Submarine springs, Fresh water, Coastal waters

909

Kohout, F. A., and J. H. Hartwell (1967) Hydrologic effects of Area B flood control plan on urbanization of Dade County, Florida. Florida Geological Survey report of investigations 47. Florida State Board of Conservation, Division of Geology, Tallahassee, FL. 61 pp.

TIME COVERAGE: 1967

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Flood control, Pump stations, Runoff, Hydrology, Water levels, Urbanization, Everglades

910

Kohout, F. A., and M. C. Kolipinski (1967) Biological zonation related to groundwater discharge along the shore of Biscayne Bay, Miami, Florida. In: Estuaries. G. H. Lauff (ed.). AAAS publication 83. American Association for the Advancement of Science, Washington, DC. 488-499.

TIME COVERAGE: 1967

SUMMARY: The distribution of fauna and flora along a shoreline is controlled by many factors including salinity. The distribution of organisms correlates strongly with underlying hydrological factors, and thus may be a function of the salinity related to groundwater discharge.

KEY WORDS: Ecological zonation, Ground water, Fresh water, Ecological distribution, Salinity, Water mixing, Cutler Area, Species list

911

Kohout, F. A., and S. D. Leach (1964) Salt-water movement caused by control-dam operation in the Snake Creek Canal, Miami, Florida. Rep. of investigations 24, part 4. Florida State Board of Conservation, Division of Geology, Tallahassee, FL. 49 pp.

TIME COVERAGE: 1961

SUMMARY: Salt water movement into the Biscayne Aquifer was investigated to establish criteria for the operation of the salt-water control dam in the Snake Creek Canal.

KEY WORDS: Sea water, Saline intrusion, Dams, Canals, Biscayne Aquifer, Snake Creek Canal

912

Kolipinski, M. C. (1964) The life history, growth, and ecology of four intertidal gastropods (genus *Nerita*) of southeast Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 131 pp.

TIME COVERAGE: 1964

SUMMARY: This work is a description of the life history, growth, and ecology of four *Nerita* species from southeast Florida.

KEY WORDS: Intertidal environment, *Nerita fulgurans*, *Nerita peloronta*, *Nerita tessellata*, *Nerita versicolor*, Life history, Growth, Gastropods, Key Largo, Virginia Key

913

Kolipinski, M. C., and A. L. Higer (1970) Detection and identification of benthic communities and shoreline features in Biscayne Bay using multiband imagery. Earth Resources Prog. Rev., 3(47):1-16.

TIME COVERAGE: 1970

SUMMARY: This paper describes the use of multispectral imagery to identify and delineate benthic and shoreline communities in Biscayne Bay.

KEY WORDS: Imaging techniques, Benthos, Coastal landforms

914

Kouassi, A. M. (1986) Light induced alteration of the photophysical properties of dissolved organic matter in seawater. M.Sc. thesis. University of Miami, Coral Gables, FL. 148 pp.

TIME COVERAGE: 1986

SUMMARY: This research provided additional evidence that seawater and its abiotic organic content undergo degradation under solar radiation. [SEE FOLLOWING ABSTRACT FOR DESCRIPTION OF THE RESULTS.]

KEY WORDS: Dissolved organic matter, Sea water, Light absorption, Humus

915

Kouassi, A. M., and R. G. Zika (1992) Light-induced destruction of the absorbance property of dissolved organic matter in seawater. Toxic. Environ. Chem., 35(-):195-211.

TIME COVERAGE: 1992

SUMMARY: The absorption spectra of marine humic substances decrease when they are exposed to a known intensity of monochromatic light at various wavelengths or to a polychromatic source such as sunlight. The results of studies of photochemical bleaching of absorption of marine humic substances were presented and compared to the characteristics of total dissolved organic matter to assess the contribution made by the humic fractions. From the

absorbance and apparent quantum efficiency data at specific wavelength and the solar fluxes, a model calculation was used to determine the rates of the change of the photoprocess in the Biscayne Bay seawater and humic substances collected in the Gulf of Mexico.

KEY WORDS: Sea water, Light, Dissolved organic matter, Virginia Key

916

Krantz, G. E., and J. P. Norris (1976) Culture of pink shrimp, *Penaeus duorarum* at the Turkey Point experimental mariculture laboratory. Sea Grant tech. bull. 36. University of Miami Sea Grant Program, Coral Gables, FL. 36 pp.

TIME COVERAGE: 1976

SUMMARY: This citation is a review and analysis of laboratory and pond studies on intensive culture of pink shrimp at Turkey Point since 1968.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Shrimp culture, Turkey Point

917

Kreader, C. A. (1983) Analytical procedures for measuring protein, DNA, and RNA in *Acartia tonsa*. M.Sc. thesis. University of Miami, Coral Gables, FL. 102 pp.

TIME COVERAGE: 1983

SUMMARY: Recommended procedures for the measurement of protein, DNA and RNA in the copepod *Acartia tonsa* were described.

KEY WORDS: Copepods, *Acartia tonsa*, Proteins, DNA, RNA

918

Kreitman, A., and L. A. Wedderburn (1984) Hydrogeology of South Florida. In: Environments of South Florida: Present and Past II. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL.

TIME COVERAGE: 1984

SUMMARY: This citation describes the aquifers of South Florida including the Biscayne Aquifer.

KEY WORDS: Biscayne Aquifer, Hydrology, Saline water, Ground water

919

Kremer, P. (1982) Effect of food availability on the metabolism of the ctenophore *Mnemiopsis mccradyi*. Mar. Biol., 71(2):149-156.

TIME COVERAGE: 1979

SUMMARY: Measurements of respiration and excretion for this ctenophore species were carried out under laboratory conditions. Freshly collected ctenophores from Biscayne Bay were used in this study.

KEY WORDS: Food consumption, Respiration, Excretion, Metabolism, *Mnemiopsis mccradyi*, Ctenophores

920

Krueger, J. F. (1973) The accumulation of dieldrin into the blood of pre- and post-ecdysis juvenile pink shrimp, *Penaeus duorarum*. M.Sc. thesis. University of Miami, Coral Gables, FL. 63 pp.

TIME COVERAGE: 1973

SUMMARY: The levels of dieldrin in the blood of pink shrimp were determined. Specimens were obtained from fishermen operating in Biscayne Bay.

KEY WORDS: Insecticides, Dieldrin, Juveniles, Pink shrimp, *Penaeus duorarum*

921

Kushlan, J. A. (1988) Conservation and management of the American crocodile. Environ. Management, 12(6):777-790.

TIME COVERAGE: 1978 - 1982

SUMMARY: In an attempt to determine what factors might be limiting population growth of the crocodile, an extensive study was conducted. Factors included climate, hurricanes, population dispersion, nesting habitat, fertility, predation, nest chamber environment, juvenile survivorship, artificial mortality, disturbance, and environmental contamination. No single factor limited the population.

KEY WORDS: American crocodile, *Crocodylus acutus*, Resource conservation, Resource management, Florida Bay, Turkey Point

922

Kushlan, J. A. (1974) The ecology of the white ibis in southern Florida, a regional study. Ph.D. dissertation. University of Miami, Coral Gables, FL. 129 pp.

TIME COVERAGE: 1971 - 1973

SUMMARY: This study determined the ecological impact, in terms of prey consumption and energy requirements, and the adaptive strategy of the white ibis, the most abundant wading bird in South Florida.

KEY WORDS: White ibis, *Eudocimus albus*, Aquatic birds, Wood stork, *Mycteria americana*

923

Kushlan, J. A. (1982) The status of crocodylians in south Florida. In: Crocodyles; Proc., 5th Working Meeting of the Crocodile Specialist Group of the Species Survival Commission of the International Union for Conservation of Nature and Natural Resources. 1980. International Union for the Conservation of Nature and Natural Resources, Gland, Switzerland.

TIME COVERAGE: 1982

SUMMARY: Two species of crocodylians occur in South Florida: the American crocodile and the American alligator. The American crocodile is considered to be endangered and the American alligator is considered threatened. This report discusses the preliminary findings of recent and ongoing studies.

KEY WORDS: American crocodile, *Crocodylus acutus*, American alligator, *Alligator mississippiensis*, Turkey Point, South Florida

924

Kushlan, J. A., and F. J. Mazzotti (1989) Historic and present distribution of the American crocodile in Florida. J. Herpetol., 23(1):1-7.

TIME COVERAGE: 1870, 1884, 1891, 1896, 1923, 1944, 1970, 1980, 1977 - 1982

SUMMARY: The historic and recent distribution of the American crocodile in southern Florida were discussed. Its nesting distribution is southern Biscayne Bay and northeastern Florida Bay. Nesting sites in Miami Beach and the upper Florida Keys have been lost to development. This loss has been compensated by the creation of artificial nesting sites on spoil banks along the cooling canals of southern Biscayne Bay. The general distribution of the crocodile in Florida is the same as that historically documentable.

KEY WORDS: American crocodile, *Crocodylus acutus*, Geographical distribution, Florida Bay, South Bay, Florida Keys, Miami Beach

925

Kushlan, J. A., and F. J. Mazzotti Population biology and status of the American crocodile in south Florida. In: Crocodyles; Proc., 7th Working Meeting of the Crocodile Specialist Group of the Species Survival Commission of the International Union for Conservation of Nature and Natural Resources. Caracas, Venezuela, 1986. International Union for the Conservation of Nature and Natural Resources, Gland, Switzerland.

TIME COVERAGE: 1986

SUMMARY: The core range of the American crocodile extends into southern Biscayne Bay and Card Sound. Nesting occurs in northern Florida Bay, northern Key Largo and Turkey Point.

There is evidence that the population is increasing. The loss of habitat in northern Biscayne Bay may have been offset by the creation of new habitats in northern Key Largo and Turkey Point.  
KEY WORDS: American crocodile, *Crocodylus acutus*, Population dynamics, South Florida, Card Sound, Florida Bay, Key Largo, Turkey Point

926

Kushlan, J. A., and D. A. White (1977) Nesting wading bird populations in southern Florida. Florida Scientist, 40(1):65-72.

TIME COVERAGE: 1974 - 1975

SUMMARY: Wading birds, including ibises, herons and storks, once nested in southern Florida by the millions. A 1974 - 1975 survey located 41 colonies. White ibis and cattle egret were most abundant, and those of great egrets, little blue herons, Louisiana herons and snowy egrets were lower than expected. Wading birds nested year round but individual species had more circumscribed nesting seasons which differed seasonally and between inland and coastal colonies.

KEY WORDS: Aquatic birds, Nesting, Population density, South Florida, White ibis, *Eudocimus albus*, Roseate spoonbill, *Ajaja ajaja*, Wood stork, *Mycteria americana*, Great blue heron, *Ardea herodias*, Cattle egret, *Bubulcus ibis*, Great egret, *Casmerodius alba*, Little blue heron, Florida caerulea, Louisiana herons, *Hydronassa tricolor*, Snowy egret, *Egretta thula*

927

La Gorce, J. O. (1930) Florida - the fountain of youth. Natl. Geographic Mag., 57(-):1-93.

TIME COVERAGE: 1930

SUMMARY: This article describes Florida in the late 1920s including South Florida. Many photographs are included.

KEY WORDS: History, Geography, Land use, Recreation, Florida

928

La Gorce, J. O. (1921) Treasure-house of the Gulf Stream: the completion and opening of the new aquarium and biological laboratory at Miami, Florida. Natl. Geographic Mag., 39(-):53-68.

TIME COVERAGE: 1921

SUMMARY: This paper describes the 1920s Miami Aquarium.

KEY WORDS: Aquaria, Biological institutions, Marine organisms, Miami Beach, Gulf Stream

929

La Plante, L. (1995) The sage of Biscayne Bay: Charles Torrey Simpson's love affair with South Florida. Tequesta, 55(-):60-82.

TIME COVERAGE: 1880s - 1932

SUMMARY: This article is a short biography of Charles Torrey Simpson, a botanist and malacologist who authored many books about South Florida.

KEY WORDS: History, Simpson, Charles Torrey

930

Lackey, J. B. (1974) Entrainment studies at Turkey Point on Biscayne Bay: have thermal effects affected the plankton of Biscayne Bay? In: Entrainment and Intake Screening. Proc., 2nd Entrainment and Intake Screening Workshop. L. D. Jensen, (ed.). Baltimore, MD, 1973. Electric Power Research Institute, Palo Alto, CA. 187-191.

TIME COVERAGE: 1972

SUMMARY: Seagrasses have persisted during the four years of the study as healthy dense beds in areas receiving plant effluent. The "bare spot" at the mouth of the Grand Canal, said to be caused by the effluents, was apparently present before there was thermal effluent. The sides of the canals have been colonized by mangroves. As long as the temperatures of thermal effluents does not exceed 34 °C over a long period of time, damage to organisms is negligible.

KEY WORDS: Thermal pollution, Power plants, Entrainment, Plankton, Turkey Point

931

Lackey, J. B., and E. W. Lackey (1972) Thermal effects at Turkey Point: a study. Report. Florida Power and Light Company, Miami, FL. Various paging.

TIME COVERAGE: 1968 - 1972?

SUMMARY: The purpose of this study is to study thermal effects related to the operation of a power plant specially to plankton and seagrasses.

KEY WORDS: Temperature effects, Marine organisms, Turkey Point

932

Landrum and Brown (1999) Aircraft noise considerations in the transfer of ownership of Homestead Air Reserve Base, Homestead, Florida, from the United States Air Force to Dade County, Florida. Final review draft. Prepared for the Federal Aviation Administration and the US Air Force. Various paging.

TIME COVERAGE: 1999

SUMMARY: This technical memorandum analyzes the potential aircraft noise impacts related to the proposal to use the former Homestead Air Force Base for a commercial service airport from its initial activity level up to the maximum capacity of the existing one runway. It evaluates alternative traffic routing proposals to modify or reduce noise within properties owned and operated by the National Park Service and Fish and Wildlife Service.

KEY WORDS: Homestead Air Reserve Base, Noise abatement, Biscayne National Park, Aircraft, Environmental impact

933

Landrum, L. W. (1990) Biscayne: The Story Behind the Scenery. KC Publications, Las Vegas, NV.

TIME COVERAGE: 1990

SUMMARY: This publication is a description of the Biscayne Bay National Park with color illustrations.

KEY WORDS: Natural resources, Biscayne National Park

934

Lane, C. E. (1959) Cobra of the sea. Sea Frontiers, 5(1):7-13.

TIME COVERAGE: 1959

SUMMARY: This citation describes the Portuguese man-of-war.

KEY WORDS: Portuguese man-of-war, *Physalia physalis*, Jellyfish, Stinging organs, Biological poisons

935

Lane, C. E., and E. Dodge (1958) The toxicity of *Physalia* nematocysts. Biol. Bull., 115(2):219-226.

TIME COVERAGE: 1958

SUMMARY: The general composition and conditions of reactivity of the nematocysts and nematocyst contents of *Physalia* were described.

KEY WORDS: Stinging organs, Biological poisons, Toxicity, Portuguese man-of-war, Jellyfish, *Physalia physalis*

936

Lane, C. E., G. S. Posner, and L. J. Greenfield (1952) The distribution of glycogen in the shipworm, *Teredo* (Lyrodus) *pedicellata* Quatrefages. Bull. Mar. Sci. Gulf Caribb., 2(3):385-392.

TIME COVERAGE: 1952

SUMMARY: Adult *Teredo* worms were shown to contain approximately 30% dry weight glycogen, most of it concentrated in the mantle, muscles and gills. This figure was achieved within six weeks after the borer first invades wood.

KEY WORDS: Shipworms, *Teredo pedicellata*, Boring organisms, Glycogen

937

Lane, C. E., and J. Q. Tierney (1951) Hydrodynamics and respiration in *Teredo*. Bull. Mar. Sci. Gulf Caribb., 1(2):104-110.

TIME COVERAGE: 1951

SUMMARY: Basal oxygen consumption of *Teredo* was determined and was found to be significantly reduced when the animal was removed from wood.

KEY WORDS: Shipworms, *Teredo pedicellata*, Boring organisms, Respiration, Oxygen consumption

938

Langevin, C. D. (1999) Ground-water flows to Biscayne Bay. Proc., South Florida Restoration Science Forum. S. Gerould, and A. Higer, (eds.). Boca Raton, FL, May 17-19,1999. Open-file report 99-181. US Geological Survey Program on the South Florida Ecosystem, Tallahassee, FL. 58-59.

TIME COVERAGE: 1996 - 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Groundwater, Freshwater, Hydrology

939

Langley, S. P. (1974) A continuous-flow apparatus for marine zooplankton: uptake of dieldrin by glass and the chaetognath, *Sagitta hispida* Conant. M.Sc. thesis. University of Florida, Coral Gables, FL. 50 pp.

TIME COVERAGE: 1974

SUMMARY: The uptake of dieldrin in a continuous flow apparatus was studied. Test animals and seawater were obtained from Biscayne Bay.

KEY WORDS: Zooplankton, Insecticides, Dieldrin, Test equipment, Toxicity tests, Chaetognaths, *Sagitta hispida*

940

LaRoe, E. T. (1967) A contribution to the biology of the Loliginidae (Cephalopoda: Myopsida) of the tropical western Atlantic. M.Sc. thesis. University of Miami, Coral Gables, FL. 220 pp.

TIME COVERAGE: 1967

SUMMARY: Five species of the Loliginidae squid family were examined. Some specimens were collected in Biscayne Bay.

KEY WORDS: Squid, Loliginidae, Life history, Animal morphology

941

Lasker, R. (1952) An analysis of the amino acids of *Teredo* by paper partition chromatography. M.Sc. thesis. University of Miami, Coral Gables, FL. 42 pp.

TIME COVERAGE: 1952

SUMMARY: The objective of this work was to provide information about possible sources of shipworm protein. The amino acid distribution of *Teredo* was compared with that of wood and nanoplankton.

KEY WORDS: Boring organisms, *Teredo pedicellata*, Amino acids, Chromatographic techniques

942

Lauredo, S. C. (1998) Co-existence: Stiltsville (Florida). Ph.D. dissertation. Florida International University, Miami, FL. 75 pp.

TIME COVERAGE: 1998  
SUMMARY: [COPY NOT AVAILABLE.]  
KEY WORDS: Motorboats, Stiltsville

943

Laxon, D. D. (1968) The Dupont Plaza site. Florida Anthropologist, 21(-):55-60.

TIME COVERAGE: 1968

SUMMARY: Representative Tequesta material was salvaged from the area now occupied by the Dupont Plaza complex at the mouth of the Miami River. Large areas under the present-day parking lot may be excavated in the future.

KEY WORDS: Archaeology, Middens, Miami River, Tequesta

944

Laxon, D. D. (1959) Three salvaged Tequesta sites in Dade County, Florida. Florida Anthropologist, 12(-):57-65.

TIME COVERAGE: 1958 - 1959

SUMMARY: This paper describes material of the Tequesta culture collected at three sites in Dade County that were destroyed during construction projects.

KEY WORDS: Archaeology, Middens, Little River, Brickell Point, Florida Portland Cement Plant, Tequesta

945

Layne, J. N. (1965) Observations on marine mammals in Florida waters. Bull. Florida State Museum, Biological Ser., 9(4):131-181.

TIME COVERAGE: 1953 - 1963

SUMMARY: Data were presented on the distribution, measurements and weights, ecology, and other aspects of the biology of twelve species of cetaceans, one pinniped, and the manatee in Florida waters. Most records are for the period 1953 through 1963 although some for earlier years were included.

KEY WORDS: Marine mammals, Whales, Dolphins, Manatees, Pinnipeds, Stranding, Florida

946

Leach, C. W. (1969) Creosoted wood piles in Biscayne Bay are sound after eleven years of service - progress report. Proc., 65th Ann. Mtg. American Wood-Preservers' Association. Denver, CO, April 28 - 30, 1969. American Wood-Preservers' Association, Washington, DC. 272-275.

TIME COVERAGE: 1956-1957, 1967

SUMMARY: Creosoted wood piles were driven in 1956 and 1957 in the coastal water of Biscayne Bay as part of the small craft docking facilities of the University of Miami. After 11 years, the piles were found to be in excellent condition.

KEY WORDS: Piles, Preservatives, Wood, Virginia Key

947

Leach, S. D., and R. G. Grantham (1966) Salt-water study of the Miami River and its tributaries, Dade County, Florida. Florida Geological Survey rep. of investigations 45. Florida State Board of Conservation, Division of Geology, Tallahassee, FL. 36 pp.

TIME COVERAGE: 1904 - 1962

SUMMARY: This report discusses salt-water intrusion into the highly permeable Biscayne Aquifer. Saltwater pollution may be held at the current level or moved seaward by raising the freshwater table in the ground.

KEY WORDS: Saline intrusion, River discharge, Miami River, Miami Canal, Tamiami Canal

948

Leach, S. D., H. Klein, and E. R. Hampton (1972) Hydrologic effects of water control and management of southeastern Florida. Bureau of Geology report of investigations 60. Florida Department of Natural Resources, Bureau of Geology, Tallahassee, FL. 115 pp.

TIME COVERAGE: 1904 - 1969

SUMMARY: This report expands the one by Leach and Grantham (1966) with further discussion of salt-water intrusion into the highly permeable Biscayne Aquifer.

KEY WORDS: Water management, Flood control, Saline intrusion, Urbanization, Hydrologic cycle, Everglades, Lake Okeechobee

949

Leach, S. D., and C. B. Sherwood (1963) Hydrologic studies in the Snake Creek Canal area, Dade County, Florida. Rep. of investigations 24, part 3. Florida State Board of Conservation, Division of Geology, Tallahassee, FL. 33 pp.

TIME COVERAGE: 1961

SUMMARY: Snake Creek was constructed to drain water from northern Dade County and southern Broward County. During dry periods, it conveys water from the Everglades seaward. A salinity control structure at the mouth of the canal prevents the upstream movement of salt water and helps maintain upstream water levels high enough to prevent salt-water encroachment.

KEY WORDS: Hydrologic cycle, Canals, Saline intrusion, Drainage water, Biscayne Aquifer, Snake River Canal

950

Leadon, M. E. (1991) Littoral environmental considerations of a barrier island in beach fill design: Key Biscayne, Florida. In: Coastal Sediments '91. Proc., Specialty Conference on Quantitative Approaches to Coastal Sediment Processes. N. C. Kraus, K. J. Gingerich, and D. L. Kriebel, Seattle, WA, 1991. American Society of Civil Engineers, New York, NY. 2089-2100.

TIME COVERAGE: 1991

SUMMARY: A completed beach fill project along portions of Key Biscayne was monitored through a series of beach and nearshore surveys and aerial photography. An analysis of littoral processes affecting the beach fill project included application of a shoreline change model.

KEY WORDS: Beach nourishment, Beach morphology, Littoral zone, Coastal engineering, Key Biscayne

951

Leadon, M. E. (1992) Physical monitoring of the Key Biscayne beach restoration project with shoreline change modeling application. In: Proc., 5th Ann. Natl. Conf. on Beach Preservation Technology: New Directions in Beach Management. L. S. Tait, (comp.). St. Petersburg, FL, 1992. Florida Shore & Beach Preservation Association, Tallahassee, FL. 196-208.

TIME COVERAGE: 1992

SUMMARY: This citation describes monitoring efforts and modeling of the beach restoration of Key Biscayne

KEY WORDS: Beach nourishment, Coastal morphology, Littoral zone, Key Biscayne

952

Leak, J. C. (1984) Growth and survival of bay anchovy (*Anchoa mitchilli*) larvae in north Biscayne Bay, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 114 pp.

TIME COVERAGE: 1984

SUMMARY: Abundance, age structure, growth, mortality, feeding and production of anchovy larvae in Biscayne Bay were estimated during field experiments.

KEY WORDS: Bay anchovy, *Anchoa mitchilli*, Fish larvae, Growth, Survival, North Bay

953

Leak, J. C. (1986) The relationship of standard length and otolith diameter in larval bay anchovy, *Anchoa mitchilli* (Val.). A shrinkage estimator. J. Exp. Mar. Biol. Ecol., 95(-):167-172.

TIME COVERAGE: 1986

SUMMARY: Anchovies were raised in the laboratory from eggs collected in Biscayne Bay. Standard length of the laboratory-reared and net-collected larvae were compared with diameter of sagittal otoliths. Otoliths of net-collected larvae were shorter than those of larvae that were laboratory reared.

KEY WORDS: Bay anchovy, *Anchoa mitchilli*, Larvae, Otoliths, Body length

954

Leak, J. C., and E. D. Houde (1987) Cohort growth and survival of bay anchovy *Anchoa mitchilli* larvae in Biscayne Bay, Florida. Mar. Ecol. (Progress series), 36(2/3):109-122.

TIME COVERAGE: 1979 - 1980

SUMMARY: Egg and larval abundance of bay anchovy from four field experiments in Biscayne Bay were analyzed to determine variability in growth and mortality rates of daily-spawned cohorts.

KEY WORDS: Mortality causes, Developmental stages, Size distribution, Survival, *Anchoa mitchilli*, Bay anchovy, North Bay, Indian Creek

955

Ledder, D. A. (1986) Food habits of the West Indian manatee, *Trichechus manatus latirostris*, in south Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 114 pp.

TIME COVERAGE: 1977 - 1981

SUMMARY: Gut contents were collected from dead manatees in order to describe their diet. *Halodule* comprised the largest portion of the diet followed by the freshwater species *Hydrilla verticillata*.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Food consumption, Feeding behavior, South Florida

956

Lee, C., and J. L. Bada (1977) Dissolved amino acids in the equatorial Pacific, the Sargasso Sea, and Biscayne Bay. Limnol. Oceanogr., 22(3):502-510.

TIME COVERAGE: 1977

SUMMARY: Seawater was analyzed for dissolved free amino acids and dissolved combined amino acids by a ligand-exchange chromatography technique. A bacterial source was postulated for the origin of the amino acids. The Biscayne Bay samples were collected on a transect from Matheson Hammock to the Safety Valve. Levels of amino acids decreased with increasing distance from shore in Biscayne Bay.

KEY WORDS: Amino acids, Matheson Hammock Park, Water analysis, Biological production, Ecosystems, Food chains, Safety Valve

957

Lee, C. H., and R. T. S. Cheng (1974) On saltwater encroachment in coastal aquifers. Water Resources Res., 10(5):1039-1043.

TIME COVERAGE: 1974

SUMMARY: Seawater encroachment in the Biscayne aquifer was studied by means of a mathematical model. Results are in good qualitative agreement with field data.

KEY WORDS: Ground water, Saline intrusion, Aquifers, Biscayne Aquifer, Cutler Area

958

Lee, J. Y. (1997) Waste disposal of Virginia Key. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Waste disposal, Landfill, Virginia Key

959

Lee, S. S., S. Sengupta, N. L. Weinberg, and H. W. Hiser (1976) Calibration and verification of environmental models. In: Advances in Engineering Science. NASA, Langley Research Center, Hampton, VA.

TIME COVERAGE: 1976

SUMMARY: This paper describes calibration and verification procedures used in remote sensing studies of thermal pollution.

KEY WORDS: Thermal pollution, Calibration, Mathematical models, Remote sensing, Power plants, Hutchinson Island

960

Lee, S. S., and T. N. Veziroglu (1974) Remote sensing applied to thermal pollution. In: Symp. Proc., Remote Sensing Applied to Energy-related Problems. T. N. Veziroglu, (ed.). Miami, FL, 1974. Clean Energy Research Institute, University of Miami, Coral Gables, FL. S5:33-70.

TIME COVERAGE: 1974

SUMMARY: This paper reviews remote sensing of thermal plumes of power plants in Biscayne Bay and other sites.

KEY WORDS: Remote sensing, Thermal pollution, Power plants, Turkey Point, Cutler Ridge, Port St. Lucie Nuclear Power Plant

961

Lee, S. S., T. N. Veziroglu, S. Sengupta, and N. L. Weinberg (1975) Remote sensing applied to thermal pollution. In: Symp., Remote Sensing: Energy-related Studies. T. N. Veziroglu, (ed.). Miami, FL, 1974. Hemisphere Publishing Co., Washington, DC. 303-334.

TIME COVERAGE: 1975

SUMMARY: This paper reviews the use of remote sensing to study thermal pollution.

KEY WORDS: Remote sensing, Thermal pollution, Power plants, Turkey Point, Cutler Ridge, Port St. Lucie Nuclear Power Plant

962

Lee, T. N. (1974) Circulation. Progress report to Atomic Energy Commission, July 1, 1973-June 30, 1974 (AT-(40-1)-3801). University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 20 pp.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuarine dynamics, Water circulation, Tidal mixing, Wind-driven circulation, Mathematical models, Flushing, Lagoons, Card Sound

963

Lee, T. N. (1975) Circulation and exchange processes in southeast Florida's coastal lagoons. Technical report 75-3. Contract no. AEC AT(40-1)-3801-sub. 4. ORO-3801-9. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 71 pp.

TIME COVERAGE: 1975

SUMMARY: Field observations of circulation and exchange-inducing processes were used to develop a conceptual model of flushing in shallow coastal lagoons. Wind-induced circulation

coupled with tides in the inlets are the dominant exchange mechanism. Mean renewal times range from one to three months.

KEY WORDS: Water circulation, Wind-driven circulation, Tidal currents, Flushing, Lagoons, Density flow, Salinity profiles, Water exchange, Card Sound, Barnes Sound

964

Lee, T. N., and J. B. McGuire (1973) An analysis of marine waste disposal in southeast Florida's coastal waters. In: Proc., Sixth Internatl. Conf., Advances in Water Pollution Research. S. H. Jenkins, (ed.). Jerusalem, Israel, 1972. Pergamon Press, Oxford, UK. 865-880.

TIME COVERAGE: 1973

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Waste disposal, Outfalls, Coastal waters, Water pollution, Nearshore dynamics

965

Lee, T. N., and J. B. McGuire (1973) The use of ocean outfalls for marine waste disposal in southeast Florida's coastal waters. Sea Grant Coastal Zone Management Bull. 2. University of Miami Sea Grant Program, Miami, FL. 19 pp.

TIME COVERAGE: 1973

SUMMARY: This citation evaluates the ocean outfall method of sewage disposal as practiced in South Florida at the time of writing. The method was found to be unsafe and a detriment to the ecology and aesthetics of the area. The City of Miami ocean outfall at Virginia Key is described.

KEY WORDS: Waste disposal, Outfalls, Coastal waters, Water pollution, Nearshore dynamics, Virginia Key

966

Lee, T. N., and C. Rooth (1971) Circulation. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. II:1-46.

TIME COVERAGE: 1971

SUMMARY: The objectives of this study were to determine: the existing circulation patterns in Card Sound as a function of tide and wind; exchange characteristics of Card Sound with surrounding water; resident time and flushing rate; spatial and temporal patterns of water mass properties; and future alterations of flow patterns and water level with the planned discharge.

KEY WORDS: Water circulation, Tidal currents, Wind-driven circulation, Flushing, Water exchange, Thermal pollution, Card Sound, Turkey Point

967

Lee, T. N., and C. Rooth (1972) Circulation. In: An ecological study of south Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. II:1-36.

TIME COVERAGE: 1972

SUMMARY: Intensive investigations on a seasonal time scale coupled with semimonthly synoptic surveys of temperature and salinity were carried out in Card Sound.

KEY WORDS: Water circulation, Tidal currents, Wind-driven circulation, Flushing, Water exchange, Thermal pollution, Turkey Point, Card Sound

968

Lee, T. N., and C. Rooth (1976) Circulation and exchange processes in southeast Florida's coastal lagoons. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.).

Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Miami, FL.

TIME COVERAGE: 1970 - 1975

SUMMARY: A series of experiments and analytical studies geared toward identification of important circulation- and exchange-inducing processes, and understanding of their role in flushing shallow coastal lagoons over a period of five years began in 1970. Wind-induced circulation coupled with tides in the inlets was the dominant exchange mechanism in the shallow lagoons. Tidal exchange of interior waters is weak and concentrated in the direction of tidal flow which is aligned with the basin axis.

KEY WORDS: Water circulation, Water exchange, Flushing, Wind-driven circulation, Tidal currents, Salinity profiles, Density flow, Lagoons, Card Sound, Barnes Sound

969

Lee, T. N., and C. Rooth (1972) Exchange processes in shallow estuaries. In: Preprints, Fourth Ann. Offshore Technology Conf. Houston, TX, 1972. Offshore Technology Conference, Dallas, TX. Vol. 2: 777-788.

TIME COVERAGE: 1972

SUMMARY: A modular approach to the analysis of mixing and flow characteristics in shallow tidal estuaries is presented using Biscayne Bay and Card Sound as examples.

KEY WORDS: Water exchange, Water mixing, Estuarine dynamics, Shallow water, Tidal currents, Card Sound

970

Lee, T. N., and C. Rooth (1972) Exchange processes in shallow estuaries. Sea Grant special bull. 4. University of Miami Sea Grant Program, Miami, FL. 33 pp.

TIME COVERAGE: 1972

SUMMARY: A modular approach to the analysis of mixing and flow characteristics in shallow tidal estuaries is presented using Biscayne Bay as an example. The method depends on isolating relatively simple characteristic flow regimes in different parts of an estuary.

KEY WORDS: Water exchange, Tidal currents, Estuarine dynamics, Water mixing, Shallow water

971

Lee, T. N., and C. Rooth (1972) Exchange processes in shallow estuaries. Quart. J. Fla. Acad. Sci., 35(Suppl. 1):31.

TIME COVERAGE: 1972

SUMMARY: A modular approach to the analysis of mixing and flow characteristics in shallow tidal estuaries was presented using Biscayne Bay as an example.

KEY WORDS: Water exchange, Water mixing, Estuarine dynamics, Shallow water, Tidal currents

972

Lee, T. N., and C. Rooth (1973) Water movements in shallow coastal bays and estuaries. Sea Grant Coastal Zone Management Bull. 3. University of Miami Sea Grant Program, Miami, FL. 19 pp.

TIME COVERAGE: 1973

SUMMARY: Residence time of water in shallow bays was studied using Biscayne Bay and Card Sound as models. Shallow bays are poorly flushed by tidal mechanisms. Tidal residence time of interior waters was estimated at approximately one year. Wind-induced circulation was found to be capable of reducing the residence time by factors ranging from 10 to 100 depending upon the magnitude, direction and duration of the passage of cold fronts and accompanying winds.

KEY WORDS: Estuarine dynamics, Shallow water, Tidal currents, Wind-driven circulation, Water mixing, Waste disposal, Water pollution, Card Sound

973

Leitz, A. C. (1992) Altitude of the water table in the Biscayne Aquifer, Dade County, Florida, April 25-28, 1988. USGS open-file rep. 92-32. US Geological Survey, Tallahassee, FL. 2 map sheets.

TIME COVERAGE: 1988

SUMMARY: This report consists of two maps of the altitude of the water table in the aquifer.

KEY WORDS: Water table, Biscayne Aquifer

974

Lelkes, G. (1985 (pub. 1987)) Petrographical studies on recent tropical shallow-water carbonate deposits. II. Florida (Biscayne Bay, Key Largo and Marquesas Keys). M. All. Földtani Intézet évi jelentése (Ann. rep. Hungarian Geological Institute), -(-):309-342 (Hungarian).

TIME COVERAGE: 1985

SUMMARY: (English abstract) This paper reports the results of petrographic analyses of modern carbonate sediments from South Florida. At the inlet to Biscayne Bay in the vicinity of Soldier Key, Halilmeda-Mollusca-Foraminifera-corals-Corallinacea-bearing calcarenites of sizeable quartz sand content and muddy calcarenites are locally being deposited.

KEY WORDS: Lagoonal sedimentation, Carbonate sediment, Mud, X-ray diffraction analysis, Barrier reefs, Key Largo, Marquesas, Soldier Key, Rodriguez Key, Grecian Rock Reef

975

Lenderking, R. E. (1954) Some recent observations on the biology of *Littorina angulifera* Lam. of Biscayne and Virginia Keys, Florida. Bull. Mar. Sci. Gulf Caribb., 3(4):273-296.

TIME COVERAGE: 1952 - 1953

SUMMARY: Periwinkles showed a bilunar periodicity in spawning through ten months of the year. The reproductive processes of the animal are described.

KEY WORDS: Periwinkles, *Littorina angulifera*, Growth, Population structure, Key Biscayne, Virginia Key

976

Leonard, J. N. (1994) Ocean outfalls for wastewater discharges - meeting Clean Water Act 403C requirements. In: Proc., MTS 94: Challenges and Opportunities in the Marine Environment. 1994, Washington, DC. Marine Technology Society, Washington, DC. 115-120.

TIME COVERAGE: 1987 - 1990, 1990 - 1992

SUMMARY: Six ocean outfalls from Palm Beach to Miami were studied as part of the Southeast Florida Outfall Experiments I and II (SEFLOE). Effluent diffusion characteristics of the outfalls were studied in detail. The Miami Central ocean outfall extends 3.6 mi offshore from Virginia Key.

KEY WORDS: Outfalls, Waste water, Southeast Florida Outfall Experiments (SEFLOE), Clean Water Act

977

Lewis, A. G. (1958) The effects of light and temperature on the vertical distribution of some inshore copepods. M.Sc. thesis. University of Miami, Coral Gables, FL. 73 pp.

TIME COVERAGE: 1956 - 1957

SUMMARY: Plankton were exposed to controlled gradients of light and temperature and the vertical distribution of copepods determined.

KEY WORDS: Copepods, *Acartia spinata*, *Acartia bermudensis*, *Calanopia americana*, *Paracalanus parvus*, Vertical distribution, Temperature effects, Light effects, Plankton, Bear Cut

978

Lewis, G. (1957) The book of Florida fishing. Crown Publishers, New York, NY. 90 pp.

TIME COVERAGE: 1957

SUMMARY: This is a fishing guide to Florida.

KEY WORDS: Fishing, Fish, Florida, Guide

979

Lewis, J. B., H. B. Moore, and W. Babis (1952) The post-larval stages of the spiny lobster, *Panulirus argus*. Bull. Mar. Sci. Gulf Caribb., 2(1):324-337.

TIME COVERAGE: 1952

SUMMARY: Post-larval stages of the spiny lobster were described.

KEY WORDS: Spiny lobster, *Panulirus argus*, Juveniles

980

Lewis, M. B. (1973) Coastal zone water quality monitoring in the Biscayne Bay area. EPA Applied Technology Division. Contract 68-01-0160. Interstate Electronics Corp., Anaheim, CA. Various paging.

TIME COVERAGE: 1973

SUMMARY: This citation described water quality monitoring activities in Biscayne Bay.

KEY WORDS: Coastal zone, Water quality, Assessment

981

Lewis, R. R., R. G. Gilmore, D. W. Crewz, and W. E. Odum (1985) Mangrove habitat and fishery resources of Florida. In: Florida Aquatic Habitat and Fishery Resources. W. Seaman (ed.). Florida Chapter, American Fisheries Society, Kissimmee, FL. 543 pp.

TIME COVERAGE: 1985

SUMMARY: This citation reviews the mangrove habitat and fishery resources of Florida.

KEY WORDS: Mangrove swamps, Estuarine fisheries, Habitat selection, Brackishwater environment, Florida

982

Lidz, B. H., and E. A. Shinn (1991) Paleoshorelines, reefs, and a rising sea: south Florida, U.S.A. J. Coastal Res., 7(-):203-229.

TIME COVERAGE: 1991

SUMMARY: The porous limestone bedrock, thin sediment cover, and tectonic activity of the Florida Platform during the past 15 ka BP provide a suitable setting for the reconstruction of paleoshorelines and onshore projection of future shorelines in a rising-sea scenario. Projections of future shorelines showed that most of the land forming the Florida Keys would flood in a rise of 1 to 2 m and that a rise of 5 m would submerge all land. Offshore reefs would die and nearshore reefs would shift landward as the mainland shoreline migrated northward.

KEY WORDS: Paleoshorelines, Coral reefs, Sea level changes, Climatic changes, Reef tract, Florida Keys

983

Lietz, A. C. (1997) Determination of nutrient loads to Biscayne Bay, Dade County, Florida. In: Proc., U. S. Geological Survey Program on the South Florida Ecosystem. Ft. Lauderdale, FL, August 25-27, 1997. US Geological Survey open file report 97-385. US Geological Survey, Tallahassee, FL. 55.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Nutrients, Canals

984

Lietz, A. C. (1999) Methodology for estimating nutrient loads discharged from the east coast canals to Biscayne Bay, Miami-Dade County, Florida. USGS Water Resources Investigations Report 99-4094. US Geological Survey South Florida Ecosystem Program, Tallahassee, FL. 36 pp.

TIME COVERAGE: 1996 - 1997

SUMMARY: Nutrient loads discharged into Biscayne Bay from the east coast canals were estimated using 1996 and 1997 water years data. The maximum total phosphorus concentration of 0.31 mg/L was the only nutrient concentration to exceed EPA water-quality criteria. High concentrations of total phosphorus usually reflect contamination as a result of human activities. Five sites exceeded the fresh-water quality standard of 0.5 mg/L for ammonia concentration. Median total organic nitrogen concentrations were higher in urban and forested/wetland areas than in agricultural areas; median concentrations of nitrite, nitrate, and nitrite plus nitrate nitrogen were higher in agricultural areas than in urban and forested/wetland areas; and ammonia, total phosphorus, and orthophosphate concentrations were higher in urban areas than in agricultural and forested/wetland areas. These results coincide with expected differences in nutrient concentrations based on knowledge of point and nonpoint source influences and nutrient cycling.

KEY WORDS: Nutrients, Canals, Water analysis, Miami-Dade County

985

Lietz, A. C. (1999) Nutrient analysis and water-quality trends at selected sites in southern Florida. Proc., South Florida Restoration Science Forum. S. Gerould, and A. Higer, (eds.). Boca Raton, FL, May 17-19,1999. Open-file report 99-181. US Geological Survey Program on the South Florida Ecosystem, Tallahassee, FL. 64-65.

TIME COVERAGE: 1996 - 1997

SUMMARY: The USGS conducted a study designed to understand nutrient concentrations and distribution within the east coast canal system, compare sampling methods to determine which methods adequately represent stream cross-section water quality, and develop models for the estimation of nutrient loads from the canals to Biscayne Bay. Major findings are discussed.

KEY WORDS: Water quality, Miami Canal, Tamiami Canal, Everglades, Nutrients

986

Lietz, A. C. (1996) South Florida Ecosystem Program: methodology for the determination of nutrient loads from east coast canals to Biscayne Bay. USGS fact sheet FS-129-96. US Geological Survey, Reston, VA. 2 pp.

TIME COVERAGE: 1996

SUMMARY: This fact sheet describes how the nutrient loads from the canals into Biscayne Bay are determined.

KEY WORDS: Nutrients (Mineral), Canals, Methodology

987

Liggett, M. L. (1997) Impacts of Virginia Key campground alternative plans on manatees and sea turtles. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Environmental impact, Land use, Manatees, *Trichechus manatus*, Loggerhead turtle, *Caretta caretta*, Virginia Key

988

Light, S. S., and J. W. Dineen (1994) Water control in the Everglades: a historical perspective. In: Everglades: the Ecosystem and its Restoration. S. M. Davis, and J. C. Ogden (eds.). St. Lucie Press, Delray Beach, FL. 826 pp. 47-84.

TIME COVERAGE: 1994

SUMMARY: This citation is a detailed description of the water control efforts in the Everglades.

KEY WORDS: Water resources, Water supply, Water conservation, Everglades

989

Lillycrop, L. S., and G. L. Howell (1996) The impacts of aragonite use in the nourishment of Dade County and other southeast Florida shore protection projects. In: Proc., 9th Natl. Conf. on Beach Preservation Technology, The Future of Beach Nourishment. L. S. Tait, (comp.). St. Petersburg, FL, 1996. Florida Shore & Beach Preservation Association, Tallahassee, FL. 60-74.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Aragonite, Beach nourishment, Turtles, Benthos, Dade County

990

Limouzy, C. B. (1987) Effect of incubation temperature on efficiency of yolk utilization of snook (*Centropomus undecimalis*) larvae. M.Sc. thesis. University of Miami, Coral Gables, FL. 58 pp.

TIME COVERAGE: 1985

SUMMARY: The success of hatchery programs to replenish snook populations by restocking of juveniles may be improved if larger and more energetic larvae were grown. Rearing temperature can have an important effect on larval fish development so the effects of temperature on the rates of development, growth and yolk conversion efficiency of larval snook were investigated. Some specimens were collected in Biscayne Bay.

KEY WORDS: Snook, *Centropomus undecimalis*, Larval development, Incubation, Temperature effects

991

Lin, G., and L. da S. L. Sternberg (1994) Utilization of surface water by red mangrove (*Rhizophora mangle* L.): an isotopic study. Bull. Mar. Sci., 54(1):94-102.

TIME COVERAGE: 1991

SUMMARY: Oxygen isotope ratios of possible water sources in different soil layers and stem water from red mangroves were determined whether mangroves utilize mostly surface water or not. The dependence of mangroves on surface water as their sole water source has significant implications for plant water relations and may explain growth form differentiations in some mangrove species in southern Florida.

KEY WORDS: Surface water, Red mangrove, *Rhizophora mangle*, Biscayne National Park

992

Lin, L. H., and H. Wang (1988) Nearshore wave information along the Florida coast. In: Proc., Beach Preservation Technology 88: Problems and Advancements in Beach Nourishment. L. S. Tait, (comp.). Florida Shore & Beach Preservation Association, Tallahassee, FL. 191-200.

TIME COVERAGE: 1988

SUMMARY: This paper summarizes the available nearshore wave information along the Florida Coast. Emphasis is placed upon measured wave data.

KEY WORDS: Nearshore currents, Wave height, Wave period, Wave direction, Florida

993

Lin, P. C. P., R. H. Sasso, and C. A. Spell (1997) Regional beach restoration plan for three consecutive barrier islands in south Florida. In: Proc., 10th Natl. Conf. on Beach Preservation

Technology, New Insights into Beach Preservation. L. S. Tait, (comp.). St. Petersburg, FL, 1997. Florida Shore & Beach Preservation Association, Tallahassee, FL. 290-303.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach nourishment, Barrier islands, Fisher Island, Virginia Key, Key Biscayne, Norris Cut, Bear Cut

994

Lindall, W. N. (1973) Alterations of estuaries of South Florida: a threat to its fish resources. Marine Fisheries Review, 35(10):26-33.

TIME COVERAGE: 1966 - 1970

SUMMARY: This paper reviews the fisheries of South Florida and how these resources are threatened by man's activities. Some of the major alterations are reduction of freshwater runoff, domestic and industrial pollution, pesticide contamination, thermal addition, and dredging and filling.

KEY WORDS: Estuarine organisms, Fisheries, Shellfish fisheries, Industrial wastes, Domestic wastes, Water pollution, Thermal pollution

995

Lindberg, W. J., and M. J. Marshall (1984) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - stone crab. FWS/OBS-82/11.21. US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 17 pp.

TIME COVERAGE: 1984

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of stone crab are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Stone crab, *Menippe mercenaria*, South Florida

996

Lindeman, K. C. (1988) Coastal construction, larval settlement and early juvenile habitat use in grunts, snappers and other coastal fishes of southeast Florida. Bull. Mar. Sci., 44(2):1068.

TIME COVERAGE: 1988

SUMMARY: This paper discusses the larval settlement on and juvenile habitat use of new coastal construction. Consistent differences in species and life stage abundances occur among several common habitat types. Larval and juvenile porkfish and sergeant majors abundantly colonize vertical and oblique surfaces associated with pile and rip-rap habitats and can remain associated with these structures through reproductive maturity. Usage of construction-derived habitats by gray and schoolmaster snappers and other species appear to primarily occur in early juvenile and subadult stages when rip-rap and pile habitats are used as resting and foraging sites.

KEY WORDS: Artificial habitats, Coastal structures, Larval settlement, Juveniles, Grunts, Snappers, Marine fish, Attracting techniques, Habitat selection

997

Lindeman, K. C. (1997) Comparative management of beach systems of Florida and the Antilles: applications using ecological assessment and decision support processes. In: Managing beach resources in the smaller Caribbean islands: workshop papers. G. Cambers, (ed.). Coastal Region and Small Island Papers. Unesco, Paris, France. 134-64.

SUMMARY: 1997

KEY WORDS: Sediment movement, Beach nourishment, Aggregates, Ecosystem management Decision making, Southeast Florida, Antilles

998

Lindeman, K. C. (1997) Development of grunts and snappers of southeast Florida: cross-shelf distributions and effects of beach management alternatives. PHD. dissertation. University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: The economically important fish families Haemulidae and Lutjanidae (grunts and snappers) are valuable model systems for the comparative examination of development and habitat use. Over 20 species were used to assess: (a) variations in early life history attributes within and among basal percoid families, and (b) effects of ten beach management alternatives in southeast Florida. For the Biscayne Bay region, combining habitats and cross-shelf strata identified over 150 available habitats.

KEY WORDS: Beaches, Coastal zone management, Life history, Fishery management, Dredging, Environmental impact, Haemulidae, Lutjanidae, Grunts, Sea perches

999

Lindeman, K. C. (1989) Shoreline habitat use, cross-shelf distributions and nursery area evaluation of newly-settled coastal fishes of southeast Florida. In: Coastal Zone '89: Proc., 6th Symp. on Coastal and Ocean Management. O. T. Magoon, H. Converse, D. Miner, L. T. Tobin, and D. Clark, (eds.). Charleston, SC, 1989. American Society of Civil Engineers, New York, NY. 996.

TIME COVERAGE: 1989

SUMMARY: To comparatively evaluate complete spatial boundaries of larval settlement and early juvenile habitat use among more than 15 species of grunts and snappers, multi-scale distribution and abundance patterns were examined at Biscayne Bay and other locations. Scales examined included intertidal and subtidal habitats characteristic of cross-shelf physiographic gradients of barrier islands/key, mainland tidal creek and inshore reef environment.

KEY WORDS: Grunts, Snappers, Nursery grounds, Habitat, Larvae, Juveniles, Geographical distribution, Southeast Florida

1000

Lindeman, K. C., G. A. Diaz, J. E. Serafy, and J. S. Ault (1998) A spatial framework for assessing cross-shelf habitat use among newly settled grunts and snappers. Proc., 50th annual Gulf and Caribbean Fisheries Institute. R. L. Creswell, (ed.). Merida, Mexico, 1997. Gulf and Caribbean Fisheries Institute, Fort Pierce, FL. 385-416.

TIME COVERAGE: 1998

SUMMARY: The differential use of nursery habitats by grunts and snappers across a complex coastal seascape was examined using a cross-shelf habitat framework. The framework defined structural bottom types, cross-shelf physical strata, and associated spatial features. The hypothesis that utilization of cross-shelf habitats by grunts and snappers was uniform was not supported by 30 years of literature or museum materials, and new field surveys of the Biscayne Bay area. In terms of bottom types, newly settled stages of *Lutjanus griseus* and *Anisotremus surinamensis* were not recorded from hard structures and seagrasses, respectively. Distributions of newly settled *Lutjanus synagris* were broader; they occurred in both grassbeds and on hard structures. Structurally-identical habitats were often used differently based on their cross-shelf positioning. Habitat utilization patterns ranged from opportunistic to highly specialized.

KEY WORDS: Habitat, Nursery grounds, Grunts, Haemulidae, Snappers, Lutjanidae, *Lutjanus synagris*, *Anisotremus surinamensis*, *Lutjanus griseus*

1001

Lirman, D., and P. Fong (1997) Susceptibility of coral communities to storm intensity, duration and frequency. In: Proc., 8th Internatl. Coral Reef Symp. H. A. Lessions, and I. G. Macintyre, (eds.). Panama, 1996. Smithsonian Tropical Research Institute, Balboa, Panama. 561-566.

TIME COVERAGE: 1992, 1993, 1994

SUMMARY: The reefs of the northern portion of the Florida Reef Tract experienced three major storms of different intensities and duration during a period of 27 months. Hurricane Andrew caused damage almost exclusively to branching coral on Elkhorn Reef. The Storm of the Century (1993) remained over the area for 18 hrs and greatly reduced the cover of *Porites*, and compounded the effects of Andrew. Tropical storm Gordon (1994) further reduced the cover of *Porites* and fire corals in Elkhorn Reef. Coral rubble created by Gordon buried many of the elkhorn fragments that were already showing signs of regrowth.

KEY WORDS: Coral, Storms, Elkhorn Reef, Ball Buoy Reef, Biscayne National Park, Hurricane Andrew, Tropical Storm Gordon

1002

Little, E. L. (1978) Atlas of United States trees. Volume 5: Florida. US Department of Agriculture miscellaneous publication 1361. US Government Printing Office, Washington, DC.

SUMMARY: Richter Government Publications

KEY WORDS: Trees, Geographical distribution, Botanical resources, Florida

1003

Litz, J., J. Contillo, J. Tobias, and B. Mase (1996) Low-level monitoring of bottlenose dolphins (*Tursiops truncatus*) in Biscayne Bay, Florida. Unpublished report. NOAA/NMFS/SEFSC, Miami, FL.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Population dynamics, Photography, Monitoring, Dolphins, *Tursiops truncatus*

1004

Livingston, R. J. (1970) Circadian rhythms in the respiration of eight species of cardinalfishes (Pisces: Apogonidae): comparative analysis and adaptive significance. Ph.D. dissertation. University of Miami, Coral Gables, FL. 139 pp.

TIME COVERAGE: 1970

SUMMARY: Volumetric respirometers were constructed to determine respiration rates under controlled conditions of light, temperature, salinity and oxygen tension. In addition to the laboratory studies, field studies were made at Alligator Reef, Long Reef, and Triumph Reef. Regular collections were made in Biscayne Bay and reefs in other areas.

KEY WORDS: Circadian rhythms, Respiration, Cardinalfish, *Astrapogon puncticulatus*, *Astrapogon alutus*, *Astrapogon stellatus*, *Phaeoptyx conklini*, *Apogon townsendi*, *Apogon lachneri*, *Apogon maculatus*, *Apogon pseudomaculatus*, *Apogon binotatus*, Alligator Reef, Long Reef, Triumph Reef

1005

Livingston, R. J. (1990) Inshore marine habitats. In: Ecosystems of Florida. University of Central Florida, Orlando, FL.

TIME COVERAGE: 1990

SUMMARY: This citation describes the inshore marine habitats of Florida, diverse, highly productive series of biological systems.

KEY WORDS: Florida Bay, Biscayne Bay, Ecosystems, Florida

1006

Livs Associates Inc. (1994) Virginia Key site assessment. Report. EAS Engineering, Inc., Coral Gables, FL. Various paging.

TIME COVERAGE: 1963, 1969, 1980, 1990, 1994

SUMMARY: This report is the assessment of the proposed site of a movie studio in Virginia Key.

KEY WORDS: Site surveys, Virginia Key

1007

Loeb, G. I., and N. Smith (1981) Slime analysis of painted steel panels immersed in Biscayne Bay, Miami Beach, Florida. NRL memorandum report 4411. Reproduced by NTIS (ADA 097 229). Naval Research Laboratory, Washington, DC. 30 pp.

TIME COVERAGE: 1978 - 1980

SUMMARY: Light microscopy was used to assess slime film formation on panels coated with Navy and commercial coatings subjected to static and dynamic exposure at Biscayne Bay.

KEY WORDS: Antifouling substances, Biodegradation, Light microscopy, Materials testing, Steel, Miami Beach

1008

Loftus, W. F., and J. A. Kushlan (1984) Population fluctuations of the Schaus swallowtail (Lepidoptera: Papilionidae) on the islands of Biscayne Bay, Florida, with comments on the Bahamian swallowtail. Florida Entomologist, 67(2):277-287.

TIME COVERAGE: 1979 - 1982

SUMMARY: Censuses of the Swallowtail butterfly were conducted in the islands of Biscayne Bay. Census populations varied by year and seemed to be related to the severity of the winter dry season.

KEY WORDS: Schaus swallowtail, *Heraclides aristodemus ponceanus*, Bahamian swallowtail, *Heraclides andraemon bonhotei*, Butterflies, Population number, Hammocks, Elliott Key, Old Rhodes Key, Biscayne National Park

1009

Loftus, W. F., and J. A. Kushlan (1982) The status of the Schaus swallowtail and the Bahama swallowtail butterflies in Biscayne National Park. Report M-649. South Florida Research Center, Homestead, FL. 18 pp.

TIME COVERAGE: 1979 - 1981

SUMMARY: Surveys of swallowtail butterflies were conducted in several keys of Biscayne National Park to determine number of adults present, to delineate emergence season and distribution, and to identify factors which affect their status.

KEY WORDS: Schaus swallowtail, *Heraclides aristodemus ponceanus*, Bahamian swallowtail, *Heraclides andraemon bonhotei*, Butterflies, Population number, Hammocks, Elliott Key, Old Rhodes Key, Totten Key, Biscayne National Park, Butterflies

1010

Long, E. R., A. Robertson, D. A. Wolfe, J. Hameedi, and G. M. Sloane (1996) Estimates of the spatial extent of sediment toxicity in major U.S. estuaries. Environ. Sci. Technol., 30(12):3585-3592.

TIME COVERAGE: 1996

SUMMARY: The results of biotoxicity studies conducted in several estuaries in the US are compared.

KEY WORDS: Sediment pollution, Estuaries

1011

Long, E. R., G. M. Sloane, G. I. Scott, B. Thompson, R. S. Carr, J. Biedenbach, T. L. Wade, B. J. Presley, K. J. Scott, C. Mueller, G. Brecken-Fols, B. Albrecht, J. W. Anderson, and G. T. Chandler (1999) Magnitude and extent of chemical contamination and toxicity in sediments of Biscayne Bay and vicinity. NOAA Technical Memorandum NOS NCCOS CCMA 141. NOAA/NOS/NCCOS, Silver Spring, /MD. 174 pp.

TIME COVERAGE: 1999

SUMMARY: This report discusses the results of a biotoxicity survey of Biscayne Bay.

KEY WORDS: Sediment pollution, Chemical pollutants, Trace metals, Organic compounds

1012

Longley, W. H., and S. F. Hildebrand (1941) Systematic catalogue of the fishes of Tortugas, Florida, with observations on color, habits, and local distribution. Papers from the Tortugas Laboratory, 34(-):1-331.

TIME COVERAGE: 1941

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Fish, Dry Tortugas, Taxonomy, Geographical distribution

1013

Lönnberg, E. (1894) List of fishes observed and collected in south Florida. Ofversigt af Kongl. Vetenskaps-Akademiens forhandlingar (Stockholm), -(3):109-131.

TIME COVERAGE: 1892 - 1893

SUMMARY: This paper contains a list of fishes collected in Florida.

KEY WORDS: Fish, South Florida, Florida Keys, Species list

1014

Loope, L., M. Duever, A. Herndon, J. Snyder, and D. Jansen (1994) Hurricane impact on uplands and freshwater swamp forest. BioScience, 44(4):238-246.

TIME COVERAGE: 1992

SUMMARY: This paper describes the effects of Hurricane Andrew on upland and freshwater forests. Large trees and epiphytes sustained the greatest damage.

KEY WORDS: Hurricanes, Vegetation, Swamps, Hurricane Andrew, Elliott Key

1015

Lorenz, J. J., J. C. Ogden, R. D. Bjork, and G. V. N. Powell (1999) Nesting patterns of roseate spoonbills in Florida Bay 1950 - 1999: implications of landscape scale anthropogenic impacts. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 55-56.

TIME COVERAGE: 1950 - 1999

SUMMARY: By 1935, the roseate spoonbill population in Florida Bay decreased to 15 breeding pairs located in Bottle Key. By the 1950s, the population began to recover. Fifty years of nesting data were analyzed in conjunction with foraging information in order to determine suitability of roseate spoonbills as an indicator species for Florida Bay. The primary foraging grounds for the northeastern Florida Bay roseate spoonbill population were the wetlands north of Florida Bay and east of southern Biscayne Bay from Terrapin Point to Turkey Point.

KEY WORDS: Roseate spoonbill, *Ajaja ajaja*, Florida Bay, Terrapin Point, Turkey Point, Population, Indicator species, Foraging

1016

Low, R. A. (1973) Shoreline grassbed fishes in Biscayne Bay, Florida, with notes on the availability of clupeoid fishes. M.Sc. thesis. University of Miami, Coral Gables, FL. 145 pp.

TIME COVERAGE: 1967 - 1969

SUMMARY: This survey of seagrass bed fishes reported at least 175 species representing 66 families. Large fishes such as sharks were not reported. The general ecology of the fish population in the seagrass beds is discussed.

KEY WORDS: Coastal fisheries, Clupeoid fisheries, Zoobenthos, Phytobenthos, Seagrass, Cape Florida, Bear Cut, Seaquarium flats, *Sardinella anchovia*, *Opisthonema oglinum*, *Harengula humeralis*, *Harengula pensacolae*, Species list

1017

Luce, G., and B. F. Greer (1955) Summary of Florida commercial marine fish landings for 1954. Mimeographed reports 55-25. Marine Laboratory, University of Miami, Coral Gables, FL. 44 pp.

TIME COVERAGE: 1954

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Florida

1018

Lummus, J. N. (1944) The Miracle of Miami Beach. Miami Post, Miami, FL. 142 pp.

TIME COVERAGE: 1870 - 1944

SUMMARY: This book is a history of the development of Miami Beach. Most of the illustrations are photographs taken in 1913 and 1914.

KEY WORDS: History, Miami Beach

1019

Lutz, J. (1977) Water quality characteristics of several southeast Florida canals. Tech. publication 77-4. South Florida Water Management District, Resource Planning Department, West Palm Beach. Various paging.

TIME COVERAGE: 1974 - 1975

SUMMARY: Water quality data was used to compute nutrient loads from the basins of several canals in southeast Florida.

KEY WORDS: Water quality, Canals, Hillsboro Canal, North New River Canal, Tamiami Canal, Snapper Creek Canal, Western C-51 Canal, Water management, Flood control, Water drainage

1020

Lutz, P. L., and C. B. Austin (1983) Land crabs: a new resource potential. Proc., 35th annual Gulf and Caribbean Fisheries Institute, 1982, 35(-):6-16.

TIME COVERAGE: 1983

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land crab, *Cardisoma guanhumii*, Crab culture, Food resources, Bahamas

1021

Lynn, W. R., and W. T. Yang (1960) The ecological effects of sewage in Biscayne Bay. Oxygen demand and organic carbon determinations. Bull. Mar. Sci. Gulf Caribb., 10(4):491-509.

TIME COVERAGE: 1960

SUMMARY: An evaluation of manometric techniques in measuring biochemical oxygen demand in bay-bottom sediments indicated limitations of the method. A wet-oxidation method for the determination of organic carbon was proposed and compared with other methods.

KEY WORDS: Oxygen demand, Organic carbon, Sediment analysis, Sewage, Water pollution

1022

Maass, H. (1992) Nature embraces artificial islands. The Miami Herald, Miami, FL. June 4. Neighbors. 16SE.

TIME COVERAGE: 1992

SUMMARY: Description of restoration efforts of the islands in northern Biscayne Bay which include removal of non-native plants such as Australian pines and planting of native species, such as mangroves, sea oats and gumbo limbo, that stabilize the shoreline and reduce runoff of fine sedimentary material. The islands suffered severe damage during Hurricane Andrew.

KEY WORDS: Elliott Key, Restoration, Artificial islands, Hurricane Andrew, Sands Key, Adams Key, Boca Chita Key, Biscayne National Park

1023

MacDonald, D. D. (1994) Approach to the assessment of sediment quality in Florida coastal waters. Report in two volumes. MacDonald Environmental Sciences Ltd., Ladysmith, B. C., Canada.

TIME COVERAGE: 1994

SUMMARY: Florida sediment chemical measurements indicated that contaminants were present in elevated levels in a number of coastal areas. However, this information alone is not sufficient to indicate potential biological harm associated with chemical levels. A cost-effective approach for screening chemical levels was needed to estimate potential biological effects. This report was prepared to provide the state of Florida with guidance on the development of effects-based sediment quality assessment guidelines.

KEY WORDS: Sediment analysis, Pollution monitoring, Coastal waters, Florida, Pesticides, PCBs, PAHs, Phthalate esters, Dioxins, Furans, As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, TBT, Zn

1024

MacDonald, D. D. (1993) Development of an approach to the assessment of sediment quality in Florida coastal waters. Report prepared for the Florida Department of Environmental Regulation. MacDonald Environmental Sciences Ltd., British Columbia, Canada. Two volumes.

TIME COVERAGE: 1993

SUMMARY: This report was prepared to provide the Florida Department of Environmental Regulation (FDER) with guidance on the development of effects based sediment quality assessment guidelines (SQAGs) for Florida coastal waters. As such, a variety of approaches to the derivation of numerical SQAGs were reviewed and evaluated in light of Florida's unique requirements for sediment quality assessment guidelines. This approach was applied to Biscayne Bay.

KEY WORDS: Sediment analysis, Pollution monitoring, Coastal waters

1025

Macfie, D. (1977) Richmond Naval Air Station. Tequesta, 37(-):38-50.

TIME COVERAGE: 1942-1945

SUMMARY: This article describes the Richmond Naval Air Station which housed lighter than air ships.

KEY WORDS: Richmond Naval Air Station, Airships, Hurricane of 1945

1026

Macia, S. (2000) The effects of sea urchin grazing and drift algal blooms on a subtropical seagrass bed community. J. Experimental Marine Biol. Ecol., 246(1):53-67.

TIME COVERAGE: 2000

SUMMARY: Caging experiments were conducted to investigate direct herbivory and blooms of drift algae on *Thalassia* beds. Naturally occurring levels of grazing sea urchins do not appear to affect the *Thalassia* population. Experimentally increased sea urchin population in winter seagrass shoot density and biomass decreased. In winter, drift algal blooms form large mats that cover the seagrass canopy. Under normal grazing conditions the algal blooms do not have significant negative effects on the seagrass. With increased grazing pressure, there is a synergistic effect.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Algal blooms, Laurencia, Dictyota, Seagrass, *Thalassia testudinum*, Biological drift, West Point, Key Biscayne

1027

Macia, S. M., and E. Irlandi (1996) Salinity fluctuations and the survival of the sea urchin *Lytechinus variegatus* and the gastropod *Astraea tecta*. Proc., 24th Benthic Ecology Mtg. Columbia, SC, March 1996. University of South Carolina, Columbia, SC. 58.

TIME COVERAGE: 1996

SUMMARY: This abstract briefly discusses the effects of drastic changes in salinity caused by freshwater discharges from canals on sea urchins and the gastropod *Astraea tecta*. Results suggested that the stress from sudden severe drops in salinity may limit the distribution of some species.

KEY WORDS: Salinity, Sea urchin, *Lytechinus variegatus*, Gastropods, *Astraea tecta*

1028

Macintyre, I. G., and R. P. Reid (1995) Crystal alteration in a living calcareous alga (*Halimeda*): implications for studies in skeletal diagenesis. *J. Sed. Res.*, A65(1):143-153.

TIME COVERAGE: 1995

SUMMARY: Reorganization of aragonite crystals occurs within living individuals of *Halimeda*. Detailed SEM observations of live *Halimeda* show that calcification occurred in two basic stages: uniform-sized, small aragonite needles are precipitated in inter-urtrible spaces, and the needles are altered to anhedral equant aragonite.

KEY WORDS: Algae, *Halimeda incrassata*, Calcification, Calcium carbonates, Matheson Hammock

1029

Mackay, K. (1998) Airport imperils Florida parks: NPCA demands supplemental evaluation of expansion project. *National Parks*, 72(1-2):13-14.

TIME COVERAGE: 1998

SUMMARY: This paper describes the proposed conversion of the Homestead Air Force Base airport to accommodate international commercial air traffic.

KEY WORDS: Homestead Air Force Base, Everglades National Park, Noise abatement

1030

Madsen, M. N. (1981) Tidal flushing of a marina in Biscayne Bay. M.Eng. thesis. University of Florida, Gainesville, FL. 596 pp.

TIME COVERAGE: 1981

SUMMARY: A three-dimensional numerical model was developed to investigate the flushing capability of three canal/marina systems.

KEY WORDS: Flushing, Tidal inlets, Marinas, Canals, Homestead Bayfront Park, Chapman Field Park, Black Point Park

1031

Mago Leccia, F. (1957) The comparative osteology of the scombroid fishes of the genus *Scomberomorus* from Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 75 pp.

TIME COVERAGE: 1957

SUMMARY: This work is a study of the osteology of mackerel. Most specimens were obtained from local anglers.

KEY WORDS: Spanish mackerel, *Scomberomorus maculatus*, Cero, *Scomberomorus regalis*, Kingfish, *Scomberomorus cavalla*, Osteology, Florida, Bahamas

1032

Mahadevan, S., J. Sprinkel, D. Heatwole, and D. H. Wooding (1984) A review and annotated bibliography of benthic studies in the coastal and estuarine areas of Florida, with a selected compilation of worldwide benthic methodological references and southeastern United States benthic taxonomic references. Florida Sea Grant report SGR-66. Florida Sea Grant College Program, Gainesville, FL. 576 pp.

TIME COVERAGE: 1984

SUMMARY: This is an annotated bibliography of benthic studies in Florida. The information is presented by counties.

KEY WORDS: Benthos, Estuarine organisms, Aquatic organisms, Methodology, Bibliographies, Florida

1033

Main, M. B., and W. G. Nelson (1988) Sedimentary characteristics of sabellariid worm reefs (*Phragmatopoma lapidosa* Kinberg). Est. Coastal Shelf Sci., 26(1):105-109.

TIME COVERAGE: 1984

SUMMARY: Sedimentary characteristics of worm reefs constructed by the sabellariid polychaete were examined to determine whether sediments of specific size and/or composition were selected for tube construction. Worm reefs and unconsolidated beach sediments were collected from six locations along the southeastern shore of Florida.

KEY WORDS: Tube dwellers, *Phragmatopoma lapidosa*, Sabellariids, Reef formation, Sediment texture, Key Biscayne

1034

Makemson, J. C. (1991) Adherence of *Vibrio harveyi* to cellulose, cellulose-NO<sub>3</sub>, nylon, and glass fiber filters. In: Abstract, 91st general mtg. of the American Society for Microbiology. Dallas, TX, 1991. American Society for Microbiology, Washington, DC. 249.

TIME COVERAGE: 1991

SUMMARY: *Vibrio harveyi* is the principal planktonic luminous bacterium in Biscayne Bay. The adherence of these bacteria to various types of filters is briefly discussed.

KEY WORDS: Luminous organisms, *Vibrio harveyi*, Adhesion, Filters, Bahrain

1035

Mallery, C. H., and H. J. Teas (1984) The mineral ion relations of mangroves. I. Root cell compartments in a salt excluder and a salt secreter species at low salinities. Plant & Cell Physiology, 27(-):1123-1131.

TIME COVERAGE: 1984

SUMMARY: Efflux kinetics of red and black mangroves were documented. Estimates of the percent isotope distributed throughout the whole plant, the uptake rates, the amounts calculated to be present in the root cell compartments and the rate of constants and half-times of efflux were made.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Black mangrove, *Avicennia germinans*, Salinity, Roots

1036

Man, E. H., and A. Thorhaug (1977) Development of rehabilitation techniques to promote recreational and commercial uses of deteriorated estuaries. In: Atlantic Offshore Users Workshop. Newark, DE, 1977. DEL-SG 11-77. University of Delaware Sea Grant Program, Newark, DE. 82-83.

TIME COVERAGE: 1977

SUMMARY: This paper discusses rehabilitation techniques that could be applied to northern Biscayne Bay.

KEY WORDS: Water reclamation, Recreational waters, Urbanization, Environmental protection

1037

Manker, J. P. (1975) Distribution and concentration of mercury, lead, cobalt, zinc, and chromium in suspended particulates and bottom sediments - upper Florida Keys, Florida Bay, and Biscayne Bay. Ph.D. dissertation. Rice University, Houston, TX. 114 pp.

TIME COVERAGE: 1974

SUMMARY: Sediment and suspended particulate samples were collected in southern Biscayne Bay, Florida Bay and the Florida Keys and the concentrations of Pb, Hg, Cr, Co and Zn determined. Highest metal concentrations were found in the 4 μ fraction of sediments and in suspended particulates. Low levels of trace metals were found in Biscayne Bay which is mainly

a sand-size quartz environment. In general, toxic metal concentrations in the study area were correlated with areas of dense population with associated high automobile and boat traffic.

KEY WORDS: Suspended particulate matter, Sediment analysis, Hg, Pb, Co, Zn, Cr, Toxicity, Pollution, Florida Keys, Florida Bay

1038

Manker, J. P. (1976) Toxic metal concentration and distribution in suspended particulates and bottom sediments of the Upper Florida Keys area. Abstracts with programs (Geological Society of America), 8(-):224.

TIME COVERAGE: Abstract

SUMMARY: Concentrations of Hg, Pb, Co, Zn, and Cr were determined in bottom sediments, the 4- $\mu$ m fraction of bottom sediments, and suspended particulates from the Florida Keys and Biscayne Bay. Living coral specimens (*Siderastrea sidera*) collected from outer reefs in the study area were subjected to chemical analysis. Highest concentrations of toxic metals were found in the 4- $\mu$ m fraction and suspended particulates. The 4- $\mu$ m and simultaneously collected suspended particulates were similar in heavy metal concentration and particle assemblage/morphology, indicating the possible existence of equilibrium conditions (physical and chemical) between fractions. Because toxic metals were more concentrated in the 4- $\mu$ m fraction as compared to bulk samples, a great potential exists during high winds for dispersal of this mobile fraction to areas of low concentration. High toxic metal concentrations could be correlated with areas of great human activity. Corals from reefs adjacent to densely populated areas show higher concentrations of Hg, Co, and Zn when compared to corals from reefs adjacent to sparsely populated areas. Reefs which display highest concentrations of these metals have undergone serious deterioration.

KEY WORDS: Suspended particulate matter, Sediment analysis, Hg, Pb, Co, Zn, Cr, Coral reefs, Pollution, Toxicity

1039

Manning, R. B. (1959) A checklist of the stomatopod crustaceans of the Florida - Gulf of Mexico area. Quart. J. Fla. Acad. Sci., 22(1):14-24.

TIME COVERAGE: 1959

SUMMARY: This paper describes the stomatopod crustaceans of Florida.

KEY WORDS: Stomatopods, Species list, Florida, Gulf of Mexico

1040

Manning, R. B. (1963) A monograph of the stomatopod crustaceans of the western Atlantic. Ph.D. dissertation. University of Miami, Coral Gables, FL. 389 pp.

TIME COVERAGE: 1963

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Stomatopods, Taxonomy, Western Atlantic

1041

Manning, R. B. (1961) Observations on *Microprosthema semilaeve* (Von Martens) (Decapoda, Stenopodidae) from Florida. Crustaceana, 2(1):81-82.

TIME COVERAGE: 1961

SUMMARY: This citation is a description of a shrimp based on a specimen collected in the Florida Keys. Specimens of this species were also collected in Biscayne Bay and the Dry Tortugas.

KEY WORDS: Shrimp, *Microprosthema semilaeve*, Long Reef, Florida Keys, Dry Tortugas

1042

Manning, R. B. (1959) A review of the genus *Squilla* (Crustacea, Stomatopoda) in the western Atlantic. M.Sc. thesis. University of Miami, Coral Gables, FL. 160 pp.

TIME COVERAGE: 1959

SUMMARY: The taxonomy of the stomatopod genus *Squilla* was reviewed. Some specimens were collected in seagrass beds in Biscayne Bay.

KEY WORDS: Stomatopods, *Squilla*, Taxonomy

1043

Manning, R. B. (1969) Stomatopod crustacea of the western Atlantic. Studies in tropical oceanography 8. University of Miami Press, Coral Gables, FL. 380 pp.

TIME COVERAGE: 1969

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Stomatopods, Taxonomy, Western Atlantic

1044

Manning, R. B., and H. E. Kumpf (1959) Preliminary investigation of the fecal pellets of certain invertebrates of the south Florida area. Bull. Mar. Sci. Gulf Caribb., 9(3):291-309.

TIME COVERAGE: 1959

SUMMARY: Representative invertebrates from the South Florida area were collected and their fecal pellets studied.

KEY WORDS: Fecal pellets, Marine mollusks, Gastropods, Florida Keys, Marco Island

1045

Manning, R. B., and A. J. Provenzano (1961) Occurrence of *Ucides cordatus* (Linnaeus, 1763) (Decapoda) in the United States. Crustaceana, 2(1):158-159.

TIME COVERAGE: 1960

SUMMARY: This short citation describes specimens of this large land crab collected in Biscayne Bay.

KEY WORDS: Land crab, *Ucides cordatus*, Virginia Key

1046

Marine Mammal Commission (1988) Preliminary assessment of habitat protection needs for West Indian manatees on the east coast of Florida and Georgia. Report. National Technical Information Service, Springfield, VA. 107 pp.

TIME COVERAGE: 1988

SUMMARY: Habitat protection for manatees, including the south Florida area are discussed. Recommendations include expansion and modification of boat speed regulation zones in protected areas.

KEY WORDS: Manatees, *Trichechus manatus*, Rare species, Biscayne National Park, Nature conservation, Florida, Georgia, Boat speed regulation, Cape Florida State Recreation Area, Deering Hammock, Black Creek, Oleta River State Recreation Area

1047

Marino, J. N., and A. J. Mehta (1988) Sediment trapping at Florida's east coast inlets. In: Hydrodynamics and sediment dynamics of tidal inlets. D. G. Aubrey, and L. Weishar (eds.). Lecture notes on coastal and estuarine studies 29. Springer Verlag, New York, NY. 456 pp.

TIME COVERAGE: 1988

SUMMARY: Sediment volumes associated with nineteen tidal inlets along the east coast of Florida were estimated. Significant regions examined were ebb and flood shoals, the adjacent beaches, and the sources and placement areas for dredged materials.

KEY WORDS: Sedimentation, Tidal inlets, Shoals, Government Cut, Bakers Haulover Inlet

1048

Markley, S. M. (1982) Photosynthesis and light-enhanced calcification in the calcareous green alga, *Halimeda opuntia*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 118 pp.

TIME COVERAGE: 1982

SUMMARY: The mechanism of calcification was examined in the calcareous green algae *Halimeda opuntia*. Net calcification waters were determined following the course of radioisotope incorporation into calcium carbonated over several hours. Net deposition occurred primarily in the light.

KEY WORDS: Algae, *Halimeda opuntia*, Photosynthesis, Calcification, Soldier Key, Bimini

1049

Markley, S. M., and G. R. Milano (eds.) (1985) Biscayne Bay today: a summary report on its physical and biological characteristics. January. Metro-Dade County Environmental Resources Management, Biscayne Bay Restoration and Enhancement Program, Miami, FL. 78 pp.

TIME COVERAGE: 1979 - 1982

SUMMARY: This report summarizes the results and conclusions of comprehensive monitoring and studies of water quality, sediment, turbidity, circulation patterns, marine life and fisheries.

KEY WORDS: Benthos, Benthic environment, Water circulation, Fishery resources, Sediment, Water quality, Turbidity, Resource conservation, Environmental protection

1050

Markley, S. M., G. R. Milano, and E. Calas (1992) Biscayne Bay Restoration and Enhancement Program shoreline and habitat enhancement guide. In: Proc., 19th Ann. Conf. on Wetlands Restoration and Creation. F. J. Webb, (ed.). Plant City, FL, 1992. Hillsborough Community College, Plant City, FL. 111-120.

TIME COVERAGE: 1992

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Habitat improvement, Environmental restoration, Shore protection, Mangrove swamps, Aquatic plants

1051

Markley, S. M., D. K. Valdes, and R. Menge (1990) Sanitary sewer contamination of the Miami River. DERM tech. rep. 90-9. Metro Dade Department of Environmental Resources Management, Miami, FL. Various paging.

TIME COVERAGE: 1990

SUMMARY: The objectives of this report are to summarize the current sanitary quality of the river, present the results of investigations conducted to identify sources of raw sewage entering storm sewers, and to provide recommendations for continuing actions necessary to enhance the sanitary quality of the river.

KEY WORDS: Sewage, Drainage water, Water pollution, Miami River, Coliform bacteria

1052

Markowitz, A. (1997) Popular little island is back in business. The Miami Herald, Miami, FL. January 25. Local. 3B.

TIME COVERAGE: 1997

SUMMARY: Boca Chita Key was heavily damaged by Hurricane Andrew. The National Park Service restored the Key to resemble the 1930s - 1940s appearance. Natural vegetation and coconut palms (not native to the area but present in the 1940s) have been planted.

KEY WORDS: Boca Chita Key, Restoration, Hurricane Andrew

1053

Marmelstein, A. D., P. W. Morgan, and W. E. Pequegnat (1968) Photoperiodism and related ecology in *Thalassia testudinum*. Bot. Gazette, 129(1):63-67.

TIME COVERAGE: 1964 - 1965

SUMMARY: This study was conducted to determine whether *Thalassia* is responsive to photoperiodism. The observations led to a tentative classification of *Thalassia* as an "intermediate-day plant" with respect to flowering and vegetative growth.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Photoperiodicity, Flowering

1054

Marshall, A. R. (1956) A survey of the snook fishery of Florida, with studies of the biology of the principal species, *Centropomus undecimalis* (Bloch). M.Sc. thesis. University of Miami, Coral Gables, FL. 116 pp.

TIME COVERAGE: 1954 - 1955

SUMMARY: This work is a review of snook biology and fisheries in South Florida.

KEY WORDS: Snook, *Centropomus undecimalis*, Fisheries, Sport fishing, Life history

1055

Marshall, N. (1945) The molting without growth of spiny lobsters, *Panulirus argus*, kept in a live car. Trans. Amer. Fisheries Soc., 75(-):267-269.

TIME COVERAGE: 1945

SUMMARY: Tagging was tested on lobsters kept in a car. Little increase in weight or length was noted. Captivity conditions rather than tagging may have been the cause for the lack of weight or length increase.

KEY WORDS: Spiny lobster, *Panulirus argus*, Tagging, Molting

1056

Marszalek, D. S. (1984) Florida Reef Tract: marine habitats and ecosystems. 10 maps. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1984

SUMMARY: This is a set of ten maps, 1:30,000 scale, covering the marine habitats of the reef track from Miami to Key West. There are text and photographs on reverse side of the maps.

KEY WORDS: Reef Tract, Coral reefs, Bottom topography, Ecosystems, Ecotypes, Miami, Florida Keys, Maps, Elliott Key, Safety Valve, Key Biscayne, Virginia Key

1057

Marszalek, D. S. (1981) Impact of dredging on a subtropical reef community, southeast Florida, U.S.A. In: Proc., 4th Internatl. Coral Reef Symp., The Reef and Man. E. D. Gomez, C. E. Birkeland, R. W. Buddemeier, R. E. Johannes, J. A. Marsh, and R. T. Tsuda, (eds.). Manila, Philippines, 1981. Marine Sciences Center, University of the Philippines, Quezon City, Philippines. Vol. 1: 147-153.

TIME COVERAGE: 1977 - 1981

SUMMARY: This citation discusses the effect of the large-scale dredging project near Miami Beach on the local biota. The main impact was the deposition of a silt layer on portions of the limestone reefs. The most severely impacted were organisms susceptible to total burial, primarily encrusting coralline algae, encrusting and endolithid sponges, and the sessile micro- and meiofauna which inhabit the limestone reef surface. Sea whips appeared to be the least affected by dredging operations.

KEY WORDS: Dredging, Coral, Sponges, Beach nourishment, Damage, Environmental impact, Miami Beach, Bakers Haulover, Sea whips

1058

Martens, J. H. C. (1935) Beach sands between Charleston, South Carolina, and Miami, Florida. Bull. Geol. Soc. America, 46(-):1563-1596.

TIME COVERAGE: 1935

SUMMARY: This citation describes the beach sands of the southeastern coast as far south as Miami.

KEY WORDS: Sand, Beaches, Texture, Mineral composition, South Carolina, Georgia, East Florida

1059

Martens, J. H. C. (1931) Beaches of Florida. Annual report of the Florida State Geological Survey. 21/22 Report. Florida State Geological Survey, Tallahassee, FL. 67-119.

TIME COVERAGE: 1931

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beaches, Coastal landforms, Sand, Florida

1060

Martin, J. F. (1987) The anaerobic reduction of nitrogenous oxides by bacteria from *Thalassia testudinum* sediments. Ph.D. dissertation. University of Miami, Coral Gables, FL. 178 pp.

TIME COVERAGE: 1987

SUMMARY: Denitrification by *Thalassia testudinum* sediments was measured with the acetylene blockage assay. Denitrification was found to be variable and could counteract much of the nitrogen contributed by fixation. Sediment core samples were collected from seagrass beds in Biscayne Bay and Bimini.

KEY WORDS: Seagrass, *Thalassia testudinum*, Organic sediments, Anaerobic bacteria, Nitrogen cycle, Denitrification, Soldier Key, Virginia Key, Bimini

1061

Martin, T. R. (1995) Use of non-rubble structures for reducing shoreline erosion at Dade County, Florida. In: Coastal Zone '95. Proc., 9th Conf. B. L. Edge, (ed.). American Society of Civil Engineers, New York, NY. 527-528.

TIME COVERAGE: 1995

SUMMARY: This abstract briefly describes the measures recommended to reduce the erosion of the Sunny Isles Beach.

KEY WORDS: Beach nourishment, Breakwaters, Coast defenses, Sunny Isles

1062

Martinez, S. (1972) Fecundity, sexual maturation and spawning of scaled sardine (*Harengula pensacolae*). M.Sc. thesis. University of Miami, Coral Gables, FL. 51 pp.

TIME COVERAGE: 1963 - 1972

SUMMARY: Scaled sardines were collected on the east coast of Florida, mostly from Biscayne Bay. Fecundity and maturations of the specimens were studied.

KEY WORDS: Scaled sardine, *Harengula pensacolae*, Fecundity, Sexual maturity, Spawning, Bait fish

1063

Marx, J. M. (1986) Settlement of spiny lobster, *Panulirus argus*, puereli in south Florida: an evaluation from two perspectives. Canadian J. Fish. Aquatic Sci., 43(11):2221-2227.

TIME COVERAGE: 1986

SUMMARY: Puereli settle in various shallow water habitats including red alga, algal-covered mangrove roots and colonies of bryozoans. Settlement occurs year-round in South Florida but seasonal trends are not consistent. Recruitment peaks in spring but sometimes occurs in other seasons.

KEY WORDS: Spiny lobster, *Panulirus argus*, Larval settlement, Seasonal variations, Elliott Key, Florida Keys, Florida Bay

1064

Marx, J. M., and W. F. Herrnkind (1986) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - spiny lobster. Biological rep.

82 (11.61). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 21 pp.

TIME COVERAGE: 1986

SUMMARY: The life history, growth characteristics, fishery, ecological role and environmental requirements of the spiny lobster are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Spiny lobster, *Panulirus argus*, South Florida

1065

Mathews, C. W. (1980) Antifouling marine concrete. Report. Sponsored by the Dept. of Energy. Republished by NTIS. Naval Construction Battalion Center, Civil Engineering Laboratory, Port Hueneme, CA. 37 pp.

TIME COVERAGE: 1980

SUMMARY: Various agents were investigated for their ability to prevent attachment and growth of marine fouling organisms. Test specimens were exposed in Port Hueneme, CA, and Key Biscayne.

KEY WORDS: Antifouling substances, Concrete, Key Biscayne

1066

Mathis, K., J. C. Cato, R. L. Degner, P. D. Landrum, and F. J. Prochaska (1979) Commercial fishing activity and facility needs in Florida: Dade and Monroe Counties. Florida Agricultural Market Research Center. Industry report 79-3. University of Florida, Food and Resource Economics Department, Gainesville, FL. 68 pp.

TIME COVERAGE: 1979

SUMMARY: Information about commercial seafood industries of Dade and Monroe Counties was obtained from published reports and from a mail survey of commercial fishermen and seafood dealers. Total seafood landings increased from \$14.6 million in 1971 to \$26.6 million in 1976. Registration of commercial boats declined in Dade County but increased in Monroe County from 1963-1964 to 1977-1978, while pleasure boat registrations nearly tripled in the two counties together.

KEY WORDS: Commercial fishing, Fishing harbors, Landing statistics, Monroe County, Dade County

1067

Matthews, S. (2000) Hatchling success in loggerhead turtles. Florida Scientist, 63(Suppl. 1):44-45.

TIME COVERAGE: 2000

SUMMARY: This abstract describes research on the effects of sand type and nest temperature on hatching success of loggerhead turtles.

KEY WORDS: Loggerhead turtle, *Caretta caretta*, Nests, Hatching, Miami Beach

1068

Matraw, H. C. (1975) Occurrence of chlorinated hydrocarbon insecticides, southern Florida, 1968-72. Pesticides Monit. J., 9(2):106-114.

TIME COVERAGE: 1968 - 1972

SUMMARY: The frequency with which chlorinated hydrocarbon insecticides appeared in South Florida surface waters decreased sharply between 1968 and 1972. Sediment analyses attested to the earlier widespread use of chlordane, DDT and dieldrin. Insecticide residues were more frequently detected in South Florida than in other US crop soils. Transport of pesticides from the agricultural areas into water conservation areas is facilitated by the water-management canals.

KEY WORDS: Surface water, Insecticides, DDTs, DDEs, Agricultural pollution, South Florida, Everglades

1069

Mauro, N. A. (1975) The premetamorphic developmental rate of *Phragmatopoma lapidosa* Kinberg 1867, compared with that in temperate sabellariids (Polychaeta: Sabellariidae). Bull. Mar. Sci., 25(3):387-392.

TIME COVERAGE: 1975

SUMMARY: Developmental rates of two species of tube dwellers collected in Biscayne Bay were determined and compared to those of another species.

KEY WORDS: Tube dwellers, *Phragmatopoma lapidosa*, Sabellariids, Biological development, Larval development, Key Biscayne

1070

Mauro, N. A. (1977) Variations in osmoregulatory capacity in two species of intertidal sabellariids (Annelida: Polychaeta) from tropical and mediterranean habitats. Comparative biochemistry and physiology, 56A(-):375-377.

TIME COVERAGE: 1977

SUMMARY: Response of tropical and mediterranean tube worms to salinity changes were compared to those of brackish water invertebrates. Tube worms were found to regulate and tolerate salinities ranging from 30 to 40 o/oo. One of the species studied was collected in Biscayne Bay.

KEY WORDS: Tube dwellers, Sabellariids, *Phragmatopoma lapidosa*, *Phragmatopoma californica*, Osmoregulation, Key Biscayne, Southern California

1071

Maxwell, S. L. (1968) The anatomy, histology, and electrophysiology of the eye of *Cardisoma guanhum* (Latreille). M.Sc. thesis. University of Miami, Coral Gables, FL. 66 pp.

TIME COVERAGE: 1968

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land crab, *Cardisoma guanhum*, Compound eyes, Vision

1072

Maxwell, T., C. Carney, E. Tissue, T. Bjerstedt, and R. Smosna (1986) Sedimentation patterns of a small coastal-sand complex, Key Biscayne, Florida. Abstracts with program (Geological Society of America), 18(4):315.

TIME COVERAGE: 1986

SUMMARY: On north Key Biscayne, a complex system of interrelated environments consists of beach, sublittoral sand flat, and tidal channel. The sediment is a mixed carbonate/clastic sand, composed primarily of quartz, molluscs, and *Halimeda*. Textural and compositional differences among sediments of the various subenvironments reflect the availability of different grain types as well as the relative importance of waves and currents.

KEY WORDS: Sand, Grain size, Sediment texture, Key Biscayne

1073

Mayfield, M., L. Avila, and E. N. Rappaport (1994) Annual summaries: Atlantic hurricane season of 1992. Mon. Weather Rev., 122(3):517-538.

TIME COVERAGE: 1992

SUMMARY: This citation summarizes the hurricanes of 1992 including Hurricane Andrew.

KEY WORDS: Hurricanes, Tropical depressions, Hurricane Andrew

1074

Maynard, N. G. (1968) Aquatic foams as an ecological habitat. Zeitschrift fur allgemeine Mikrobiologie, 8(2):119-126.

TIME COVERAGE: 1968

SUMMARY: Foams of were collected from different aquatic habitats. In all instances, heavy concentrations of diatoms, and lesser amounts of dinoflagellates and green and blue-green algae were found. Adsorption of algae to the surface of bubbles takes place and the algae are carried to the surface.

KEY WORDS: Foams, Surface microlayer, Habitat, Diatoms, Dinoflagellates, Algae, Everglades, Bear Cut, Cape Florida, Key Biscayne, Florida Bay

1075

Mayo, C. A. (1968) Physiology and behavior of the man-of-war fish, *Nomeus gronovii*, in the Florida Current. M.Sc. thesis. University of Miami, Coral Gables, FL. 76 pp.

TIME COVERAGE: 1968

SUMMARY: The physiology and behavior of the man-of-war fish were studied. These fish live and feed among the tentacles of the poisonous man-of-war jellyfish. Specimens were collected in Biscayne Bay and kept in aquariums.

KEY WORDS: Man-of-war fish, *Nomeus gronovii*, Fish physiology, Feeding behavior, Interspecific relationships, Florida Current, Bear Cut, Norris Cut, Cape Florida

1076

Mayo, K. E. (1995) Dade County manatee protection plan. DERM tech. rep. 95-5. Dade County. Department of Environmental Resources Management, Miami, FL. 141 pp.

TIME COVERAGE: 1995

SUMMARY: This report describes the Dade Manatee Protection Plan. Included are habitat, manatee-human interactions, land development, education and awareness and government coordination.

KEY WORDS: Manatees, *Trichechus manatus latirostris*, Dade County

1077

Maysles, A., C. Zwerin, and D. Maysles (1991) Islands. Maysles Films, New York, NY. Videorecording, VHS, 57 min.

TIME COVERAGE: 1986

SUMMARY: This videodocuments Surrounded Islands by Christo. Footage of other Christo projects are also included.

KEY WORDS: Surrounded Islands, Christo, Conceptual arts

1078

Mazzotti, F. J. (1983) The ecology of *Crocodylus acutus* in Florida; a thesis in ecology. Ph.D. dissertation. Pennsylvania State University, University Park, PA. 161 pp.

TIME COVERAGE: 1983

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: American crocodile, *Crocodylus acutus*, Barnes Sound, Card Sound, Turkey Point, Key Largo, Florida Bay

1079

Mazzotti, F. J., and M. S. Cherkiss (1998) Status and distribution of the American crocodile (*Crocodylus acutus*) in Biscayne Bay. Report. Everglades Research and Education Center, University of Florida, Belle Glade, FL. 29 pp.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: American crocodile, *Crocodylus acutus*, South Bay

1080

McAllister, B. (1938) A study of the flora of Key Biscayne, Dade County, Florida. M.A. thesis. Duke University, Durham, NC. 54 pp.

TIME COVERAGE: 1935 - 1938

SUMMARY: The flora of Key Biscayne was found to be mostly tropical and subtropical species. Few of them are endemic to south Florida and were probably brought over by wind, water or birds. The plant communities were divided into three groups: coastal, palmetto bushland, and mangrove swamp. Cleared areas of Key Biscayne at the time of the study included vegetation of all types except mangroves, which were found only on the leeward shore of Biscayne Bay.

KEY WORDS: Vegetation, Botanical resources, Key Biscayne, Species list

1081

McBride, R. A. (1987) Tidal inlet history, morphology, and stability, eastern coast of Florida, USA. In: Coastal Sediments '87. Proc., Specialty Conf. on Advances in Understanding of Coastal Sediment Processes. N. C. Kraus, (ed.). New Orleans, LA, 1987. American Society of Civil Engineers, New York, NY. 1592-1607.

TIME COVERAGE: 1987

SUMMARY: The tidal inlet history of more than 40 tidal inlets along the eastern coast of Florida is described.

KEY WORDS: Inlets (Waterways), Tidal inlets, Bakers Haulover Inlet, Government Cut, Norris Cut, Bear Cut, East Florida

1082

McCluney, W. R. (ed.) (1971) The environmental destruction of south Florida; a handbook for citizens. University of Miami Press, Coral Gables, FL.

TIME COVERAGE: 1971

SUMMARY: This book contains a series of chapters about environmental problems in South Florida.

KEY WORDS: Environmental protection, Pollution, Man-induced effects, Urbanization, South Florida

1083

McCormick, H. W., T. Allen, and W. E. Young (1963) Shadows in the Sea: the Sharks, Skates and Rays. Weathervane Books, New York, NY. 415 pp.

TIME COVERAGE: 1963

SUMMARY: This book describes the general biology and fisheries of sharks. Some accounts of shark encounters in South Florida are included.

KEY WORDS: Sharks, Skates, Rays, Shark attacks, Shark fisheries, Shark utilization

1084

McCorquodale, D. S. (1987) An assessment of indicator bacteria and bacteriophages in surface waters and sediments of Biscayne Bay. Phase II report, 2nd quarter. Dade County Department of Environmental Resource Management, Miami, FL. 5 pp + tables.

TIME COVERAGE: 1986

SUMMARY: This study compared various water pollution indicator systems (coliform and other bacteria) at four sites in order to develop a standardized monitoring program.

KEY WORDS: Bacteria, Bacteriophages, Indicator species, Water quality, Sewage disposal, Liveaboards, Little River, King's Bay Marina, Dinner Key Marina, Biscayne Canal

1085

McCorquodale, D. S. (1987) Coliphage as an indicator of fecal pollution in marine waters: assay, validation, and application. Ph.D. dissertation. Nova University, Ft. Lauderdale, FL. 115 pp.

TIME COVERAGE: 1986

SUMMARY: *Escheria coli* cannot be used as an indicator microorganism in coastal areas because it is readily killed or inactivated in seawater. This work describes the use of coliphage, a virus that infects *E. coli*, was be used as an indicator of pollution in saline waters.

KEY WORDS: Coliphage, Pollution indicators, Microbial contamination, Marine pollution, Viruses, Miami River, Little River, Dinner Key Marina, King's Bay Marina, Biscayne Canal, Bahamas

1086

McCorquodale, D. S., and C. M. Burney (1993) Biscayne Bay sewage pollution indicators. Final report November 5, 1993. Contract C3242 of the South Florida Water Management District. Spectrum Laboratories, Ft. Lauderdale, FL. Various paging.

TIME COVERAGE: 1992

SUMMARY: A Miami River plume study indicated that there was no detectable die off or reproduction of coliphage when the river mixed with seawater. The coliphage counts simply decline with increasing salinity due to dilution. Results of the Virginia Key sewage outfall study lead to the same conclusion.

KEY WORDS: Sewage, Coliphage, Water pollution, Pollution indicators, Miami River, Virginia Key

1087

McCready, S. (1994) Looking for a link: abnormal fish and pollution. Sea Frontiers, 40(5):18-19.

TIME COVERAGE: 1994

SUMMARY: This article describes evidence of pollution as the cause of fish abnormalities in northern Biscayne Bay.

KEY WORDS: Abnormalities, Fish, Pollution

1088

McGoodwin, J. R., and C. L. Dyer (1993) Hurricane Andrew and south Florida's commercial fishing peoples; impacts and immediate needs. MAST, 6(1/2):205-219.

TIME COVERAGE: 1992

SUMMARY: The impact of Hurricane Andrew on commercial fishermen operating in South Florida was examined. There are no legislative mandates or standing operating procedures that require any agency to take the responsibility of assessing storm impact on the fisheries industry.

KEY WORDS: Commercial fishing, Fishery industry, Fishermen, Hurricane Andrew, South Florida, Florida Keys

1089

McGowan, M. F., F. Al-Yamani, and T. R. Capo (1991) Taxonomic composition and abundance of Biscayne Bay zooplankton in March, May, and August 1990. Tech. rep. TR-91-002. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 8 pp.

TIME COVERAGE: 1990

SUMMARY: This report presented the results of identification, enumeration, and analysis of zooplankton and microzooplankton samples to assess the suitability of the habitat for the release of hatchery-raised larvae and juvenile fishes.

KEY WORDS: Zooplankton, Check lists, Abundance, Ecological distribution

1090

McGregor, A. J. (1974) A ceramic chronology for the Biscayne Bay region of southeast Florida. M.A. thesis. Florida Atlantic University, Boca Raton, FL. 49 pp.

TIME COVERAGE: 1974

SUMMARY: A prehistory chronology of the Biscayne Bay region was determined based on ceramic material found in the area.

KEY WORDS: Archaeology, Ceramics

1091

McGuire, M. P., and A. M. Szmant (1997) Time course of physiological responses to NH<sub>4</sub> enrichment by a coral-zooxanthellae symbiosis. In: Proc., 8th Internatl. Coral Reef Symp. H. A. Lessios, and I. G. Macintyre, (eds.). Panama, 1996. Smithsonian Tropical Research Institute, Balboa, Panama. 909-914.

TIME COVERAGE: 1997

SUMMARY: It had been proposed that zooxanthellae *in vivo* are nitrogen-limited and that nitrogen enrichment results in a decrease in translocation to the host. Such decreased translocation was proposed as the cause of measured decreases in calcification by the coral. To test those relationships, the coral *Porites astreoides* was exposed to ammonia enrichment and the physiological responses measured in both animal and zooxanthellae.

KEY WORDS: Coral, *Porites astreoides*, Ammonia, Nutrients (Mineral), Zooxanthellae

1092

Mclver, S. (1999) Boats on Biscayne Bay. South Florida History, 27(3):10-13.

TIME COVERAGE: 1887

SUMMARY: This short article describes the 1887 regatta organized by Ralph Munroe on Biscayne Bay.

KEY WORDS: Boats, Recreation, Coconut Grove, Biscayne Bay Yacht Club, Munroe, R. M.

1093

Mclver, S. (1987) One hundred years on Biscayne Bay, 1887-1987. Biscayne Bay Yacht Club, Coconut Grove, FL. 148 pp.

TIME COVERAGE: 1887 - 1987

SUMMARY: This book is a history of Biscayne Bay Yacht Club.

KEY WORDS: Boating, Yachting, History, Biscayne Bay Yacht Club, Coconut Grove

1094

McKeever, N. M. (1975) A survey for toxin producing marine macroalgae in south Florida coastal waters. M.Sc. thesis. University of Miami, Coral Gables, FL. 93 pp.

TIME COVERAGE: 1975

SUMMARY: Fish mortality, fish erythrocyte hemolysis, gastropod tentacle withdrawal and bacterial growth inhibition were used to survey for the presence of toxic principles in aqueous extracts of 19 species of marine macroalgae. Organic carbon, protein and dry weight determinations were used to standardize individual algae for intra as well as inter algal comparisons.

KEY WORDS: Algae, Biological poisons, Toxicology, Seaweeds, Card Sound, Turkey Point, Bear Cut

1095

McKenney, T. W. (1959) A contribution to the life history of the squirrel fish, *Holocentrus vexillarius* Poey. Bull. Mar. Sci. Gulf Caribb., 9(2):174-221.

TIME COVERAGE: 1959

SUMMARY: The early development of the squirrel fish was described based on larval, juvenile and adult specimens and a size sequence is illustrated. Changed during development, geographical distribution, vertical distribution, spawning, food, and general biology are discussed.

KEY WORDS: Squirrel fish, *Holocentrus vexillarius*, Life history

1096

McKenney, T. W. (1965) Young flyingfishes of the genera *Parexocoetus*, *Exocoetus*, *Hirundichthys*, and *Prognichthys* and some young stromateoid fishes from the western North Atlantic, with some comments on the pelagic life of the Exocoetidae and Stromateoidea. Ph.D. dissertation. University of Miami, Coral Gables, FL. 336 pp.

TIME COVERAGE: 1965

SUMMARY: This work describes flyingfishes from various parts of the world. Some specimens were collected in Biscayne Bay.

KEY WORDS: Flyingfishes, *Parexocoetus*, *Exocoetus*, *Hirundichthys*, *Prognichthys*, *Stromateoidea*, Pelagic environment, Juveniles, Taxonomy

1097

McKenney, T. W., E. C. Alexander, and G. L. Voss (1958) Early development and larval distribution of the carangid fish, *Caranx crysos* (Mitchill). Bull. Mar. Sci. Gulf Caribb., 8(2):167-200.

TIME COVERAGE: 1886, 1930, 1937, 1951 - 1957

SUMMARY: The early development of the blue runner was described and the early stages illustrated. Food, spawning, growth, temperatures, salinities and depth of capture were discussed.

KEY WORDS: Blue runner, *Caranx crysos*, Biological development, Larvae, Geographical distribution

1098

McKenry, C. E. B. (1976) Consensus. Special report 6. Biscayne Bay Symposium II. University of Miami Sea Grant Program, Coral Gables, FL. 23 pp.

TIME COVERAGE: 1976

SUMMARY: Two symposia were conducted in 1976 on the state of the Bay. Papers from the first symposium summarizing the status of the Bay were published in Biscayne Bay: Past / Present / Future. This report contains the consensus of the second symposium on technical and management issues raised by the first symposium.

KEY WORDS: Environmental protection, Environment management, Water quality, Water use

1099

McKenzie, D. J. (1983) Water quality at and adjacent to the south Dade County solid-waste disposal facility, Florida. Water resources investigations rep. 83-4003. US Geological Survey, Tallahassee, FL. 37 pp.

TIME COVERAGE: 1977 - 1978

SUMMARY: A water quality reconnaissance was conducted at the south Dade County solid waste landfill, located in the unconfined Biscayne Bay aquifer. Water quality beneath the landfill is highly variable with location and depth. Leachate was more evident in shallow wells and during the dry season.

KEY WORDS: Landfill, Waste disposal, Water quality, Leaching, Groundwater pollution, Biscayne Aquifer, Goulds, Cutler Ridge, Nutrients, Fe, Mn, Pb

1100

McKinley, E. (1995) Temporal and spatial variation in the abundance of penaeid shrimp in Biscayne Bay: environmental and anthropogenic influences. M.A. internship report. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1993 - 1994

SUMMARY: The goal of this project was to gain a greater understanding of the physico-chemical and environmental factors influencing the temporal and spatial variability of juvenile pink shrimp populations in Biscayne Bay.

KEY WORDS: Shrimp fisheries, Abundance, Spatial variations, Quantitative distribution, Environmental factors, Anthropogenic factors, Biscayne Canal, Little River, Sunset Harbor, Miami River, Rickenbacker Causeway, Matheson Hammock, Black Point, Turkey Point

1101

McKinney, E. C., and M. C. Schmale (1994) Damselfish with neurofibromatosis exhibit cytotoxicity toward tumor targets. Developmental Comparative Immuno., 18(4):305-313.

TIME COVERAGE: 1994

SUMMARY: This study was designed to determine whether fish in the early stages of damselfish neurofibromatosis have measurable immunological responses toward tumor cells. Damselfish neurofibromatosis is a malignant transmissible disease and is the only naturally occurring animal model of human neurofibromatosis type I.

KEY WORDS: Damselfish, Neurofibromatosis, Tumors, Fish diseases

1102

McLaughlin, P. A., and A. Thorhaug (1978) Restoration of *Thalassia testudinum*: animal community in a maturing four-year-old site - preliminary results. In: Proc., 5th Ann. Conf. Restoration of Coastal Vegetation in Florida. D. P. Cole, (ed.). Tampa, FL, 1978. Hillsborough Community College, Tampa, FL. 149-161.

TIME COVERAGE: 1972

SUMMARY: The animal community in a maturing four-year-old site of seeded *Thalassia* at Turkey Point was evaluated. There were marked differences between restored and non-restored areas with respect to annelids, isopods, molluscs and penaid shrimp. Virtually no brachyuran crabs were found at any station in the area in contrast to previous studies.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Environmental restoration, Turkey Point

1103

McLaughlin, P. A., S. F. Treat, A. Thorhaug, and R. Lemaitre (1983) A restored seagrass (*Thalassia*) bed and its animal community. Environ. Conserv., 10(3):247-254.

TIME COVERAGE: 1977

SUMMARY: This study was undertaken to ascertain whether the recolonizing animal community associated with a restored *Thalassia* bed would establish itself with a similar community structure to that of "natural" communities. Seagrass bed planted in 1973, undisturbed beds and barren areas were sampled in 1977. Differences in species and abundances between restored and natural sites were not statistically different. Populations of certain groups were numerically far higher in the restored areas.

KEY WORDS: *Thalassia*, Seagrass, Thermal pollution, Turkey Point, Biocoenosis, Nature conservation, Habitat improvement, Colonization

1104

McMillan, R. T. (1984) Effective fungicides for the control of *Cercospora* spot on *Rhizophora mangle*. Internat. J. Tropical Plant Diseases, 2(-):85-88.

TIME COVERAGE: 1984

SUMMARY: The population of *Cercospora rhizophorae* on red mangrove was higher from April through July. All fungicides gave significant control but benomyl was the most effective.

KEY WORDS: Red mangrove, *Rhizophora mangle*, *Cercospora rhizophorae*, Fungicides

1105

McMillan, R. T. (1964) Studies of a recently described *Cercospora* on *Rhizophora mangle*. Plant Disease Reporter, 48(-):909-911.

TIME COVERAGE: 1962

SUMMARY: Inoculation tests established that *Cercospora rhizophorae* was the primary pathogen of a leafspot disease of red mangrove. The leafspot causes moderate injury, specially during the warm, wet season and is widely distributed throughout the range of the host in Florida.

KEY WORDS: Red mangrove, *Rhizophora mangle*, *Cercospora rhizophorae*, Fungal diseases

1106

McNicoll, R. E. (1941) The Caloosa village Tequesta: a Miami of the sixteenth century. Tequesta, 1(-):11-20.

TIME COVERAGE: 1941

SUMMARY: This paper describes the Caloosa village located in the 16th century in what is now Miami.

KEY WORDS: Tequesta, Caloosas, History

1107

McNulty, J. K. (1961) Ecological effects of sewage pollution in Biscayne Bay, Florida: sediments and the distribution of benthic and fouling macro-organisms. Bull. Mar. Sci. Gulf Caribb., 11(3):394-447.

TIME COVERAGE: 1961

SUMMARY: Evidence was presented on both harmful and fertilizing effects of sewage in northern Biscayne Bay as determined by the quantitative distribution of benthic and fouling macro-organisms. Harmful effects as indicated by absence of benthic life were limited to 3 of 65 stations within 200 yds of sewage sources in greater than average depths. Fertilizing effects were most pronounced in a narrow band roughly 200 - 600 yds from sewage sources in shallow water with good tidal circulation where the bottom consisted of fine mud.

KEY WORDS: Sewage disposal, Pollution, Sediment, Benthos, Fouling organisms, Species list

1108

McNulty, J. K. (1970) Effects of abatement of domestic sewage pollution on the benthos, volumes of zooplankton, and the fouling organisms of Biscayne Bay, Florida. Studies in Tropical Oceanography no. 9. University of Miami Press, Coral Gables, FL. 107 pp.

TIME COVERAGE: 1956, 1960 - 1961

SUMMARY: The purpose of this study was to compare the benthos, sediment, plankton, fouling organisms of northern Biscayne Bay before and after pollution abatement. Care was taken to use the same sampling techniques at the many of the same stations sampled in 1956 before pollution abatement measures were instituted. Pollution consisted of 227 million liters per day of untreated domestic sewage. Various elements of the biota of northern Biscayne Bay were studied before the abatement of pollution. Four years after removal of pollution certain changes were noted. Populations of benthic macroinvertebrates declined from abnormally large numbers of species and individuals to normal numbers of each, while soft-bottom populations changed qualitatively but not quantitatively. Adjacent to outfalls, populations had increased in numbers of species and numbers of individuals in hard sandy bottoms only. Volumes of zooplankton decreased to about one-half the pre-abatement values in poorly flushed waters. Elsewhere they remained about the same. Abundance of amphipod tubes declined. Other fouling organisms remained about the same. There was no evidence of improved commercial and sports fishing.

KEY WORDS: Sewage disposal, Pollution control, Benthos, Zooplankton, Fouling organisms, Nutrients

1109

McNulty, J. K. (1955) Macroorganism studies. In: Report on preliminary studies of pollution in Biscayne Bay. H. B. Moore, I. Hela, E. S. Reynolds, J. K. McNulty, S. Miller, and C. A. Carpenter (ed.). Progress report to Federal Security Agency, Public Health Service, National Institutes of Health, under grant E-510. Mimeographed report 55-3. Marine Laboratory, University of Miami, Coral Gables, FL. Various paging.

TIME COVERAGE: 1955

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Pollution effects, Plankton, Fouling organisms, Boring organisms, Fish

1110

McNulty, J. K. (1957) Pollution studies in Biscayne Bay during 1956. Mimeographed report 57-8. ML 15711. Progress report to Federal Security Agency, Public Health Service, National Institutes of Health under grant RG-4062(C3). Marine Laboratory, University of Miami, Coral Gables, FL. 19 pp.

TIME COVERAGE: 1957

SUMMARY: Biological oxygen demand measurements were made using sediment samples from Central Bay. Maximum values were found in areas of maximum pollution. Minimum values were found in area with low pollution or high current velocities. Intermediate values indicating substantial organic deposition were found in central parts of the Bay.

KEY WORDS: Sewage disposal, Pollution, Fouling organisms, Mud

1111

McNulty, J. K. (1966) Recovery of Biscayne Bay from pollution. Ph.D. dissertation. University of Miami, Coral Gables, FL. 178 pp.

TIME COVERAGE: 1953 - 1956, 1960 - 1961,

SUMMARY: The purpose of this study was to compare the benthos before and after pollution abatement. Stations in northern Biscayne Bay sampled from 1953 to 1956 were re-occupied in 1960 to 1961. Two bottom communities were described: soft and hard bottom. Pollution affects the soft bottom communities less than the hard bottom one. After abatement, bottom macro-invertebrates adjacent to outfalls increase in numbers of species and individuals in hard bottoms only. At a distance from the outfalls, hard bottom populations dropped back to normal. Zooplankton volumes decreased to about half the pre-abatement levels in the poorly flushed northern Bay. Elsewhere they remained about the same.

KEY WORDS: Sewage disposal, Pollution, Benthos, Zooplankton, Fouling organisms, Pollution control

1112

McNulty, J. K. (1956) Report on additional studies of pollution in Biscayne Bay. Mimeographed report 56-6. Progress report to Federal Security Agency, Public Health Service, National Institutes of Health under grand RG-4062(C2). Marine Laboratory, University of Miami, Coral Gables, FL. 21 pp.

TIME COVERAGE: 1956

SUMMARY: This document is a preliminary report of measurements made in Biscayne Bay after the cessation of sewage flow. Some results are presented.

KEY WORDS: Sewage disposal, Pollution, Estuarine sedimentation, Mud, Fouling organisms

1113

McNulty, J. K., and N. N. Lopez (1969) Year-round production of ripe gametes by benthic polychaetes in Biscayne Bay, Florida. Bull. Mar. Sci., 19(4):945-954.

TIME COVERAGE: 1965 - 1966

SUMMARY: Four of the most abundant benthic polychaetes of Biscayne Bay contained ripe gametes through the one year of observations. The absence of recurring seasonal cycles of abundance of the benthic polychaetes was interpreted to be the result of steady year-round recruitment of young.

KEY WORDS: Polychaetes, *Lumbrineris impatiens*, *Leanira grubei*, *Owenia fusiformis*, *Chaetopterus variopedatus*, Zoobenthos, Sexual cells, Breeding

1114

McNulty, J. K., E. S. Reynolds, and S. M. Miller (1960) Ecological effects of sewage pollution in Biscayne Bay, Florida: distribution of coliform bacteria, chemical nutrients, and volumes of zooplankton. In: Trans., Second Seminar on Biological Problems in Water Pollution. C. M. Tarzwell, (ed.). Cincinnati, OH, 1959. US Dept. of Health, Education, and Welfare, Public Health Service, Bureau of State Services, Division of Water Supply and Pollution Control, Cincinnati, OH. 189-202.

TIME COVERAGE: 1960

SUMMARY: Ketchum's Intertidal Volume Concept was applied to the distribution of coliform bacteria. Due to irregularities of shoreline and bathymetry, segment boundaries follow section contours based on the observed mean excursion of a particle of water in the flood tide. The resulting segmentation pattern is interpreted to mean that river water in the main ship channel is flushed from the Bay in roughly 7 to 9 days, and in other parts of the Bay where flushing occurs at all in roughly 8 to 11 days.

KEY WORDS: Sewage disposal, Pollution, Coliform bacteria, Nutrients (Mineral), Zooplankton, Flushing

1115

McNulty, J. K., R. C. Work, and H. B. Moore (1962) Level sea bottom communities in Biscayne Bay and neighboring areas. Bull. Mar. Sci. Gulf Caribb., 12(2):204-233.

TIME COVERAGE: 1962

SUMMARY: Grab samples were taken at 180 stations in Biscayne Bay from level soft bottom areas free of seagrasses and shallow water. All species of infauna taken were recorded, together with their relative frequency in relation to the particle size of the sediment. Communities were distinguished and their significance discussed.

KEY WORDS: Community composition, Ocean floor, Sediment analysis, Ecological distribution, Aquatic communities, Species list, Key Biscayne, Elliott Key, Safety Valve, Sands Key, Featherbed Bank, Bear Cut, Infauna

1116

McNulty, J. K., R. C. Work, and H. B. Moore (1962) Some relationships between the infauna of the level bottom and the sediment in south Florida. Bull. Mar. Sci. Gulf Caribb., 12(3):322-332.

TIME COVERAGE: 1962

SUMMARY: This paper is a continuation of the work described on McNulty *et al.* (1962). Detritus feeders predominate in the finest sediments, and deposit and filter feeders at intermediate grades. From a comparison of a number of selected communities, there is a very close correlation between the body size of the deposit feeders and the particle size regardless of the type of animal concerned.

KEY WORDS: Community composition, Ocean floor, Sediment analysis, Ecological distribution, Infauna

1117

McPherson, B. F. (1964) Contributions to the biology of the sea urchin *Tripneustes ventricosus*. M.Sc. thesis. University of Miami, Coral Gables, FL. 96 pp.

TIME COVERAGE: 1962 - 1963

SUMMARY: The objectives of this work were to study the growth of sea urchins from individuals and from size frequency distribution, to determine the size at which ripe gametes are first formed, to determine the male to female ratio, and to define the spawning season.

KEY WORDS: White-spined sea urchin, *Tripneustes ventricosus*, Life history, Biological development, Sea urchin, Virginia Key, Boca Raton

1118

McPherson, B. F. (1965) Contributions to the biology of the sea urchin *Tripneustes ventricosus*. Bull. Mar. Sci., 15(1):228-244.

TIME COVERAGE: 1962 - 1963

SUMMARY: Growth of the white-spined sea urchin was studied using tagging, penning and size frequency analyses methods. Young urchins were found primarily in the summer. Growth was rapid during the first year. There was a significance departure from the 1:1 sex ratio in urchins larger than 80 mm.

KEY WORDS: White-spined sea urchin, *Tripneustes ventricosus*, Life history, Biological development, Sea urchin, Virginia Key, Key Biscayne, Boca Raton

1119

McPherson, B. F. (1968) Contributions to the biology of the sea urchin *Eucidaris tribuloides* (Lamarck). Bull. Mar. Sci., 18(2):400-443.

TIME COVERAGE: 1964 - 1967

SUMMARY: [SEE FOLLOWING CITATION FOR A DESCRIPTION OF THE WORK.]

KEY WORDS: Sea urchin, *Eucidaris tribuloides*, Life history, Biological development

1120

McPherson, B. F. (1968) The ecology of the tropical sea urchin *Eucidaris tribuloides*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 147 pp.

TIME COVERAGE: 1964 - 1967

SUMMARY: The ecology of the sea urchin is described. Samples were collected in Biscayne Bay as well as in other parts of Florida and the world.

KEY WORDS: Sea urchin, *Eucidaris tribuloides*, Life history, Biological development, Ecophysiology, Virginia Key, Margot Fish Shoal, Long Reef

1121

McPherson, B. F. (1968) Feeding and oxygen uptake of the tropical sea urchin *Eucidaris tribuloides* (Lamarck). Biol. Bull., 135(2):308-321.

TIME COVERAGE: 1968

SUMMARY: Feeding and oxygen uptake of sea urchins collected at the Margot Fish Shoal were conducted in the laboratory.

KEY WORDS: Sea urchin, *Eucidaris tribuloides*, Metabolism, Oxygen consumption, Respiration, Margot Fish Shoal

1122

McPherson, B. F. (1994) National Water Quality Assessment Program - southern Florida. US open file report 94-57. US Geological Survey, Tallahassee, FL. 2 pp.

TIME COVERAGE: 1994

SUMMARY: This fact sheet describes the USGS National Water Quality Assessment Program in South Florida.

KEY WORDS: Water quality, Aquifers, South Florida

1123

McPherson, B. F. (1969) Studies on the biology of the tropical urchins, *Echinometra lucunter* and *Echinometra viridis*. Bull. Mar. Sci., 19(1):194-213.

TIME COVERAGE: 1965 - 1966

SUMMARY: This paper discussed the distribution and biology of two species of sea urchin at various locations in South Florida.

KEY WORDS: Sea urchin, *Echinometra lucunter*, *Echinometra viridis*, Life history, Biological development, Virginia Key, Margot Fish Shoal, Long Reef, French Reef, Florida Keys

1124

McPherson, B. F. (1973) Water quality in the conservation areas of the central and southern Florida flood control district. USGS open file report 73-174. US Geological Survey, Tallahassee, FL. 39 pp.

TIME COVERAGE: 1973

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

KEY WORDS: Water quality, Chemical indicators, Water levels, Pesticides, Nutrients, Everglades

1125

McPherson, B. F., and R. Halley (1996) The South Florida environment - a region under stress. USGS circular 1134. US Geological Survey, Denver, CO. 61 pp.

TIME COVERAGE: 1996

SUMMARY: This reports describes the South Florida region and discusses environmental impacts in the area.

KEY WORDS: Florida Bay, Hydrology, Geology, Climate, Urbanization

1126

McPherson, B. F., G. Y. Hendrix, H. Klein, and H. M. Tyus (1976) The environment of south Florida, a summary report. US Government Printing Office, Washington, DC. 81 pp.

TIME COVERAGE: 1976

SUMMARY: This report is a description of the South Florida ecosystem and changes resulting from man's activities.

KEY WORDS: Natural resources, Environmental management, Ecosystems, Hydrology, Man-induced effects, South Florida

1127

McSweeney, E. S. (1982) A new *Pagurapseudes* (Crustacea: Tanaidacea) from Southern Florida. Bull. Mar. Sci., 32(2):455-466.

TIME COVERAGE: 1982

SUMMARY: A new species of shell-inhabiting tanaidacean was described from Key Largo and Biscayne Bay.

KEY WORDS: New species, Taxonomy, Organism morphology, Key Largo, *Pagurapseudes largoensis*

1128

McSweeney, E. S. (1968) A systematic study of five species of Tanaidacea (Crustacea: Malacostraca) collected in southern Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 172 pp.

TIME COVERAGE: 1968

SUMMARY: The work is a study of the systematics of Tanaidacea. Some specimens were collected in Biscayne Bay.

KEY WORDS: Tanaidacea, *Kalliapseudes*, *Apseudes*, *Pagurapseudes*, *Tanais stanfordi*, *Zuexo*, Taxonomy, South Florida, Virginia Key

1129

Mearns, A. J., B. Benggio, and T. D. Waite (1999) Ballast water treatment during emergency response: the case of the M/T Igloo Moon. Proc., Riding the crest into the 21st century; Oceans '99. Marine Technology Society, Washington, DC.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ballast, Water treatment, Tanker ships, Environmental protection, Igloo Moon Biscayne National Park

1130

Meeder, J., B. Davis, J. Absten, and J. N. Boyer (1999) Influence of freshwater discharge and ammonia loading on inshore benthic community structure in Biscayne Bay. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 225-226.

TIME COVERAGE: 1999

SUMMARY: Total ammonia concentrations in soil, sediment, surface water and groundwater were surveyed in coastal mangrove ecosystems and adjacent Bay waters. Benthic community characteristics and physical parameters were also determined.

KEY WORDS: Ammonia, Soil, Sediment, Surface water, Groundwater, Fresh water, Benthic environment, Biscayne National Park

1131

Meeder, J., A. Renshaw, and Ross. M. (1999) Tidal creek flux studies, Biscayne National Park. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 223-224.

TIME COVERAGE: 1996 - 1997

SUMMARY: Two tidal creek basins along the western shore of the Bay between Military and Mowry Canals were studied. Tidal and nutrient levels were monitored. A net influx of organic carbon and nutrients into the coastal wetlands occurs during spring tides. Differences in nutrient cycling of nearshore and coastal ecosystems are discussed.

KEY WORDS: Tidal flux, Military Canal, Mowry Canal, Nutrients, Tidal dynamics, Water exchange, Coastal waters, Biscayne National Park

1132

Meeder, J. F., M. Ross, P. L. Ruiz, and G. Telesnicki (1997) The L-31E freshwater diversion pilot project. In: Conf. program and abstracts, First annual conference of the Walt Dineen Society. 1997. Florida International University, Miami, FL. 11.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Levees, Fresh water, Nutrients, L-31E canal

1133

Menge, R., and I. Puente-Guibert (1994) The Wagner Creek Basin Assessment and Pollution Abatement Project. Metro-Dade DERM technical report 94-3. Metro Dade Department of Environmental Resources Management, Miami, FL. 48 pp.

TIME COVERAGE: 1994

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water quality, Pollution monitoring, Sewage disposal, Wagner Creek, Seybold Canal, Miami River

1134

Menzies, R. A. (1981) Biochemical population genetics and the spiny lobster, larval recruitment problem: an update. In: Proc., 33rd Ann. Gulf and Caribbean Fisheries Institute. J. B. Higman, (ed.). San Jose, Costa Rica, 1980. Gulf and Caribbean Fisheries Institute, Miami, FL. 230-243.

TIME COVERAGE: 1981

SUMMARY: A genetic study of spiny lobster populations was performed to determine larval recruitment. Preliminary results are reported.

KEY WORDS: Spiny lobster, *Panulirus argus*, Population genetics, Larvae, Elliott Key, Key West, Caribbean

1135

Menzies, R. A., J. M. Kerrigan, and P. Kanciruk (1978) Biochemical systematics and problems of larval recruitment in the spiny lobster, *Panulirus argus*. In: Proc., Spiny Lobster Research Review. R. E. Warner, (ed.). Key West, FL, 1976. Technical paper no. 4. Florida Sea Grant College Program, Gainesville, FL. 22-30.

TIME COVERAGE: 1978

SUMMARY: One of the goals of this study was to determine which genes might be influenced by physiological or environmental factors. Preliminary investigations were done with the Elliott Key lobster population.

KEY WORDS: Spiny lobster, *Panulirus argus*, Larvae, Population genetics, Elliott Key, Bahamas, Belize, Boca Raton, Florida Keys

1136

Menzies, R. A., and J. M. Kerrigan (1980) The larval recruitment problem of the spiny lobster. Fisheries, 5(4):42-46.

TIME COVERAGE: 1980

SUMMARY: The main difficulties in identifying lobster management units is their long pelagic planktonic phase and their transport by currents. An approach to this problem is to study protein variations as a reflection of genetic differences in populations.

KEY WORDS: Spiny lobster, *Panulirus argus*, Larvae, Recruitment, Florida Keys

1137

Meredith, S. B. (1995) Marine construction that survived Hurricane Andrew. In: Coastal Zone '95. Proc., 9th Conf. B. L. Edge, (ed.). American Society of Civil Engineers, New York, NY. 272-273.

TIME COVERAGE: 1992

SUMMARY: This paper reviews marine construction in Dade County that survived Hurricane Andrew.

KEY WORDS: Marinas, Construction, Hurricane Andrew, Grove Key Marina

1138

Merritt, M. L. (1994) A rewetting approximation for a simulator of flow in a surficial aquifer overlain by seasonally inundated wetlands. Ground water, 32(2):286-292.

TIME COVERAGE: 1962 - 1967

SUMMARY: An approximation is presented to rectify situations occurring as part of the three-dimensional simulation of surficial aquifer flows in which surface grid cells become dry and then cannot readily receive flows that would again partially saturate them. The rewetting procedure was tested in a recent transient simulation of flows in the surficial Biscayne aquifer.

KEY WORDS: Aquifers, Groundwater dynamics, Surface water, Simulation, Wetlands, Biscayne Aquifer

1139

Merritt, M. L. (1997) Tests of subsurface storage of freshwater at Hialeah, Dade County, Florida, and numerical simulation of the salinity of recovered water. USGS water-supply paper 2431. US Government Printing Office, Washington, DC. 114 pp.

TIME COVERAGE: 1997

SUMMARY: Injection and observation wells were drilled in late 1974 for the purpose of conducting tests of storage and recovery of potable water in the brackish Upper Floridian Aquifer. Results of the study were described.

KEY WORDS: Subsurface water, Groundwater storage, Aquifers, Water quality, Salinity, Hialeah-Miami Springs Well Field, Upper Floridian Aquifer

1140

Merzer, M. (1999) The Miami Circle. The Miami Herald, Miami, FL. Jan. 3.

TIME COVERAGE: 1998

SUMMARY: The Miami Circle was found on Brickell Point, where the Miami River flows into Biscayne Bay. The Circle, its probable purpose and the reaction of the South Florida community to the discovery of the site are discussed.

KEY WORDS: The Miami Circle, Archaeology

1141

Messing, C. G. (1983) Postmarsupial development and growth of *Pagurapseudes largoensis* McSweeney (Crustacea, Tanaidacea). J. Crustacean Biol., 3(-):380-408.

TIME COVERAGE: 1977 - 1978

SUMMARY: The postmarsupial development of gastropod shell-inhabiting crab is described. Specimens were reared in the laboratory

KEY WORDS: Crabs, *Pagurapseudes largoensis*, Growth, Biological development, Card Sound, Long Arsenicker Key

1142

Metropolitan Dade County (1974) Proposed environmental protection guide for metropolitan Dade County. Part 2 of the Comprehensive Development Master Plan, June 1974. Dade County Planning Department, Miami, FL. 181 pp.

TIME COVERAGE: 1974

SUMMARY: This report is Part 2 of the proposed three-part Comprehensive Development Policies for Dade County.

KEY WORDS: Regional planning, Environmental protection, Environment management, Resource conservation, Dade County

1143

Metropolitan Dade County (1974) Proposed metropolitan development guide. Part 3 of the Comprehensive Development Master Plan, June 1974. Dade County Planning Department, Miami, FL. 248 pp.

TIME COVERAGE: 1974

SUMMARY: This report is Part 3 of the proposed three-part Comprehensive Development Policies for Dade County.

KEY WORDS: Regional planning, Environmental protection, Environment management, Resource conservation, Dade County

1144

Meyer, F. W. (1984) Disposal of liquid wastes in cavernous dolostones beneath southeastern Florida. In: Hydrology of Karstic Terrains: Case Histories. International contributions to hydrogeology. Vol.1. Heise, Hannover, Germany.

TIME COVERAGE: 1984

SUMMARY: This paper explores the disposal of liquid wastes into deep dolostone formations.

KEY WORDS: Waste disposal, Boulder Zone, Southeast Florida

1145

Meyer, F. W. (1974) Evaluation of hydraulic characteristics of a deep artesian aquifer from natural water-level fluctuations, Miami, Florida. Report of investigations no. 75. Florida Bureau of Geology, Tallahassee, FL. 32 pp.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water levels, Tidal dynamics, Boulder Zone, Miami

1146

Meyer, F. W. (1971) Preliminary evaluation of the hydrologic effects of implementing water and sewerage plans, Dade County, Florida. USGS open file report 71003. US Geological Survey, Tallahassee, FL. 110 pp.

TIME COVERAGE: 1971

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water use, sewage, Hydrology, Dade County

1147

Meyer, F. W., and J. E. Hull (1967) Hydrologic conditions in the Canal 111 area, southeastern Dade County, Florida. Provisional data. US Geological Survey, Tallahassee, FL.

TIME COVERAGE: 1967

SUMMARY: The purpose of this study is to observe and document changes in the hydrological regimen in the vicinity of the canal and its related water-control structures.

KEY WORDS: Ground water, Water table, Chlorinity, Everglades National Park, Canal C-111

1148

Meyers, S. P. (1968) Degradative activities of filamentous marine fungi. In: Proc., 1st Internatl. Biodeterioration Symp., Biodeterioration of Materials: Microbiological and Allied Aspects. A. H. Walters, and J. J. Elphick, (eds.). Southampton, England, 1968. Elsevier, Barking, Essex. 594-609.

TIME COVERAGE: 1968

SUMMARY: Gravimetric analyses of cellulytic activity of representative marine Ascomycetes and Deuteromycetes showed striking weight losses of a cellulose substrate concurrent with fungal growth.

KEY WORDS: Fungi, Biodegradation, Wood, Fouling organisms

1149

Meyers, S. P. (1953) Marine fungi in Biscayne Bay, Florida. Bull. Mar. Sci. Gulf Caribb., 2(4):590-601.

TIME COVERAGE: 1953

SUMMARY: A collection of various marine fungal forms, including several previously unreported, indicated the regular occurrence of marine fungi in warmer ocean waters. The consistent isolation of these fungi from submerged wood as well as their relative rapidity in the invasion of such wood suggests an economic role in the primary microfloral complex on wood surfaces in sea water heretofore given minor consideration.

KEY WORDS: Fungi, Halophiobolus, Fisher Island, Government Cut, Miami River, Virginia Key

1150

Meyers, S. P. (1954) Marine fungi in Biscayne Bay, Florida. II. Further studies of occurrence and distribution. Bull. Mar. Sci. Gulf Caribb., 3(4):307-327.

TIME COVERAGE: 1954

SUMMARY: Seven morphologically different marine halophilic wood-inhabiting fungi of the class Ascomycetes were found in Biscayne Bay.

KEY WORDS: Fungi, Halophiobolus, Ecological distribution, Abundance, Northern Bay, Virginia Key, Key Biscayne, Miami River, Matheson Hammock, Ascomycetes, Matheson Hammock, Cape Florida

1151

Meyers, S. P. (1968) Observations on the physiological ecology of marine fungi. Bull. Misaki Marine Biological Institute Kyoto University, 12(-):207-225.

TIME COVERAGE: 1968

SUMMARY: This paper is a review of the physiology and ecology of marine fungi.

KEY WORDS: Fungi, Ecology, Physiology

1152

Meyers, S. P. (1969) Thalassiomycetes XI. Further studies of the genus *Lindra* with a description of *L. marinera*, a new species. *Mycologia*, 61(3):486-495.

TIME COVERAGE: 1964

SUMMARY: A new species of *Lindra* is described. The fungus was isolated from leaves of *Thalassia* collected in Biscayne Bay.

KEY WORDS: Fungi, Thalassiomycetes, *Lindra*, *Lindra marinera*, New species, Taxonomy

1153

Meyers, S. P. (1966) Variability in growth and reproduction of the marine fungus, *Lulworthia floridana*. *Helgolander wissenschaftliche Meeresuntersuchungen*, 13(-):436-443.

TIME COVERAGE: 1966

SUMMARY: Growth and reproduction of *Lulworthia* were studied. The specimens were isolated from submerged wood, manila cordage and cellulose tape in Biscayne Bay.

KEY WORDS: Fungi, *Lulworthia floridana*, Growth, Reproduction

1154

Meyers, S. P., and B. E. Hopper (1966) Attraction of the marine nematode, *Metoncholaimus* sp., to fungal substrates. *Bull. Mar. Sci.*, 16(1):142-150.

TIME COVERAGE: 1964 - 1965

SUMMARY: An extremely abundant omnivorous marine nematode, *Metoncholaimus* sp., was found to readily colonize mycelial-cellulose mats of marine fungi in the field. The meiofauna on the fungal substrate comprised almost entirely the single species of nematode with the majority of the large population being gravid females. Striking dissimilarities in nematode colonization was noted among closely situated test sites as well as at single sites at the same and different collections periods.

KEY WORDS: Nematodes, *Metoncholaimus*, Fungi, Interspecific relationships, Key Biscayne

1155

Meyers, S. P., B. E. Hopper, and R. C. Cefalu (1970) Ecological investigations of the marine nematode *Metoncholaimus scissus*. *Mar. Biol.*, 6(1):43-47.

TIME COVERAGE: 1967 - 1968

SUMMARY: Significant concentrations of *Metoncholaimus scissus* were noted in seagrass beds. Activities of this nematode frequently show an indirect relationship to blooms of the benthic diatom *Pleurosigma balticum*.

KEY WORDS: Nematodes, *Metoncholaimus scissus*, Turtle grass, *Thalassia testudinum*, Interspecific relationships, *Pleurosigma balticum*

1156

Meyers, S. P., and B. E. Hopper (1967) Studies on marine fungal-nematode associations and plant degradation. *Helgolander wiss. Meeresunters.*, 15(-):270-281.

TIME COVERAGE: 1967 (lab study)

SUMMARY: A diverse range of fungal infestation was found in *Thalassia*. Certain of the fungi initiate considerable degradation of leaf tissue and show a developmental cycle in nature related to the physiological state of the host plant. Fungal-cellulose mats as a "trapping" substrate was extremely effective for discernment of ecologically significant shifts in nematode concentrations.

KEY WORDS: Fungi, Nematodes, Biodegradation, Turtle grass, *Thalassia testudinum*, Interspecific relationships

1157

Meyers, S. P., K. M. Kamp, R. F. Johnson, and D. L. Shaffer (1964) *Thalassiomycetes* IV. Analysis of variance of ascospores of the genus *Lulworthia*. Can. J. Botany, 42(-):519-526.

TIME COVERAGE: 1964

SUMMARY: Fungi were isolated from manila cordage submerged continuously on wooden racks at the University of Miami pier on Bear Cut. Significant variability in spores of the medial range group was found thus the use of ascospore length for accurate differentiation of species in this genus is questioned.

KEY WORDS: Fungi, *Lulworthia*, *Thalassiomycetes*, Spores, Bear Cut

1158

Meyers, S. P., and J. J. Kohlmeyer (1965) *Varicosporina ramulosa* gen.nov.sp.nov., an aquatic hyphomycete from marine areas. Can. J. Botany, 43(-):915-921.

TIME COVERAGE: 1962

SUMMARY: A new monotypic hyphomycetous genus was described. Isolation of the fungus from plant material from Biscayne Bay and North Carolina.

KEY WORDS: Fungi, *Varicosporina ramulosa*, New species, Hyphomycetes, North Carolina

1159

Meyers, S. P., P. A. Orpurt, J. Simms, and L. L. Boral (1965) *Thalassiomycetes* VII. Observations on fungal infestation of turtle grass, *Thalassia testudinum* König. Bull. Mar. Sci., 15(-):548-564.

TIME COVERAGE: 1963 - 1964

SUMMARY: This is a study of seasonal fungal infestation of *Thalassia* at four sites in Biscayne Bay: Bear Cut, Virginia Key, Matheson Hammock and Soldier Key.

KEY WORDS: Fungi, Infestation, Turtle grass, *Thalassia testudinum*, Bear Cut, Virginia Key, Matheson Hammock, Soldier Key

1160

Meyers, S. P., B. Prindle, and E. S. Reynolds (1960) Cellulolytic activity of marine fungi. Degradation of ligno-cellulose material. Tappi, 43(6):534-538.

TIME COVERAGE: 1960

SUMMARY: This citation is a discussion of the degradation of cellulytic material by fungi. Some fungi species studied were probably isolated from Biscayne Bay.

KEY WORDS: Fungi, Ascomycetes, Deuteromycetes, Cellulose, Yarns, Degradation

1161

Meyers, S. P., and E. S. Reynolds (1960) Cellulolytic activity of lignicolous marine ascomycetes and deuteromycetes. In: Proc., 16th general mtg. of the Society for Industrial Microbiology, Developments in Industrial Microbiology. Vol. 1. State College, PA, 1959. Plenum Press, New York, NY. 157-168.

TIME COVERAGE: 1960

SUMMARY: Manila twine, a lignocellulose material comparable to wood, was used to evaluate the enzymatic activity of marine fungi and their degradation of vascular tissue. Some fungi species studied were probably isolated from Biscayne Bay.

KEY WORDS: Fungi, Ascomycetes, Deuteromycetes, Wood, Fouling organisms, Enzymes, Biodegradation

1162

Meyers, S. P., and E. S. Reynolds (1963) Degradation of lignocellulose materials by marine fungi. In: Symp. on Marine Microbiology. C. H. Oppenheimer, (ed.). Chicago, IL, 1961. Charles C. Thomas, Springfield, IL. 315-328.

TIME COVERAGE: 1963

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Fungi, Ascomycetes, Deuteromycetes, Wood, Fouling organisms, Biodegradation

1163

Meyers, S. P., and E. S. Reynolds (1959) Effects of wood and wood products on perithecial development by lignicolous marine ascomycetes. *Mycologia*, 51(-):138-145.

TIME COVERAGE: 1959

SUMMARY: Wood and wood products were used to stimulate perithecial production in seven genera of lignicolous marine Ascomycetes. The species examined were not fastidious in their requirements for mycelial growth.

KEY WORDS: Fungi, Wood, Fouling organisms, Reproduction, Growth

1164

Meyers, S. P., and E. S. Reynolds (1957) Incidence of marine fungi in relation to wood-borer attack. *Science*, 126(3280):969.

TIME COVERAGE: 1957

SUMMARY: This short paper discusses the role of fungi in wood degradation.

KEY WORDS: Fungi, Wood

1165

Meyers, S. P., and E. S. Reynolds (1957) Incidence of marine fungi in relation to wood-borer attack. *Science*, 126(3280):969.

TIME COVERAGE: 1957

SUMMARY: The role of marine fungi in the destruction of wood by wood borers was studied.

KEY WORDS: Fungi, Wood, Fouling organisms

1166

Meyers, S. P., and E. S. Reynolds (1958) A wood incubation method for the study of lignicolous marine fungi. *Bull. Mar. Sci. Gulf Caribb.*, 8(4):342-347.

TIME COVERAGE: 1958

SUMMARY: Test panels of wood, submerged in various marine localities, often showed little or no visible lignicolous fungal development during the initial laboratory examination. Through of process of controlled incubation of the fungal infested wood, the incipient fungi developed the characteristic morphological features of the various marine ascomycetous species present.

KEY WORDS: Fungi, Wood, Fouling organisms

1167

Meyers, S. P., and E. Scott (1968) Cellulose degradation by *Lulworthia floridana* and other lignicolous marine fungi. *Mar. Biol.*, 2(-):41-46.

TIME COVERAGE: 1968

SUMMARY: Gravimetric analysis of cellulose utilization by representative marine Ascomycetes showed noteworthy activity based on loss of weight of cellulose by the various fungi.

KEY WORDS: Fungi, Ascomycetes, *Lulworthia floridana*, Biodegradation, Wood, Fouling organisms, Enzymes

1168

Meyers, S. P., and E. Scott (1967) Thallasiomycetes [sic]. X. Variation in growth and reproduction of two isolates of *Corollospora maritima*. *Mycologia*, 59(-):446-455.

TIME COVERAGE: 1965

SUMMARY: Growth and reproduction of two isolates of this marine yeast were studied. One of the cultures was isolated from balsa wood submerged in Biscayne Bay.

KEY WORDS: Fungi, Ascomycetes, *Corollospora maritima*, Growth, Reproduction

1169

Meyers, S. P., and J. Simms (1965) Thalassiomycetes VI. Comparative growth studies of *Lindra thalassiae* and lignicolous ascomycete species. Canadian J. Bot., 43(-):379-392.

TIME COVERAGE: 1965 (lab study)

SUMMARY: Physiological studies of the fungus *Lindra thalassiae* showed a stimulating effect of leaf tissue on fungal reproduction. *L. thalassiae* shows a euryhaline growth response in the mycelial stage but requires higher salinities for maximal reproduction. The fungus was isolated from necrotic leaves of *Thalassia* collected in Biscayne Bay.

KEY WORDS: Fungi, Thalassiomycetes, *Lindra thalassiae*, Ascomycetes, Wood, Fouling organisms, Turtle grass, *Thalassia testudinum*, Growth

1170

Meylan, A., B. Schroeder, and A. Mosier (1995) Sea turtle nesting activity in the state of Florida 1979 - 1992. Florida marine res. pub. 52. Florida Marine Research Institute, St. Petersburg, FL. 51 pp.

TIME COVERAGE: 1979 - 1992

SUMMARY: Loggerhead turtles, green turtles and leatherback turtles nest regularly on Florida sand beaches. Approximately 90% of the nesting activity in the southeastern US occurs in Florida. This aggregation is the second largest in the world. This report contains number of nests found by year in various locations in Florida.

KEY WORDS: Loggerhead turtle, Green turtle, Leatherback turtle, *Chelonia mydas*, *Dermochelys coriacea*, *Caretta caretta*, Florida, Key Biscayne, Cape Florida, Fisher Island, Golden Beach, Miami Beach, Virginia Key, Nesting

1171

Miami, C. o. (1992) Miami River master plan. Final report. City of Miami. Department of Planning, Building and Zoning, Miami, FL. Various paging.

TIME COVERAGE: 1992

SUMMARY: This is the master development plan for the Miami River.

KEY WORDS: River basin management, Environment management, Regional planning, Urbanization, Miami River

1172

Miami, City of (1987) Virginia Key master plan. Report. City of Miami. Planning Department, Miami, FL. 46 pp.

TIME COVERAGE: 1987

SUMMARY: This is the master development plan for Virginia Key.

KEY WORDS: Land use, Resource conservation, Resource development, Virginia Key

1173

Miami Department of Development & Housing Conservation (1995) Request for unified development proposals for the Virginia Key Campground, Virginia Key Beach, Miami, Florida. Request for proposals. Miami Department of Development & Housing Conservation. Development Division, Miami, FL.

TIME COVERAGE: 1995

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land use, Development projects, Virginia Key

1174

Miami Herald (1941-1972) Miami Herald Fishing Guide. The Miami Herald, Miami, FL.

TIME COVERAGE: Published annually, 1941-1972; title varies

SUMMARY: Richter has 1941, 1948, 1951, 1953-4, 1962, 1964, 1967-1972

KEY WORDS: Fishing, Boats, Boating, Florida, Guide

1175

Miami River Quality Action Team (1999) Annual report. Miami River Quality Action Team, Miami, FL.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Annual reports, Miami River

1176

Miami River Management Committee (1984) Final recommendations of the Miami River Management Committee. Presented to Governor Bob Graham. Miami River Management Committee, Miami, FL. 53 pp.

TIME COVERAGE: 1984

SUMMARY: Recommendations of the Committee included increased police protection in the area, storm water outfalls evaluations and redesign, tax reform for water-front businesses, and unification of jurisdiction.

KEY WORDS: Miami River, Merchant ships, Water quality, Pollution, Resource management

1177

Miami-Dade Water and Sewer Department (1994) Cross Bay line contingency plan update. Report. Miami-Dade Water and Sewer Department, Miami, FL. Various paging.

TIME COVERAGE: 1994

SUMMARY: This is the contingency plan in case of failure of the Cross Bay Line failure. The Cross Bay Line is a concrete cylinder pipe which carries raw sewage from the Metropolitan Dade County to the Central District Water Treatment Plant in Virginia Key.

KEY WORDS: Sewage, Virginia Key, Cross Bay Line, Pipelines, Leaks

1178

Mianmanus, R. T. (1988) Induction of settlement and metamorphosis in larvae of *Aplysia brasiliiana* and *Strombus gigas* (Mollusca: Gastropoda). Ph.D. dissertation. University of Miami, Coral Gables, FL. 171 pp.

TIME COVERAGE: 1988

SUMMARY: Induction of larval settlement and metamorphosis by macroalgae under laboratory conditions were investigated for the Queen conch and the sea hare. Queen conch egg masses were collected in Biscayne Bay, Turks and Caicos Islands. Adult sea hares were collected in Bear Cut and kept in aquariums. Specimens of both species were raised in aquariums.

KEY WORDS: Queen conch, *Strombus gigas*, Sea hare, *Aplysia brasiliiana*, Larval settlement, Metamorphosis

1179

Michel, J. F. (1970) Addendum to technical report dated May 1970, Analysis of the physical effects of the discharge of cooling water into Card Sound by the Turkey Point plant of Florida Power and Light Company. Reports on grants and contracts 71001. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 4 pp.

TIME COVERAGE: 1970

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Thermal pollution, Intake temperature, Channel flow, Card Sound, Turkey Point, Florida Power and Light Company

1180

Michel, J. F. (1970) Analysis of the physical effects of the discharge of cooling water into Card Sound by the Turkey Point plant of Florida Power and Light Company. Technical report 70065. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 14 pp.

TIME COVERAGE: 1970

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Thermal pollution, Water circulation, Cooling water, Card Sound, Turkey Point, Florida Power and Light Company, South Bay

1181

Michel, J. F. (1972) The effect of a variable wind field from Hurricane Abby on water surface elevations of Biscayne Bay, Florida. *Eos*, 53(11):1019.

TIME COVERAGE: 1968

SUMMARY: The effect of the changing wind field on water surface elevation on two transects in Biscayne Bay as measured by recording tide gages was related to wind stress and bathymetry.

KEY WORDS: Hurricanes, Surface water waves, Wind fields, Hurricane Abby

1182

Michel, J. F. (1971) Hydrodynamic boundary conditions. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler (eds.). Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. III:1-13.

TIME COVERAGE: 1971

SUMMARY: This citation defined the boundary conditions for a model of the area affected by the Turkey Point effluent discharge.

KEY WORDS: Tidal dynamics, Boundary conditions, Water circulation, Hydrodynamics, Card Sound, South Bay, Turkey Point

1183

Michel, J. F. (1976) The impact of works of man on the physical regime of Biscayne Bay. In: *Biscayne Bay: Past / Present / Future*. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 265-270.

TIME COVERAGE: 1919 - 1974

SUMMARY: This paper discusses the effect of construction of causeways and channels on the circulation of Biscayne Bay. The peak of development occurred between 1919 and 1926 with the construction of two causeways and Bakers Haulover Cut.

KEY WORDS: Man-induced effects, Environmental impact, Urbanization, Bridges, Circulation, Bakers Haulover Cut

1184

Michel, J. F. (1973) Investigation of hydrodynamic effects of the proposed marina for Miami Beach, Florida. Reports on grants and contracts 73076. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 31 pp.

TIME COVERAGE: 1973

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marinas, Water circulation, Tidal dynamics, Hydrodynamics, Miami Beach

1185

Michel, J. F. (1968) A study of tidal transport and diffusion in Bear Cut, Dade County, Florida. Report to Department of the Army, Jacksonville District, Corps of Engineers, Jacksonville, FL. Institute of Marine Sciences, University of Miami, Miami, FL. 7 pp.

TIME COVERAGE: 1968

SUMMARY: This study was designed to determine the disposition of suspended solids resulting from the deposition of hydraulic fill along the shore of Virginia Key. This fill was to be used in the proposed beach nourishment program undertaken by the Corps of Engineers. Attention was paid to the effect on salt water intakes at the NOAA and University of Miami facilities. It was

indicated that heavy concentrations of suspended material at these intakes might result in the death of many scientific valuable specimens.

KEY WORDS: Sediment transport, Tidal currents, Bear Cut, Virginia Key

1186

Michel, J. F., and J. D. Riege (1972) Hydrodynamic boundary conditions. In: An ecological study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. III:1-11.

TIME COVERAGE: 1972

SUMMARY: In order to improve numerical modeling techniques for areas such as Card Sound, a detailed analysis of the flow across the boundaries of a basin while treating the basin as a storage area acted upon only by the wind was made.

KEY WORDS: Tidal dynamics, Boundary conditions, Water circulation, Hydrodynamics, Card Sound, South Bay, Turkey Point

1187

Midboe, E. A. (1972) A study of Biscayne Bay, Florida. Unpublished B.Sc. thesis. University of Virginia, Charlottesville, VA. 48 pp.

TIME COVERAGE: 1972

SUMMARY: The objectives of this study were to examine the flushing mechanisms throughout the northern Bay and to compare these with present methods used to model estuaries.

KEY WORDS: Water circulation, Flushing, Models, North Bay

1188

Mikulka, W. R. (1969) Nocturnal and lunar variation in the light response patterns of juvenile pink shrimp, *Penaeus duorarum*. M.Sc. thesis. University of Miami, Coral Gables, FL. 48 pp.

TIME COVERAGE: 1969

SUMMARY: This work describes the light response patterns of juvenile pink shrimp. Pink shrimp are positively phototactic. The specimens were obtained from local bait fishermen operating in Biscayne Bay.

KEY WORDS: Light effects, Phototaxis, Pink shrimp, *Penaeus duorarum*

1189

Milanich, J. T. (1999) Much ado about a circle. Archaeology, 52(5):22-25.

TIME COVERAGE: 1999

SUMMARY: This paper discusses the possibility that the Miami Circle, located at the entrance to the Miami River, could be a 1950s septic tank drain.

KEY WORDS: Archaeology, Miami Circle

1190

Milano, G. R. (2000) Cape Florida State Recreation Area wetlands restoration. Proc., 25th Ann. Conf. on Ecosystem Restoration and Creation. P. J. Cannizzaro, (ed.). Hillsborough Community College, 1998. Hillsborough Community College, Plant City, FL.

TIME COVERAGE: 2000

SUMMARY: During the 1950s, over 80 ha of wetlands were destroyed in southern Key Biscayne through dredge and fill operations associated with failed developments. These wetlands were replaced with Australian pines which were destroyed by Hurricane Andrew. This paper describes the restoration effort to historic vegetation types present before the dredge and fill operation.

KEY WORDS: Wetlands, Restoration, Cape Florida State Recreation Area, Key Biscayne

1191

Milano, G. R. (1999) Restoration of coastal wetlands in southeastern Florida. Wetland J., 11(2):15-24, 29.

TIME COVERAGE: 1990 - 1999

SUMMARY: Ten wetland restoration projects in Biscayne Bay are described in this paper: Bear Cut, Cape Florida, Bay Vista Campus, Virginia Key, National Bulk Carrier site, Oleta River Phase I, Oleta River Phase II, Highland Oaks and Chicken Key. Size, completion date, location, scope of restoration, species planted and funding are provided for each site.

KEY WORDS: Wetlands, Coastal zone management, Land reclamation, Environmental restoration, Mangrove swamps, Salt marshes, Dade County, Bear Cut, Cape Florida, Bay Vista Campus, Virginia Key, National Bulk Carrier, Oleta River, Highland Oaks, Chicken Key

1192

Miles, C. J., and R. J. Pfeuffer (1997) Pesticides in canals of south Florida. Arch. Environ. Contam. Toxic., 32(4):337-345.

TIME COVERAGE: 1991 - 1995

SUMMARY: Atrazine, ametryn, bromacil, simazine and norflurazon were the most frequently detected pesticides in surface water samples collected in canals in South Florida, and DDE, DDD and ametryn were the most frequently detected pesticides in sediment samples. Many of the most frequently detected compounds were used in large amounts in the monitoring area based on pesticide usage estimates. Spatial trends in pesticide detections followed use patterns. The maximum atrazine detections occurred in winter to late spring and were associated with usage on turfgrass and agricultural products. Endosulfan residues above the Florida water quality criterion were occasionally observed in surface water in the Homestead area and most of the exceedences occurred in confined waters.

KEY WORDS: Canals, Pesticides, Water analysis, Sediment analysis

1193

Miller, E. M. (1940) Mortality of fishes due to cold on the southeast Florida coast, 1940. Ecology, 21(3):420-421.

TIME COVERAGE: 1940

SUMMARY: Cold temperatures were experienced in South Florida in January 1940, resulting in a fish kill. Water temperatures reached 51 °F. Fish species affected by the cold were listed in the paper.

KEY WORDS: Fish kill, Temperature effects, Miami, Key Largo, Florida Bay

1194

Miller, G. S. (1921) American records of whales of the genus *Pseudorca*. Proc. US National Museum, 57(-):205-208.

TIME COVERAGE: 1921

SUMMARY: This citation reviews records of the presence of *Pseudorcas* in the US. The remains of one specimen was found in southern Biscayne Bay.

KEY WORDS: False killer whale, *Pseudorca crassidens*, Skull

1195

Miller, G. C., and D. L. Sutherland (1978) Behavior of the spiny lobster, *Panulirus argus*, to baited Florida and prototype traps. In: Proc., Spiny Lobster Research Review. R. E. Warner, (ed.). Key West, FL, 1976. Tech. paper no. 4. Florida Sea Grant College Program, Gainesville, FL.

TIME COVERAGE: 1976

SUMMARY: Prototype lobster traps were evaluated at the Elliott Key Marina.

KEY WORDS: Spiny lobster, *Panulirus argus*, Elliott Key, Lobster traps

1196

Miller, H. P. (1984) Numerical three-dimensional free surface circulation model for the south Biscayne Bay, Florida. Applied Mathematical Modeling, 8(5):313-318.

TIME COVERAGE: 1984

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Nearshore dynamics, Transport processes, Finite difference method, Mathematical models, South Bay

1197

Miller, H. P. (1987) Some contributions to computational fluid dynamics. Ph.D. Dissertation. Columbia University, New York, NY.

TIME COVERAGE: 1992

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Tides

1198

Miller, H. P. (1984) Three-dimensional free-surface suspended particles transport in the South Biscayne Bay, Florida. Internatl. J. Numerical Methods in Fluids, 4(10):901-914.

TIME COVERAGE: 1984

SUMMARY: A three-dimensional, time-dependent free surface model was developed which takes account of topographical and meteorological parameters for application to suspended particles transport.

KEY WORDS: Suspended particulate matter, Particle settling, Nearshore dynamics, Transport processes, South Bay

1199

Miller, M. W., E. Weil, and A. M. Szmant (1996) Benthic community structure and differential effects of grazing on reefs in Biscayne National Park (BNP). In: 24th Benthic Ecology Meeting. Columbia, SC, March 1996. University of South Carolina, Columbia, SC. 61.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coral reefs, Grazing, Biscayne National Park

1200

Miller, P. C. (1972) Bioclimate, leaf temperature, and primary production in red mangrove canopies in south Florida. Ecology, 53(1):22-45.

TIME COVERAGE: 1972

SUMMARY: A model of primary production and transpiration of forest canopies of red mangroves was developed to clarify some of the physical processes affecting primary production.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Transpiration, Primary production, Models, South Florida

1201

Miller, P. C. (1975) Simulation of water relations and net photosynthesis in mangroves in southern Florida. In: Proc. Internatl. Symp. on Biol. and Management of Mangroves. G. E. Walsh, S. C. Snedaker, and H. J. Teas, (eds.). Honolulu, HI, 1974. University of Florida, Institute of Food and Agricultural Sciences, Gainesville, FL. 615-631.

TIME COVERAGE: 1975

SUMMARY: Field and laboratory data on water relations and photosynthesis of three mangrove species were synthesized in a simulation model to explore some of their implications to the ecology of the species.

KEY WORDS: Mangrove swamps, *Avicennia germinans*, *Laguncularia racemosa*, *Rhizophora mangle*, Photosynthesis, Water content, Turkey Point, Key Largo, Everglades

1202

Miller, P. C., W. A. Stoner, J. Hom, and D. K. Poole (1976) Potential influence of thermal effluents on the production and water-use efficiency of mangrove species in South Florida. In: Proc. Symp., Thermal ecology II. G. W. Esch, and R. W. McFarlane, (eds.). Augusta, GA, 1975. Technical Information Center, Energy Research and Development Administration, Oak Ridge, TN. 39-45.

TIME COVERAGE: 1976

SUMMARY: A simulation model of leaf energy exchange, water relations and photosynthesis for mangrove ecosystems was generated. The study area was in southern Biscayne Bay.

KEY WORDS: Mangrove swamps, Temperature effects, Photosynthesis, Thermal pollution, *Rhizophora mangle*, *Avicennia germinans*, *Laguncularia racemosa*

1203

Miller, S. S. (1973) Canals cool hot water for reuse. Environ. Sci. Technol., 7(1):20-21.

TIME COVERAGE: BB 343

SUMMARY: This citation describes the cooling canals of the Turkey Point Power Plant.

KEY WORDS: Thermal pollution, Cooling water, Turkey Point

1204

Miller, S. M. (1951) The distribution of phosphorus compounds in marine sediments and in the overlying sea water. M.Sc. thesis. University of Miami, Coral Gables, FL. 55 pp.

TIME COVERAGE: 1950

SUMMARY: Hurricane Harbor is an inlet in Biscayne Key, sheltered from wind and wave action. The water is similar to that of the Bay and is less susceptible to contamination by sewage so the site was chosen to study phosphorus compounds in sediment.

KEY WORDS: Phosphorus compounds, Sediment, Sea water, Hurricane Harbor, Key Biscayne

1205

Miller, S. (1931) Florida Fishing. G. Howard Watt, New York, NY. 320 pp.

TIME COVERAGE: 1931

SUMMARY: This is a fishing guide to Florida.

KEY WORDS: Fishing, Fish, Florida, Guide

1206

Miller, S. M. (1952) Phosphorus exchange in a sub-tropical marine basin. Bull. Mar. Sci. Gulf Caribb., 1(4):257-265.

TIME COVERAGE: 1950 - 1951

SUMMARY: The phosphorus concentrations of sediment and overlying water were determined to determine whether any exchange of P was taking place. Phosphorus in sediment was shown to decrease in summer and the level in water increases. The opposite effect was found during the winter months.

KEY WORDS: Phosphorus compounds, Sediment, Sea water, Hurricane Harbor, Key Biscayne, P

1207

Miller, S. (1938) Southern & Central Florida Fishing: the Blue Book 1938. Florida Fishing Inc., Miami, FL.

TIME COVERAGE: 1938

SUMMARY: Locations for fishing in Biscayne Bay and other sites in Florida are described in this guide.

KEY WORDS: Fishing, Fish, South Florida, Central Florida, Guide

1208

Miller, W. L. (1978) Effects of bottom sediments on infiltration from the Miami and tributary canals to the Biscayne Aquifer, Dade County, Florida. Water-resources investigations 78-36. US Geological Survey, Tallahassee, FL. 63 pp.

TIME COVERAGE: 1972 - 1973

SUMMARY: Canal bottom sediments impede downward infiltration from the canals. Filtration through bottom sediments reduced concentrations of coliform bacteria, pesticides, PCBs, metals and suspended materials. Filtration by the sandy upper part of the aquifer further reduced concentrations of these contaminants.

KEY WORDS: Canals, Saline intrusion, Ground water, Water supply, Sedimentation, Miami Canal, Biscayne Aquifer, PCBs, Pesticides, Coliform bacteria, Al, Ca, Cr, Cu, Fe, Pb, Hg, K, Na, Sr, As, Water quality

1209

Millero, F. J., S. Sotolongo, and M. Izaguirre (1987) The oxidation kinetics of Fe(II) in seawater. Geochim. Cosmochim. A., 51(4):793-801.

TIME COVERAGE: 1987

SUMMARY: The oxidation of Fe(II) was studied. Seawater of Biscayne Bay yielded slower half time values than those determined for water or Gulf Stream seawater. This may be the result of the presence of organic ligands that can complex Fe(II).

KEY WORDS: Fe, Sea water, Chemical oceanography

1210

Milliken, D. L. (1949) Report of investigation of water resources of Biscayne Bay, Florida, May - August 1949. Report in cooperation with the City of Miami. US Geological Survey, Miami, FL. 71 pp.

TIME COVERAGE: 1949

SUMMARY: The purpose of this investigation was to obtain data on tidal flow into and out of Biscayne Bay, the movement of water within the Bay, and water level elevations at various points. This data were to be used in the location and design on the proposed Miami sewage treatment plant.

KEY WORDS: Tidal dynamics, Water motion, Water levels

1211

Milton, S. L., S. Kabler-Leone, A. A. Schulman, and P. L. Lutz (1994) The effects of Hurricane Andrew on the sea turtle nesting beaches of South Florida. In: Proc., 14th Ann. Symp. on Sea Turtle Biol. and Conservation. K. A. Bjorndal, A. B. Bolten, D. A. Johnson, and P. J. Eliazar, (comps.). Hilton Head, SC, 1994. NOAA technical memorandum NMFS-SEFSC-351. NOAA/NMFS Southeast Fisheries Science Center, Miami, FL. 84.

TIME COVERAGE: 1992

SUMMARY: Hurricane Andrew affected turtle nests over 90 miles of beaches. Greatest mortality was due to beach flooding associated with storm surge, and was largest at beaches near the storm's eye. Post-hurricane hatching success, mortality and cause of death were collected on nests at Fisher Island which experienced flooding and changes in topography.

KEY WORDS: Turtles, Nests, Hurricane Andrew, Fisher Island

1212

Milton, S. L., S. Leone-Kabler, A. A. Schulman, and P. L. Lutz (1994) Effects of Hurricane Andrew on the sea turtle nesting beaches of south Florida. Bull. Mar. Sci., 54(3):974-981.

TIME COVERAGE: 1992

SUMMARY: Hurricane and sea turtle nesting seasons overlap in the Caribbean and northwest Atlantic Ocean. Hurricane Andrew affected seaturtle nests over a total of 90 miles of beaches.

Storm surge associated with the hurricane produced the greatest mortality through nest flooding. Further mortality occurred when surviving turtles suffocated in nests situated in areas where sand accumulated.

KEY WORDS: Turtles, Nests, Beaches, Storm surge, Hurricane Andrew, Virginia Key, Key Biscayne, Fisher Island, South Florida

1213

Milton, S. L., P. L. Lutz, and A. A. Schulman (1995) The suitability of aragonite sand as a nesting substrate for loggerhead sea turtles (*Caretta caretta*). In: Proc., 8th Natl. Conf. on Beach Preservation Technology. Sand Wars, Sand Shortages & Sand-Holding Structures. L. S. Tait, (comp.). St. Petersburg, FL, 1995. Florida Shore & Beach Preservation Association, Tallahassee, FL. 179-180.

TIME COVERAGE: 1991

SUMMARY: The suitability of aragonite sand was evaluated as a nesting substrate for loggerhead turtles.

KEY WORDS: Aragonite, Nesting, Loggerhead turtle, *Caretta caretta*, Fisher Island

1214

Milton, S. L., A. A. Schulman, and P. L. Lutz (1995) A comparison of Florida silicate and Bahamian aragonite sand as substrates for sea turtle nesting. In: Proc., 12th Ann. Workshop on Sea Turtle Biol. and Conservation. J. I. Richardson, and T. H. Richardson, (comps.). Jekyll Island, GA, 1992. NOAA technical memorandum NMFS-SEFSC-361. NOAA/NMFS Southeast Fisheries Science Center, Miami, FL. 128-131.

TIME COVERAGE: 1995

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Silicates, Aragonite, Nesting, Loggerhead turtle, *Caretta caretta*, Fisher Island

1215

Milton, S. L., A. A. Schulman, and P. L. Lutz (1997) The effect of beach nourishment with aragonite versus silicate sand on beach temperature and loggerhead sea turtle nesting success. J. Coastal Res., 13(3):904-915.

TIME COVERAGE: 1997

SUMMARY: This study was undertaken to examine the effects of oolitic aragonite on turtles which nest in the beaches of South Florida. Temperature, grain size distribution and hydric potential were measured, and the effects of these parameters on nest hatching and emergence success compared for nests buried in Bahama aragonite versus native Florida sand. The temperature regimes of the two types of sands differed significantly. Both sands, however, has similar high hatching and emergence rates.

KEY WORDS: Beach nourishment, Aragonite, Nesting, Incubation, Hatching, Loggerhead turtle, *Caretta caretta*, Fisher Island, Bahamas

1216

Minkin, J. L. (1949) Biscayne Bay pollution survey, May-October, 1949. Mimeographed report. Bureau of Sanitary Engineering, Jacksonville, FL. 78 pp.

TIME COVERAGE: 1949

SUMMARY: [COPY NOT AVAILABLE. CITED IN MCNULTY (1970).]

KEY WORDS: Pollution, Coliform bacteria

1217

Mitchell, C. L. (1926) The Florida Hurricane of September 18-20, 1926. US Weather Bureau. Department of Agriculture, Washington, DC. 23 pp.

TIME COVERAGE: 1926

SUMMARY: This report describes the hurricane that passed over South Florida in 1926.

KEY WORDS: Hurricanes, Hurricane of 1926

1218

Mitchell, C. L. (1926) The West Indian hurricane of September 14-22, 1926. Monthly Weather Rev., 54(-):409-414.

TIME COVERAGE: 1926

SUMMARY: This paper is the description of the 1926 hurricane that passed over Miami, where a barometric pressure of 27.6 barograms was recorded.

KEY WORDS: Hurricanes, Hurricane tracking, Hurricane of 1926

1219

Mitchell-Tapping, H. J. (1980) Depositional history of the oolite of the Miami Limestone Formation. Florida Scient., 43(2):116-125.

TIME COVERAGE: 1980

SUMMARY: A new division of the Miami Oolite based on field outcrops above and below the water, fossils, well cuttings and SEM study of ooids was proposed.

KEY WORDS: Oolites, Sedimentation, Miami Limestone, Pleistocene

1220

Mitchell, S. R. (1997) Draft EIS for the development of Virginia Key: impacts on cultural, archaeological resources and traditional human uses of the area. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Archaeology, Land use, Environmental impact, Virginia Key

1221

Moe, M. A. (1991) Lobsters: Florida, Bahamas, Caribbean. Green Turtle Publications, Plantation, FL.

TIME COVERAGE: 1991

SUMMARY: This book is a description of the lobster species of Florida, the Bahamas and the Caribbean, lobster culture and fisheries.

KEY WORDS: Spiny lobster, *Panulirus argus*, Life history, Nephropidae, Scyllaridae, Lobsters, Taxonomy, Identification, Lobster culture, Lobster fisheries, Florida, Bahamas, Caribbean, Guide

1222

Moffett, A. W. (1957) A key to some southern Florida fishes based on vertebral characters. M.Sc. thesis. University of Miami, Coral Gables, FL. 108 pp.

TIME COVERAGE: 1957

SUMMARY: This work describes a visual key based on vertebra for the identification of fish. Specimens were collected in Biscayne Bay.

KEY WORDS: Vertebrae, Fish, Identification keys

1223

Moffett, J. W. (1986) The photochemistry of copper complexes in seawater. Ph.D. dissertation. University of Miami, Coral Gables, FL. 164 pp.

TIME COVERAGE: 1986

SUMMARY: The photochemistry of copper in seawater was studied to assess the role of sunlight in the speciation and redox chemistry of copper in the water column. Some seawater samples were collected in Biscayne Bay.

KEY WORDS: Cu, Sea water, Photochemistry

1224

Moffett, J. W., and R. G. Zika (1987) Photochemistry of copper complexes in sea water. In: Photochemistry of Environmental Aquatic Systems. R. G. Zika, and W. J. Cooper (eds.). ACS symposium series 327. American Chemical Society, Washington, DC. 288 pp.

TIME COVERAGE: 1987

SUMMARY: [THIS CITATION REPORTS ON THE WORK DESCRIBED IN THE PREVIOUS RECORD.]

KEY WORDS: Cu, Sea water, Photochemistry

1225

Moffett, J. W., and R. G. Zika (1987) Solvent extraction of copper acetylacetonate in studies of copper (II) speciation in seawater. Mar. Chem., 21(4):301-313.

TIME COVERAGE: 1987

SUMMARY: Studies of Biscayne Bay seawater indicated two ligand types present, and speciation of Cu was dominated by one of these ligands.

KEY WORDS: Cu, Solvent extraction, Sea water

1226

Mohl, R. A. (1982) Changing economic patterns in the Miami Metropolitan area, 1940 - 1980. Tequesta, 42(-):63-73.

TIME COVERAGE: 1940 - 1980

SUMMARY: The economic pattern of the Miami metropolitan area changed from a tourist and retirement haven after World War II into a center of international trade and banking.

KEY WORDS: Economics

1227

Moler, P. E. (1991) American crocodile nest survey and monitoring. Report. Florida Game and Fresh Water Fish Commission, Tallahassee, FL. 10 pp.

TIME COVERAGE: 1991

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: American crocodile, *Crocodylus acutus*, Nesting, Key Largo, Barnes Sound.

1228

Montague, J. R., J. A. Aguinaga, K. L. Ambrisco, D. L. Vassil, and W. Collazo (1991) Laboratory measurement of ingestion rate for the sea urchin *Lytechinus variegatus* (Lamarck) (Echinodermata: Echinoidea). Florida Scient., 54(3/4):129-134.

TIME COVERAGE: 1988

SUMMARY: Sea urchins were fed unblemished or decayed blades of *Thalassia*. Decayed blades had nearly twice as much dry weight as green blades of the same size. Ingestion times for both types of blades were negatively correlated with sea urchin size (bigger urchins ate faster). Mean ingestion time were significantly different for the two types of blades (decayed < green). Sea urchins showed no preference when offered both types of blades.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Ingestion, Turtle grass, *Thalassia testudinum*

1229

Montague, J. R., J. L. Carballo, L. M. Valdes, and M. Chacken (1995) Analyses of decay and parrot fish grazing along attached blades of turtle grass (*Thalassia testudinum*) from two sites in Biscayne Bay. Florida Scient., 58(2):206-215.

TIME COVERAGE: 1988 - 1993

SUMMARY: Attached blades of *Thalassia* were collected in Bear Cut and other areas of Biscayne Bay over a period of five years. Some of the samples were collected after Hurricane Andrew. *Thalassia* samples collected before and after the hurricane showed no significant differences. Parrot fish tended to graze selectively on the decayed tips of the seagrass blades

KEY WORDS: Turtle grass, *Thalassia testudinum*, Grazing, Parrot fish, Crandon Marina, Bear Cut, Hurricane Andrew

1230

Montague, J. R., J. L. Carballo, W. P. Lamas, J. A. Sanchez, E. R. Levine, M. Chacken, and J. A. Aguinaga (1995) Population ecology of the sea urchin *Lytechinus variegatus* in relation to seagrass diversity at two sites in Biscayne Bay: pre- vs. post-Hurricane Andrew (1989-1992). Florida Scientist, 58(2):234-246.

TIME COVERAGE: 1989 - 1992

SUMMARY: Collections of sea urchins were made in Bear Cut and near the Crandon Marina and significant differences were found in urchin densities. The percentage of *Thalassia* bottom cover differed among both sites. Little change was observed at the sites after the passage of Hurricane Andrew.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Seagrass, Hurricane Andrew, Crandon Marina, Bear Cut

1231

Montague, J. R., A. Morales, and I. Gonzalez (1995) Population density of sea urchins (*Lytechinus variegatus*) in relation to standing crop of seagrasses in Biscayne Bay. Florida Scientist, 58(Suppl. 1):13.

TIME COVERAGE: 1994 - 1995

SUMMARY: Sea urchins and benthic vegetation were collected from Bear Cut, Crandon Park and Virginia Key. Population densities and seagrass biomass were determined.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Population density, Sea grass, *Thalassia testudinum*, Bear Cut, Crandon Park, Key Biscayne, Virginia Key

1232

Montague, J. R., L. Ortiz, A. Arguelles, J. M. Millan, and L. Cardoch (1988) Density and dispersion estimates for sea urchins in a south Florida seagrass community. Florida Scientist, 51(1):19-22.

TIME COVERAGE: 1986

SUMMARY: Sea urchins were collected in Key Biscayne and population density determined. The statistical dispersion of the urchins in the seagrass beds was random.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, *Tripneustes ventricosus*, Seagrass, Abundance

1233

Mooney, M. J. (1978) Waterspout vs. marina. Sea Frontiers, 24(3):159-168.

TIME COVERAGE: 1968

SUMMARY: This is an account of a waterspout that passed over Dinner Key Marina.

KEY WORDS: Waterspouts, Dinner Key Marina

1234

Moore, D. R. (1963) Distribution of the sea grass, *Thalassia*, in the United States. Bull. Mar. Sci. Gulf Caribb., 13(-):329-342.

TIME COVERAGE: 1963

SUMMARY: This paper discusses the distribution of *Thalassia* in the US. The distribution depends upon a variety of factors including temperature, turbidity, water depth, salinity and wave action.

KEY WORDS: Seagrass, *Thalassia*, Ecological distribution, Turtle grass

1235

Moore, D. R. (1964) The family Vitrinellidae in south Florida and the Gulf of Mexico. Ph.D. dissertation. University of Miami, Coral Gables, FL. 235 pp.

TIME COVERAGE: 1964

SUMMARY: This work is a study of the mollusk family Vitrinellidae, small snails of the size range of foraminifera. Some specimens were collected in Biscayne Bay.

KEY WORDS: Vitrinellidae, Marine mollusks, Taxonomy, Gulf of Mexico

1236

Moore, H. B. (1972) Biology of tropical bottom invertebrates. Final report for the Water Quality Office, Environmental Protection Agency, Program #18050 DMV, Grant #WP-01433. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 29 pp.

TIME COVERAGE: 1972

SUMMARY: The infauna of the upper parts of Biscayne Bay were surveyed and the relation to sediment type described for 121 species. Accounts of the ecology of 33 local species were prepared. Upper lethal temperatures were determined for 50 species. Part of this citation is an annotated bibliography.

KEY WORDS: Tropical environment, Marine invertebrates, Ecological distribution, Infauna, Northern Bay, Sediment

1237

Moore, H. F. (1908) The commercial sponges and the sponge fisheries. Bull. US Bureau of Fisheries, Part 1, 28(-):399-512.

TIME COVERAGE: 1908

SUMMARY: This paper reviews species of commercial sponges, fishery methods, and the sponge fisheries of various areas worldwide including Biscayne Bay and the Florida Keys.

KEY WORDS: Sponges, Sponge fisheries, Florida keys, Card Sound

1238

Moore, H. B. (1965) The correlation of symmetry, color and spination in an urchin. Bull. Mar. Sci., 15(1):245-254.

TIME COVERAGE: 1964

SUMMARY: Two abnormal specimens of *Lytechinus variegatus* are described. The specimens showed a correlation between shape changes, reduction of spination, and disturbance of color pattern.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Bear Cut, Abnormalities

1239

Moore, H. B. (1972) An estimate of carbonate production by macrobenthos in some tropical, soft-bottom communities. Mar. Biol., 17(-):145-148.

TIME COVERAGE: 1972

SUMMARY: Productivity figures for most of the soft bottom communities of Biscayne Bay are known, and these values were converted to carbonate production. The highest values were found for intertidal areas.

KEY WORDS: Carbonates, Biological production, Benthos, Mud, Community composition, Ocean floor, Key Biscayne

1240

Moore, H. B. (1967) Miami sea temperatures. Technical report ML 67269. Institute of Marine Science, University of Miami, Miami, FL.

TIME COVERAGE: 1947 - 1967

SUMMARY: This report contains tables of sea temperatures in Biscayne Bay.

KEY WORDS: Water temperature, Miami, Virginia Key, Venetian Causeway

1241

Moore, H. B. (1970) Miami sea temperatures and salinities. Technical report 70038. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 9 pp.

TIME COVERAGE: 1947 - 1968

SUMMARY: This report contains salinities and water temperatures in Biscayne Bay.

KEY WORDS: Water temperature, Salinity, Miami

1242

Moore, H. B., H. D. Albertson, and S. M. Miller (1974) Long-term changes in the settlement of barnacles in the Miami area. Bull. Mar. Sci., 24(1):86-100.

TIME COVERAGE: 1943 - 1970

SUMMARY: Daily and monthly counts of barnacle settlement rates on test panels at Miami Beach were presented. The effects of various environmental factors such as sewage pollution and hurricanes are discussed. Changes in species composition due to the immigrations of two new species into the area were documented.

KEY WORDS: Barnacles, Biological settlement, Miami Beach, Environmental effects, Miami Beach

1243

Moore, H. B., and F. O. Bingham (1971) The effects of refuse dumps on the plant and animal life of adjacent shallows of Biscayne Bay. Special report prepared for Greenleaf/Telesca Engineers, Architects. University of Miami, Miami, FL.

TIME COVERAGE: 1971

SUMMARY: The objectives of this report were to suggest the use of procedures that would minimize the harmful effects of filling procedures on the marine life of the adjacent waters of Biscayne Bay; to note the recognizable effects of the filling of mangrove forests with garden and home refuse; and to recommend studies that would better describe the ecological problems related to the filling of low areas with suck refuse.

KEY WORDS: Waste disposal, Coastal waters, Pollution surveys

1244

Moore, H. B., L. T. Davies, T. H. Fraser, R. H. Gore, and N. N. Lopez (1968) Some biomass figures from a tidal flat in Biscayne Bay, Florida. Bull. Mar. Sci., 18(2):261-279.

TIME COVERAGE: 1965

SUMMARY: The dominant species of invertebrate macrofauna were sampled. Each species was discussed briefly in terms of its abundance, biomass, dispersion, and associations with tidal level, sediment texture and marine grass.

KEY WORDS: Biomass, Tidal flats, Marine invertebrates, Abundance, Mud flats, Virginia Key

1245

Moore, H. B., and A. C. Frue (1959) The settlement and growth of *Balanus improvisus*, *B. eburneus* and *B. amphitrite* in the Miami area. Bull. Mar. Sci. Gulf Caribb., 9(4):421-440.

TIME COVERAGE: 1943 - 1958

SUMMARY: Data for twelve years on the settlement, survival and growth of three species of barnacles in the Miami area were analyzed. Long period, seasonal and short period fluctuations were described, and the correlations of these with temperature and river discharge discussed. In two of the species there appeared to be three distinct spawning periods during the year, and it is possible that these coincide with the maturation of three successive generations since growth and maturation were very rapid.

KEY WORDS: Barnacles, *Balanus improvisus*, *Balanus eburneus*, *Balanus amphitrite*, Biological settlement, Growth

1246

Moore, H. B., I. Hela, E. S. Reynolds, J. K. McNulty, S. M. Miller, and C. A. Carpenter (1955) Report on preliminary studies of pollution in Biscayne Bay. Mimeographed report 55-3. Progress report to the Federal Security Agency, Public Health Service, National Institutes of Health under grant E-510. Marine Laboratory, University of Miami, Coral Gables, FL.

TIME COVERAGE: 1955

SUMMARY: This study was prepared to document conditions in Biscayne Bay before sewage effluents inputs into the Bay stopped in July 1956.

KEY WORDS: Sewage disposal, Water pollution, Hydrography, Chemical oceanography, Bacteriology, Marine organisms, Nutrients

1247

Moore, H. B., T. V. Jutare, J. C. Bauer, and J. A. Jones (1963) The biology of *Lytechinus variegatus*. Bull. Mar. Sci. Gulf Caribb., 13(1):23-53.

TIME COVERAGE: 1957 - 1959

SUMMARY: This species of sea urchin feeds largely on *Thalassia* and is eaten by various gastropods and birds. Growth rate showed a negative correlation with temperature. Spawning occurs throughout the summer at Miami but is briefer in Bermuda where it also exhibits a lunar rhythm. Following an usually cold winter in Miami, a large proportion were protandrous hermaphrodites and had an unusual test shape.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Life history, Bear Cut, Key Biscayne

1248

Moore, H. B., T. V. Jutare, J. A. Jones, B. F. McPherson, and C. F. E. Roper (1963) A contribution to the biology of *Tripneustes esculentus*. Bull. Mar. Sci. Gulf Caribb., 13(2):267-281.

TIME COVERAGE: 1959 - 1961

SUMMARY: The biology of this sea urchin was studied for several years in Miami and Bermuda. It spawns in the spring and summer but with different spawning patterns in different years. First spawning seems to be triggered by temperature and successive spawnings by attainment of a gonad size which increases during the season. Winter growth of the gonad and its rate of build up between spawnings is negatively correlated with temperature. Hermaphroditism was common in a year group which was in the immature stage during an unusually cold winter.

KEY WORDS: Sea urchin, *Tripneustes esculentus*, Life history

1249

Moore, H. B., and N. N. Lopez (1975) An additional study of the ecology of *Chione cancellata*. Bull. Mar. Sci., 25(1):126-130.

TIME COVERAGE: 1964 - 1972

SUMMARY: This citations expands on previous studies on *Chione cancellata*.

KEY WORDS: Venus clams, *Chione cancellata*, Ecophysiology, Seaquarium Flats, Bear Cut, Virginia Key

1250

Moore, H. B., and N. N. Lopez (1970) A contribution to the ecology of the lamellibranch *Dosinia elegans*. Bull. Mar. Sci., 20(4):980-986.

TIME COVERAGE: 1963 - 1970?

SUMMARY: This paper discusses aspects of *Dosinia elegans*.

KEY WORDS: Clams, Lamellibranchiata, Veneridae, *Dosinia elegans*, Growth, Biomass

1251

Moore, H. B., and N. N. Lopez (1970) A contribution to the ecology of the lamellibranch *Tellina alternata*. Bull. Mar. Sci., 20(4):971-979.

TIME COVERAGE: 1957 - 1959, 1964 - 1968

SUMMARY: This paper discusses the ecology of *Tellina alternata*.

KEY WORDS: Clams, *Tellina alternata*, Growth, Population density

1252

Moore, H. B., and N. N. Lopez (1972) A contribution to the ecology of the lamellibranch *Anodontia alba*. Bull. Mar. Sci., 22(2):381-390.

TIME COVERAGE: 1972

SUMMARY: This citation discusses the ecology of this clam.

KEY WORDS: Lucina clams, *Anodontia alba*, Ecophysiology, Virginia Key

1253

Moore, H. B., and N. N. Lopez (1966) The ecology and productivity of *Moira atropos* (Lamarck). Bull. Mar. Sci., 16(4):648-667.

TIME COVERAGE: 1957 - 1959

SUMMARY: This paper discusses the ecology of the heart urchin in communities living at about 3 m in Biscayne Bay. After urchins reach a size of about 40 mm, growth stops and energy is directed towards spawn production usually in spring and summer, showing a possible correlation with moon phase.

KEY WORDS: Heart urchins, *Moira atropos*, Ecophysiology, Biological production

1254

Moore, H. B., and N. N. Lopez (1969) The ecology of *Chione cancellata*. Bull. Mar. Sci., 19(1):131-148.

TIME COVERAGE: 1964 - 1966

SUMMARY: This citation describes the biology of the Venus clam.

KEY WORDS: Venus clams, *Chione cancellata*, Ecophysiology, Habitat, Virginia Key

1255

Moore, H. B., and N. N. Lopez (1972) Factors controlling variation in the seasonal spawning pattern of *Lytechinus variegatus*. Mar. Biol., 14(-):275-280.

TIME COVERAGE: 1959, 1962 - 1971

SUMMARY: A population of sea urchins was sampled in Bear Cut and the gonad volume and test diameter recorded at monthly intervals for 10 yrs. Correlations were found between the appearance in successive years of a brood of young urchins on the shore and the temperature and rainfall.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Spawning seasons, Bear Cut

1256

Moore, H. B., and B. F. McPherson (1963) Colonization of the Miami area by the barnacle *Balanus trigonus* Darwin and a note on its occurrence on the test of an echinoid. Bull. Mar. Sci., 13(3):418-421.

TIME COVERAGE: 1963

SUMMARY: The occurrence of a barnacle new to the east coast was recorded. Data were given on its seasonal and vertical distribution,

KEY WORDS: Barnacles, *Balanus trigonus*, Colonization, Sea urchin, *Tripneustes esculentus*, *Lytechinus variegatus*

1257

Moore, H. B., and B. F. McPherson (1965) A contribution to the study of the productivity of the urchins *Tripneustes esculentus* and *Lytechinus variegatus*. Bull. Mar. Sci., 15(4):855-871.

TIME COVERAGE: 1963 - 1964

SUMMARY: Sea urchins were collected off the sewage treatment plant in Virginia and Key and off Bear Cut and kept in an aquarium. Rates of feeding, respiration and excretion were determined in summer and winter for the two species. Both show a complete seasonal adaptation of the feeding rate to a maximum at the optimum feeding temperatures. Young individuals feed three times as fast as the older ones. Respiratory rate was higher in the summer than in winter, and relatively high in small individuals.

KEY WORDS: Sea urchin, *Tripneustes esculentus*, *Lytechinus variegatus*, Biological production, Seasonal variations, Virginia Key, Bear Cut

1258

Moore, H. B., and D. R. Moore (1950) Key to the common gastropods of the Miami area. Report. Marine Laboratory, University of Miami, Miami, FL. 15 pp.

TIME COVERAGE: 1950

SUMMARY: This report lists the common gastropods in Biscayne Bay.

KEY WORDS: Gastropods, Identification keys, Miami, Species list

1259

Moore, J. C. (1953) Distribution of marine mammals to Florida waters. American Midland Naturalist, 49(-):117-158.

TIME COVERAGE: 1953

SUMMARY: This paper describes the distribution of marine mammals in Florida.

KEY WORDS: Marine mammals, Geographical distribution, Florida

1260

Moore, J. C. (1951) The range of the Florida manatee. Quarterly J. Florida Academy of Sciences, 14(1):1-19.

TIME COVERAGE: 1951

SUMMARY: This paper describes the distribution and behavior of manatees in Florida. The greatest number of animals in South Florida were found gathered on a cold morning near the warm outflow of a factory outlet located under the Miami river.

KEY WORDS: West Indian manatee, *Trichechus manatus latirostris*, Geographical distribution, Florida

1261

Moore, J. G. Thermal pollution. In: Proc., Natl. Symp. on Thermal Pollution: Engineering Aspects of Thermal Pollution. F. L. Parker, and P. A. Krenkel, Nashville, TN, 1968. Vanderbilt University Press 1969, Nashville, TN. 243-248.

TIME COVERAGE: 1968

SUMMARY: Possible effects of thermal pollution of Biscayne Bay from the Turkey Point power plant are discussed.

KEY WORDS: Thermal pollution, Cooling water, Turkey Point

1262

Moore, R. T., and S. P. Meyers (1962) Thalassiomycetes III. The genus Zalerion. Can. J. Microbiol., 8(4):407-416.

TIME COVERAGE: 1962

SUMMARY: This paper describes the taxonomy of this genus. Specimens were collected from seawater of Biscayne Bay.

KEY WORDS: Fungi, Zalerion, Deuteromycetes, Taxonomy

1263

Moore, R. T., and E. Scott (1967) Thalassiomycetes X. Variation in growth and reproduction of two isolates of *Corollospora maritima*. Mycologia, 59(3):446-455.

TIME COVERAGE: 1965

SUMMARY: The growth and reproduction of two isolates of *Corollospora* were studied. One of the isolates was obtained from a balsa wood panel submerged in Biscayne Bay.

KEY WORDS: Fungi, *Corollospora maritima*

1264

Mopper, K., and B. F. Taylor (1986) Biogeochemical cycling of sulfur: thiols in coastal marine sediments. In: Organic Marine Geochemistry. M. L. Sohn (ed.). ACS symposium series no. 305. American Chemical Society, Washington, DC.

TIME COVERAGE: 1984

SUMMARY: Intertidal Biscayne Bay sediments were periodically collected, and slurries prepared from these samples analyzed for thiols. Over 30 thiols were present at significant levels in anoxic intertidal Biscayne Bay sediments, and apparently arise as a result of interacting biotic processes and abiotic conditions.

KEY WORDS: Biogeochemical cycle, S, Coastal zone, Sediment

1265

Morell, V. (1997) First Floridians found near Biscayne Bay. Science, 275:1258-59.

TIME COVERAGE: 1997

SUMMARY: Recently dated fish bones and artifacts found in Cutler Ridge indicate the presence of humans in South Florida almost 10,000 yrs ago.

KEY WORDS: Archaeology, Cutler Ridge

1266

Morgan, C. (1999) Standing up for Stiltsville. The Miami Herald, Miami, FL. June 22. 1.

TIME COVERAGE: 1999

SUMMARY: This article discusses the 5-month "stay of execution" for Stiltsville. The remaining structures were scheduled to be removed July 1.

KEY WORDS: Stiltsville, Biscayne National Park

1267

Morgan, C. (1999) Stiltsville gets second reprieve. The Miami Herald, Miami, FL. January 23.

TIME COVERAGE: 1999

SUMMARY: Federal authorities agreed to extend the discussions regarding the fate of Stiltsville until December 2000.

KEY WORDS: Biscayne National Park, Stiltsville

1268

Mormino, G. M. (1997) Midas returns: Miami goes to war, 1941 - 1945. Tequesta, 57(-):5-51.

TIME COVERAGE: 1941 - 1945

SUMMARY: This articles describes Miami during World War II. Biscayne Bay served as a training ground for sailors and pilots. Servicemen, including foreign troops, were stationed at hotels in Miami Beach during training and rehabilitation.

KEY WORDS: History, World War II

1269

Morrill, J. B., and F. C. W. Olson (1955) Literature survey of the Biscayne Bay area. Report prepared under contract N62306 - s - 287 with the US Navy Hydrographic Office. Oceanographic Institute, Florida State University, Tallahassee, FL. 143 pp.

TIME COVERAGE: 1955

SUMMARY: This bibliography has chapters summarizing the climate, morphology, geology, hydrology, currents, tides, temperature, salinity, transparency, and sea and swell in Biscayne

Bay. Some of the information sources are unpublished documents. Also included are rainfall data from 1901 to 1947

KEY WORDS: Climate, Geology, Hydrology, Water currents, Water temperature, Salinity, Water quality, Bibliographies

1270

Motte, J. R. (1953) Journey into Wilderness: an Army Surgeon's Account of Life in Camp and Field During the Creek and Seminole Wars., Edited by J. F. Sunderman. University of Florida Press, Gainesville.

TIME COVERAGE: 1836-1838

SUMMARY: This account describes the journeys of J. R. Motte who went traveled as far Key Largo along the east coast of Florida.

KEY WORDS: History, Biographies, Geography

1271

Muir, H. (1953) Miami, U. S. A. Hurricane House Publishers, Coconut Grove, FL. 308 pp.

TIME COVERAGE: 1875 - 1950s

SUMMARY: This book describes the growth of the South Florida community.

KEY WORDS: Miami, History, Coconut Grove

1272

Multer, H. G. (compiler) (1969) Field guide to some carbonate rock environments, Florida Keys and western Bahamas. Farleigh Dickinson University, Madison, NJ. 159 pp. 159 pp.

TIME COVERAGE: 1969

SUMMARY: This is a field guide to various types of carbonate environments in South Florida and the Bahamas.

KEY WORDS: Carbonate rocks, Florida Keys, Bahamas, Bear Cut, Florida Bay, Dry Tortugas, Card Sound, Barnes Sound, Virginia Key, Key Biscayne, Field guide

1273

Multer, H. G. (1977) Field guide to some carbonate rock environments, Florida Keys and western Bahamas. Field guide. Kendall/Hunt, Dubuque, IO. 415 pp.

TIME COVERAGE: 1977

SUMMARY: This report is a field guide to carbonate rock environments including worm and mangrove reefs at Bear Cut, the thermal stress environment at Turkey Point, Pleistocene outcrops, and other areas of interest.

KEY WORDS: Carbonate rocks, Florida Keys, Bahamas, Bear Cut, Florida Bay, Card Sound

1274

Multer, H. G., and J. E. Hoffmeister (1968) Subaerial laminated crusts of the Florida Keys. Geol. Soc. America Bull., 79(-):183-192.

TIME COVERAGE: 1968

SUMMARY: Exposed Pleistocene marine limestone of the Florida keys are often coated by laminated calcitic crusts. These crusts were identified as marine algal stromatolites similar to the soft, marine, living algal stromatolitic mats of the Florida Keys which border and occasionally coast the encrusted bedrock. Such juxtaposition is now considered coincidental. Carbon-14 dating of crust samples reveals a time of formation during which the land surface was above sea level indicating a subaerial origin.

KEY WORDS: Limestone, Algal mats, Weathering, Sedimentary structures, Florida Keys

1275

Multer, H. G., and J. D. Milliman (1967) Geologic aspects of sabellarian reefs, southeastern Florida. Bull. Mar. Sci., 17(2):257-267.

TIME COVERAGE: 1967

SUMMARY: The tube-building marine polychaete *Phragmatopoma lapidosa* produces thick, wave resistant littoral reefs and encrustations along the southeastern coast of Florida. One such reef at Virginia Key is described.

KEY WORDS: Tube dwellers, *Phragmatopoma lapidosa*, Sabellariids, Reef formation, Sediment texture, Virginia Key, Key Biscayne, Vero Beach, Jupiter Beach

1276

Munroe, R. M. (1896) Account of sponge-cultural experiments in Biscayne Bay. In: Notes on Biscayne Bay, Florida, with reference to its adaptability as the site of a marine hatching and experiment station. H. M. Smith Report of the Commissioner [US Commission of Fish and Fisheries] for the year ending June 30, 1895.

TIME COVERAGE: 1895

SUMMARY: 187-188

KEY WORDS: Sponge culture

1277

Munroe, R. M., and V. Gilpin (1930) The Commodore's Story. Reprinted in 1974 by the Historical Association of Southern Florida, Miami, FL. 384 pp.

TIME COVERAGE: 1877 - 1926

SUMMARY: This book is a biography of Commodore R. M. Monroe, the founder of the Biscayne Bay Yacht Club and a long time resident of South Florida. His home, the Barnacle, stands to this day.

KEY WORDS: History

1278

Murphy, L. W., and T. G. Smith (1995) Submerged in the past: mapping the beguiling waters of Florida's Biscayne and Dry Tortugas National Parks. Geo Info Systems, 5(10):26-33.

TIME COVERAGE: 1995

SUMMARY: Since 1993, the National Park Service has been conducting surveys designed to provide a comprehensive, cumulative, natural and cultural resource inventory accessible through geographic database software. These underwater remote sensing surveys are some of the first to be designed specifically for GIS applications.

KEY WORDS: Hydrographic surveying, Underwater object location, Archaeology, Biscayne National Park, Dry Tortugas National Park

1279

Murray, M. H. (1994) Storm-tide elevations produced by Hurricane Andrew along the southern Florida coasts, August 24, 1992. Open-file report 94-116. US Geological Survey, Tallahassee, FL. 27 pp.

TIME COVERAGE: 1992

SUMMARY: The combined effects of Hurricane Andrew's storm tide (storm surge and astronomical tides) caused flooding over a large part of extreme southern Florida. High water marks were identified, described, surveyed and plotted in quadrangle maps. Storm tide elevations ranged from 4 to 6 feet in northern Biscayne Bay and increased to about 17 feet near the center of the Bay.

KEY WORDS: Storm surge, Flooding, Hurricane Andrew, Dade County, Collier County, Monroe County

1280

National Park Service (1966?) Biscayne National Monument: a proposal. Report. US National Park Service, Washington, DC.

TIME COVERAGE: 1966

SUMMARY: This is a short public oriented report on the proposed Biscayne National Monument. Most of the text is the same as that in US National Park Service (1965).

KEY WORDS: Environmental protection, Resource management, Biscayne National Monument

1281

National Park Service (1983) Biscayne National Park: general management plan, development concept plan, wilderness study and environmental assessment. Report. US Government Printing Office, Washington, DC. 133 pp.

TIME COVERAGE: 1983

SUMMARY: This is the proposed management plan for the Biscayne National Park.

KEY WORDS: Marine parks, Protected resources, Biscayne National Park

1282

National Park Service (1977) Draft general management plan, Biscayne National Monument. Report. US Government Printing Office, Washington, DC. 36 pp.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marine parks, Environment management, Nature conservation, Biscayne National Monument

1283

National Park Service (1977) Draft general management plan, Biscayne National Monument. Report. US National Park Service, Washington, DC. 39 pp.

TIME COVERAGE: 1977

SUMMARY: This is the draft of the general management plan for Biscayne National Monument.

KEY WORDS: Marine parks, Environment management, Nature conservation, Biscayne National Monument

1284

National Park Service (1976) Environmental Assessment. General management plan for Biscayne National Monument, Florida. US Department of the Interior, National Park Service, Denver Service Center, Denver, CO. 261 pp.

TIME COVERAGE: 1976

SUMMARY: This report is a detailed management plan for the Biscayne National Monument.

KEY WORDS: Natural resources, Marine parks, Nature conservation, Environment management, Biscayne National Monument, Species list

1285

National Park Service (1978) Final environmental statement for general management plan, Biscayne National Monument, Florida. Report. National Park Service, Denver, CO. 349 pp.

TIME COVERAGE: 1978

SUMMARY: This is the final environmental for the Biscayne National Monument.

KEY WORDS: Natural resources, Marine parks, Nature conservation, Environment management, Biscayne National Monument

1286

National Park Service (1965?) Florida coral reefs: Islandia. Report. US National Park Service, Washington, DC. 24 pp.

TIME COVERAGE: 1965

SUMMARY: This is a description of the proposed national park in the northern Florida Keys.

KEY WORDS: Coral reefs, Florida Keys, Elliott Key, Islandia

1287

National Park Service (1978) General management plan, Biscayne National Monument. Report. US National Park Service, Washington, DC. 39 pp.

TIME COVERAGE: 1978

SUMMARY: This is the general management plan for Biscayne National Monument.

KEY WORDS: Marine parks, Environment management, Nature conservation, Biscayne National Monument

1288

Nelson, D. R. (1962) An evaluation of the Columbia Obstruction Method for studying the behavior of the pink shrimp, *Penaeus duorarum* Burkenroad. M.Sc. thesis. University of Miami, Coral Gables, FL. 77 pp.

TIME COVERAGE: 1962

SUMMARY: The purpose of this study was to evaluate the use of the Columbia Obstruction Method to study the behavior of pink shrimp. The method has been used in the study of rats and other animals. Pink shrimp for the study were collected in Biscayne Bay.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Behavior

1289

Nelson, D. R. (1965) Hearing and acoustic orientation in the lemon shark, *Negaprion brevirostris* (Poey), and other large sharks. Ph.D. dissertation. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1965

SUMMARY: The objectives of this study were to investigate the sense of hearing in the lemon shark, the unconditioned heart response of sound in the shark, and the response of sharks to sounds of possible biological significance. Field experiments were conducted in Biscayne Bay.

KEY WORDS: Audition, Bioacoustics, Sharks, Lemon shark, *Negaprion brevirostris*

1290

Nelson, D. M., M. E. Monaco, E. A. Irlandi, L. R. Settle, and L. Coston-Clements (1991) Distribution and abundance of fishes and invertebrates in southeast estuaries. ELMR report no. 9. NOAA/NOS/ORCA, Strategic Environment Assessments Division, Rockville, MD. 177 pp.

TIME COVERAGE: 1991

SUMMARY: This report is a summary of distribution and abundance of fishes and invertebrates in southeast estuaries including Biscayne Bay.

KEY WORDS: Estuarine organisms, Estuarine fisheries, Abundance, Geographical distribution, Southeast coast, Gulf of Mexico

1291

Nesbitt, S. A., J. C. Ogden, H. W. Kale, B. W. Patty, and L. A. Rowse (1982) Florida atlas of breeding sites for herons and their allies: 1976-78. Biological Services Program FWS/OBS-81/49. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, DC. 449 pp.

TIME COVERAGE: 1976 - 1978

SUMMARY: This document contains the results of aerial surveys of breeding sites for herons and their allies in peninsular Florida. The atlas includes information on 295 colonies including several located in Dade County. One of the colonies is located in West Arsenicker Key in southern Biscayne Bay.

KEY WORDS: Breeding sites, Aquatic birds, Marine birds, Florida, Arsenicker Key, Cutler

1292

Neumann, C. J., G. W. Cry, E. L. Caso, and B. R. Jarvinen (1978) Tropical cyclones of the North Atlantic Ocean, 1871-1977. NOAA/National Weather Service/National Climatic Center, Asheville, NC. 170 pp.

TIME COVERAGE: 1871 - 1977  
SUMMARY: [UPDATED EDITION IS NEUMANN (1992).]  
KEY WORDS: Hurricanes, North Atlantic

1293

Newmann, C. J., B. R. Jarvinen, C. J. McAdie, and J. D. Elms (1993) Tropical cyclones of the North Atlantic Ocean, 1871-1992. Historical climatology series 6-2. NOAA/National Weather Service/National Climatic Center, Asheville, NC. 193 pp.

TIME COVERAGE: 1871 - 1992

SUMMARY: This report is a series of maps showing the tracks of all known hurricanes from 1871 to 1992.

KEY WORDS: Hurricanes, North Atlantic

1294

Newell, S. Y. (1976) Mangrove fungi: the succession in the mycoflora of red mangrove (*Rhizophora mangle* L.) seedlings. In: Recent Advances in Aquatic Mycology. E. B. G. Jones (ed.). John Wiley, New York, NY. 749 pp.

TIME COVERAGE: 1976

SUMMARY: This citation discusses the succession of fungi on seedlings of red mangrove.

KEY WORDS: Fungi, Mangrove swamps, Red mangrove, *Rhizophora mangle*, Species list

1295

Newell, S. Y. (1974) The succession in the mycoflora of red mangrove (*Rhizophora mangle* L.) seedlings. Ph.D. dissertation. University of Miami, Coral Gables, FL. 103 pp.

TIME COVERAGE: 1970 - 1971

SUMMARY: This study describes the pattern of colonization of red mangrove seedlings by communities of fungi. Some samples were obtained in Biscayne Bay.

KEY WORDS: Fungi, Mangrove swamps, Red mangrove, *Rhizophora mangle*

1296

Newell, S. Y., J. W. Fell, and C. Miller (1986) Deposition and decomposition of turtlegrass leaves. Int. Revue ges. Hydrobiol., 71(3):363-369.

TIME COVERAGE: 1986

SUMMARY: Seagrasses are generally deposited on the shoreline. This study describes rates of input of dry matter, organic carbon, and nitrogen for turtle grass as it decays on the shoreline and is continuously submerged.

KEY WORDS: Degradation, Intertidal environment, Seagrass, Sedimentation, Organic carbon, Nitrogen, Biogeochemical cycle, Leaves, Manatee Bay, Las Roques, *Thalassia testudinum*, West Point

1297

Newell, S. Y., and J. W. Fell (1980) Mycoflora of turtlegrass (*Thalassia testudinum* König) as recorded after seawater incubation. Botanica Marina, 23(-):265-275.

TIME COVERAGE: 1977

SUMMARY: Samples of *Thalassia* were incubated in seawater and active mycoflora studies.

KEY WORDS: *Thalassia testudinum*, Mycoflora, Matheson Hammock Park, Fungi, Spores, Turtle grass

1298

Newell, S. Y., and J. W. Fell (1982) Near-ultraviolet light in incubation of marine leaf-litter samples. Mycologia, 74(-):508-510.

TIME COVERAGE: 1982 (lab study)

SUMMARY: This study reports the results of routine application of near ultraviolet light during incubation to samples of dead leaves of *Thalassia*. Exposure to the ultraviolet light had little effect on sporulation and thus identification of the three most prevalent fungi.

KEY WORDS: Fungi, Turtle grass, *Thalassia testudinum*, Spores

1299

Newell, S. Y., and J. W. Fell (1975) Preliminary experimentation in the development of natural food analogues for culture of detritivorous shrimp. Sea Grant technical bull. 30. University of Miami Sea Grant, Coral Gables, FL. 115 pp.

TIME COVERAGE: 1975

SUMMARY: Fungal fermentation of agricultural by-products were conducted and attempts made to optimize fungal protein production. Resultant artificial detrital feeds were tested at pink shrimp aquaculture facilities located in south Dade County.

KEY WORDS: Fungi, Shrimp culture, Feed, Artificial feeding, Detritus feeders

1300

Newell, S. Y., and J. W. Fell (1982) Surface sterilization and the active mycoflora of leaves of a seagrass. *Botanica Marina*, 25(-):339-345.

TIME COVERAGE: 1976 - 1977

SUMMARY: *Thalassia* samples from the field and samples containing growing mycelium of known identity were used to study leaf surface sterilization techniques. Spores of potential dormant leaf-surface inhabitants were applied. Frequencies of fungal species after surface sterilization were much higher in decaying leaves from sandy intertidal zones than in decaying leaves from submerged sites.

KEY WORDS: Fungi, Turtle grass, *Thalassia testudinum*, Sterilization

1301

Nicholas, J. C. (1975) The economy of the south Florida coastal zone. Report. FAU/FIU Joint Center for Environmental and Urban Problems, Miami (?), FL. 37 pp + tables.

TIME COVERAGE: 1975

SUMMARY: This is a study of the economies of Dade, Broward, Palm Beach, Martin and St. Lucie counties, in which 98% of the people and over 90% of the economic activity are found in the coastal zone.

KEY WORDS: Coastal zone, Economic analysis, South Florida

1302

Niedhauk, C. A. (1973) Charlotte's Story: Parts of an Updated Florida Key Diary: 1934-1935. C. A. Niedhauk, Islamorada, FL. 205 pp.

TIME COVERAGE: 1934 - 1935

SUMMARY: This is an account of the Niedhauk's life on Elliott Key.

KEY WORDS: Biographies, Elliott Key, Florida Keys

1303

Niedhauk, C. (1969) Pioneering on Elliott Key, 1934-1935. *Tequesta*, 29(-):27-45.

TIME COVERAGE: 1934 - 1935

SUMMARY: The experiences of the Niedhauks on Elliott Key during the Depression years are described in this paper. Most of the settlers were "Conchs" from Key West. Earlier inhabitants included farmers and ship builders. Elliott Key was mostly abandoned after the construction of the Florida East Coast Railroad. Aspects of the sponge fisheries and the Hurricane of 1935 are described.

KEY WORDS: Biographies, Elliott Key, Florida Keys, Sponge fisheries, Hurricane of 1935, Biographies, Florida Keys

1304

Niemiec, P. (1996) The Sweeting homestead on Elliott Key. Tequesta, 56(-):24-45.

TIME COVERAGE: 1882 - 1930

SUMMARY: The Sweeting family settled Elliott Key from 1882 to 1930. experiences of the family are described.

KEY WORDS: Elliott Key, Homesteading

1305

Nnaji, S. (1987) South Biscayne Bay water quality: a twelve year record for Biscayne National Park. Research/resources management report SER-88. National Park Service, Southeast Regional Office, Atlanta, GA. pp.

TIME COVERAGE: 1972 - 1982

SUMMARY: An observational study was performed on a set of water quality data obtained in Biscayne Bay over a period of about 12 years, and multivariate analysis of the data is presented.

KEY WORDS: Water quality, Fresh water, South Bay, Biscayne National Park, Salinity, Turbidity, pH, Dissolved oxygen, Nutrients

1306

NOAA (1973) Estuarine-dependent marine fishes. Appendix E: South Florida ecological study. NOAA/NMFS, Gulf Coastal Fisheries Center, St. Petersburg Beach, FL. Part I, 98 pp + Part II, various paging.

TIME COVERAGE: 1973

SUMMARY: Published and unpublished literature relative to the commercial and sport fishes of South Florida was reviewed for the purpose of documenting the importance of the estuarine zone to fish production.

KEY WORDS: Marine fish, Estuarine fisheries, South Florida

1307

NOAA (1990) Estuaries of the United States; vital statistics of a national resource base. NOAA/NOS/ORCA/SAB, Rockville, MD. 79 pp.

TIME COVERAGE: 1990

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuaries, Estuarine dynamics

1308

NOAA (1950 - to date) Tidal current tables; Atlantic coast of North America. NOAA/National Ocean Service, Washington, DC.

TIME COVERAGE: 1950 - to date

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Tidal currents, Tide tables, Atlantic Ocean, East coast

1309

NOAA (1949-to date) Tide tables, high and low water predictions, East coast of North and South America, including Greenland. NOAA/National Ocean Service, Washington.

TIME COVERAGE: 1949-to date

SUMMARY: [Title varies as does issuing body (US Coast and Geodetic Survey, National Ocean Survey, National Ocean Service, NOAA).]

KEY WORDS: Tide tables, East coast, Atlantic Ocean

1310

Noe, C. D. (1967) Contribution to the life history of the stone crab *Menippe mercenaria* Say with emphasis on the reproductive cycle. M.Sc. thesis. University of Miami, Coral Gables, FL. 55 pp.

TIME COVERAGE: 1965 - 1966

SUMMARY: The spawning and growth cycles of stone crabs were studied using specimens collected in Bear Cut.

KEY WORDS: Stone crab, *Menippe mercenaria*, Life history, Reproduction, Bear Cut

1311

Norris, J. P. (1974) Shrimp farming. Sea Frontiers, 20(2):100-107.

TIME COVERAGE: 1974

SUMMARY: This article describes the life cycle of the *Penaeus duorarum* and shrimp farming.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Shrimp culture, Turkey Point

1312

Nowlin, R. (1977) Aerial photographic interpretation of the benthic communities living on Bruce Shoals, Biscayne Bay, Florida. J. Tennessee Acad. Science, 52(-):67.

TIME COVERAGE: 1977

SUMMARY: This abstract describes the use of aerial photography to study benthic communities in Biscayne Bay.

KEY WORDS: Aerial photography, Benthos, Aquatic communities, Bruce Shoals, Safety Valve

1313

Nucci, L. R., and R. E. Berkoff (1995) The development and rehabilitation of south Florida bulkheads and seawalls. In: Proc., Ports '95. M. A. Knott, (ed.). Tampa, FL, 1995. American Society of Civil Engineers, New York, NY. 1008-1021.

TIME COVERAGE: 1995

SUMMARY: This citation describes the history and types of bulkheads constructed in South Florida. Virtually none were constructed prior to 1900 and the majority of those constructed between 1900 and 1920 no longer exist. Several case histories are discussed.

KEY WORDS: Sea walls, Coastal structures, Miami River, New River, Deering Bay, North Miami Beach

1314

Nugent, R. S. (1970) The effects of thermal effluent on some of the macrofauna of a subtropical estuary. Ph.D. dissertation. University of Miami, Coral Gables, FL. 198 pp.

TIME COVERAGE: 1968 - 1970

SUMMARY: The objective of this study was to determine the effects of the effluent from the Turkey Point Power Plant on the macrofauna of the mangrove habitats. Water samples were also obtained. Biofouling panels were also deployed and analyzed. The heated water afforded some protection to the fish from cold water kills. Anglers reported that more fish were caught in the colder months in the effluent canals of the power plant than in unheated canals in the area. The heated water contributed to the death of some organisms, such as blue crabs, grunts and toadfish, during the summer months. Settlement of the ivory barnacle increased in the heated water. Dissolved oxygen concentrations were lower in the heated water.

KEY WORDS: Thermal pollution, Turkey Point, Temperature effects, South Bay, Marine organisms

1315

Nugent, R. S. (1970) The effects of thermal effluent on some of the macrofauna of a subtropical estuary. Sea Grant tech. bull. 1. University of Miami Sea Grant, Coral Gables, FL. 198 pp.

TIME COVERAGE: 1968 - 1970

SUMMARY: [REPRINT OF DISSERTATION.]

KEY WORDS: Thermal pollution, Turkey Point, Temperature effects, South Bay, Marine organisms, Water quality, Biofouling

1316

NUS Corporation (1984) Remedial action master plan: Munisport site, North Miami, Dade County, Florida. NUS project 0701.96. EPA work assignment 01-4V79.0. Contract no. 68-01-6699. NUS Corporation, Pittsburgh, PA. Various paging.

TIME COVERAGE: 1984

SUMMARY: This is a remedial action plan for the Munisport site.

KEY WORDS: Groundwater pollution, Water quality, Pollution control, Munisport Landfill, North Miami

1317

Nye, L. B. (2000) Bioindicators of stress in fish in Biscayne Bay: stress protein 70 and melanomacrophage aggregates. Ph.D. dissertation. University of Miami, Coral Gables, FL.

TIME COVERAGE: 2000

SUMMARY: The presence of stress-related proteins in fish collected in Biscayne Bay was evaluated as an indicator of contamination.

KEY WORDS: Bioindicators

1318

Nye, L. B. (2000) Bioindicators of stress in fish in Biscayne Bay: stress protein 70 and melanomacrophage aggregates. Ph.D. dissertation. University of Miami, Coral Gables, FL.

TIME COVERAGE: 2000

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Biological stress, Indicators, Proteins, Pollution monitoring, Fish diseases, Pinfish, *Lagodon rhomboides*, Gray snapper, *Lutjanus griseus*, Grunts, *Haemulon sciurus*, *Haemulon plumeri*, Sea bream, *Archosargus rhomboidalis*, Gulf toadfish, *Opsanus beta*

1319

Nye, L. B. (1996) Stress proteins as a bioindicator in the sub-tropical marine fish, *Lutjanus griseus*, the grey snapper. Mar. Environ. Res., 42(1-4):278.

TIME COVERAGE: 1996

SUMMARY: Grey snapper produced stress proteins when exposed to heat shock. Further work is underway to develop grey snapper stress proteins as a bioindicator for Biscayne Bay.

KEY WORDS: Indicators, Biological stress, Grey snapper, *Lutjanus griseus*

1320

O'Brien, J. J., and R. M. Overstreet (1991) Parasite-host interactions between the rhizocephalan barnacle, *Loxothylacus texanus*, and the blue crab, *Callinectes sapidus*. Amer. Zoologist, 31(5):91A.

TIME COVERAGE: 1991

SUMMARY: This species of crab was found to be absent from the Atlantic coast north of Biscayne Bay. This work was based crabs collected in Mississippi.

KEY WORDS: Parasites, Life cycle, Temperature effects, *Loxothylacus texanus*, Blue crab, *Callinectes sapidus*

1321

Odell, D. K. (1976) Distribution and abundance of marine mammals in south Florida: preliminary results. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 315 pp.

TIME COVERAGE: 1974

SUMMARY: Twenty aerial surveys of Biscayne Bay for marine mammals were conducted beginning in July 1974 approximately every two weeks for a year. Six dolphin herds totaling 50 individuals were observed. Herd size ranged from 3 to 13 with a mean of 8 animals per herd. No manatees were observed in the Bay.

KEY WORDS: Manatees, *Trichechus manatus*, Bottlenose dolphin, *Tursiops truncatus*, Abundance, Everglades National Park

1322

Odell, D. K. (1981) Growth of a West Indian manatee, *Trichechus manatus*, born in captivity. In: Proc., Workshop, The West Indian Manatee in Florida. R. L. Brownell, and K. Ralls, (eds.). Orlando, FL, 1978. Florida Audubon Society, Maitland, FL. 131-140.

TIME COVERAGE: 1975

SUMMARY: This paper describes the growth of a manatee born in captivity at the Miami Seaquarium.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Captivity, Growth, Miami Seaquarium

1323

Odell, D. K. (1979) A preliminary study of the ecology and population biology of the bottlenose dolphin in southeast Florida. PB-294 336. Report No. MMC-74/07, in fulfillment of contract MM4AC003. NTIS, Springfield, VA. 26 pp.

TIME COVERAGE: 1974 - 1975

SUMMARY: Aerial surveys to assess the abundance of bottlenose dolphins in and around Biscayne Bay were conducted. Dolphins were more abundant in Everglades National Park than in Biscayne Bay. Cetaceans carcasses found during the survey were examined and tissues analyzed for chlorinated hydrocarbons and trace metals.

KEY WORDS: Bottlenose dolphin, *Tursiops truncatus*, Population number, Pygmy sperm whale, *Kogia simus*, *Kogia breviceps*, Stranding, Chlorinated hydrocarbons, Odontocetes, Dwarf sperm whale, Everglades National Park, Cr, Cd, Pb, Zn, Cu, Mn, Ag, DDTs

1324

Odell, D. K., and J. E. Reynolds (1979) Observations on manatee mortality in south Florida. J. Wildlife Management, 43(2):572-577.

TIME COVERAGE: 1974 - 1978

SUMMARY: Of 57 dead manatees, 34 were found in Dade County. Flood control dams accounted for 25% of the mortalities; boats and barges, 28%; other human factors, 7%; and undetermined, 40%. All flood control dams in Dade and associated heavy rains may have been underestimated.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Mortality causes, South Florida

1325

Odell, D. K., and J. E. Reynolds (1981) Observations on manatee mortality in south Florida. In: Proc., Workshop, The West Indian Manatee in Florida. R. L. Brownell, and K. Ralls, (eds.). Orlando, FL, 1978. Florida Audubon Society, Maitland, FL. 92-97.

TIME COVERAGE: 1974 - 1978

SUMMARY: [PUBLISHED IN J. WILDLIFE MANAGEMENT, 1979, 43(2):572-577.]

KEY WORDS: West Indian manatee, *Trichechus manatus*, Mortality causes, South Florida

1326

Odell, D. K., D. B. Siniff, and G. H. Waring (1975) Final report, *Tursiops truncatus* Assessment Workshop, Miami, 1975. Sponsored by the Marine Mammal Commission under contract no. MM5AC021; UM-RSMAS-75042. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 141 pp.

TIME COVERAGE: 1974 - 1975

SUMMARY: This citation is the summary of the assessment workshop. One of the chapters described aerial surveys for dolphin conducted in Biscayne Bay.

KEY WORDS: Bottlenose dolphin, *Tursiops truncatus*, Population number, Stock assessment

1327

Odum, W. E. (1968) The ecological significance of fine particle selection by the striped mullet *Mugil cephalus*. Limnol. Oceanogr., 13(-):92-98.

TIME COVERAGE: 1968

SUMMARY: Striped mullet was shown to prefer very fine particles wherever sediments are involved in feeding. It is suggested that these small inorganic and plant detrital sediment particles are much richer both in adsorbed organic material and in adsorbed bacteria, Protozoa, and other microorganisms than the coarser material that the mullet rejects. This selectivity resulted in substantially higher organic values of the stomach contents than of the sediments.

KEY WORDS: Striped mullet, *Mugil cephalus*, Particulate organic matter, Feeding

1328

Odum, W. E. (1966) The food and feeding of the striped mullet *Mugil cephalus* Linnaeus in relation to the environment. M.Sc. thesis. University of Miami, Coral Gables, FL. 118 pp.

TIME COVERAGE: 1966

SUMMARY: The feeding behavior of mullet from Sapelo Sound and Biscayne Bay was determined. Mullet are able to feed from two food chains: the grazing food chain and the detritus food chain. Diet of mullet in Bear Cut was dominated by diatoms of epiphytic origin.

KEY WORDS: Striped mullet, *Mugil cephalus*, Food consumption, Feeding behavior, Digestive system, Bear Cut, Matheson Hammock

1329

Odum, W. E. (1970) Insidious alteration of the estuarine environment. Trans. Amer. Fisheries Soc., 99(-):836-847.

TIME COVERAGE: 1970

SUMMARY: Features of estuarine ecosystems were described and how insidious changes can occur.

KEY WORDS: Estuaries, Brackishwater environment, Pollution, Man-induced effects, Nutrients

1330

Odum, W. E., C. C. McIvor, and T. J. Smith (1982) The ecology of the mangroves of south Florida: a community profile. FWS/OBS 81/24. US Fish and Wildlife Service, Office of Biological Services, National Coastal Ecosystems Team, Washington, DC. 144 pp.

TIME COVERAGE: 1982

SUMMARY: This report discusses various aspects of the mangrove ecosystem including microorganisms, invertebrates, fishes, amphibians, reptiles, birds and mammals.

KEY WORDS: Mangrove swamps, Ecosystems, Wetlands, Coastal zone management, Microorganisms, Invertebrates, Fishes, Amphibians, Reptiles, Birds, Mammals

1331

Ogden, J. C. (1992) The impact of Hurricane Andrew on the ecosystems of south Florida. Conservation Biol., 6(4):488-490.

TIME COVERAGE: 1992

SUMMARY: The most evident impact of Hurricane Andrew on the marine ecosystem as evidenced by aerial surveys was uprooted and defoliated mangrove forests.

KEY WORDS: Ecosystems, Ecosystem disturbance, Hurricane Andrew, South Florida

1332

Ogden, J. C. (1978) Status and nesting biology of the American crocodile, *Crocodylus acutus*, (Reptilia, Crocodylidae) in Florida. J. Herpetology, 12(2):183-196.

TIME COVERAGE: 1978

SUMMARY: This project was designed to determine the status of the crocodile in Florida and factors regulating that population.

KEY WORDS: American crocodile, *Crocodylus acutus*, Nesting, Population number, Florida Keys, Florida Bay, Barnes Sound

1333

Ogden, J. C., and R. C. Carpenter (1987) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - long-spined black sea urchin. Biological rep. 82(11.77). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 17 pp.

TIME COVERAGE: 1987

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of the long-spined black sea urchin are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Sea urchin, *Diadema antillarum*, South Florida

1334

O'Gower, A. K., and J. W. Wacasey (1967) Animal communities associated with *Thalassia*, *Diplanthera*, and sand beds in Biscayne Bay I. Analysis of communities in relation to water movements. Bull. Mar. Sci., 17(1):175-210.

TIME COVERAGE: 1967

SUMMARY: Random samples collected from *Thalassia*, *Diplanthera*, and sand beds in the shallow sublittoral zones of Key Biscayne and Virginia Key indicated dissimilarities and similarities between the communities inhabiting these environments. The data on occurrence and densities of species in these communities were analyzed and associations of densities and selected environmental factors were determined.

KEY WORDS: Seagrass, *Thalassia*, *Diplanthera*, Sand bars, Marine organisms, Water motion, Community composition, Key Biscayne, Virginia Key, Species list

1335

Oliver, G. D. (1987) Population dynamics of *Lytechinus variegatus*. M.Sc. thesis. University of Miami, Coral Gables, FL. 104 pp.

TIME COVERAGE: 1983 - 1984

SUMMARY: This is a study of the population dynamics of sea urchins collected in the seagrass beds of Biscayne Bay.

KEY WORDS: Sea urchin, *Lytechinus variegatus*, Population dynamics, Virginia Key, Bear Cut

1336

Oliver, L. M., W. S. Fisher, and A. Volety (1998) Hemocyte activities and contaminant burdens in oysters (*Crassostrea virginica*) from five estuaries in the Southeastern United States. J. Shellfish Research, 17(1):335.

TIME COVERAGE: 1998

SUMMARY: A survey of oysters from 16 sites in Tampa Bay indicated that high concentrations of metals in tissues appeared to be associated with heightened cellular defense responses such as circulating hemocyte number, percent mobility, rate of locomotion, phagocytic activity and superoxide anion producing ability. To further investigate the relationship between toxicant accumulation and immunomodulation, oysters were collected from sites within each of 4 bays in the Gulf of Mexico and from Biscayne Bay.

KEY WORDS: Oyster culture, Bioaccumulation, Water quality, Immunity, Haematology, Crassostrea virginica, Tampa Bay

1337

Olsen, E. J., and K. R. Bodge (1991) Caribbean beach fill and Mediterranean structures at southeast Florida. In: Proc., 4th Ann. National Beach Preservation Technology Conference, Preserving and Enhancing Our Beach Environment. L. S. Tait, (comp.). Charleston, SC, 1991. Florida Shore & Beach Preservation Association, Tallahassee, FL. 57-72.

TIME COVERAGE: 1991

SUMMARY: This paper describes the use of aragonite beach fill in the shorefront improvement project for Fisher Island.

KEY WORDS: Beach nourishment, Oolites, Aragonite, Fisher Island

1338

Olsen, E. J., and K. R. Bodge (1991) The use of aragonite as an alternate source of beach fill in southeast Florida. In: Coastal Sediments '91. Proc. of a Specialty Conf. on Quantitative Approaches to Coastal Sediment Processes. N. C. Kraus, K. J. Gingerich, and D. L. Kriebel, Seattle, WA, 1991. American Society of Civil Engineers, New York. 2130-2144.

TIME COVERAGE: 1991

SUMMARY: The first full-scale use in the US of imported aragonite sand for beach restoration was at Fisher Island. The structure plan made use of classic headland and spiral-bay shoreline behavior to induce a net desired littoral drift pattern. The pattern and the predicted equilibrium fill platform was selected to minimize fill losses and impacts to nearshore seagrass beds.

KEY WORDS: Aragonite, Beach nourishment, Restoration, Fisher Island

1339

Olsen Associates Inc. (1989) Beach restoration at Fisher Island, Florida. Report. Olsen Associates Inc., Jacksonville, FL. 73 pp.

TIME COVERAGE: 1989

SUMMARY: The purpose of this study was to design and permit a beach restoration project at Fisher Island. The project was intended to provide a beach suitable for recreation and to enhance storm protection for the island.

KEY WORDS: Beach nourishment, Restoration, Aragonite, Fisher Island

1340

Opresko, D. M. (1973) Abundance and distribution of shallow-water gorgonians in the area of Miami, Florida. Bull. Mar. Sci., 23(3):535-558.

TIME COVERAGE: 1973

SUMMARY: The composition of the gorgonian fauna at three sites was examined. Specimens were analyzed as to number of species, number of colonies of each species, relative abundance of various taxonomic groups, and average height and weight of each species.

KEY WORDS: Gorgonians, Shallow water, Abundance, Ecological distribution, Soldier Key, Boca Chica Pass, Red Reef, Species list

1341

Opresko, D. M. (1974) Recolonization and regrowth of a population of the gorgonian *Plexaura homomalla*. In: Symp., Prostaglandins from *Plexaura homomalla*: Ecology, Utilization and Conservation of a Major Medical Marine Resource. F. M. Bayer, and A. J. Weinheimer (eds.). Studies in tropical oceanography no. 12. University of Miami Press, Coral Gables, FL. 165 pp.

TIME COVERAGE: 1962, 1967

SUMMARY: An analysis was made of the size and structure of a population of the gorgonian *Plexaura homomalla* occurring on a small patch reef, Red Reef, near Margot Fish Shoal.

KEY WORDS: Gorgonians, *Plexaura homomalla*, Population structure, Abundance, Red Reef

1342

Opresko, L. K. (1974) The early development of *Octopus briareus* Robson and the organogenesis of the digestive system and its associated organs. Ph.D. dissertation. University of Miami, Coral Gables, FL. 154 pp.

TIME COVERAGE: 1971

SUMMARY: The early development of *Octopus briareus* was studied using specimens reared in the laboratory. These specimens were offspring of octopus specimens were collected at Soldier Key.

KEY WORDS: Octopus, *Octopus briareus*, Organogenesis, Digestive system, Embryonic development, Soldier Key

1343

Opresko, L. K., D. M. Opresko, R. F. Thomas, and G. L. Voss (1973) Guide to the lobsters and lobster-like animals of Florida, Gulf of Mexico and the Caribbean region. Sea Grant Field Guide Series 1. University of Miami Sea Grant Program, Coral Gables, FL. 44 pp.

TIME COVERAGE: 1973

SUMMARY: This is a taxonomic guide to lobsters and lobster-like animals found in Florida and the Caribbean region.

KEY WORDS: Lobsters, Spiny lobster, Slipper lobster, Identification keys, Florida, Gulf of Mexico, Caribbean

1344

Opresko, L. K., R. F. Thomas, and F. M. Bayer (1976) Guide to the larger marine gastropods of Florida, the Gulf of Mexico, and the Caribbean region. Sea Grant field guide series 5. University of Miami Sea Grant College Program, Coral Gables, FL. 54 pp.

TIME COVERAGE: 1976

SUMMARY: This is an identification guide to large marine gastropods found in Florida, the Gulf of Mexico and the Caribbean.

KEY WORDS: Gastropods, Conch, Top-shell, Helmet shell, Tulip shell, Identification keys, Florida, Gulf of Mexico, Caribbean

1345

Oremland, R. S. (1976) Studies on the methane cycle in tropical marine sediments. Ph.D. dissertation. University of Miami, Coral Gables, FL. 108 pp.

TIME COVERAGE: 1976

SUMMARY: *In situ* rates of methanogenesis observed in several tropical benthic communities reveals that beds of *Thalassia* have the highest methanogenic activity of all sites studied. Sediments collected in Soldier key were treated with substrate enhancers and inhibitors to study changes in rates of methanogenesis.

KEY WORDS: Methane, Methanogenesis, Benthos, Sediment, Bacteria, Decomposers, Soldier Key

1346

Oremland, R. S., and B. F. Taylor (1978) Sulfate reduction and methanogenesis in marine sediments. Geochim. Cosmochim. A., 42(-):209-214.

TIME COVERAGE: 1978

SUMMARY: Methanogenesis and sulfate reduction were followed in the laboratory from sediment taken from a seagrass bed. Both processes occurred simultaneously in sediment incubated under nitrogen indicating the processes are not mutually exclusive. Under hydrogen, a negative pressure developed as the result of oxidation by bacteria. Hydrogen also stimulated methanogenesis.

KEY WORDS: Methanogenesis, Sulfate reduction, Sediment, Seagrass, Bacteria, Soldier Key

1347

Orpurt, P. A., and L. L. Boral (1964) The flowers, fruits, and seeds of *Thalassia testudinum* Koenig. Bull. Mar. Sci. Gulf Caribb., 14(2):296-302.

TIME COVERAGE: 1964

SUMMARY: This paper is a description of the flowers, fruits and seeds of *Thalassia*.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Plant physiology, Plant morphology

1348

Orpurt, P. A., S. P. Meyers, L. L. Boral, and J. Sims (1964) Thalassiomycetes V. A new species of *Lindra* from turtle grass, *Thalassia testudinum* König. Bull. Mar. Sci. Gulf Caribb., 14(-):405-417.

TIME COVERAGE: 1964

SUMMARY: This paper describes the first isolation of a fungus from the widespread, ecologically important, marine flowering plant. Spore germination tests indicate suitable adaptation of the fungus to a euhaline environment.

KEY WORDS: Fungi, *Lindra thalassiae*, New species, Turtle grass, *Thalassia testudinum*

1349

Ortner, P. B., C. Kreader, and G. R. Harvey (1983) Interactive effects of metals and humus on marine phytoplankton carbon uptake. Nature, 301(-):57-59.

TIME COVERAGE: 1983

SUMMARY: Marine fulvic acid was synthesized in the laboratory. The resulting material was physically, spectroscopically and chemically identical to one or more natural marine fulvic acids isolated from the Gulf of Mexico. Addition of fulvic acids alone (natural or synthetic) has no effect Biscayne bay carbon uptake.

KEY WORDS: Trace metals, Humus, Humic acids, Fulvic acids, Phytoplankton

1350

O'Shea, T. J., C. A. Beck, R. K. Bonde, H. I. Kochman, and D. K. Odell (1985) An analysis of manatee mortality patterns in Florida, 1976-81. J. Wildlife Management, 49(1):1-11.

TIME COVERAGE: 1976 - 1981

SUMMARY: Mortality distributions of 406 manatees recovered in Florida were analyzed. Probable causes of death were: 187, undetermined; 87, collisions with boats; 58, perinatal and early juvenile; 35, entrapment with locks and flood control dams; 20, other human-caused; and 19, natural.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Mortality causes, Florida

1351

O'Shea, T. J., and H. I. Kochman (1990) Florida manatees: distribution, geographically referenced data sets, and ecological and behavioral aspects of habitat use. In: Geographic Information Systems as an Aid to Managing Habitat for West Indian Manatees in Florida and Georgia. J. E. Reynolds, and K. D. Haddad, (eds.). Report of a workshop. Florida marine research publications no. 49. Florida Marine Research Institute, St. Petersburg, FL. 11-22.

TIME COVERAGE: 1990

SUMMARY: A brief overview of manatee distribution and biology is provided for use in developing GIS techniques to assist in the study of these animals.

KEY WORDS: Manatees, *Trichechus manatus latirostris*, Geographical distribution, Mortality, Aerial surveys, Biotelemetry, Florida

1352

Osmond, J. K., J. R. Carpenter, and H. L. Windom (1965)  $\text{Th}^{230}/\text{U}^{234}$  age of the Pleistocene corals and oolites of Florida. J. Geophys. Res., 70(8):1843-1847.

TIME COVERAGE: 1965

SUMMARY: Determination of the activity ratio of these two isotopes in corals from the Pleistocene Key Largo limestone leads to the conclusion that the reef-forming corals lived about 130,000 years ago in a sea that stood about 10 m higher than today.

KEY WORDS: Th isotopes, U isotopes, Radiometric dating, Oolites, Coral, Windley Key, Key Largo, Coral Gables, Bimini

1353

Ostlund, H. G., and H. G. Dorsey (1976) Turkey Point tritium. Progress report to Energy Research and Development Administration. Contract E-(40-1)-3944; UM-RSMAS-#76005. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1976

SUMMARY: The waters of lower Biscayne Bay, and Card and Barnes Sounds receive only a small portion of the total tritium produced by the Turkey Point Nuclear Power Plant. The dominating tritium loss was most likely through evaporation from the cooling canals.

KEY WORDS: Tritium, Turkey Point, South Bay, Card Sound, Barnes Sound

1354

Overstreet, R. M. (1968) Digenetic trematodes of marine teleost fishes from Biscayne Bay, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 188 pp.

TIME COVERAGE: 1966 - 1968

SUMMARY: The alimentary system and coelomic cavity were examined in all species of fish examined for the presence of trematodes. Gills, heart, swim bladder and other tissues in were examined in most species

KEY WORDS: Trematodes, Digenea, Fish

1355

Overstreet, R. M. (1969) Digenetic trematodes of marine teleost fishes from Biscayne Bay, Florida. Tulane Studies in Zoology and Botany, 15(4):120-176.

TIME COVERAGE: 1966 - 1968

SUMMARY: This citation is a list of species and descriptions of trematodes found in teleost fish.

KEY WORDS: Trematodes, Digenea, Fish, Species list

1356

Owens, J. B. (1996) A study of historic, regional maritime technologies exemplified at the Barnacle State Historic Site. Internship report; M.A. in Marine Affairs. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: History, Coastal structures, Surface craft, Resource management, Barnacle State Historic Site

1357

Owre, H. B. (1949) Larval stages of some south Florida marine gastropods. M.Sc. thesis. University of Miami, Coral Gables, FL. 77 pp (Shelved under H. B. Michel).

TIME COVERAGE: 1949

SUMMARY: This citation describes the larval stages of gastropods collected in the South Florida area.

KEY WORDS: Gastropods, Molluscan larvae, Developmental stages, Soldier Key, Virginia Key, Miami Beach, Cape Florida, Dry Tortugas, Florida Keys

1358

Owre, H. B. (1972) Marine biological investigations in the Bahamas. 18. The genus *Spadella* and other Chaetognatha. Sarsia, 49(-):49-58.

TIME COVERAGE: 1971

SUMMARY: Collections were made in the Bahamas for specimens of the genus *Spadella*. Collections were also made with the same gear at Broad Creek and some of the species found in the Bahamas were found in those samples.

KEY WORDS: Chaetognaths, *Spadella*, Bahamas, Broad Creek

1359

Owre, O. T. (1976) The avifauna of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1976

SUMMARY: This paper outlines the foraging habitats and feeding strategies of birds in Biscayne Bay. A species list is provided.

KEY WORDS: Aquatic birds, Species list

1360

Paddon, J., and D. Suman (1995) The Virginia Key campground. In: Urban Growth and Sustainable Habitats: Case Studies of Policy Conflicts in South Florida's Coastal Environment. D. Suman, M. Shivilani, and M. L. Villanueva (eds.). Division of Marine Affairs and Policy, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 175 pp.

TIME COVERAGE: BB 191

SUMMARY: This report describes Virginia Key and the proposed campground.

KEY WORDS: Protected resources, Recreation, Shore protection, Virginia Key

1361

Paige, D. (1981) A Day in the Life of a Marine Biologist. Troll Associates, Mahwah, NJ. 32 pp.

TIME COVERAGE: 1981

SUMMARY: This is a children's book describing daily activities of a marine biologist in Biscayne Bay.

KEY WORDS: Biologists, Marine scientists, Oceanographic institutions

1362

Pait, A. S., A. E. De Souza, and D. R. G. Farrow (1992) Agricultural pesticide use in coastal areas: a national summary. Report. NOAA/NOS/ORCA, Rockville, MD. 112 pp.

TIME COVERAGE: 1992

SUMMARY: This report is a summary of pesticide use in coastal areas.

KEY WORDS: Pesticides, Coastal waters, Toxicity

1363

Pait, A. S., D. R. G. Farrow, J. A. Lowe, and P. A. Pacheco (1989) Agricultural pesticide use in estuarine drainage areas: a preliminary summary for selected pesticides. National Coastal Pollutant Discharge Inventory (NCPDI) Program. NOAA/NOS, Rockville, MD. 134 pp.

TIME COVERAGE: 1989

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuarine dynamics, Brackishwater pollution, Pesticides, Toxicity, United States

1364

Palmer and Baker Engineers, Inc. (1960) Study of regimen of tidal flow in relation to Mid-Bay Drive, Upper Biscayne Bay. Report. Metropolitan Dade Co., Miami, FL. 38 pp.

TIME COVERAGE: 1960

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Tides

1365

Papy, F. (1992) Cruising Guide to the Florida Keys, with Florida West Coast Supplement. Revised 8th ed. F. Papy, Ridgeland, SC. 262 pp.

TIME COVERAGE: 1992

SUMMARY: This is a cruising guide to the Florida keys.

KEY WORDS: Boating, Navigational charts, Florida Keys, Cruising guide

1366

Park, F. D. R. (1969) Virginia Key - Key Biscayne beach nourishment project. Shore and Beach, 37(1):32-35.

TIME COVERAGE: 1969

SUMMARY: This paper describes a proposed Key Biscayne - Virginia Key beach restoration project utilizing sand from off Key Biscayne.

KEY WORDS: Beach nourishment, Virginia Key, Key Biscayne

1367

Park, J. R. (1969) A preliminary study of portunid crabs in Biscayne Bay. Quart. J. Fla. Acad. Sci., 32(1):12-20.

TIME COVERAGE: 1967 - 1968

SUMMARY: This study describes the populations of different Portunid crab species in Biscayne Bay.

KEY WORDS: Crabs, Population dynamics, Species list

1368

Park, P. (1998) What are a few toxins among friends? Miami New Times, Miami, FL. METRO. Feb. 5-11. Accessed at internet site <[www.miaminewtimes.com/1998/020598/metro2.html](http://www.miaminewtimes.com/1998/020598/metro2.html)>.

TIME COVERAGE: 1998

SUMMARY: This article discusses the EPA proposal to remove the Munisport landfill from the Superfund list

KEY WORDS: Munisport, EPA, Superfund

1369

Parker, G. G. (1945) The effect of the Pleistocene epoch on the geology and ground water of southern Florida. Quart. J. Fla. Acad. Sci., 8(2):119-143.

TIME COVERAGE: 1945

SUMMARY: This paper describes the effect of the Pleistocene epoch on the geology and ground water of southern Florida.

KEY WORDS: Pleistocene, Geology, Ground water, Sea level changes, South Florida

1370

Parker, G. G. (1951) Geologic and hydrologic factors in the perennial yield of Biscayne Aquifer. J. Amer. Water Works Assoc., 43(-):817-835.

TIME COVERAGE: 1951

SUMMARY: The objectives of this paper were to present an general overall view of the geology and hydrology basic to an understanding of water supply in the Miami area, and to discuss the factors of perennial yield that are applicable to the local aquifer.

KEY WORDS: Water supply, Biscayne Aquifer

1371

Parker, G. G. (1960) Ground water in the Central and Southern Florida Flood Control District. Proc. Soil Science Soc. Florida, 20(-):211-231.

TIME COVERAGE: 1960

SUMMARY: This paper is a general description of the ground water system of South Florida.

KEY WORDS: Ground water, Aquifers, Surface water, Saline intrusion, Central Florida, South Florida

1372

Parker, G. G. (1974) Hydrology of the pre-drainage system of the Everglades in southern Florida. In: Environments of south Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 18-27.

TIME COVERAGE: 1974

SUMMARY: This citation describes the pre-drainage system of the Kissimmee - Lake Okeechobee - Everglades system.

KEY WORDS: Drainage water, Everglades, Hydrology

1373

Parker, G. G. (1984) Hydrology of the pre-drainage system of the Everglades in southern Florida. In: Environments of South Florida: Present and Past II. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL. 551 pp.

TIME COVERAGE: 1984

SUMMARY: This citation describes the hydrology of South Florida prior to the construction of the drainage canals.

KEY WORDS: Drainage water, Everglades, Hydrology

1374

Parker, G. G. (1946) Municipal water-supply problems of southern Florida. Proc., Soil Science Society of Florida. 72-88.

TIME COVERAGE: 1946

SUMMARY: This report was intended to be a general treatment of the problems of municipal water supplies in the South Florida area. A general treatment of the problems and of the factors controlling occurrence and development of water available for municipal use was given and some data on water consumption by separate counties were presented.

KEY WORDS: Water supply, Ground water, South Florida

1375

Parker, G. G. (1945) Salt water encroachment in southern Florida. J. Amer. Water Works Assoc., 37(-):526-542.

TIME COVERAGE: 1945

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Saline intrusion, Ground water, Canals, Miami

1376

Parker, G. G., and C. W. Cooke (1944) Late Cenozoic geology of southern Florida, with a discussion of the ground water. Geological bull. 27. Florida Geological Survey, Tallahassee, FL. 119 pp.

TIME COVERAGE: 1944

SUMMARY: The late Cenozoic geology of southern Florida is described.

KEY WORDS: Geology, Cenozoic, Ground water, South Florida

1377

Parker, G. G., G. E. Ferguson, and S. K. Love (1944) Interim report on the investigations of water resources in southeastern Florida with special reference to the Miami area of Dade County. Report of investigations no. 4. Florida Geological Survey, Tallahassee, FL. 39 pp.

TIME COVERAGE: 1939

SUMMARY: Water resources in southeastern Florida were undertaken in 1939. Basic geological, hydrological and chemical data were obtained.

KEY WORDS: Ground water, Saline intrusion, Water management, Miami Canal, North New River Canal, Dade County, Miami

1378

Parker, G. G., G. E. Ferguson, and S. K. Love (1955) Water resources of southeastern Florida with special reference to the geology and ground water of the Miami area. Geological Survey water-supply paper 1255. US Government Printing Office, Washington, DC. 965 pp.

TIME COVERAGE: 1955

SUMMARY: This book contains chapters on climate, geology, geomorphology, ground water, surface water, water quality, and chemical characteristics of the water.

KEY WORDS: Water resources, Landforms, Geology, Ground water, Climate, Surface water, Miami

1379

Parker, G. G., and N. D. Hoy (1943) Further studies of geological relationships affecting soil and water conservation and use in the Everglades. Part I: Additional notes on the geology and ground water of southern Florida. Proc. Soil Science Society of Florida, V-A(-):33-55.

TIME COVERAGE: 1943

SUMMARY: This paper describes the geologic and hydraulic characteristics of water bearing formations in South Florida.

KEY WORDS: Water resources, Landforms, Geology, Ground water, Climate, Surface water, Everglades, South Florida

1380

Parker, G. G., and V. T. Stringfield (1950) Effects of earthquakes, trains, tides, winds, and atmospheric pressure changes on water in the geologic formations of southern Florida. Economic Geol., 45(5):441-460.

TIME COVERAGE: 1950

SUMMARY: Determination of fundamental hydrologic factors as permeability, transmissibility and storage; areas of recharge and discharge; direction of ground-water movement; safe yield; and other pertinent related factors are based in part upon water-level measurements in wells. Such determinations can be misleading since water levels in wells are not stationary or indicative of recharge or discharge. Water levels fluctuate as the result of tides, atmospheric pressure, winds, earthquakes and passing trains. Among the features discussed was a 4.5-ft fluctuation of water level in a Miami well caused by earthquake waves originating in the Dominican Republic.

KEY WORDS: Water levels, Wells, Tidal effects, Atmospheric pressure, Winds, Earthquakes, Dade County

1381

Parks, A. M. (1977) The Forgotten Frontier: Florida Through the Lens of Ralph Middleton Munroe. Banyan Books, Inc., Miami, FL. 177 pp.

TIME COVERAGE: 1977

SUMMARY: This is an excellent source of the photographs taken by Munroe including the fresh water springs in Biscayne Bay.

KEY WORDS: Munroe, R. M., Photographs, History

1382

Parks, A. M. (1971) The history of Coconut Grove, Florida, 1821-1925. M.A. thesis. University of Miami, Coral Gables, FL. 78 pp.

TIME COVERAGE: 1821 - 1925

SUMMARY: This work is the history of Coconut Grove from the time Florida became a territory of the United States in 1821 until 1925 when the Grove became a possession of Miami.

KEY WORDS: History, Coconut Grove

1383

Parks, A. M. (1987) John Sewell Miami Memoir: A New Pictorial Edition of John Sewell's Own Story. A. M. Parks, Miami, FL. 267 pp.

TIME COVERAGE: 1921 - 1933

SUMMARY: This book is an illustrated version of Sewell's memoirs. Included are some photographs of Biscayne Bay.

KEY WORDS: Miami, History

1384

Parks, A. M. (1973) Key Biscayne base marker - 1855. Tequesta, 33(-):3-16.

TIME COVERAGE: 1855

SUMMARY: This paper describes origin of the Key Biscayne North Base Marker found during the construction of the golf course in Key Biscayne. The marker was placed there by the US Coast Survey in 1855. The paper describes the activities of the Survey in the area.

KEY WORDS: History, US Coast Survey, Surveying, Key Biscayne

1385

Parks, A. M. (1975) Miami in 1876. Tequesta, 35(-):89-145.

TIME COVERAGE: 1876

SUMMARY: This paper describes Miami in 1876 when there was only one real town in South Florida, Key West.

KEY WORDS: History, Miami

1386

Parras, T. (1997) Virginia Key campground; environmental impact statement. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land use, Recreation, Environmental impact, Virginia Key

1387

Pasley, D., and R. C. Benson (1976) Salt water intrusion measurements in developing coastal zone communities adjacent to Biscayne Bay, Dade County, Florida. Geophysics, 41(2):369.

TIME COVERAGE: 1976

SUMMARY: The urban development of south Dade County has been in a relatively steady-state condition for the past few decades. Recently the first massive stages of coastal urbanization started in areas surrounded by farm and undeveloped lands. Typically associated with these large projects are man-made lakes developed as a source of land-fill, and canal access to the Bay. These lakes and canals increase salt-water intrusion.

KEY WORDS: Saline intrusion, Urbanization, Artificial lakes, Canals, Coastal zone management, Dade County

1388

Patino, E. (1997) Determining flows into northeastern Florida Bay, Dade and Monroe Counties, Florida. In: Proc., US Geological Survey Program on the South Florida Ecosystem. Ft. Lauderdale, FL, August 25-27, 1997. US Geological Survey open file report 97-385. US Geological Survey, Tallahassee, FL. 68.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water currents, Salinity, Dade County, Monroe County, Florida Bay

1389

Patterson, E., and E. Irlandi (1998) Seasonal and inter-annual comparisons of density, biomass, and morphometrics of *Thalassia testudinum* sites of varying salinity in Biscayne Bay, FL. Proc., Ann. Mtg., American Society of Limnology and Oceanography Ecological Society of America. St. Louis, MO, 1998. American Society of Limnology and Oceanography, Waco, TX.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sea grass, *Thalassia testudinum*, Population density, Biomass, Morphometry, Salinity effects

1390

Payne, B. (1979) Big raft-up in Biscayne Bay: Columbus Day Cruising Regatta. Sail, 10(-):133-135.

TIME COVERAGE: 1979

SUMMARY: This article describes the Columbus Day regatta in the Bay.

KEY WORDS: Sailing ships, Columbus Day Cruising Regatta

1391

Pearson, J. F. W. (1937) Studies on the life zones of marine waters adjacent to Miami: I. The distribution of the Ophiuroidea. Proc. Florida Academy of Sciences for 1936, 1(-):66-72.

TIME COVERAGE: 1928, 1938?

SUMMARY: This citation describes the studies done by zoology classes in five life zones of the Bay. The zones range from soft mud to coral reef.

KEY WORDS: Sea urchin, Ophiuroidea, Coral, Echinoderms, Miami, Coconut Grove, Dinner Key, Key Biscayne, Cape Florida, Broad Creek, Carysfort Light

1392

Pellenbarg, R. E. (1973) Trace metal distributions in the carbonate sediments of certain subtropical areas: Card Sound, Florida; Turkey Point, Florida; and Mangrove Lake, Bermuda. M.Sc. thesis. University of Miami, Coral Gables, FL. 201 pp.

TIME COVERAGE: 1973

SUMMARY: Sediments from Card Sound, Turkey Point and Bermuda were analyzed for trace metals. These near-shore sediment has a high carbonate content. In general, the sediment of Turkey Point had a higher trace metal content than those of Card Sound.

KEY WORDS: Carbonate sediment, Card Sound, Turkey Point, Mangrove Lake, Bermuda, Cd, Co, Cu, Fe, Pb, Ni, Ag, V, Zn

1393

Penhale, P. A., and J. M. Sprogis (1976) The role of epiphytes in seagrass systems. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1976

SUMMARY: This paper discusses the role of epiphytes, the complex of microalgae attached to seagrass blades.

KEY WORDS: Seagrass, Algae, Epiphytes

1394

Penn, J. (1997) Mangrove section [Virginia Key]. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Mangrove swamps, Wetlands, Virginia Key

1395

Penzias, L. P. (1969) *Tellina martinicensis* (Mollusca: Bivalvia): biology and productivity. Bull. Mar. Sci., 19(3):568-579.

TIME COVERAGE: 1963 - 1967

SUMMARY: The ecology of the clam *Tellina martinicensis* was discussed in this citation.

KEY WORDS: Clams, *Tellina martinicensis*, Life history, Biological production, Cape Florida, Key Biscayne

1396

Perez, A. I., L. Ajamil, C. Lunetta, M. Reed, and N. Brown (1983) Environmental protection program for the expansion of the Port of Miami, Florida. In: Coastal Zone '83. Proc., 3rd Symp. on Coastal and Ocean Management. O. T. Magoon, and H. Converse, (eds.). San Diego, CA, 1983. American Society of Civil Engineers, New York, NY. 1090-1104.

TIME COVERAGE: 1983

SUMMARY: The mangroves and seagrasses lost as a result of the expansion of the Port of Miami were replanted elsewhere in Biscayne Bay. This paper describes the environmental protection efforts during port expansion.

KEY WORDS: Environmental restoration, Seagrass, Mangrove swamps, Revegetation, Port of Miami

1397

Perkins, R. D. (1974) Discontinuity surfaces as a stratigraphic tool: the Pleistocene of south Florida. Ann. mtg., Geological Society of America. Abstracts with programs. Miami Beach, FL, 1974. Geological Society of America, 908-909.

TIME COVERAGE: 1974

SUMMARY: Pleistocene rocks in South Florida contain evidence for subaerial exposure along well defined discontinuity surfaces.

KEY WORDS: Pleistocene, Stratigraphy, Discontinuity layers, Sea level

1398

Perkins, R. D., and P. Enos (1968) Hurricane Betsy in the Florida-Bahama area - geologic effects and comparison with Hurricane Donna. J. Geol., 76(6):710-717.

TIME COVERAGE: 1960, 1965

SUMMARY: The effects of hurricanes Donna (1960) and Betsy (1965) were compared. These hurricanes were of comparable size and intensity but their geological effects differed. Both caused extensive damage to the outer reefs although Betsy acted essentially on a fauna from which Donna had removed the weaker elements.

KEY WORDS: Hurricanes, Hurricane Betsy, Hurricane Donna, Florida Keys, Florida Bay, Bahamas, Geology, Storm surge

1399

Perrine, H. E. (1876) Biscayne Bay, Dade Co., Florida, Between the 25th and 26th Degrees of Latitude; a Complete Manual of Information Concerning the Climate, Soil, Products, etc., of the Lands Bordering on Biscayne Bay, in Florida. Weed, Parsons and Company, Albany, NY, 17 pp.

TIME COVERAGE: 1876

SUMMARY: This book is a complete description of the Biscayne Bay environment. The author received a directive from President John Quincy Adams to collect and send to US valuable tropical plants and seeds.

KEY WORDS: Natural resources, Perrine Grant

1400

Perschbacher, P. W., and F. J. Schwartz (1979) Recent records of *Callinectes danae* and *Callinectes marginatus* (Decapoda: Portunidae) from North Carolina with environmental notes. Fishery Bull., 76(-):879-880.

TIME COVERAGE: 1979

SUMMARY: This paper is a record of recent collections of these two crab species.

KEY WORDS: Crabs, *Callinectes danae*, *Callinectes marginatus*, Geographical distribution, North Carolina, Florida

1401

Petasne, R. G. (1987) Measurement and cycling of hydrogen peroxide in seawater. M.Sc. thesis. University of Miami, Coral Gables, FL. 93 pp.

TIME COVERAGE: 1987

SUMMARY: The chemistry of hydrogen peroxide in seawater and method of analyses were discussed. Surface water samples were obtained from Bear Cut.

KEY WORDS: Hydrogen peroxide, Sea water, Bear Cut

1402

Petasne, R. G., and R. G. Zika (1987) Fate of superoxide in coastal sea water. Nature, 325(-):516-518.

TIME COVERAGE: 1985

SUMMARY: The superoxide anion  $O_2^-$  is key in intermediate oxygen redox chemistry. Studies of  $H_2O_2$  and  $O_2^-$  levels were performed using Biscayne Bay seawater.

KEY WORDS: Superoxide, Oxides, Sea water, Coastal waters

1403

Petasne, R. G., and R. G. Zika (1997) Hydrogen peroxide lifetimes in south Florida coastal and offshore waters. Mar. Chem., 56(3-4):215-225.

TIME COVERAGE: 1997

SUMMARY: Hydrogen peroxide is ubiquitous in the surface mixed layer of the ocean and is an important chemical intermediate of aerobic systems. Hydrogen peroxide in natural seawater appears to be primarily biologically mediated by microorganisms less than 1  $\mu m$  in diameter.

KEY WORDS: Hydrogen peroxide, Sea water, Decomposers, Virginia Key, Gulf Stream, Florida Keys

1404

Peters, T. (1981) Biscayne Country, 1870-1926. Banyan Books, Miami, FL.

TIME COVERAGE: 1870-1926

SUMMARY: This book is a history of South Florida from 1870 to 1926.

KEY WORDS: History, Biographies

1405

Peters, T. (1976) Lemon City: Pioneering on Biscayne Bay 1850-1925. Banyan Books, Miami, FL. 302 pp.

TIME COVERAGE: 1850-1925

SUMMARY: This book is a history of Lemon City, a loosely defined settlement along the northern shores of Biscayne Bay.

KEY WORDS: History, Lemon City, Miami, North Bay

1406

Pettit, G. A. (1977) Shallow-water Caprellidae (Crustacea: Amphipoda) of the southeastern Florida coast. M.Sc. thesis. Florida Atlantic University, Boca Raton, FL. 80 pp.

TIME COVERAGE: 1977

SUMMARY: The caprellid amphipods found in shallow waters of South Florida was investigated.

KEY WORDS: Amphipods, Caprellidae, Southeast Florida, Elliott Key, Crandon Park

1407

Petuch, E. J. (1994) Atlas of Florida Fossil Shells (Pliocene and Pleistocene marine gastropods). Chicago Spectrum Press, Evanston, IL.

TIME COVERAGE: 1994

SUMMARY: This is a guide to fossil shells found in Florida.

KEY WORDS: Gastropods, Fossils, Shells, Pliocene, Pleistocene, Florida, Guide

1408

Petuch, E. J. (1986) The Pliocene reefs of Miami: their geomorphological significance in the evolution of the Atlantic Coastal Ridge, Southeastern Florida, U.S.A. J. Coastal Res., 2(4):391-408.

TIME COVERAGE: 1986

SUMMARY: Construction excavations in western Metropolitan Miami dredged up coral reef deposits from depths of only 15 - 20 m below the Atlantic Coastal Ridge. Based upon index fossils, these richly fossiliferous sediments are referable to the Buckingham Formation and are dated as early Pliocene. A distinctive Pliocene coral fauna was present, and over three hundred species of mollusks along with several species of echinoids and crustaceans. Although being more biothermal in form, the Pliocene reef system under Miami appeared to have distinct zonation. Based upon both the extent of the Atlantic Coastal Ridge and the implied faunal zonation of the reefs, it is conjectured that the Pliocene reef tract produced the original topographic high along the southeastern coast of Florida. This was later covered by a crust of oolitic limestone and sand in the late Pleistocene to produce the Atlantic Coastal Ridge. The southern part of this basin infilled with carbonate sediments, and during subaerial exposure in the early Pleistocene, produced the Tamiami Formation. Together, the atoll-like Pliocene reef tracts and the central lagoon-like basin laid down the geomorphological framework for the formation of the Everglades in the Holocene. The Everglades is now seen to be reef-controlled.

KEY WORDS: Coral reefs, Pliocene, Fossils, Miami, Atlantic Coastal Ridge, Everglades

1409

Phillips, C., and W. H. Brady (1953) Sea pests: Poisonous or Harmful Sea Life of Florida and the West Indies. University of Miami Press, Miami, FL. 78 pp.

TIME COVERAGE: 1952

SUMMARY: This book contains descriptions of harmful and/or poisonous marine animals found in Florida and the Caribbean.

KEY WORDS: Dangerous organisms, Poisonous organisms, Florida, Caribbean

1410

Phillips, O. P. (1903) How the mangrove tree adds new land to Florida. J. Geography, -(2):10-21.

TIME COVERAGE: 1903

SUMMARY: This paper discusses the soil and agriculture of South Florida. The soil is composed, in places, entirely of shells or coral cemented together so hard that, to put it in the language of one of the inhabitants, they "have to plow with dynamite and reap the potato crop with crow bars," and still it is so productive that the trees can scarcely support the weight of the fruit produced. The flora of South Florida and land-building by mangroves are also discussed.

KEY WORDS: Mangrove swamps, Landforms, Everglades

1411

Phillips, R. G. (1981) Phenology and reproductive physiology of *Thalassia testudinum* from the western tropical Atlantic. Aquatic Bot., 11(-):263-277.

TIME COVERAGE: 1976 - 1979

SUMMARY: Flowering of *Thalassia* is an erratic occurrence in more northern seagrass beds but it is a recurrent event in more tropical sites. The phenology and laboratory studies suggest that the nearly synchronous flowering of *Thalassia* at different latitudes is largely related to temperature. Floral induction in more tropical habitats is probably genotypically responsive to higher temperature than that required by plants of more temperate habitats.

KEY WORDS: Phenology, Flowering, Reproduction, Seagrass, *Thalassia testudinum*

1412

Phillips, R. C., and E. G. Menez (1988) No. 34. Smithsonian Contributions to the Marine Sciences. Smithsonian Institution Press, Washington, DC.

TIME COVERAGE: 1988

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sea grass, Identification keys, Distribution

1413

Pielke, R. A. (1995) Hurricane Andrew: mesoscale weather and societal responses. Report. NOAA National Center for Atmospheric Research, Environmental & Societal Impacts Group, Boulder, CO.

TIME COVERAGE: 1992

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Hurricane Andrew, Weather forecasting, Sociological aspects

1414

Pierce, C. W. (1962) The cruise of the Bonton. Tequesta, 22(-):3-63.

TIME COVERAGE: 1885

SUMMARY: This article about a trip from the east coast of Florida to the Ten Thousand Islands via the Florida Keys was written by the owner of the ship Bonton and published unedited. It is an excellent piece of natural history, ornithology and human history.

KEY WORDS: Cruises, Bonton (Ship), Natural resources, Birds, Miami, Florida Bay, Florida Keys

1415

Pierce, C. W. (1970) Pioneer Life in Southeast Florida. (Edited by D. W. Curl.) University of Miami Press, Coral Gables, FL. 264 pp.

TIME COVERAGE: 1872 - 1893

SUMMARY: This is an account of pioneer life of the Pierce family in South Florida. One chapter specifically discusses Biscayne Bay.

KEY WORDS: History, Biographies, Southeast Florida, Lake Worth

1416

Pierce, R. H., and R. C. Brown (1986-1987) A survey of coprostanol concentrations in Biscayne Bay sediments. Final report. Dade County Department of Environmental Resource Management, Miami, FL.

TIME COVERAGE: 1986 - 1987

SUMMARY: The fecal sterol coprostanol was used as an indicator of sewage contamination in sediments collected in Biscayne Bay. The Bay were found to be impacted by sewage-derived materials, specially areas with moored boats.

KEY WORDS: Coprostanol, Sewage disposal, Water quality, Liveaboards, Biscayne Canal, Little River, King's Bay Marina, Dinner Key Marina, Kjeldahl nitrogen, P, N, Sediment

1417

Pilkey, O. H., D. C. Sharma, H. R. Wanless, L. J. Doyle, O. H. Pilkey, W. J. Neal, and B. L. Gruver (1984) Living with the East Florida Shore. Duke University Press, Durham, NC. 259 pp.

TIME COVERAGE: 1984

SUMMARY: This book discusses dwellings and beach erosion in southeast Florida.

KEY WORDS: Coastal zone management, Beaches, Barrier islands, Land use, East Florida

1418

Pilsbry, H. A. (1953) Notes on Floridan barnacles (Cirripedia). Proc. Acad. Nat. Sci. Phila., 105(-):13-28.

TIME COVERAGE: 1953

SUMMARY: This article describes barnacles found in Florida.

KEY WORDS: Barnacles, Cirripedia, Florida Keys, South Florida

1419

Pimm, S. L., G. E. Davis, L. Loope, C. T. Roman, T. J. Smith, and J. T. Tilmant (1994) Hurricane Andrew. BioScience, 44(4):224-229.

TIME COVERAGE: 1992

SUMMARY: This citation discusses the possible effects of Hurricane Andrew on the ecosystems of the area: marine, uplands, freshwater marshes and mangroves.

KEY WORDS: Hurricanes, Ecosystem disturbance, Hurricane Andrew

1420

Pires, A. M. S. (1981) *Carpías harrietae* (Isopoda, Asellota), a new species from Florida. Crustaceana, 40(2):206-212.

TIME COVERAGE: 1965

SUMMARY: This citation is the description of a new species of isopod based on specimens collected in Biscayne Bay.

KEY WORDS: Isopods, New species, Taxonomy, Animal morphology, *Carpías harrietae*

1421

Pitt, W. A. J. (Effects of septic tank effluent on ground-water quality, Dade County, Florida: an interim report) (1974) USGS open file report 74010. US Geological Survey, Tallahassee, FL. 58 pp.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Wastes, Ground water, Biscayne Aquifer, Dade County

1422

Pitt, W. A. J. (1976) Response of ground-water levels to flood control operations in three basins, southeastern Florida. USGS open file report 74-86. US Geological Survey, Tallahassee, FL. 69 pp.

TIME COVERAGE: 1976

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

KEY WORDS: Water levels, Canal flows, Flood control, Biscayne Aquifer, Snapper Creek Canal, Snake Creek Canal, Pompano-Cypress Creek Canal

1423

Pitt, W. A. J., H. C. Mattraw, and H. Klein (1975) Ground-water quality in selected areas serviced by septic tanks, Dade County, Florida. Open file report 75-607. US Geological Survey, Tallahassee, FL. 82 pp.

TIME COVERAGE: 1971 - 1974

SUMMARY: USGS investigated the chemical, physical, bacteriological, and virological characteristics of the ground water in five selected areas serviced by septic tanks in Dade County. Results indicated that septic tank effluents reached the ground water system.

KEY WORDS: Ground water, Waste disposal, Pollution monitoring, Dade County, Al, As, B, Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, Zn, Coliform bacteria, C, Oxygen demand, Nutrients, Salinity, Water quality

1424

Pitts, P. A. (1998) Tidal and long-term volume transport through Jewfish Creek, Florida Keys. Bull. Mar. Sci., 63(3):559-570.

TIME COVERAGE: 1998

SUMMARY: A 14-month current meter record together with channel calibration measurements are used to investigate the dynamics of long-term volume transport through Jewfish Creek, the main channel connecting Blackwater Sound in northeastern Florida Bay with Barnes Sound. Water level records indicate that the tidal transport is forced by Atlantic tides entering Barnes Sound through Biscayne Bay. Blackwater Sound is virtually tideless.

KEY WORDS: Tidal currents, Tidal cycles, Current meters, Florida Bay, Barnes Sound

1425

Pitts, P. A., and N. P. Smith (1997) An analysis of historical meteorological data from the Florida Keys and current meter data from three tidal channels in lower Biscayne Bay. Unpublished report. Harbor Branch Oceanographic Institution, Ft. Pierce, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Meteorological data, Current meter data, Tidal inlets, Florida Keys, Angelfish Creek, Broad Creek, Caesar's Creek, South Bay

1426

Plane, J. M. C., and C. F. Nien (1989) Measurements of NO<sub>3</sub> in the marine troposphere by differential optical absorption spectroscopy. In: Abstracts of papers, American Chemical Society, 198th Natl. Mtg. Miami Beach, Florida, 1989. American Chemical Society, Washington, DC. ENVR 19.

TIME COVERAGE: 1989

SUMMARY: This study describes the use of a recently constructed differential optical absorption spectrometer to measure nitrate over Biscayne Bay.

KEY WORDS: Spectroscopic techniques, Nitrogen compounds, Troposphere, Aerosols

1427

Plane, J. M. C., and C. F. Nien (1991) A study of nighttime NO<sub>3</sub> chemistry by differential optical absorption spectroscopy. Proc., SPIE - the International Society for Optical Engineering. 8-20.

TIME COVERAGE: 1989

SUMMARY: Differential optical absorption spectroscopy was used to study levels of nitrate in the marine boundary layer in Key Biscayne. Several example of changes in the levels of nitrate with weather phenomena were discussed.

KEY WORDS: Spectroscopic techniques, Nitrogen compounds, Aerosols, Atmospheric boundary layer

1428

Plescia, J. B., and J. J. Stipp (1975) Preliminary geochronology of the Safety Valve Formation. Florida Scient., 38(Suppl. 1):12.

TIME COVERAGE: 1975

SUMMARY: The Safety Valve is a complex carbonate tidal bar belt extending approximately 10 miles southward of Key Biscayne to Soldier Key. The belt is composed of about 10 east-west trending bars separated by tidal channels. Sediment thickness varies from 4-5 m in the north to 1 m in the southern end. Carbon dating indicates that the northern section began forming in the northern end about 3600 BP at about the time Biscayne Bay was reflooded by the rise in sea level.

KEY WORDS: Safety Valve, Key Biscayne, Soldier Key, Nearshore bars, Carbonate sediment, Geochronometry

1429

Poli, M. A. (1982) A review of ciguatera (tropical fish poisoning), with special reference to the Caribbean, and an investigation into its incidence and significance in Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 56 pp.

TIME COVERAGE: 1982

SUMMARY: This work is an investigation of ciguatera, a disease of tropical marine fish, which causes severe pain and extended disability in persons having ingested fresh fish. Outbreaks in South Florida are discussed.

KEY WORDS: Ciguatera, Poisonous fish, Caribbean, Florida

1430

Pomponi, S. A. (1974) A cytological study of the Halicionidae and the Callyspongiidae (Porifera, Demospongiae, Haplosclerida). M.Sc. thesis. University of Miami, Coral Gables, FL. 90 pp.

TIME COVERAGE: 1974

SUMMARY: The purpose of this study of the cytology of sponges was to attempt to delineate taxa with more precision than that of the methods used and to establish more meaningful taxonomic relationships. Specimens were collected in Biscayne Bay and other locations.

KEY WORDS: Sponges, Halicionidae, Callyspongiidae, Cytology, Bear Cut, Big Pine Key, Bahamas

1431

Poole, D. J., A. E. Lugo, and S. C. Snedaker (1975) Litter production in mangrove forests of southern Florida and Puerto Rico. In: Proc., Internatl. Symp. on Biol. and Management of Mangroves. G. E. Walsh, S. C. Snedaker, and H. J. Teas, (eds.). Honolulu, HI, 1974. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. 213-237.

TIME COVERAGE: 1975

SUMMARY: Leaf litter in two mangrove forests was studied. Turnover rates of the riverine and overwash forest were higher than those of nearby basin forests. No statistically significant difference was found in the rate of total litter-fall between the Florida and Puerto Rico sites.

There were statistical differences within each geographical region and between mangrove forest types.

KEY WORDS: Mangrove swamps, Detritus, Puerto Rico, Ten Thousand Islands

1432

Pope, J., T. H. O'Donnell, Macko, S. A., and D. Rosen (1999) Use of stable isotopes for tracking an aragonite beach fill. Coastal sediments '99; Proc., 4th International Symposium on Coastal Engineering and Science of Coastal Sediment Processes. N. C. Kraus, and W. G. McDougal, (eds.). Hauppauge, NY, 1999. American Society of Civil Engineers, Reston, VA.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Aragonite, Beach nourishment, Sand, Miami Beach

1433

Pope, P. E. (1974) Seashore and wading birds of Florida. Great Outdoors, St. Petersburg, FL. 44 pp.

TIME COVERAGE: 1974

SUMMARY: This is a guide to the seashore and wading birds of Florida.

KEY WORDS: Marine birds, Florida, Guide

1434

Port of Miami (1987- to date) Official directory. International Port & Airport Publishing Company, Miami, FL.

TIME COVERAGE: 1987-to date

SUMMARY: This is an annual report about the facilities of the Port of Miami.

KEY WORDS: Shipping, Cargoes, Trade, Port installations, Cruises, Miami

1435

Port of Miami (1979-1985) Port handbook. Howard Publications, Jacksonville, FL.

TIME COVERAGE: 1979-1985

SUMMARY: This is an annual report about the Port of Miami.

KEY WORDS: Shipping, Cargoes, Trade, Port installations, Cruises, Miami

1436

Porter, J. W. (1987) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - reef-building corals. Biological rep. 82(11.73). US Fish and Wildlife Service, National Wetland Research Center, Slidell, LA. 23 pp.

TIME COVERAGE: 1987

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of reef-building corals (elkhorn, staghorn, common star and large star corals) are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Coral reefs, *Acropora palmata*, *Acropora cervicornis*, *Montastraea annularis*, *Montastraea cavernosa*, Elkhorn coral, Staghorn coral, Common star coral, Large star coral

1437

Portnoy, J. W., R. M. Erwin, and T. W. Custer (1981) Atlas of gull and tern colonies: North Carolina to Key West, Florida (including pelicans, cormorants and skimmers). FWS/OBS 80/05. National Coastal Ecosystems Team, US Fish and Wildlife Service, Biological Services Program, Slidell, LA. 121 pp.

TIME COVERAGE: 1976

SUMMARY: Colonies of pelicans, cormorants, gulls, terns and black skimmers were inventoried in 1976 from North Carolina to Key West. This atlas shows the location of each known active

colony and includes information on nesting site and substrate species composition and numbers, nesting stage, and inventory method. Several sites in Biscayne Bay are included.

KEY WORDS: Marine birds, Atlases, Pelicans, Cormorants, Gulls, Terns, Black skimmers, North Carolina, South Carolina, Georgia, Florida

1438

Pos, W. H. (1997) On the process and mechanisms affecting carbonyl sulfide and carbon monoxide photoreduction in natural waters. Ph. D. Dissertation. Georgia Institute of Technology, Atlanta, GA. 243 pp.

TIME COVERAGE: 1997

SUMMARY: A coupled mechanism operating on the carbonyl sulfide and carbon monoxide photooxidation pathway in natural waters was demonstrated.

KEY WORDS: Gulf Stream, S, C, Florida Bay, Tampa Bay

1439

Pos, W. H., D. D. Riemer, and R. G. Zika (1998) Carbonyl sulfide (OCS) and carbon monoxide (CO) in natural waters: evidence of a coupled production pathway. Mar. Chem., 62(1-2):89-101.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Carbonyl sulfide, Sulfur compounds, Carbon monoxide, Photochemical reactions

1440

Posner, G. S. (1951) Certain aspects of the histology and histochemistry of shipworms. M.Sc. thesis. University of Miami, Coral Gables, FL. 102 pp.

TIME COVERAGE: 1951

SUMMARY: The object of this study was to describe certain aspects of the histology and histochemistry of shipworms of the Miami area.

KEY WORDS: Shipworms, Boring organisms, Bankia, Teredo, Histology

1441

Post, B. S. &. (1983) Lower southeast Florida hurricane evacuation study. Technical data rep. US Army Corps of Engineers, Jacksonville District, Jacksonville, FL. Various paging.

TIME COVERAGE: 1983

SUMMARY: The objective of this study was to provide a quantitative framework upon which counties in South Florida could update and refine hurricane evacuation plans.

KEY WORDS: Evacuation, Hurricanes, Dade County, Monroe County, Broward County, Palm Beach County

1442

Post, B. S. &. (1992) Wastewater reuse feasibility study. Prepared for Miami-Dade Water and Sewer Authority Department., Metropolitan Dade County. Post, Buckley, Schiuh & Jernigan, Inc., Miami, FL. Two volumes.

TIME COVERAGE: 1992

SUMMARY: The purpose of this study was to address concerns about reuse of wastewater and to develop feasible, cost effective reuse alternatives for Dade County.

KEY WORDS: Wastewater treatment, Water quality, Water supply

1443

Powell, M. D., S. H. Houston, and T. A. Reinhold (1996) Hurricane Andrew's landfall in south Florida. Part I: Standardizing measurements for documentation of surface wind fields. Weather and Forecasting, 11(3):304-328.

TIME COVERAGE: 1992

SUMMARY: Many anemometers failed during the passage of Hurricane Andrew through South Florida. This citation discusses procedures for the standardization of winds during the storm.  
KEY WORDS: Wind speed, Wind measurement, Hurricane Andrew

1444

Powell, M. D., and S. H. Houston (1996) Hurricane Andrew's landfall in south Florida. Part II: Surface wind fields and potential real-time applications. Weather and Forecasting, 11(3):329-349.

TIME COVERAGE: 1992

SUMMARY: This citation describes the surface winds experienced during the passage of Hurricane Andrew.

KEY WORDS: Wind speed, Wind fields, Hurricane Andrew

1445

Powles, H., and W. E. Burgess (1978) Observations on benthic larvae of *Pareques* (Pisces: Sciaenidae) from Florida and Colombia. Copeia, -(1):169-172.

TIME COVERAGE: 1978

SUMMARY: This citation is a description of three larval specimens of *Pareques* representing two species, and provide observations on habitat and behavior of these young fishes.

KEY WORDS: Sciaenidae, *Pareques*, Larvae, Behavior, Colombia, Soldier Key

1446

Prager, J. C., C. S. Hegre, S. Cheer, P. Rogerson, and J. H. Gentile (1973) Power, plankton, and firefly tails. Underwater Naturalist, 8(-):18-22.

TIME COVERAGE: 1973

SUMMARY: This article describes the use of ATP to determine living biomass in a volume of water and its use at the Turkey Point power plant.

KEY WORDS: Plankton, Algae, Thermal pollution, Turkey Point

1447

Prestamo, F. J., and G. C. Greenan (1976) Biscayne Bay: urban growth and change. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 255-263.

TIME COVERAGE: 1910 - 1976?

SUMMARY: This paper reviews the urban growth process in the immediate area to Biscayne Bay defined by walking distance from the bayfront. The area has maintained approximately the same percentage of the total county population but the authors consider that this percentage will rise.

KEY WORDS: Urbanization, Land use, Regional planning

1448

Pringle, M. E. (1967) Activity and stability of *Physalia physalis* toxin. M.Sc. thesis. University of Miami, Coral Gables, FL. 52 pp.

TIME COVERAGE: Preparations of nematocysts were prepared from the tentacles of freshly stranded Portuguese man-of-war specimens and the toxins extracted. The stability and general chemistry of the toxins was described.

SUMMARY: At Richter Library

KEY WORDS: Portuguese man-of-war, *Physalia physalis*, Toxicity, Key Biscayne

1449

Pritchard-Carpenter Consultants (1968) Movement, dispersion and recirculation of condenser cooling water discharge from the Turkey Point Power Station. Unpublished manuscript. Pritchard-Carpenter Consultants, [n.p.]. 17 pp.

TIME COVERAGE: 1968

SUMMARY: This manuscript describes dye studies done to characterize the thermal effluent plume from the Turkey Point power plant.

KEY WORDS: Cooling water, Water circulation, Dye dispersion, Turkey Point, South Bay

1450

Pritchard, P. C. H. (series ed.) (1978-1982) Rare and Endangered Biota of Florida. C. R. Gilbert (ed.). University Presses of Florida, Gainesville, FL. 6v.

TIME COVERAGE: 1978 - 1982

SUMMARY: This is a six-volume set describing rare and endangered species of Florida. The volumes are: 1, Mammals (J. N. Layne, ed.); 2, Birds (H. W. Kale, ed.); 3, Reptilians and Amphibians (R. W. McDiarmid, ed.); and 4, Fishes

KEY WORDS: Rare species, Biota, Mammals, Birds, Amphibians, Reptiles, Fish, Plants, Invertebrates, Florida

1451

Prospero, J. M., R. T. Nees, and M. Uematsu (1987) Deposition rate of particulate and dissolved aluminum derived from Saharan dust in precipitation at Miami, Florida. J. Geophys. Res., 92(D12):14723-14731.

TIME COVERAGE: 1982 - 1983

SUMMARY: The deposition rate of Al in Miami from samples containing dust from the Sahara was determined over one year. The rate was sufficiently great to have a major impact on the sediment accumulation rates in a large area of the North Atlantic.

KEY WORDS: Dust, Atmospheric particulates, Al, Atmospheric precipitation, Miami

1452

Provenzano, A. J. (1962) The larval development of *Calcinus tibicen* (Herbst) (Crustacea, Anomura) in the laboratory. Biol. Bull., 123(1):179-202.

TIME COVERAGE: 1962

SUMMARY: Ovigerous females of this hermit crab were collected in Bear Cut and the larvae raised and studied in the laboratory.

KEY WORDS: Hermit crabs, *Calcinus tibicen*, Larval development, Bear Cut

1453

Provenzano, A. J. (1961) A North American record for *Callinectes bocourti* (A. Milne Edwards 1879) (Decapoda, Portunidae). Crustaceana, 3(2):167.

TIME COVERAGE: 1950

SUMMARY: This citation is a brief note about a record size specimen of *Callinectes bocourti* caught at Matheson Hammock.

KEY WORDS: Crabs, *Callinectes bocourti*, Matheson Hammock

1454

Provenzano, A. J. (1969) Recent experiments on the laboratory rearing of tropical lobster larvae. Proc., 21st Ann. Session, Gulf and Caribbean Fisheries Institute. Miami, FL, 1968. 152-157.

TIME COVERAGE: 1968

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Spiny lobster, *Panulirus argus*, Larvae, Rearing

1455

Provenzano, A. J. (1958) The shallow water hermit crabs of Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 121 pp.

TIME COVERAGE: 1958

SUMMARY: This work is a study of hermit crabs collected in shallow water areas of South Florida.

KEY WORDS: Hermit crabs, Intertidal environment, Identification keys, Taxonomy, Florida

1456

Provenzano, A. J. (1959) The shallow-water hermit crabs of Florida. Bull. Mar. Sci. Gulf Caribb., 9(4):349-420.

TIME COVERAGE: 1959

SUMMARY: Twenty-three species of pagurid crabs from the tidal and immediately subtidal waters of Florida including one new species were described, illustrated and discussed.

KEY WORDS: Hermit crabs, Intertidal environment, Identification keys, Taxonomy, Florida

1457

Provenzano, A. J. (1962) A study of larval development in some genera of pagurid crabs. Ph.D. dissertation. University of Miami, Coral Gables, FL. 289 pp.

TIME COVERAGE: 1962

SUMMARY: Ovigerous females of several species of hermit crabs were collected in several areas of south Florida and the resulting larvae reared in the laboratory. The larval development of the crabs was described.

KEY WORDS: Hermit crabs, Paguridea, Larval development, Bear Cut, Florida Keys

1458

Puri, H. S., and R. O. Vernon (1964) Summary of the geology of Florida and a guidebook to the classic exposures. Florida Geological Survey special publication no. 5. Florida Geological Survey, Tallahassee, FL. 312 pp.

TIME COVERAGE: 1964

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Geology, Geological structures, Sedimentary structures, Florida

1459

Purpura, J. A. (1962) Model studies of coastal inlets with special reference to the Bakers Haulover Inlet model study. Leaflet 150. Engineering progress at the University of Florida, 16(4). Florida Engineering and Industrial Experiment Station, University of Florida, Gainesville, FL. 17 pp.

TIME COVERAGE: 1962

SUMMARY: The purpose of this study was to evaluate the erosion of the seashore on both sides of the Bakers Haulover inlet and to proposed improvements. A scale model of the inlet was constructed for the study.

KEY WORDS: Scale models, Bakers Haulover Inlet, Beach erosion, Tidal effects

1460

Purpura, J. A. (1963) Model studies of coastal inlets with special reference to Bakers Haulover Inlet. M.Sc. thesis. University of Florida, Gainesville, FL. 72 pp.

TIME COVERAGE: 1963

SUMMARY: An extensive hydrographic survey showed that in its 1963 situation the inlet had poor current distribution coupled with high velocities because the cross-section of the inlet was badly utilized. A hydraulic model of the inlet was constructed to simulate field conditions. Improvements to the inlet were suggested.

KEY WORDS: Hydraulic models, Coastal inlets, Navigational channels, Bakers Haulover Inlet

1461

Pybas, D. W. (1987) Atlas of artificial reefs in Florida. Florida Sea Grant Extension Program, Gainesville, FL. 26 pp.

TIME COVERAGE: 1987

SUMMARY: This report is an atlas of artificial reefs in Florida.

KEY WORDS: Artificial reefs, Atlases, Florida

1462

Pybas, D. W. (1991) Atlas of artificial reefs in Florida. Sea Grant extension bulletin 20. Florida Sea Grant College Program, Gainesville, FL. 40 pp.

TIME COVERAGE: 1991

SUMMARY: This report is an atlas of artificial reefs in Florida.

KEY WORDS: Artificial reefs, Atlases, Florida

1463

Pybas, D. W. (1997) Atlas of artificial reefs in Florida. SG-1. 5th edition. Florida Sea Grant College Program, Gainesville, FL. 52 pp.

TIME COVERAGE: 1997

SUMMARY: This report is an atlas of artificial reefs in Florida. Artificial reefs in the Bay are described and locations listed.

KEY WORDS: Artificial reefs, Atlases, Florida

1464

Pybas, D. W. (1995) Planning for alternative preparation technologies and havens for boats in hurricane prone coastal communities. In: Coastal Zone '95. Proc., 9th Conf. B. L. Edge (ed.). American Society of Civil Engineers, New York, NY. 596 pp.

TIME COVERAGE: 1992

SUMMARY: This citation examined the protection currently offered by marinas and anchorage, and describes potential improvements.

KEY WORDS: Marinas, Boats, Mooring systems, Safety, Hurricanes, Hurricane Andrew

1465

Quinn, H., J. P. Tolson, C. J. Klein, S. P. Orlando, and C. Alexander (1989) Susceptibility of east coast estuaries to nutrient discharges: Albemarle/Pamlico Sound to Biscayne Bay. Summary report. NOAA/NOS, Rockville, MD. 31 pp.

TIME COVERAGE: 1989

SUMMARY: The report summarizes estimates of the relative susceptibility and status of 17 estuaries on the East Coast from North Carolina through Florida with respect to nutrient-related pollution. Each summary contains data on significant physical and hydrologic features, estimations of nutrient loading, pollution susceptibility, and nutrient concentrations, along with a narrative to assist the reader in interpreting the data.

KEY WORDS: Estuaries, Nutrient cycles, Eutrophication, Pollution, Atlantic coast

1466

Quiñones-Aponte, V. (1997) Geochemical analysis of ground-water flow to Biscayne Bay. In: Proc., US Geological Survey Program on the South Florida Ecosystem. Ft. Lauderdale, FL, August 25-27, 1997. US Geological Survey open file report 97-385. US Geological Survey, Tallahassee, FL. 71-72.

TIME COVERAGE: 1997

SUMMARY: During 1997, 29 water quality/water level monitoring wells were installed in Biscayne Bay. The wells are arranged in three transects. Water samples were collected from

the wells and analyzed for nutrients, major inorganic constituents and isotopic composition. Ground water is discharging offshore along the Coconut Grove transect.

KEY WORDS: Ground water, Drainage water, Hydrology, Coconut Grove, Cutler, Mowry Canal, Nutrients, Freshwater discharge

1467

Quiñones-Aponte, V. (1996) South Florida Ecosystem Program: ground-water discharges to Biscayne Bay. USGS fact sheet FS-131-96. US Geological Survey, Reston, VA. 3 pp.

TIME COVERAGE: 1996

SUMMARY: This fact sheet describes sources of ground water discharge into Biscayne Bay.

KEY WORDS: Ground water, Drainage water, Hydrology

1468

Rabin, C. (1996) Island gets all-natural makeover: workers restoring ragged Chicken Key. The Miami Herald, Miami, FL. November 19. Local. 1B.

TIME COVERAGE: 1996

SUMMARY: One of the six natural island in the Bay is Chicken Key. Legend has it that it was thus named because sailors trying to escape pirates would hide in this small island thus the name "Chicken". Most of the island's vegetation was destroyed in the 1940s when the government dredged a channel just north of the island so military barges would reach Chapman Field. More than 30,000 cubic yards of fill were pumped onto the Key. Australian pines and Brazilian pepper trees invaded. The dredged material eroded into the Bay. Hurricane Andrew destroyed the vegetation of the Key and provided an opportunity to restore the Key. Chicken Key will be managed by the Deering Estate for the Metro Parks and Recreation Department.

KEY WORDS: Chicken Key, Restoration, Hurricane Andrew

1469

Radell, M. J., and B. G. Katz (1991) Major-ion and selected trace-metal chemistry of the Biscayne Aquifer, southeast Florida. Water resources investigations rep. 91-4009. US Geological Survey, Tallahassee, FL. 18 pp.

TIME COVERAGE: 1991

SUMMARY: This report describes the major ion and trace metal chemistry of the Biscayne aquifer. Data were presented to define the areal, vertical and seasonal water quality distribution of the major ions throughout the aquifer.

KEY WORDS: Ions, Trace metals, Water analysis, Biscayne Aquifer

1470

Rainbolt, V. (1924?) The Town That Climate Built. Parker Art Printing Assoc., Miami, FL.

TIME COVERAGE: 1924

SUMMARY: This is an interesting account of life in South Florida during the early part of the century.

KEY WORDS: Climatology, History

1471

Ralph H. Burke, Inc. (1962) Feasibility study and master plan for a marine stadium on Virginia Key at Miami, Florida. Report. Ralph H. Burke, Inc., Chicago, IL.

TIME COVERAGE: 1962

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Recreational waters, Feasibility studies, Marine Stadium, Virginia Key

1472

Ralph H. Burke, Inc. (1962) Feasibility study and master plan for a marine stadium on Virginia Key at Miami, Florida. Ralph H. Burke, Inc., Chicago, IL. 51 pp.

TIME COVERAGE: 1962

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Recreational waters, Feasibility studies, Marine Stadium, Virginia Key

1473

Ramachandran, S. (1985) Biomass and hydrogen photoproduction by a marine blue-green alga *Oscillatoria* sp. Miami BG 7 in natural seawater culture system. Ph.D. dissertation. University of Miami, Coral Gables, FL. 108 pp.

TIME COVERAGE: 1985

SUMMARY: The Miami BG 7 alga strain was originally isolated in 1974 from coastal waters of south Florida. This alga showed high biomass yields and hydrogen production rates in natural seawater systems. Variations in water quality did not affect either the biomass or the hydrogen production.

KEY WORDS: Algae, *Oscillatoria* sp., Algal culture, Biomass, Hydrogen, Biological production

1474

Ramaswamy, L. (1997) Virginia Key Beach Park: assessment of upland vegetation. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Upland vegetation, Virginia Key

1475

Ramdiyal, N. A., and D. Lirman (2000) Effects of low salinity on photosynthesis of the coral *Siderastrea radians* from Biscayne Bay. Florida Scientist, 63(Suppl. 1):17-18.

TIME COVERAGE: 2000

SUMMARY: The effect of low salinity on photosynthesis and respiration of the common Biscayne Bay coral *Siderastrea radians* was examined. Significant negative effects were noted. Photosynthesis levels approached normal levels after a seven-day recovery period.

KEY WORDS: Coral, *Siderastrea radians*, Salinity effects, Photosynthesis, Elliott Key

1476

Randall, J. E. (1968) Caribbean Reef Fishes. T. F. H. Publications, Jersey City, NJ. 318 pp.

TIME COVERAGE: 1968

SUMMARY: This is a guide to reef fishes of the Caribbean and adjacent areas.

KEY WORDS: Reef fish, Caribbean, Guide

1477

Randall, J. E. (1983) Caribbean Reef Fishes. (Revised and expanded edition) T. F. H. Publications, Neptune City, NJ. 350 pp.

TIME COVERAGE: 1983

SUMMARY: This is a guide to reef fishes of the Caribbean and adjacent areas.

KEY WORDS: Reef fish, Caribbean, Guide

1478

Randall, J. E. (1965) Food habits of the Nassau grouper (*Epinephelus striatus*). Meeting of the Association of Island Marine Laboratories of the Caribbean, Isla Margarita, Venezuela, 613-16.

TIME COVERAGE: 1965

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Nassau grouper, *Epinephelus striatus*, Food consumption, Stomach content

1479

Randall, J. E. (1967) Food habits of reef fishes of the West Indies. In: Proc., Internatl. Conf. on Tropical Oceanography. Miami Beach, FL, 1965. Studies in tropical oceanography 5. University of Miami, Institute of Marine Sciences, Miami, FL. 665-847.

TIME COVERAGE: 1967

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Reef fish, Game fish, Food consumption, Stomach content, Caribbean

1480

Randall, J. E., and J. E. Bohlke (1965) Review of the Atlantic labrid fishes of the genus *Halichoeres*. Proc. Acad. Nat. Sci. Phila., 117(-):235-259.

TIME COVERAGE: 1965

SUMMARY: This citation is a taxonomic key to the wrasses of the West Atlantic.

KEY WORDS: Wrasses, Labridae, *Halichoeres*, Taxonomy

1481

Rappaport, E. N. (1992) Hurricane Andrew - a preliminary look. Mariners Weather Log, 36(4):16-25.

TIME COVERAGE: 1992

SUMMARY: This is a meteorological description of Hurricane Andrew and preliminary damage estimates.

KEY WORDS: Hurricanes, Hurricane Andrew

1482

Rappaport, E. N. (1994) Hurricane Andrew. Weather, 49(2):51-60.

TIME COVERAGE: 1992

SUMMARY: This paper is an account of the development and track of Hurricane Andrew.

KEY WORDS: Hurricane tracking, Hurricane Andrew

1483

Rappaport, E. N., and R. C. Sheets (1993) A meteorological analysis of Hurricane Andrew. In: Proc., 6th Ann. National Conf. on Beach Preservation Technology. The State of the Art of Beach Nourishment. L. S. Tait, (ed.). St. Petersburg, FL, 1993. Florida Shore & Beach Preservation Association, Tallahassee, FL. 340-357.

TIME COVERAGE: BB 474

SUMMARY: 1992

KEY WORDS: Wind speed, Meteorology, Hurricanes, Hurricane Andrew

1484

Rappaport, E. N., and R. C. Sheets (1993) A meteorological analysis of Hurricane Andrew. In: Excerpts, 15th Ann. National Hurricane Conf. L. S. Tait, (compiler). Orlando, FL, April 13 - 16, 1993. National Hurricane Conference, Tallahassee, FL.

TIME COVERAGE: 1992

SUMMARY: This is a meteorological account of Hurricane Andrew's passage through South Florida.

KEY WORDS: Hurricane Andrew, Meteorology

1485

Rarnaswamy, L. (1997) Virginia Key Beach Park assessment of upland vegetation. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Plant populations, Vegetation, Virginia Key

1486

Rathbun, M. J. (1930) The cancroid crabs of America of the families Euryalidae, Portunidae, Atelecyclidae, Cancridae and Xanthidae. United States National Museum Bull., 152(1):1-609.

TIME COVERAGE: 1930

SUMMARY: This citation is a taxonomic study of cancroid crabs including those found in South Florida.

KEY WORDS: Cancroid crabs, Euryalidae, Portunidae, Atelecyclidae, Cancridae, Xanthidae, Taxonomy

1487

Rathbun, M. J. (1918) The grapsoid crabs of America. United States National Museum Bull., 97(1):1-461.

TIME COVERAGE: 1918

SUMMARY: This citation is a taxonomic study of grapsoid crabs including those found in South Florida.

KEY WORDS: Grapsoid crabs, Taxonomy

1488

Rathbun, M. J. (1937) The oxystamatous and allied crabs of America. United States National Museum Bull., 166(1):1-278.

TIME COVERAGE: 1937

SUMMARY: This citation is a taxonomic study of oxystamatous and allied crabs including those found in South Florida.

KEY WORDS: Crabs, Oxystomata, Dromiacea, Hapalocarcinidea, Gymnopleura, Taxonomy

1489

Rathbun, M. J. (1925) The spider crabs of America. United States National Museum Bull., 129(-):1-613.

TIME COVERAGE: 1925

SUMMARY: This citation is a taxonomic study of spider crabs including those found in South Florida.

KEY WORDS: Spider crabs, Oxyrhyncha, Taxonomy

1490

Reardon, L. F. (1986) The Florida Hurricane & Disaster 1926. (Reprinted from the 1926 edition.) Alva Parks & Co., Coral Gables, FL, in conjunction with Lion & Thorne Publishing, Tulsa, OK. 112 pp.

TIME COVERAGE: 1926

SUMMARY: This book contains a description of the Hurricane of 1926 which changed much of Miami.

KEY WORDS: Hurricanes, Hurricane of 1926

1491

Reark, J. B. (1983) The coastal ecology of the Card Point Area, Dade County, Florida. Ph.D. dissertation. Clayton University, [n.p.]. 98 pp.

TIME COVERAGE: 1928, 1941 - 1942, 1946 - 1948, 1975 - 1976, 1982 - 1983

SUMMARY: Card Sound was the proposed site for a nuclear power generator in the late 1970s. A feature clearly seen in satellite photographs is a pale band extending inland from the coast around the top of the peninsula of Florida. This zone is hypersaline and was absent in a 1928 aerial photograph. The site was a fresh water habitat that became saline due to manipulation of

the area's hydrology. Actual salinization was produced by a tidal surge of the Hurricane of 1945.

KEY WORDS: Coastal zone, Card Point, Turkey Point, Hurricane of 1945

1492

Reark, J. B. (1974) Current vegetational status of the Cocoplum property, Coral Gables, Florida. Prepared for Crow, Pope, and Land of Florida, Inc. J. B. Reark, Miami, FL. 50 pp.

TIME COVERAGE: 1922, 1974

SUMMARY: Photographs taken in 1922 and 1974 were used to evaluate past and current vegetation in the Cocoplum area, south of Coral Gables. Less than ten acres of the original coves in the 1922 photos can be considered "virgin". Destruction of the original protective strand vegetation has exposed much of the Bay shore to erosion, as much as 350 ft in places.

KEY WORDS: Vegetation, Botanical resources, Cocoplum

1493

Reark, J. B. (1975) A history of the colonization of mangroves on a tract of land on Biscayne Bay, Florida. In: Proc., Internatl. Symp. on Biol. and Management of Mangroves. G. E. Walsh, S. C. Snedaker, and H. J. Teas, (eds.). Honolulu, HI, 1974. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. 776-804.

TIME COVERAGE: 1975

SUMMARY: A historical investigation of anthropogenic impact of human activities and natural phenomena on the Cocoplum area was conducted. Impacts include drainage of the Everglades, early agricultural and real estate development efforts, mosquito control ditches and hurricanes, all of which solidify the soil and make possible the invasion of fresh water marshes by *Rhizophora* and *Laguncularia*. Physiogeographic, climatic and hurricane data are presented.

KEY WORDS: Mangrove swamps, Man-induced effects, Erosion, Saline water, Hurricanes, Cocoplum

1494

Reark, J. B. (1982) An in situ fertilizer experiment using young *Rhizophora*. In: Proc., 9th annual Conf. on Wetlands Restoration and Creation. F. J. Webb, (ed.). 1982. Hillsborough Community College, Tampa, FL. 166-180.

TIME COVERAGE: 1980

SUMMARY: Mitigation mangrove plantings at Poinciana Island were placed in rip-rap planters using sand. Evaluation after one year showed that fertilizing with commercial 5-8-5 acid formula significantly changed the chlorosis ratio in the plants.

KEY WORDS: Mangrove swamps, *Rhizophora*, Red mangrove, Fertilizers, Revegetation, Poinciana Island, Sunny Isles

1495

Rebel, T. P. (1973) Effects of temperature on survival of eggs and yolk-sac larvae of four species of marine fishes from South Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 53 pp.

TIME COVERAGE: 1973

SUMMARY: Eggs of several species of fish common in Biscayne Bay waters were collected in plankton tows, identified and incubated. Eggs and yolk-sac larvae were exposed to a variety of temperatures and survival determined.

KEY WORDS: Temperature effects, Eggs, Larvae, Bay anchovy, *Anchoa mitchilli*, Scaled sardine, *Harengula jaguana*, Yellowfin menhaden, *Brevoortia smithi*, Sea bream, *Archosargus rhomboidalis*, Virginia Key

1496

Redford, P. (1970) Billion-Dollar Sandbar: a Biography of Miami Beach. Dutton, New York, NY. 306 pp.

TIME COVERAGE: 1970

SUMMARY: This is a history of South Florida with an emphasis on Miami Beach.

KEY WORDS: History, Miami Beach

1497

Reeve, M. R. (1975) The ecological significance of the zooplankton in the shallow subtropical waters of south Florida. In: Estuarine Research. 2nd Internatl. Estuarine Research Conf. L. E. Cronin, (ed.). Myrtle Beach, SC, 1973. Academic Press, New York. Vol.1: 352-371.

TIME COVERAGE: 1975

SUMMARY: This report presents existing data on plankton which indicate that shallow water regions may support planktonic production at least as large as those of deeper, colder water regions. Planktonic organisms may be important to the ecosystem because of the possible rapid uptake of dissolved organics flushed out from land and/or released from sediment, and by their ability to graze on detrital-bacterial aggregations in the water column. Plankton biomass in Biscayne Bay and Card Sound could be correlated to freshwater runoff. In low biomass regions, summer temperatures were associated with severe depressions of macroplankton populations.

KEY WORDS: Zooplankton, Biomass, Seasonal variations, Shallow water, Subtropical zones, Card Sound

1498

Reeve, M. R. (1970) Seasonal changes in the zooplankton of south Biscayne Bay and some problems of assessing the effects on the zooplankton of natural and artificial thermal and other fluctuations. Bull. Mar. Sci., 20(4):894-921.

TIME COVERAGE: 1970

SUMMARY: The seasonal variation in zooplankton from five stations in southern Biscayne Bay over a one-year period was presented, and the data condensed into two groups: inshore and midbay. The inshore stations were characterized by generally lower and more variable salinity and higher temperatures compared to midbay. The quantitatively important copepods were confined to six genera which were each dominated by a single species. The seasonal fluctuations in number at both locations were given for each species, as well as abundance in relation to temperature-salinity plots. The major meroplanktonic components were decapod larvae, molluscan veliger larvae, and larvae of polychaetous annelids. All were more abundant inshore partly due to the concentrating effort of the shallower water column.

KEY WORDS: Zooplankton, Seasonal variations, Turkey Point, South Bay, Bear Cut, Chicken Key, Temperature effects, Thermal pollution

1499

Reeve, M. R. (1964) Studies on the seasonal variation of the zooplankton in a marine subtropical in-shore environment. Bull. Mar. Sci. Gulf Caribb., 14(1):103-122.

TIME COVERAGE: 1962 - 1963

SUMMARY: The zooplankton of Bear Cut was sampled for one year. Plankton production peaks were discussed in the light of local weather conditions. Copepods accounted for a high proportion of the total though several species had different peaks of abundance during the year. Most of the plankton groups were represented in every plankton sample, but there was a far higher proportion of young copepods and young chaetognaths in the summer. The hydrography of Biscayne Bay is discussed in relation to the origins of the plankton in Bear Cut.

KEY WORDS: Zooplankton, Seasonal variations, Chaetognaths, *Sagitta hispida*, Bear Cut

1500

Reeve, M. R., and L. D. Baker (1975) Production of two planktonic carnivores (chaetognath and ctenophore) in South Florida inshore waters. Fishery Bull., 73(2):238-248.

TIME COVERAGE: 1970 - 1972

SUMMARY: Seasonal changes in biomass and production of two planktonic carnivores were followed in Card Sound and Biscayne Bay. Production was estimated as the product as mean daily biomass and daily growth rate.

KEY WORDS: Ctenophores, Chaetognaths, Zooplankton, Card Sound, Biological production, *Sagitta hispida*, *Mnemiopsis mccradyi*

1501

Reeve, M. R., and E. Coper (1972) Plankton of the Biscayne Bay/Card Sound system. In: An ecological study of south Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. VI:1-9.

TIME COVERAGE: 1970 - 1971

SUMMARY: The progress report reviewed knowledge of plankton and particulate material based on previous work and sampling done as part of this contract in the waters of Biscayne Bay and Card Sound.

KEY WORDS: Plankton, South Bay, Turkey Point, Card Sound

1502

Reeve, M. R., and E. Coper (1973) The plankton and other seston in Card Sound, South Florida, in 1971. Technical report. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 24 pp.

TIME COVERAGE: 1971

SUMMARY: Phytoplankton, ultramicro-, micro- and macrozooplankton, and detritus were studied in Card Sound. Variability as analyzed in relation to seasonal and spatial distribution.

KEY WORDS: Plankton, Seston, Seasonal variations, Spatial variations, Turkey Point, Card Sound, South Bay

1503

Reeve, M. R., and E. Coper (1972) Some effects of heated effluents on the copepod *Acartia tonsa* from a sub-tropical bay and some problems of assessment. In: Marine Pollution and Sea Life. FAO Techn. Conf. on Marine Pollution and its Effects on Living Resources and Fishing. M. Ruivo, (ed.). Rome, Italy, 1970. Fishing News Books, West Byfleet, Surrey, UK. 250-252.

TIME COVERAGE: 1970

SUMMARY: No single temperature can be applied by a regulatory agency as that beyond which water may not be raised, unless it is that chosen on the basis of winter conditions. Otherwise, prohibited temperatures must closely correlated with the patterns of seasonal change of the environmental water temperature. Acclimation to progressively higher temperatures occurs natural in the copepod species studied, and probably continues to some extent even after stabilization following environmental temperature change.

KEY WORDS: Temperature effects, Copepods, *Acartia tonsa*, Thermal pollution

1504

Reeve, M. R., and E. Coper (1971) Zooplankton. In: An ecological study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. VI:1-32.

TIME COVERAGE: 1971

SUMMARY: The major thrust of this study was to acquire detailed information on the species composition and biomass of zooplankton seasonally in south Biscayne Bay and subsequently in Card Sound.

KEY WORDS: Zooplankton, South Bay, Turkey Point, Card Sound

1505

Reeve, M. R., M. A. Walter, and T. Ikeda (1978) Laboratory studies of ingestion and food utilization in lobate and tentaculate ctenophores. Limnol. Oceanogr., 23(4):740-751.

TIME COVERAGE: 1978

SUMMARY: Ctenophores ingestion rates are linearly related to food density up to concentrations much higher than those usually assumed to be representative of the natural environment. Daily rations in excess of 1000% of their body weights at high prey densities are matched by growth rates characteristic of phytoplankton (daily doublings). Digestive efficiencies greater than 70% were recorded at moderate prey densities. Growth efficiencies rarely exceed 10% because the bulk of assimilated food is required for the energy metabolism. Ingestion rates of ctenophores collected in Biscayne Bay and Saanich Inlet were studied in this work.

KEY WORDS: Ctenophores, *Mnemiopsis mccradyi*, *Pleurobrachia bachei*, Food consumption, Ingestion

1506

Reich, C. (1998) Groundwater conductivity beneath Florida Bay: does the Biscayne Aquifer discharge into Florida Bay? Proc., 1998 Florida Bay Science Conf. Miami, FL, May 12-14, 1998. University of Florida, Gainesville, FL.

TIME COVERAGE: 1998

SUMMARY: Prior to 1900, discharge into Biscayne Bay occurred through well-known solution holes in the Miami oolite and this flow produced numerous freshwater springs. The offshore springs were about 1.2 Km from the Cutler area. The greater head potential of the Biscayne Aquifer also acted as a salinity barrier. Dredging of canals from the 1900s until recently reduced the potentiometric surface of the Aquifer reducing the offshore springs and allowing saltwater intrusion.

KEY WORDS: Paleoecology, Biscayne Aquifer, Salt water intrusion, Florida Bay

1507

Reid, J. P., R. K. Bonde, and T. J. O'Shea (1995) Reproduction and mortality of radio-tagged and recognizable manatees on the Atlantic coast of Florida. In: Population Biology of the Florida Manatee. T. J. O'Shea, B. B. Ackerman, and H. F. Percival (eds.). Information and technology report 1. National Biological Service, Washington, DC. 171-191.

TIME COVERAGE: 1986 - 1991

SUMMARY: Radio tagging and photo identification were used to study aspects of the reproduction and mortality of manatees along the east coast from Georgia to Biscayne Bay. Most specimens were tagged in Brevard County. Statistics of the reproduction and mortality of the animals tagged were provided.

KEY WORDS: Manatees, *Trichechus manatus latirostris*, Tagging, Reproduction, Mortality, East Florida

1508

Reid, J. P., G. B. Rathbun, and J. R. Wilcox (1991) Distribution patterns of individually identifiable West Indian manatees (*Trichechus manatus*) in Florida. Marine Mammal Sci., 7(2):180-190.

TIME COVERAGE: 1986

SUMMARY: Of 891 individuals in the catalog, 470 were sighted at least once; 219 cases of seasonal returns were noted; and 98 instances of movement between areas. Movement in

excess of 820 km were noted. Rapid movement south during early winter and northerly spring movement verify seasonal migration.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Identification, Geographical distribution, Migrations, Florida

1509

Reiger (ed.), J. F. (1971) Sailing in Florida waters in the early 1880s. Part I. Tequesta, 31(-):43-66.

TIME COVERAGE: 1880s

SUMMARY: This paper is an account of a sailing expedition in South Florida including Biscayne Bay. [Excerpts from A. Henshall, "Around the coast of Florida" (nine papers, January 25, 1883 to March 22, 1883), published in Forest and Stream.]

KEY WORDS: History, Exploration, Florida, Florida Keys

1510

Renaud, J. C. (1956) A report on some polychaetous annelids from the Miami-Bimini area. American Museum Novitates, -(1812):1-40.

TIME COVERAGE: 1954

SUMMARY: This paper describes annelids collected in Miami, the Florida Keys and the Bahamas.

KEY WORDS: Annelids, Miami, Bimini, Florida Keys, Species list, Taxonomy

1511

Research Planning Institute (1981) South Florida oil spill sensitivity atlas. South Florida Regional Planning Council, Miami, FL. 23 pp.

TIME COVERAGE: 1981

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Oil spills, Shore protection, Nature conservation, Atlases, Card Sound, Florida Keys

1512

Research Planning Institute, I. (1984) The sensitivity of coastal environments and wildlife to spilled oil in the south Florida region. RPI/R/84/8/2-21. Research Planning Institute, Columbia, SC. Various paging.

TIME COVERAGE: 1984

SUMMARY: A shoreline assessment of Florida was conducted by means of aerial overflights, ground stations and literature reviews. A series of maps depicting shoreline and wildlife sensitivity to spilled oil were produced. The maps also include information on oil spill clean ups.

KEY WORDS: Oil spills, Shore protection, Nature conservation, South Florida

1513

Restrepo, J., and R. A. Rokovich (1997) Behavior and ground-water model simulation of landfill debris in an unlined landfill near Miami, Florida. Abstracts with programs (American Geological Society), 29(6):330.

TIME COVERAGE: 1997

SUMMARY: An unlined land fill near Biscayne Bay stopped receiving solid waste in 1980. The landfill extends as high as 35 feet above sea level. Monitoring well and soil borings provided evidence that landfill debris extends below the water table at the site. Groundwater elevation maps indicate a southeasterly water flow.

KEY WORDS: Landfill, Ground water, Hydraulic models, Miami

1514

Reyes-Vasquez, G. (1985) Effects of environmental factors on the biosynthesis of hemolytic toxins by the marine cyanobacterium *Synechococcus* sp. Miami BGI16S. Ph.D. dissertation. University of Miami, Coral Gables, FL. 99 pp.

TIME COVERAGE: 1985

SUMMARY: The effects of environmental factors upon growth and hemolytic compound biosynthesis by this blue-green algae were studied. This strain was previously isolated from an area of Biscayne Bay where a massive fish kill occurred in the 1970s. Production of hemolysins was found to be influenced by light intensity, temperature and salt concentration as well as cell age. At least two different hemolytic compounds were produced by this strain. One was water soluble and heat labile, and the other was ethanol soluble and heat stable.

KEY WORDS: Cyanophyta, Algae, *Synechococcus* sp., Poisonous organisms, Toxicity

1515

Reyes-Vasquez, G. (1965) Studies on the diatom flora living on *Thalassia testudinum* König in Biscayne Bay. M.Sc. thesis, University of Miami, Coral Gables, FL, FL. 81 pp.

TIME COVERAGE: 1964 - 1965

SUMMARY: This work studied the diatoms living on *Thalassia*. Seasonal variations, and salinity and temperature tolerances were examined. Results suggest that the periphyton of estuaries is controlled by the characteristics of the sediments.

KEY WORDS: Diatoms, Turtle grass, *Thalassia testudinum*, Bear Cut, Key Biscayne, Soldier Key, Ragged Keys, Matheson Hammock, Taxonomy

1516

Reyes-Vasquez, G. (1970) Studies on the diatom flora living on *Thalassia testudinum* König in Biscayne Bay, Florida. Bull. Mar. Sci., 20(-):105-134.

TIME COVERAGE: 1964 - 1965

SUMMARY: This study describes the diatom flora living on *Thalassia*. The ranges of salinity and temperature within which the studied species thrive were established.

KEY WORDS: Diatoms, Turtle grass, *Thalassia testudinum*

1517

Reynolds, E. S. (1955) Bacteriological studies. In: Report on preliminary studies of pollution in Biscayne Bay. H. B. Moore, I. Hela, E. S. Reynolds, J. K. McNulty, S. M. Miller, and C. A. Carpenter (eds.). Progress report 55-3. Marine Laboratory, University of Miami, Coral Gables, FL. III: 1-18.

TIME COVERAGE: 1955

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Bacteria, Sewage disposal, Water pollution

1518

Reynolds, E. S., and S. P. Meyers (1957) Marine wood-inhabiting fungi. Research reviews (US Office of Naval Research), (December):6-11.

TIME COVERAGE: 1957

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Fungi, Wood, Fouling organisms

1519

Rhoads, S. N. (1899) Annotated list of land and fresh-water shells recently collected in the vicinity of Miami, Florida. Nautilus, 13(-):43-48.

TIME COVERAGE: 1899

SUMMARY: This paper describes land and fresh water shells collected in Miami.

KEY WORDS: Shells, Freshwater mollusks, Miami, Species list

1520

Ribi, G. (1982) Differential colonization of roots of *Rhizophora mangle* by the wood boring isopod *Sphaeroma terebrans* as a mechanism to increase root density. Mar. Ecol., 3(1):13-19.

TIME COVERAGE: 1982

SUMMARY: Frequency of parasitism of free ending prop roots of red mangroves by this isopod increases with increasing distance of the endings of established roots. Wooden structures placed in the vicinity of the endings tended to reduce colonization rate. Isopod colonization may cause mangrove root density to increase by colonizing peripheral endings.

KEY WORDS: Isopods, *Sphaeroma terebrans*, Boring organisms, Red mangrove, *Rhizophora mangle*, Roots

1521

Ribi, G. (1981) Does the wood boring isopod *Sphaeroma terebrans* benefit red mangroves (*Rhizophora mangle*)? Bull. Mar. Sci., 31(4):925-928.

TIME COVERAGE: 1966, 1978 - 1979

SUMMARY: *Sphaeroma terebrans* bores into the tips of prop roots of red mangroves damaging the tip and often preventing it from reaching the substrate. Some researchers have stated that this isopod has a beneficial effect on the mangroves as they induce root spreading. In this study, no evidence was found that *S. terebrans* had a beneficial effect on red mangroves.

KEY WORDS: Isopods, *Sphaeroma terebrans*, Boring organisms, Red mangrove, *Rhizophora mangle*, Key Biscayne

1522

Rice, A. L., and A. J. Provenzano (1966) The larval development of the West Indian sponge crab *Dromidia antillensis* (Decapoda: Dromiidae). J. Zoology, London, 149(-):297-319.

TIME COVERAGE: 1963

SUMMARY: Larvae hatched in the laboratory from a berried female sponge crab collected off Key Biscayne were reared through metamorphosis.

KEY WORDS: Sponge crab, *Dromidia antillensis*, Larval development, Key Biscayne

1523

Rice, K. J. (1978) Structure and function of a tropical, subtidal sandbar community. M.Sc. thesis. University of Miami, Coral Gables, FL. 116 pp.

TIME COVERAGE: 1976 - 1977

SUMMARY: The benthic community of the Safety Valve was sampled monthly. The total abundance and biomass of the benthic microfauna showed significant seasonal and spatial variation. Seasonal variation of macrofaunal species diversity was found to be highly correlated with the abundance of the dominant bivalve *Tivela floridana*. A sand dredging operation located on the sandbar did not significantly affect macrofaunal community biomass, abundance or diversity.

KEY WORDS: Nearshore bars, Sand bars, Aquatic communities, Benthos, Seasonal variations, Temporal variations, Safety Valve, *Tivela floridana*

1524

Rice, S. (1995) National park forever changed by hurricane: philosophy focuses on the natural. The Miami Herald, Miami, FL. May 11. Neighbors. 1.

TIME COVERAGE: 1992

SUMMARY: This article discusses the effect of Hurricane Andrew on the Biscayne National Park and the resulting change towards a natural ecosystem.

KEY WORDS: Hurricane Andrew, Biscayne National Park

1525

Rickards, W. L. (1971) Studies of the use of vertical substrates for improving production in the culture of pink shrimp, *Penaeus duorarum* Burkenroad. Ph.D. dissertation. University of Miami, Coral Gables, FL. 152 pp.

TIME COVERAGE: 1969

SUMMARY: Experiments were conducted to determine the effects of vertical substrates on shrimp growth, mortality and total yield. Substrates used were artificial grass and fiberglass panels. Shrimp used in this study were obtained from fishermen operating in Biscayne Bay.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Shrimp culture, Culture tanks

1526

Rickards, W. L. (1971) Studies of the use of vertical substrates for improving production in the culture of pink shrimp, *Penaeus duorarum* Burkenroad. University of Miami, Coral Gables, FL. 152 pp.

TIME COVERAGE: 1971

SUMMARY: [THIS IS A REPRINT OF THE PH.D. DISSERTATION BY THE AUTHOR.]

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Shrimp culture, Culture tanks

1527

Ridings, A. S. (1985) Wings over Miami. South Florida History Mag., 12(4):6-12.

TIME COVERAGE: 1911 - 1940

SUMMARY: Aviation has been an integral part of the history of South Florida since the turn of the century. This article describes activities from 1911 to the end of World War II.

KEY WORDS: Aviation, Dinner Key, Chalk's Airline

1528

Riege, J. D. (1974) Investigations of tidal boundary hydraulics in Card Sound, Florida. M.Sc. Thesis. University of Miami, Coral Gables, FL. 72 pp.

TIME COVERAGE: 1974

SUMMARY: A mathematical model for open channel flow was shown to be capable of predicting tidal boundary discharges in close agreement with field measurements.

KEY WORDS: Boundary currents, Hydraulics, Tidal dynamics, Card Sound

1529

Rielinger, D. M. (1991) Respiration in black mangrove (*Avicennia germinans* [L] Stern) pneumatophores under submerged and oiled conditions. M.Sc. thesis. University of Miami, Coral Gables, FL. 71 pp.

TIME COVERAGE: 1991

SUMMARY: Negatively geotropic aerial roots called pneumatophores serve a respiratory function in response to aerobic conditions in the soil. The pneumatophores are subjected to tidal fluctuations and pollutants. In this study, pneumatophores were subjected to air, water and three types of oil. Oiled pneumatophores failed to exchange oxygen.

KEY WORDS: Black mangrove, *Avicennia germinans*, Pneumatophores, Respiration, Respiratory organs, Oxygen consumption, Oil, Virginia Key, Key Biscayne

1530

Risi, J. A., and H. R. Wanless (1993) Physical modification of the shallow subtidal environments of South Florida by Hurricane Andrew. Abstracts with programs (Geological Society of America), 25(4):65.

TIME COVERAGE: 1992

SUMMARY: Hurricane Andrew created intense winds and currents that caused erosion and deposition in the shallow subtidal on both the east and west coasts. The most striking effect was the intense scour from focused longshore currents and onshore current surges. In Biscayne

Bay, longshore currents following the axis of the bay created localized total destruction to the hardbottom communities, overturning limestone blocks, locally eroding seagrass beds, and exposing the muddy substrate below scour areas. Reefal, hardbottom and seagrass communities appear to have been stressed by low oxygen levels immediately following the storm.

KEY WORDS: Scouring, Shallow water, Erosion, Hurricane Andrew

1531

Rivas, L. R. (1962) The Florida fishes of the genus *Centropomus*, commonly known as snook. Quart. J. Fla. Acad. Sci., 25(1):53-64.

TIME COVERAGE: 1962

SUMMARY: This paper describes the species of snook found in Florida.

KEY WORDS: Snook, *Centropomus*, Taxonomy

1532

Robbin, D. M. (1987) A new Holocene sea level curve for the upper Florida Keys and Florida Reef Tract. In: Symposium on South Florida Geology. F. J. R. Maurrasse, (ed.). Memoir 3. Miami Geological Society, Coral Gables, FL. 12.

TIME COVERAGE: 1987

SUMMARY: A new Holocene sea level curve for the upper Florida Keys and Florida reef tract was constructed by integrating existing and new data from <sup>14</sup>C age analysis.

KEY WORDS: Sea level changes, Holocene, Florida Keys, Reef Tract

1533

Robertson, P. B. (1968) The larval development of some western Atlantic lobsters of the family Scyllaridae. Ph.D. dissertation. University of Miami, Coral Gables, FL. 530 pp.

TIME COVERAGE: 1965 - 1966

SUMMARY: This is a study of the development of the larvae of slipper lobsters. Ovigerous females were collected by commercial bait shrimp fishermen operating in Barnes Sound, Key Largo and southern Biscayne Bay.

KEY WORDS: Slipper lobster, Scyllaridae, Lobsters, Larval development, Key Largo, Barnes Sound

1534

Robertson, P. B. (1963) A survey of the marine rock-boring fauna of southeast Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 169 pp.

TIME COVERAGE: 1963

SUMMARY: This is a study of marine rock-boring organisms at three sites in South Florida. The species found are described.

KEY WORDS: Boring organisms, Carbonate rocks, Sponges, Sipunculids, Polychaetes, Lamellibranchs, Barnacles, Bear Cut, Margot Fish Shoal, West Summerland Key, Species list

1535

Robertson, W. B. J. (1955) An analysis of the breeding-bird populations of tropical Florida in relation to the vegetation. Ph.D. dissertation, University of Illinois, Urbana, IL. 599 pp.

TIME COVERAGE: 1950 - 1952

SUMMARY: The purpose of this study was to study the breeding bird populations of various parts of the continent in relation to regional vegetation types. Studies were also carried out in Cuba and the Bahamas.

KEY WORDS: Birds, Vegetation, Cuba, Bahamas, Species list

1536

Robertson, W. B. (1962) Ornithology of "The cruise of the Bonton". Tequesta, 22(-):65-77.

TIME COVERAGE: 1962

SUMMARY: This paper discusses the ornithological observations made during the voyage of the Bonton around South Florida.

KEY WORDS: Cruises, Bonton (Ship), Birds, Miami, Florida Bay, Florida Keys, Species list

1537

Robertson, W. B. (1974) The southern Florida avifauna. In: *Environments of south Florida: Present and Past*. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 414-452.

TIME COVERAGE: 1974

SUMMARY: This citation describes the birds of South Florida including their history as interpreted from fossils, the changing distribution patterns, and populations.

KEY WORDS: Birds, Migratory species, Nature conservation

1538

Robertson, W. B., and J. A. Kushlan (1984) The southern Florida avifauna. In: *Environments of South Florida: Present and Past II*. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL. 551 pp.

TIME COVERAGE: 1984

SUMMARY: The breeding of avifauna in South Florida as well as its history as interpreted from fossils is discussed.

KEY WORDS: Birds, Migratory species, Nature conservation

1539

Robins, C. R. (1958) Check list of the Florida game and commercial marine fishes including those of the Gulf of Mexico and the West Indies, with approved common names. Florida Board of Conservation educational series 12. Marine Laboratory, University of Miami, Miami, FL. 46 pp.

TIME COVERAGE: 1958

SUMMARY: This is list of game and commercial marine fishes found in Florida, the Gulf of Mexico and the West Indies.

KEY WORDS: Marine fish, Commercial species, Game fish, Check lists, Vernacular names

1540

Robins, C. R. (1969) Distributional patterns of fishes from coastal and shelf waters of the tropical western Atlantic. In: *Symp., Investigations and Resources of the Caribbean Sea and Adjacent Regions*. Willemstad, Curacao, 1968. FAO fisheries report 71.1. Food and Agriculture Organization of the United Nations, Rome, Italy. 148.

TIME COVERAGE: 1989

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Geographical distribution, Marine fish, Coastal waters, Ecological distribution

1541

Robins, C. R. (1957) Effects of storms on the shallow-water fish fauna of southern Florida with new records of fishes from Florida. *Bull. Mar. Sci. Gulf Caribb.*, 7(3):266-275.

TIME COVERAGE: 1956

SUMMARY: The passage of storms or persistent onshore winds result in turbulent conditions in the shallow, inshore waters and in fish kills of varying intensity. Species of fish not normally found in shallow exposed locations may become established in such a habitat during periods or seasons of calm weather. These species are unable to withstand turbulent conditions and are killed apparently due to erosion of gill filaments by accumulated sediments. The importance of storms as a limiting factor in the shoreward distribution of many species was noted. Specimens were collected during October 6-15, 1956, when onshore winds of 30 mph buffeted the Florida coast. No drop in temperature was observed.

KEY WORDS: Storms, Turbidity, Fish kill, Shallow water, Florida

1542

Robins, C. R. (1964) A new gobiid fish, *Garmannia grosvenori*, from shore waters of southern Florida and Venezuela. Bull. Mar. Sci. Gulf Caribb., 14(3):399-404.

TIME COVERAGE: 1964

SUMMARY: This paper discusses a previously undescribed gobi found in Miami and Venezuela.

KEY WORDS: Gobies, *Garmannia grosvenori*, New species, Taxonomy, Venezuela, South Florida

1543

Robins, C. R., C. Phillips, and F. Phillips (1959) Some aspects of the behavior of the blennioid fish *Chaenopsis ocellata* Poey. Zoologica, 44(-):77-84.

TIME COVERAGE: 1958

SUMMARY: The behavior in an aquarium of several specimens of pike blenny collected in Biscayne Bay was observed.

KEY WORDS: Pike blenny, *Chaenopsis ocellata*, Behavior

1544

Robins, C. R., and G. C. Ray (1986) A Field Guide to Atlantic Coast Fishes of North America. Peterson field guide series. Houghton Mifflin, Boston, MA. 354 pp.

TIME COVERAGE: 1986

SUMMARY: This is a field guide to Atlantic coast fishes.

KEY WORDS: Marine fish, Identification, Coastal waters, Atlantic coast, Guide

1545

Robins, C. R., and W. A. Starck (1961) Materials for a revision of Serranus and related fish genera. Proc. Acad. Nat. Sci. Phila., 113(-):259-314.

TIME COVERAGE: 1961

SUMMARY: This citation describes the habits, habitat and other features of Serranids of the Western Atlantic.

KEY WORDS: Serranids, Serranus, Serranellus, Paracentropistes, Mentiperca, Prionodes, Florida Keys

1546

Robinson, G. B., S. C. Robinson, and J. Lane (1996) Discover a Watershed: the Everglades. South Florida Water Management District, West Palm Beach, FL. 278 pp.

TIME COVERAGE: 1996

SUMMARY: This is a study guide to the Everglades and adjacent areas mostly for middle and high school students.

KEY WORDS: Watersheds, Everglades

1547

Robinson, R. B. (1967) Diagenesis and porosity development in Recent and Pleistocene oolites from southern Florida and the Bahamas. J. Sed. Petrol., 37(2):355-364.

TIME COVERAGE: 1967

SUMMARY: This study was based on oolites collected in South Florida and the Bahamas, ranging in age from Recent to Pleistocene. On the basis of texture alteration determined by petrographic examination, samples were classified into early and later diagenesis, and studied in detail. Diagenesis produced a great diversity in texture, mineral composition, and porosity in the short span of geologic time represented in these samples.

KEY WORDS: Oolites, Diagenesis, Porosity, Holocene, Pleistocene, Bahamas, South Florida

1548

Robinson, R. K., and D. Dimitriou (1963) Length frequencies of adults of *Panulirus argus* and occurrence of phyllosoma larvae in south Florida. Institute of Marine Science, University of Miami, Miami, FL.

TIME COVERAGE: 1962 - 1963

SUMMARY: Samples were obtained from commercial catches and measured. Plankton samples were examined for the presence of lobster larvae.

KEY WORDS: Spiny lobster, *Panulirus argus*, Length, Crustacean larvae, South Florida

1549

Rockwood, C. W. (1891) In Biscayne Bay. New Amsterdam Book Co., New York, NY. 286 pp.

TIME COVERAGE: 1891

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Biography, Description

1550

Rodriguez Mercado, A. (1972) Pharmacological and chemical studies of a toxin from *Haliclona viridis*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 69 pp.

TIME COVERAGE: 1972

SUMMARY: The toxin of the *Haliclona viridis* sponge was isolated from a specimen collected in Bear Cut. The biochemistry of this toxin and its effect on various animals was described.

KEY WORDS: Sponges, *Haliclona viridis*, Pharmacology, Toxicology, Halitoxin, Bear Cut

1551

Rodriguez, G. A. (1975) Electrophoretic patterns of blood serum from stone crabs *Menippe mercenaria* Say (Crustacea: Decapoda) held under laboratory conditions. M.Sc. thesis. University of Miami, Coral Gables, FL. 35 pp.

TIME COVERAGE: 1975

SUMMARY: Stone crabs were collected in Biscayne Bay and kept in aquariums. Gel electrophoresis patterns of the blood of the crabs were studied and interpreted.

KEY WORDS: Stone crab, *Menippe mercenaria*, Blood, Serum, Electrophoresis

1552

Roessler, M. A. (1965) An analysis of the variability of fish populations taken by otter trawl in Biscayne Bay, Florida. Trans. Amer. Fisheries Soc., 94(-):311-318.

TIME COVERAGE: 1963

SUMMARY: Three bottom habitats were trawled day and night. During the day trawl, 1391 fishes of 41 species were collected. During night the trawl, 1440 fish of 49 species were collected. The number of species per sample followed Poisson distribution and the number of individuals per sample followed a negative binomial distribution, and the number of individuals per species followed Fisher's logarithmic series. More fishes were taken in the *Thalassia* environment, and more were taken at night.

KEY WORDS: Population dynamics, Periodic variations, Marine fish, Bottom trawls, Species list, Bear Cut, Intercoastal Waterway

1553

Roessler, M. A. (1971) Effects of a steam electric station on a subtropical estuary in Florida. Presented at National Academy of Engineering Conference on Power Plant Siting, 1971. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Unpaged.

TIME COVERAGE: 1971

SUMMARY: This citation is a progress report of research done at the Turkey Point power plant site. The temperature of the water passing through the power plant is raised about 6 °C. It is recirculated through the plant without being fully cooled. Animals and plants were adversely

affects over an area of 300 acres. Many species of algae were killed and the productivity of *Thalassia* reduced. In an area of approximately 30 acres, the algae and seagrasses were completely killed and replaced by blue-green algal diatom mat. Almost all animals are absent from this zone. In an additional 150 acres, the numbers of species and the abundance of animals were severely reduced. Beyond this there is a zone of approximately 120 acres in which a few species of detritus-feeding molluscs and crustaceans were more abundant than previously observed. Their abundance increased since they consumed the dead and decaying algae and *Thalassia*. The three zones correspond with elevations of 4, 3 and 2 °C above normal seawater temperature.

KEY WORDS: Thermal pollution, Waste disposal, Turkey Point

1554

Roessler, M. A. (1971) Environmental changes associated with a Florida power plant. Mar. Pollut. Bull., 2(-):87-90.

TIME COVERAGE: 1971

SUMMARY: Damage to biota in the vicinity of the Turkey Point power plant was demonstrated quantitatively. Algae and grasses were found to be replaced by blue-green filamentous algal mats; seasonal recovery was slow and the affected areas contained fewer kinds and smaller numbers of animals. Increased temperatures were the chief cause.

KEY WORDS: Thermal pollution, Waste disposal, Turkey Point

1555

Roessler, M. A. (1964) A statistical analysis of the variability of fish populations taken by otter trawling in Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 126 pp.

TIME COVERAGE: 1963

SUMMARY: Trawl samples were taken in Biscayne Bay and fishes representing 41 species were identified. The mean number of species varied significantly in some areas. In general, *Thalassia* beds contained more species than sand bottoms.

KEY WORDS: Population dynamics, Periodic variations, Marine fish, Bottom trawls

1556

Roessler, M. A. (1977) Thermal additions in a tropical marine lagoon. In: Biological Balance and Thermal Modifications. Proc., World Conference Towards a Plan of Actions for Mankind. M. Marois, (ed.). Paris, France, 1974. Pergamon Press, Oxford, UK. 79-87.

TIME COVERAGE: 1977

SUMMARY: This report described the study of the effects of thermal additions on the ecology of Biscayne Bay and Card Sound.

KEY WORDS: Thermal pollution, Turkey Point, Card Sound, South Bay

1557

Roessler, M. A., G. L. Beardsley, and R. Smith (1973) Benthic communities of Biscayne Bay, Florida. Unpublished rep. University of Miami Sea Grant, Miami, Florida. 12 pp.

TIME COVERAGE: 1973

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Benthos, Assessments

1558

Roessler, M. A., and G. L. Beardsley (1974) Biscayne Bay: its environment and problems. Florida Sci., 37(-):186-204.

TIME COVERAGE: 1974

SUMMARY: This paper describes Biscayne Bay and the environmental problems resulting from urban development. Proposed urbanization projects are discussed.

KEY WORDS: Natural resources, Environmental protection, Urbanization

1559

Roessler, M. A., G. L. Beardsley, R. Rehrer, and J. Garcia (1975) Effects of thermal effluents on the fishes and benthic invertebrates of Biscayne Bay-Card Sound, Florida. Technical report UM-RSMAS-75027. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1975

SUMMARY: Field studies on the effects of thermal additions from the Turkey Point power plant were conducted to determine the effects of this effluent on the macro-invertebrates and fishes of the area. Maximum discharge temperature during the summer months that will cause long term damage was 33 °C. The effects of discharge into Card Sound were also examined.

KEY WORDS: Thermal pollution, Benthos, Marine Fish, Card Sound, Turkey Point

1560

Roessler, M. A., G. L. Beardsley, and D. C. Tabb (1977) New records of the introduced snail, *Melanooides tuberculata* (Mollusca: Thiaridae) in south Florida. Florida Scientist, 40(1):87-94.

TIME COVERAGE: 1977

SUMMARY: New populations of the introduced thiarid snail *Melanooides tuberculata* were found in fresh water canals of Dade and Collier counties and in the saline mangrove areas of Matheson Hammock-Snapper Creek. No trematode larvae were discovered in specimens examined. These snails were probably accidentally or intentionally introduced from the Orient by aquarium dealers.

KEY WORDS: Snails, *Melanooides tuberculata*, Introduced species

1561

Roessler, M. A., H. B. Moore, R. Rehrer, J. Garcia, N. Kenny, J. P. Norris, N. Hatfield, R. Hixon, and R. Smith (1971) Benthic animals and fishes. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. V:1-56.

TIME COVERAGE: 1971

SUMMARY: The overall objective of this study was to quantitatively determine the kinds and numbers of animals present in south Biscayne Bay and Card Sound, and to relate changes in abundances to changes in other variables in the environment.

KEY WORDS: Benthos, Fish, South Bay, Turkey Point, Card Sound, Species list

1562

Roessler, M. A., H. B. Moore, G. L. Beardsley, R. Smith, R. Hixon, C. M. Hoberg, I. M. Brook, J. M. Sprogis, and N. Hatfield (1972) Benthic biology. In: An ecological study of south Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. V:1-115.

TIME COVERAGE: 1968 - 1972

SUMMARY: This report was a quantitative study of the benthic fauna of Biscayne Bay and Card Sound, particularly the areas adjacent to the Turkey Point Power Plant. The biology of the organisms was considered in relation to temperature, radioactivity, salinity and selected chemical characteristics.

KEY WORDS: Benthos, South Bay, Card Sound, Turkey Point

1563

Roessler, M. A., and J. C. Sieman (1970) The effects of thermal additions on the biota of southern Biscayne Bay, Florida. Proc., Gulf Caribb. Fisheries Institute, 22nd Ann. Session. Miami Beach, FL, 1969. University of Miami, Coral Gables, FL. 136-145.

TIME COVERAGE: 1969

SUMMARY: The effect of the heated effluent on the *Thalassia* and macro-algal communities near the Turkey Point plant were studied by marking areas with metal squares and counting the individual plants within the squares at periodic intervals. Quantitative samples of fishes and macro-invertebrates were obtained using otter trawls. The effluents reduced the diversity and abundance of algae and animals in a small area adjacent to the mouth of the canals corresponds to the +4 °C isotherm. A second zone in which algae were damaged and species numbers and diversity reduced corresponds to the +3 °C isotherm.

KEY WORDS: Thermal pollution, Temperature effects, Algae, Turtle grass, *Thalassia testudinum*, Biota, South Bay, Turkey Point

1564

Roessler, M. A., and D. C. Tabb (1972) Optimal and exclusion temperatures for subtropical estuarine organisms. Quart. J. Fla. Acad. Sci., 35(Suppl. 1):34-35.

TIME COVERAGE: 1972

SUMMARY: A model based on the exclusion of species from the heated areas of Biscayne Bay was formulated to predict the impact of thermal additions on subtropical estuaries or coastal bays. This model was constructed from data based on the extent of damage with two fossil fuel units using cooling water. Optimum water temperature was 26 °C and 50% of the species were excluded at 33 °C or higher.

KEY WORDS: Estuarine organisms, Temperature tolerance, Thermal pollution, Turkey Point

1565

Roessler, M. A., D. C. Tabb, and R. G. Bader (1970) Progress report on an ecological study of south Biscayne Bay in the vicinity of Turkey Point. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 81 pp.

TIME COVERAGE: 1970

SUMMARY: This is a progress report of the results obtained during the first 18 months of the investigation of the effects of thermal effluents on Biscayne Bay.

KEY WORDS: Thermal pollution, Baseline studies, Ecology, South Bay, Turkey Point

1566

Roessler, M. A., and D. C. Tabb (1974) Studies of effects of thermal pollution in Biscayne Bay, Florida. Rep., EPA-660/3-74-014; Project 18080 DFU, Program element 1BA032. Office of Research and Development, Environmental Protection Agency, Washington, DC.

TIME COVERAGE: 1969 - 1971

SUMMARY: Field studies were conducted to determine the effects of thermal pollution at Turkey Point on macroinvertebrates and fishes. Otter trawls were made monthly. Data on temperature, salinity and dissolved oxygen were also collected. Experimental results suggested that maximum summer temperatures above 32 °C caused detrimental changes which were reversible in the winter, while temperatures above 33 °C caused damage that did not recover.

KEY WORDS: Thermal pollution, Benthos, Fish, Turkey Point, Card Sound, Species list, Salinity, Dissolved oxygen, Temperature

1567

Roman, C. T., N. G. Aumen, J. C. Trexler, R. J. Fennema, W. F. Loftus, and M. A. Soukup (1994) Hurricane Andrew's impact on freshwater resources. BioScience, 44(4):247-255.

TIME COVERAGE: 1992

SUMMARY: This citation discusses the impact of Hurricane Andrew on freshwater resources and habitats.

KEY WORDS: Hurricanes, Freshwater ecology, Hurricane Andrew, Everglades National Park, Big Cypress National Preserve, Chicken Key, Florida Bay

1568

Roman, M. R., M. R. Reeve, and J. L. Froggatt (1983) Carbon production and export from Biscayne Bay, Florida. I. Temporal patterns in primary production, seston and zooplankton. Est. Coastal Shelf Sci., 17(1):45-59.

TIME COVERAGE: 1977 - 1978

SUMMARY: Water samples were collected at five stations along a transect on the western shore of Biscayne Bay monthly for one year. Temperature, salinity, particle concentration, ATP, particulate organic carbon, chlorophyll, primary production, zooplankton density and zooplankton species diversity were determined. Over 90% of the total primary production originated by submerged vegetation. The high zooplankton biomass is most likely sustained by macrophyte detritus and resuspension of benthic diatoms by high winds.

KEY WORDS: Carbon cycle, Biogeochemical cycle, Organic carbon, Seston, Zooplankton, Biomass, Phytoplankton, Coastal waters, Primary production

1569

Romans, B. (1961) A Concise Natural History of East and West Florida. Reprinted from the 1775 edition. Pelican Publishing Co., New Orleans, LA.

TIME COVERAGE: 1775

SUMMARY: This book was reprinted from the 1775 description of the southern part of "British America" including navigation in the Bahamas, Florida, northern Cuba and the Florida Keys.

KEY WORDS: Navigation, Natural history, Florida Keys, Bahamas, Florida, Cuba

1570

Romans, B. (1962) A Concise Natural History of East and West Florida. (A facsimile reproduction of the 1775 ed. with introduction by R. W. Patrick.) University of Florida Press, Gainesville, FL. 339 pp + appendix.

TIME COVERAGE: 1775

SUMMARY: This is an early account of the natural history of South Florida. There is a brief mention in the book of Cape Florida and the Miami River (known at that times as Boca Ratones).

KEY WORDS: Natural history, Florida, Cape Florida

1571

Romans, B. (1999) A Concise Natural History of East and West Florida. Reprinted from the 1775 edition. University of Alabama Press, Tuscaloosa, AL.

TIME COVERAGE: 1775

SUMMARY: This book was reprinted from the 1775 description of the southern part of Florida.

KEY WORDS: Navigation, Natural history, Florida Keys, Bahamas, Florida, Cuba

1572

Romero, G. C., G. R. Harvey, and D. K. Atwood (1981) Stranded tar on Florida beaches: September 1979-October 1980. Mar. Pollut. Bull., 12(8):280-284.

TIME COVERAGE: 1979 - 1980

SUMMARY: Tar fouling of southeast Florida beaches was found to be an order of magnitude greater than that of the rest of the state, and may be the result of extensive ship traffic in the Straits of Florida.

KEY WORDS: Tar, Beaches, Fouling, Florida, Cape Florida, Haulover Beach, Elliott Key

1573

Romero, L., J. W. Fourqurean, and T. Smith (1995) Disturbance influences on dead wood dynamics and nutrient cycles in mangroves. In: Abstracts, 13th Biennial Internatl. Conf., Estuarine Research Federation. Estuaries: Bridges From Watersheds to Coastal Seas. Corpus Christi, TX, 1995. Texas A&M University Sea Grant College Program, Bryan, TX. 113.

TIME COVERAGE: 1995

SUMMARY: Dead wood comprises a significant proportion of the biomass in mangrove forests and the rate of cycling of this material is unknown. Preliminary estimates of N and P in dead wood and the impact of Hurricane Andrew are reported.

KEY WORDS: Mangrove swamps, Wood, Nutrient cycles, Hurricane Andrew

1574

Rona, D. C. (1977) Remote sensing of turbidity in Biscayne Bay, Florida. Florida Scient., 40(2):174-178.

TIME COVERAGE: 1977

SUMMARY: This paper describes the use of LANDSAT images to study turbidity in Biscayne Bay.

KEY WORDS: Remote sensing, LANDSAT, Turbidity, Suspended matter, Tides, Carbonates, Government Cut, Safety Valve

1575

Rooth, C., and T. N. Lee (1972) A method for estimating thermal anomaly areas from hot discharges in estuaries. Sea Grant special bulletin 3. University of Miami Sea Grant Program, Miami, FL. 15 pp.

TIME COVERAGE: 1972

SUMMARY: A graphic approach for the prediction of thermal anomaly areas from hot discharges was presented to provide a tool for power plant design considerations.

KEY WORDS: Temperature anomalies, Thermal pollution, Power plants, Waste disposal

1576

Rose, S. D. (1996) Matheson Hammock marina repairs - Phase II. Internship report, M.A. in Marine Affairs. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Marinas, Coastal structures, Hurricane Andrew, Matheson Hammock

1577

Rosen, A. (1957) Summary of Florida commercial marine landings for 1956. Mimeographed reports 57-24. Marine Laboratory, University of Miami, Coral Gables, FL. 50 pp.

TIME COVERAGE: 1956

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Florida

1578

Rosen, A. (1960) Summary of Florida commercial marine landings, 1959 and an analysis of the catch and effort of certain species. Mimeographed reports 60-2. Marine Laboratory, University of Miami, Miami, FL. 53 pp.

TIME COVERAGE: 1959

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Catch-effort, Florida

1579

Rosen, A., and R. W. Ellis (1958) Summary of Florida commercial marine fish landings for 1957. Mimeographed reports 58-2. Marine Laboratory, University of Miami, Miami, FL. 65 pp.

TIME COVERAGE: 1957

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Florida

1580

Rosen, A., and R. K. Robinson (1961) Summary of Florida commercial marine landings, 1960 and an analysis of the catch and effort of certain species. Mimeographed reports 61-2. Institute of Marine Science, University of Miami, Miami, FL. 32 pp.

TIME COVERAGE: 1960

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Catch-effort, Florida

1581

Rosen, A., and R. K. Robinson (1962) Summary of Florida commercial marine landings, 1961. Mimeographed reports 62-5. Institute of Marine Science, University of Miami, Miami, FL. 20 pp.

TIME COVERAGE: 1961

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Florida

1582

Rosen, A., and R. K. Robinson (1962) Summary of Florida commercial marine landings, 1961, and an analysis of the catch and effort of certain species. Mimeographed reports 62-7. Institute of Marine Science, University of Miami, Miami, FL. 32 pp.

TIME COVERAGE: 1961

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Catch-effort, Florida

1583

Rosen, A., and R. K. Robinson (1963) Summary of Florida commercial marine landings, 1962. Mimeographed papers 63-2. Institute of Marine Science, University of Miami, Miami, FL. 20 pp.

TIME COVERAGE: 1962

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Florida

1584

Rosen, A., and R. K. Robinson (1963) Summary of Florida commercial marine landings, 1962 and an analysis of the catch and effort of certain species. Mimeographed reports 63-4. Institute of Marine Science, University of Miami, Miami, FL. 32 pp.

TIME COVERAGE: 1962

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Commercial fishing, Landing statistics, Catch-effort, Florida

1585

Rosenberg, R. (1975) Stressed tropical benthic faunal communities off Miami, Florida. *Ophelia*, 14(-):93-112.

TIME COVERAGE: 1957-1959, 1974

SUMMARY: Quantitative sampling of the benthic fauna was made in two areas of Biscayne Bay. The number of species, abundance, biomass, diversity and spatial differentiation were described. Comparisons with an earlier investigation suggested that changes have occurred in

these communities. Low specialization in any species and a loss of diversity indicated that the communities were disturbed. The reasons for this are suggested to be occasionally low winter temperature, high turbidity and the influence by man.

KEY WORDS: Benthos, Biological stress, Temporal variations, Temperature effects, Turbidity, Urbanization, Key Biscayne

1586

Rosendahl, P. C. (1975) A bibliography of Biscayne Bay, Florida monitoring and research programs. Sea Grant special report #2 (NOAA Sea Grant No. 04-5-158-14). University of Miami Sea Grant Program, Coral Gables, FL. 82 pp.

TIME COVERAGE: 1975

SUMMARY: This is a bibliography of Biscayne Bay.

KEY WORDS: Monitoring, Research programs, Bibliographies

1587

Rosenfeld, J. (1996) Cities built on sand. Weatherwise, 49(4):20-28.

TIME COVERAGE: 1926

SUMMARY: This paper is an account of the effect of the Hurricane of 1926 on Miami and Miami Beach.

KEY WORDS: Hurricane of 1926

1588

Ross, M. S., J. Meeder, P. L. Ruiz, D. Reed, and M. Lewin (1999) The L-31E surface water diversion project: coastal wetlands ecosystem and some initial treatment results. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 227.

TIME COVERAGE: 1993

SUMMARY: Reestablishment of sheetflow through the coastal mangrove ecosystem from the L-31E canal was initiated in 1993. Water delivery to the wetlands began in 1997 and continues to the present. Low water stages of the canals, significant delivery is not possible between mid-October and mid-May. This study is underway.

KEY WORDS: Ammonia, Soil, Sediment, Surface water, Groundwater, Canals, Outflow, Fresh water, Mangrove swamps, Wetlands, L-31E Canal

1589

Ross, M. S., J. F. Meeder, G. Telesnicki, P. L. Ruiz, and J. P. Sah (1997) The southeast saline Everglades revisited: vegetation and soil changes during the last century. In: Conf. program and abstracts, First annual conference of the Walt Dineen Society. 1997. Florida International University, Miami, FL. 46.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Saline intrusion, Soils, Vegetation, Taylor Slough, Turkey Point

1590

Ross, S., D. M. Ross, and J. E. Podgor (eds.) (1987) The Dade County Environmental Story. Environmental Information Service of Friends of the Everglades, Miami Springs, FL. 256 pp.

TIME COVERAGE: 1987

SUMMARY: This book is a cooperative effort to create a local environmental education guidebook.

KEY WORDS: Urbanization, Environment management, Conservation, Natural resources, History, Dade County

1591

Ross (H. J.) Associates, I. (1991) Draft Munisport remedial design work plan. Unpublished report. H. J. Ross Associates, Inc., Coral Gables, FL. Various paging.

TIME COVERAGE: 1991

SUMMARY: This report is the unpublished preliminary draft of the remedial work plan for the Munisport Landfill.

KEY WORDS: Groundwater pollution, Water quality, Pollution control, Munisport Landfill, North Miami

1592

Ross (H. J.) Associates, I. (1987) Site investigation report: Munisport Landfill closure study. Report for the City of North Miami and Department of Environment Regulation. H. J. Ross Associates, Inc., Miami, FL. Various paging.

TIME COVERAGE: 1987

SUMMARY: This report is an engineering study for the closure of the Munisport Landfill.

KEY WORDS: Groundwater pollution, Water quality, Chemical pollution, Toxicity, Ammonia, Munisport Landfill, North Miami

1593

Roth, F. J., D. G. Ahearn, J. W. Fell, S. P. Meyers, and S. A. Meyer (1962) Ecology and taxonomy of yeasts isolated from various marine substrates. Limnol. Oceanogr., 7(-):178-185.

TIME COVERAGE: 1962

SUMMARY: Yeasts were observed to be common occurrence in subtropical marine waters and sediments and with indwelling plants and animals. The most prevalent types present in all environments were oxidative, asporogenous forms which expressed a growth requirement for one or more vitamins. Specimens used in this study were collected at various sites including Biscayne Bay.

KEY WORDS: Yeasts, Aquatic environment, Ecological distribution, North Bay, Elliott Key, Soldier Key, Bimini, Gulf Stream

1594

Roth, F. J., P. A. Orpurt, and D. G. Ahearn (1964) Occurrence and distribution of fungi in a subtropical marine environment. Can. J. Botany, 42(-):375-383.

TIME COVERAGE: 1961 - 1963

SUMMARY: Inshore fungi were isolated from water samples collected in Biscayne Bay and from offshore. Eulittoral samples uniformly demonstrated high mold populations in diverse speciation. Samples obtained more distant from land and in deep waters showed a greater than 10-fold decrease in average population density and about a 50% reduction in the number of species. A similar phenomenon was noted in the progression into abyssal regions.

KEY WORDS: Fungi, Ecological distribution, Abundance, Bahamas

1595

Rothman, P. A. (1987) Our Bay, Our River. P. A. Rothman, Miami, FL. Videorecording, VHS, 59 min.

TIME COVERAGE: 1987

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Environmental conditions, Resource conservation, Miami River

1596

Rublee, P. A., and M. R. Roman (1982) Decomposition of turtlegrass (*Thalassia testudinum* Konig) in flowing sea-water tanks and litterbags: compositional changes and comparison with natural particulate matter. J. Exp. Mar. Biol. Ecol., 58(-):47-58.

TIME COVERAGE: 1979 (lab study)

SUMMARY: *Thalassia* litter was incubated in seawater tanks and in the field. Weight loss of litter was evident within a week but the C:N ratio (by weight) changed only slightly over the first 180 days. The number of bacteria in the litter increased. Lipid synthesis activity suggested in the litter microbial community.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Degradation, Detritus

1597

Runnells, D. D. (1971) Chemical weathering of the Biscayne Aquifer, Dade County, Florida. *Southeastern Geol.*, 13(3):167-174.

TIME COVERAGE: 1966

SUMMARY: The average annual rainfall along the coastal ridge of Dade County is 60-65 inches, of which about 20 in are lost as subsurface drainage. The dissolved Ca content of rainwater is about 0.6 ppm whereas the shallow groundwater contains about 77 ppm. The difference in Ca content is chemical weathering.

KEY WORDS: Weathering, Oolites, Biscayne Aquifer, Dade County

1598

Rusnak, G. A., K. W. Stockman, and H. A. Hofmann (1966) The role of shell material in the natural sand replenishment cycle of the beach and nearshore area between Lake Worth inlet and the Miami ship canal. Final report to Coastal Engineering Research Center, US Army Corps of Engineers. Institute of Marine Sciences, University of Miami, Miami, FL.

TIME COVERAGE: 1966

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Shells, Sand, Beach erosion, Beach nourishment, Sediment texture, Grain size, Nearshore sedimentation

1599

Russell, M. A. C. (1981) The ingestion and assimilation of coral mucus particles by gorgonian soft corals. M.Sc. thesis. University of Miami, Coral Gables, FL. 44 pp.

TIME COVERAGE: 1981

SUMMARY: To determine the soft coral's ability to capture and ingest mucus particles, a series of *in situ* feeding experiments were conducted. Mucus particles, labeled with radioisotopes, were injected into flexible-wall feeding chambers containing gorgian branch tips.

KEY WORDS: Mucus, Coral, Gorgonians, Ingestion, Food conversion, Bache Shoal, Elliott Key, Bahamas

1600

Ryan, J. D., F. D. Calder, L. C. Burney, and H. L. Windom (1985) Environmental chemistry of Florida estuaries: deepwater ports maintenance dredging study. Port of Miami and the Miami River. Tech. rep. 1. Office of Coastal Management, Florida Department of Environmental Regulation, Tallahassee, FL. Various paging.

TIME COVERAGE: 1983

SUMMARY: The purpose of this study was to provide tools that could be used to predict potential environmental problems associated with maintenance dredging; to provide reliable data on the pollution of ports; and to provide investigative approaches and tools to address estuarine resource management. Sediment and water samples were collected in Biscayne Bay and the Miami River. The water samples were analyzed for water quality parameters, As, Cd, Cu, Fe, Pb, Ni, Ag, Zn, synthetic organic compounds and nutrients. Sediment samples were analyzed for As, Cd, Cu, Cr, Pb, Hg, Ag, Zn, As, synthetic organic compounds (PAHs, oil and grease, PCBs, and DDTs) and nutrients. A review of the existing chemical data for Biscayne Bay and the Miami River at the time of writing was provided.

KEY WORDS: Water quality, Water analysis, Sediment chemistry, Sediment, Dredging, Port installations, Intracoastal Waterway, Miami River, As, Cd, Cu, Cr, Hg, Fe, Pb, Ni, Ag, Zn, Nutrients, Synthetic organic compounds, PAHs, PCBs, DDTs

1601

Ryan, J. D., and J. H. Cox (1985) The influence of NPS pollution in Florida estuaries; a case study. In: Proc., Perspectives on Nonpoint Source Pollution. Kansas City, MO, May, 1985. US Environmental Protection Agency, Washington, DC. 172-176.

TIME COVERAGE: 1985

SUMMARY: A study was designed to characterize the pollutant climate of 13 major bays and estuaries in Florida, including Biscayne Bay, by examining sediment chemistry.

KEY WORDS: Heavy metals, Stormwater runoff, Brackishwater pollution, Anthropogenic factors, Water quality, Chemical pollutants, Pollution monitoring, Miami River, Tamiami Canal, PAHs, PCBs, Cd, Pb, Ag, Cu, Hg, Zn

1602

Ryan, J. D., and H. L. Windom (1988) A geochemical and statistical approach for assessing metal pollution in coastal sediments. In: Metals in coastal environments of Latin America. U. Seeliger, L. D. de Lacerda, and S. R. Patchineelam Springer Verlag, New York, NY.

TIME COVERAGE: 1988

SUMMARY: This citation explored the use of statistics to assess metal pollution in sediments. The Miami River and Biscayne Bay are used as one of the case studies.

KEY WORDS: Sediment pollution, Al, Miami River, Geochemistry, Sediment

1603

Ryan, J. D., H. L. Windom, L. C. Burney, and F. D. Calder (1987) Identifying metals pollution in the coastal zone. In: Coastal Zone '87. Proc., 5th Symp. on Coastal and Ocean Management. O. T. Magoon, H. Converse, D. Miner, L. T. Tobin, D. Clark, and G. Domurat, (eds.). Seattle, WA, 1987. American Society of Civil Engineers, New York, NY. 5582-5596.

TIME COVERAGE: 1987

SUMMARY: Sediments, not the water column, best reflect the pollution climate of coastal environments. This focus presents serious interpretive problems for chemicals such as metals and nutrients that have both natural and unnatural sources. Metal to aluminum ratios and simple parametric statistics were used as a basis for distinguishing natural from anthropogenic metal loads.

KEY WORDS: Metals, Sediment analysis, Sediment pollution, Cu, Al, Miami River

1604

Safe Progress Association (1960 1969?) Hour of peril. Miami, FL. 18 pp.

TIME COVERAGE: 1960 1969?

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Petroleum refineries, Environmental aspects, Environmental protection, Citizen participation

1605

Salmons, C. A. (1975) The sessile, intertidal, barnacles (Cirripedia: Thoracica) of Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 140 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: This study reviews the taxonomy of sessile, intertidal barnacles occurring in Biscayne Bay.

KEY WORDS: Barnacles, Chthamalus, Balanus, Tetraclita, *Newmanella radiata*, Taxonomy

1606

Saloman, C. H., D. M. Allen, and T. J. Costello (1968) Distribution of three species of shrimp (genus *Penaeus*) in waters contiguous to southern Florida. Bull. Mar. Sci., 18(2):343-350.

TIME COVERAGE: 1968

SUMMARY: This citation discusses the distribution of *Penaeus* shrimp species in South Florida and Bahamas. *Penaeus duorarum* was the most abundant species in Biscayne Bay.

KEY WORDS: Shrimp, *Penaeus duorarum*, *Penaeus brasiliensis*, *Penaeus aztecus*, Geographical distribution, Florida Keys, Bahamas, Florida Bay

1607

Salomon, G. (1997) Site characterization; air quality: Virginia Key Beach Park. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Air pollution, Virginia Key

1608

Sampedro, R. M. (1972) Costs and benefits of the abatement of pollution of Biscayne Bay, Miami, Florida. University of Miami Sea Grant Program, Coral Gables, FL. 96 pp.

TIME COVERAGE: 1972

SUMMARY: This report discusses the costs and benefits of abatement of pollution in the Bay.

KEY WORDS: Water pollution, Pollution control, Water quality, Cost analysis, Economic analysis

1609

Sampedro, R. M. (1973) Costs and benefits of the abatement of pollution of Biscayne Bay, Miami, Florida. M.A. thesis. University of Miami, Coral Gables, FL. 96 pp.

TIME COVERAGE: 1973

SUMMARY: This thesis is a cost and benefits analysis of pollution abatement in Biscayne Bay.

KEY WORDS: Pollution control, Water pollution, Costs, Sewage treatment, Water quality

1610

Samuels, N. (1997) Seagrasses and the seagrass community of Virginia Key beach. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Seagrass, Virginia Key

1611

Sanders, J. A. (1991) Land protection plan: Biscayne National Park. Update. Various paging.

TIME COVERAGE: 1991

SUMMARY: This is a land protection plan for Biscayne National Park.

KEY WORDS: Biscayne National Park, Management

1612

Sanders, J. A. (1990) Statement for management: basic operations statement. 63 pp.

TIME COVERAGE: 1990

SUMMARY: This is a management plan for Biscayne National Park.

KEY WORDS: Biscayne National Park, Management

1613

Sanford, S. (1909) Topography and geology of southern Florida. Florida State Geological Survey, Tallahassee, FL. 175-231.

TIME COVERAGE: 1908 - 1909

SUMMARY: This report discusses the geological features of South Florida

KEY WORDS: Geology, Landforms, Topography (Geology), Florida Keys, South Florida

1614

Sargent, F. J., T. J. Leary, D. W. Crewz, and C. R. Kruer (1995) Scarring of Florida's seagrasses: assessment and management options. FMRI technical report TR-1. Florida Department of Environmental Protection, Florida Marine Research Institute, St. Petersburg, FL. 46 pp.

TIME COVERAGE: 1995

SUMMARY: An increasing problem in Biscayne Bay is the scarring of seagrass beds, commonly made when a boat's propeller tears and cuts up roots, stems and leaves. The greatest acreage of moderate to severe scarring occurred in areas of dense human population and large number of registered boats. An assessment of the degree of seagrass bed scarring statewide indicated that approximately 8% of the seagrass beds in Dade County were scarred, and approximately 6% was rated with moderate/severe scarring.

KEY WORDS: Seagrass, Scars, Ecosystem disturbance, Boats, Damage

1615

Sass, L. C. (1967) Rainfall distribution in the Miami area. Quart. J. Fla. Acad. Sci., 30(2):81-96.

TIME COVERAGE: 1967

SUMMARY: This paper describes rainfall characteristics and patterns for the Miami area.

KEY WORDS: Rainfall, Miami

1616

Savage, T. (1972) Florida mangroves: a review. Leaflet series 7, Part 2, No. 1. Florida Department of Natural Resources, Marine Research Laboratory, St. Petersburg, FL. 15 pp.

TIME COVERAGE: 1972

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Mangrove swamps, Red mangrove, Black mangrove, White mangrove, *Rhizophora mangle*, *Laguncularia racemosa*, *Avicennia germinans*

1617

Savoie, D. L. (1984) Nitrate and non-sea-salt sulfate aerosols over major regions of the world ocean: concentrations, sources, and fluxes. Ph.D. dissertation. University of Miami, Coral Gables, FL. 432 pp.

TIME COVERAGE: 1984

SUMMARY: Aerosol samples were analyzed to determine the geographical and temporal distributions of nitrate and non-sea-salt sulfate in the tropospheric boundary layer over major regions of the world ocean.

KEY WORDS: Aerosols, Nitrates, Sulfates, World ocean, Key Biscayne, Virginia Key, Cape Florida

1618

Savoie, D. L., and J. M. Prospero (1982) Particle size distribution of nitrate and sulfate in the marine atmosphere (Sal Island, Barbados, Virginia Key, Miami, Key Biscayne). Geophys. Res. Lett., 9(10):1207-1210.

TIME COVERAGE: 1974, 1981

SUMMARY: Cascade impactor samples were collected on Barbados and Virginia Key. In all samples the majority of the nitrate mass was found on intermediate size particles, indicating sea-salt aerosols are possible sources. This contrasts with the distribution of non-sea-salt sulfate which is present primarily on submicron aerosols. The lower levels of aerosols in the small particles are probably a consequence of the higher volatility and photochemical reactivity of the nitrate compounds expected to exist in the acidic aerosols.

KEY WORDS: Aerosols, Nitrates, Sulfates, Particle distribution, Key Biscayne, Virginia Key, Barbados

1619

Savoie, D. L., J. M. Prospero, and R. T. Nees (1987) Washout ratios of nitrate, non-sea-salt sulfate and sea-salt on Virginia Key, Florida and on American Samoa. Atmospheric Environ., 21(1):103-112.

TIME COVERAGE: 1982 - 1985

SUMMARY: Rainwater and aerosol were collected and analyzed for nitrate, non-sea-salt sulfate and sodium to assess temporal variations in the concentrations and to determine the washout ratios of each constituent.

KEY WORDS: Salt particles, Nitrates, Sulfates, Na, Rain, Aerosols, Virginia Key, American Samoa

1620

Schafer, D. L. (1984) "Everything carried the face of spring": Biscayne Bay in the 1770's. Tequesta, 44(-):23-31.

TIME COVERAGE: 1770s

SUMMARY: This is an account of life on the shores of Biscayne Bay during the 1770s.

KEY WORDS: Mulcaster, F. G., Surveying, History

1621

Schaffranek, R. W. (1996) Coupling models for canal and wetland interactions in the south Florida ecosystem. USGS fact sheet FS-139-96. US Geological Survey, Reston, VA. 4 pp.

TIME COVERAGE: 1996

SUMMARY: The interconnected canals, wetlands and shallow aquifer of South Florida represent a geometrically complex, physically diverse and dynamically changing hydrologic environment. Models are being developed to understand the interactions between the three ecosystems.

KEY WORDS: Canals, Canal C-111, Wetlands, Water motion, Hydrology, South Florida

1622

Scheidt, D. J., and M. D. Flora (1983) Mowry Canal (C-103): water quality and discharge into Biscayne Bay, Florida, 1975-1981. Report SFRC-83/06. Everglades National Park, South Florida Research Center, Homestead, FL. 50 pp.

TIME COVERAGE: 1975 - 1981

SUMMARY: The Mowry Canal (C-103) is located approximately 25 mi south of Miami and plays an important role in flood protection and the salt water intrusion control network. The main objective of this study was to assess the water quality of the Canal and quantify its freshwater discharge into the Bay.

KEY WORDS: Water quality, Physicochemical properties, River discharge, Mowry Canal, Nutrients, Pesticides, Transparency, Coliform bacteria, As, Cu, Cd, Fe, Pb, Mn, Ni, Sr, Zn, Al, Hg, Sediment

1623

Schekter, R. C. (1983) Mariculture of dolphin (*Coryphaena hippurus*): is it feasible? In: Proc., 35th annual Gulf and Caribbean Fisheries Institute. J. B. Higman, (ed.). Nassau, Bahamas, 1982. Gulf and Caribbean Fisheries Institute, Miami, FL. 27-32.

TIME COVERAGE: 1981

SUMMARY: Dolphinfish have a fast natural growth rate and exhibit spontaneous captive spawning making this species a candidate for mariculture. The habitat requirements of pristine conditions and no confining solid surfaces presents potential difficulties. Initial work on mariculture of dolphinfish is discussed.

KEY WORDS: Fish culture, Dolphinfish, *Coryphaena hippurus*, Bear Cut

1624

Schmahl, G. P., and J. T. Tilmant (1980) An initial characterization of macroinvertebrate populations associated with patch reefs of Biscayne National Monument. Florida Scient., 43(Suppl. 1):23.

TIME COVERAGE: 1978 - ?

SUMMARY: Non-coral macroinvertebrates were studied as one element of a comprehensive investigation of the Biscayne National Monument. Mollusca showed the highest diversity while the Porifera exhibited the highest density of individuals per square meter.

KEY WORDS: Marine invertebrates, Coral reefs, Population number, Biscayne National Monument

1625

Schmale, M. C. (1998) Biscayne Bay toxicological study. Deliverables 2, 3 and 4. Contract no. C-6797-A2. Submitted to the South Florida Water Management District. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 31 pp + tables and figures.

TIME COVERAGE: 1998

SUMMARY: This report contains three sections. Existing contaminant data were analyzed with multivariate techniques and a new index developed and tested in Biscayne Bay. The prevalence and distribution of shrimp with microsporidian infection were examined.

KEY WORDS: Pollutants, Adams Key, Marinas, Fish health, Bioindicators, Microsporidian, Shrimp, *Penaeus duorarum*, *Thelohania duorara*, Pleistophora, "Milk" shrimp syndrome

1626

Schmale, M. C. (1991-94) The effect of historical contaminants on biota in Biscayne Bay, FL. Five reports submitted to the South Florida Water Management District. Contract no. C90-1334. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1991 - 1994

SUMMARY: This report is a set of five studies. The first was a collection of maps indicating locations and contaminant levels in sediments in Biscayne Bay based on data provided by the Dade County Department of Environmental Resource Management. Another study was a sampling design to determine the types and prevalences of diseases and abnormalities affecting fish and shellfish in Biscayne Bay.

KEY WORDS: Pollutants, Sediment analysis, Pollution effects, Fish diseases, Sea bream, *Archosargus rhomboidalis*, Blue striped grunt, *Haemulon sciurus*, Pinfish, *Lagodon rhomboides*, Gray snapper, *Lutjanus griseus*, Blue crab, *Callinectes sapidus*, Gulf toadfish, *Opsanus beta*, Pathology, Hydrocarbons, PAHs, PCBs, Zn, Pb

1627

Schmidt, D. V., and R. Clark (1993) Impacts of Hurricane Andrew on the beaches of Florida. in: Proc., 6th Ann. Natl. Conf. on Beach Preservation Technology, The state of the Art of Beach Nourishment. L. S. Tait, (ed.). St. Petersburg, FL, 1993. Florida Shore & Beach Preservation Association, Tallahassee. 279-308.

TIME COVERAGE: 1992

SUMMARY: Hurricane Andrew caused little beach erosion to the nourished beaches of Dade County. Key Biscayne, the closest beach to the eye of the hurricane, gained sand.

KEY WORDS: Hurricanes, Beaches, Storm surge, Wind speed, Hurricane Andrew

1628

Schmidt, T. W., and G. E. Davis (1978) A summary of estuarine and marine water quality information collected in Everglades National Park, Biscayne National Monument, and adjacent estuaries from 1879 to 1977. Rep. T-519. South Florida Research Center, Everglades National Park, Homestead, FL. 59 pp.

TIME COVERAGE: 1879 - 1977

SUMMARY: This report summarizes 55 published and unpublished reports on water quality information in Everglades National Park, Biscayne National Monument and adjacent estuaries. Sixteen of the studies were conducted in Biscayne Bay.

KEY WORDS: Barnes Sound, Card Sound, Coral, Freshwater flow, Whitewater Bay, Water chemistry, Biscayne Bay, Salinity, Coral, Turbidity, Seagrasses, Al, As, Fe, Hg, Cu, Freshwater flow, Algae, Drainage canals, Buttonwood Canal, Mn, F, Mg, Ca, Turkey Point Nuclear Power Plant

1629

Schmitz, H. (1973) The Miami River; a synopsis of the history, characteristics and flow of the river and the possible causes of its pollution. Preliminary report. Metropolitan Dade County Pollution Control, Miami, FL. 38 pp + tables.

TIME COVERAGE: 1973

SUMMARY: This report is an evaluation of the Miami River in general and of pollution areas.

KEY WORDS: Pollution control, Water quality, Miami River

1630

Schneider, J. J. (1969) Tidal relations in the south Biscayne Bay area, Dade County, Florida. Open file report. US Geological Survey, Water Resources Division, Tallahassee, FL. 16 pp.

TIME COVERAGE: 1967 - 1968

SUMMARY: An investigation was made to determine the elevation of mean high water and tidal patterns in south Biscayne Bay.

KEY WORDS: Tidal dynamics, Sea level, Barnes Sound, Card Sound, Manatee Bay, South Bay

1631

Schneider, J. J., and B. G. Waller (1980) Summary of hydrologic data for the east Everglades, Dade County, Florida. US open file report 80-1292. US Geological Survey, Tallahassee, FL. 73 pp.

TIME COVERAGE: 1980

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

KEY WORDS: Hydrology, Everglades, Dade County

1632

Schneider, W. J. (1966) Water resources in the Everglades. Photogrammetric Eng., 32(-):958-965.

TIME COVERAGE: 1966

SUMMARY: The use of aerial color and infrared photography for the study of water resources in South Florida was discussed in this paper.

KEY WORDS: Water resources, Aerial photography, Everglades

1633

Scholander, P. F., L. Van Dam, and S. I. Scholander (1955) Gas exchange in the roots of mangroves. Amer. J. Botany, 42(-):92-98.

TIME COVERAGE: 1955

SUMMARY: The respiratory gas exchange in the roots of two common mangroves was investigated for red and black mangroves. Gas exchange rates change with tides and exposure of the root systems.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Black mangrove, *Avicennia nitida*, Gas exchange, Roots

1634

Scholl, D. W., F. C. Craighead, and M. Stuiver (1969) Florida submergence curve revised: its relation to coastal sedimentation rates. Science, 163(3867):562-564.

TIME COVERAGE: 1969

SUMMARY: New data substantiate as well as modify the south Florida submergence curve which indicates that eustatic sea level has risen continuously although at a gradually decreasing rate during the last 6500 to 7000 sidereal years (5500 standard years) to reach its present position. Accumulation rates of coastal deposits are similar to the rate of sea-level rise, thus supporting the generalization that submergence rates largely determine as well as limit rates of coastal sedimentation in lagoonal and estuarine areas.

KEY WORDS: Sea level changes, Sedimentation, Submerged shorelines, Florida Bay

1635

Schreiber, D. R. (1984) An investigation of the interaction of *Vibrio alginolyticus* and copper in natural waters. Ph.D. dissertation. University of Miami, Coral Gables, FL. 158 pp.

TIME COVERAGE: 1984

SUMMARY: The purpose of this research was to examine how a marine bacterium modified the chemical species of Cu in seawater. The bacterium strain used was isolated from Biscayne Bay waters.

KEY WORDS: Bacteriology, *Vibrio alginolyticus*, Cu, Sea water

1636

Schreiber, R. W., and E. A. Schreiber (1973) Florida's brown pelican population: Christmas bird count analysis. American Birds, 27(-):711-715.

TIME COVERAGE: 1943 - 1972

SUMMARY: The present study is an analysis of Christmas Bird Count data for the brown pelican over the past 30 years. The number of Counts increased dramatically in recent years. Population of pelicans by coast was discussed.

KEY WORDS: Brown pelican, *Pelecanus occidentalis*, Aquatic birds, Population number, Florida

1637

Schroeder, M. C., H. Klein, and N. D. Hoy (1958) Biscayne aquifer of Dade and Broward Counties, Florida. Report of investigations 17. Florida Geological Survey, Tallahassee, FL. 56 pp.

TIME COVERAGE: 1958

SUMMARY: This report describes the Biscayne aquifer and salt water intrusion.

KEY WORDS: Biscayne Aquifer, Ground water, Water table, Dade County, Broward County

1638

Schroeder, P. B. (1975) Thermal stress in *Thalassia testudinum*. Ph.D. dissertation. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Thermal stress, *Thalassia testudinum*

1639

Schroeder, R. E. (1964) Ecological studies of the intestinal trematodes of the gray snapper, *Lutjanus griseus* (Linnaeus), in the vicinity of Lower Matecumbe Key, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 166 pp.

TIME COVERAGE: 1963 - 1964

SUMMARY: Gray snappers were examined for intestinal trematodes. The incidence of each trematode was calculated for each habitat at each time of year. Some specimens were collected in Biscayne Bay. The same trematodes found in fish from Matecumbe were found in the Biscayne animals.

KEY WORDS: Trematodes, Gray snapper, *Lutjanus griseus*, Lower Matecumbe Key

1640

Schroeder, W. C. (1924) Fisheries of Key West and the clam industry of southern Florida. Report of the United States Commissioner of Fisheries for the fiscal year 1923. Appendix XII: 1-74.

TIME COVERAGE: 1924

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Fisheries, Key West, Food fish, Lobster fisheries, Crab fisheries, Turtle fisheries, Sponge fisheries, Clam fisheries

1641

Schropp, S. J., P. D. Brooks, and D. C. White (1986) Biochemical determination of sedimentary microbial community structure in Biscayne Bay, Florida. In: Abstracts, 86th Ann. Mtg. of the American Society for Microbiology. Washington, DC, 1986. American Society for Microbiology, Washington, DC. 249.

TIME COVERAGE: 1986

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Sediment analysis, Microbiology, Aquatic communities, Miami River, Snapper Creek

1642

Schropp, S. J., F. G. Lewis, W. Eubanks, K. R. Carman, and D. C. White (1988) Biochemical characterization of estuarine benthic microbial communities for use in assessing pollution impacts. In: Chemical and Biological Characterization of Municipal Sludges, Sediments, Dredge Spoils, and Drilling Muds. J. J. Lichtenberg, J. A. Winter, C. I. Weber, and L. Fradkin, (eds.). ASTM special technical publications 976. American Society for Testing and Materials, Philadelphia, PA. 311-325.

TIME COVERAGE: 1985

SUMMARY: Analysis of phospholipid fatty acids (PLFA) were used to characterize benthic microbial community structure in Biscayne and Pensacola Bays and to relate changed in microbial community structure to sources of metal pollution. Sediment samples were obtained from clean and contaminated areas of each bay system. Polluted stations were generally characterized by high metal concentrations, fine-grained sediments, high lipid phosphate, high trans/cis fatty acid ratios, high bacterial PLFA, and low eucaryotic PLFA.

KEY WORDS: Estuaries, Benthic environment, Microbiological analysis, Pollution monitoring, Lipids, Metals, Sediment analysis, Pensacola Bay

1643

Schropp, S. J., F. G. Lewis, H. L. Windom, J. D. Ryan, F. D. Calder, and L. C. Burney (1990) Interpretation of metal concentrations in estuarine sediments of Florida using aluminum as a reference element. Estuaries, 13(3):227-235.

TIME COVERAGE: 1985 - 1987

SUMMARY: Estuarine sediments from 28 coastal sites in Florida were analyzed for Al, As, Cd, Cr, Cu, Pb, Hg, Ni and Zn. The data were normalized to Al for comparison of trace metal levels on a regional basis. Application of this method to sediments from the Miami River and parts of Biscayne Bay indicated that these sediments had unnatural metal concentrations.

KEY WORDS: Sediment, Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn, Pollution monitoring, Sediment pollution, Environment management, Pollution indicators, Miami River

1644

Schropp, S. J., and H. L. Windom (1988) A guide to the interpretation of metal concentrations in estuarine sediments. Report. Florida Department of Environmental Regulation, Coastal Zone Management Section, Tallahassee, FL. 44 pp + appendix.

TIME COVERAGE: 1988

SUMMARY: This document describes an approach for interpreting metals concentrations in coastal sediments. Interpretation of environmental metals data is made difficult by the fact that absolute metals concentrations in coastal sediments are influenced by a variety of factors, including sediment mineralogy, grain size, organic content, and anthropogenic enrichment. The interpretive tool described herein provides a means of accounting for natural variability of metals and determining whether sediments are enriched with metals with respect to expected natural concentrations. The interpretive tool is based on the relatively constant natural relationships that exist between metals and aluminum. "Clean" coastal sediments from throughout Florida were collected and their metals content determined. Metal/aluminum regressions and prediction limits were calculated and diagrams of metal/aluminum relationships constructed. Metals data from coastal sediments can be plotted on these diagrams to determine whether measured metal concentrations represent natural concentrations or metal enrichment. Biscayne Bay data is used as one of the examples.

KEY WORDS: Sediment analysis, Al, Estuarine chemistry, Zn, Pb, Cu, Ni, Cr, Cd, As

1645

Schulman, A. A., S. L. Milton, and P. L. Lutz (1994) Aragonite sand as a nesting substrate and its effect on *Caretta caretta* nests. In: Proc., 14th Ann. Symp. on Sea Turtle Biol. and Conservation. K. A. Bjorndal, A. B. Bolten, D. A. Johnson, and P. J. Eliazar, (comps). Hilton Head, SC, 1994. NOAA technical memorandum NMFS-SEFSC-351. NOAA/NMFS Southeast Fisheries Science Center, Miami, FL. 134.

TIME COVERAGE: 1991 - 1993

SUMMARY: This study compared the acceptability of aragonite sand as a nesting substrate for loggerhead turtles. No ill effects were found. Significant differences were found in nest temperatures and incubation times.

KEY WORDS: Aragonite, Loggerhead turtle, *Caretta caretta*, Nesting, Fisher Island

1646

Schultz, G. A. (1966) *Philoscia miamiensis* n.sp., an isopod crustacean from Florida with ecological notes on the new species. Trans. Amer. Microscopical Soc., 85(3):457-462.

TIME COVERAGE: 1963

SUMMARY: This paper describes a species of terrestrial isopod taken on the margin of Biscayne Bay. Some ecological observations and a new species description was provided.

KEY WORDS: Isopods, *Philoscia miamiensis*, New species, Taxonomy

1647

Schwartz News Company (1926) w. l. o. South Florida hurricane scenes Schwartz News Company, Miami, FL. 47 pp.

TIME COVERAGE: 1926

SUMMARY: Photographs (101 views) taken September 17th and 18th, 1926 in Miami, Miami Beach, Buena Vista, Little River, Hialeah, Coral Gables, Hollywood and Fort Lauderdale showing the aftermath of the Hurricane of 1926.

KEY WORDS: Hurricanes, Photographs, Miami, South Florida

1648

Science Sub-Group (1997) Ecologic and precursor success criteria for south Florida ecosystem restoration. Report to the Working Group of the South Florida Ecosystem Restoration Task Force. South Florida Ecosystem Restoration Task Force, Miami. Various paging.

TIME COVERAGE: 1997

SUMMARY: This report established success criteria for various aspects of the South Florida Ecosystem Restoration Project.

KEY WORDS: Ecosystem management, Environmental restoration, Indicators, South Florida

1649

Science Sub-Group (1993) Federal objectives for the South Florida restoration. Report. November 15. South Florida Management and Coordination Working Group, Miami, FL. 87 pp.

TIME COVERAGE: 1993

SUMMARY: This report details the objectives of the South Florida Ecosystem Restoration Project.

KEY WORDS: Ecosystem management, Environmental restoration, Hydrology, Drainage water, South Florida

1650

Science Sub-Group (1994) South Florida ecosystem restoration: scientific information needs. Draft report. Interagency Task Force on the South Florida Ecosystem, Management and Coordination Working Group, Miami, FL. 536 pp.

TIME COVERAGE: 1994

SUMMARY: This report contains a series of papers on scientific information needed for the South Florida Ecosystem Restoration Project.

KEY WORDS: Ecosystem management, Environmental restoration, Kissimmee River Basin, Lake Okeechobee, St. Lucie River, Everglades, Big Cypress, Florida Keys, Florida Bay, Caloosahatchee River Basin, Reef tract

1651

Science Sub-Group (1996) South Florida ecosystem restoration: scientific information needs; a Science Subgroup report to the Working Group of the South Florida Ecosystem Restoration Task Force. South Florida Ecosystem Restoration Task Force, Miami. 487 pp.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ecosystem management, Environmental restoration, Sustainability, Kissimmee River Basin, Lake Okeechobee, St. Lucie River, Everglades, Big Cypress, Florida Keys, Florida Bay, Caloosahatchee River Basin, Reef tract

1652

Scott, T. M., J. M. Lloyd, and G. Maddox (eds.) (1991) Florida's ground water quality monitoring program; hydrogeological framework. Florida Geological Survey special publication no. 32. Florida Geological Survey, Tallahassee, FL. 97 pp.

TIME COVERAGE: 1991

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ground water, Pollution monitoring, Water quality, Hydrogeology, Florida

1653

Scott, W. B. (1993) Hydrology and Hurricane Andrew in Florida. In: USGS Yearbook. Fiscal year 1992. 3-5.

TIME COVERAGE: 1992

SUMMARY: This article reviews the efforts to document the magnitude and extent of Hurricane Andrew's tidal surge and floods.

KEY WORDS: Storm surge, Hydrology, Hurricane Andrew

1654

Scotton, L. N. (1972) Tropical bay in danger. Sea Frontiers, 18(2):66-75.

TIME COVERAGE: 1972

SUMMARY: This paper discusses contamination problems in Biscayne Bay and anthropogenic changes to the area.

KEY WORDS: Ecological balance, Urbanization, Environmental protection, Card Sound, Resource conservation

1655

Seal, T. L., F. D. Calder, G. M. Sloane, S. Schropp, and H. L. Windom (1993) Assessment of trace metal contamination of estuarine and marine sediments from Florida. Abstracts with programs (Geological Society of America), 25(4):68.

TIME COVERAGE: 1982 - 1992

SUMMARY: In the 1980's, the Florida Department of Environmental Regulation developed an interpretive statistical tool to distinguish anthropogenic trace metal enrichment from natural chemical variability in estuarine and marine sediments of Florida. Based on normalization of metal concentrations to reference elements (Al or Li), the tool allows comparison of diverse sedimentary environments. Between 1982 and 1992, samples were collected at over 680 stations. Just under 100 stations were designated as "clean" reference sites well removed from both point or nonpoint sources. Statistical regression and prediction limits were calculated. On a statewide basis, 4% of stations were enriched above predicted levels with As, 27% with Cd, 16% with Cr, 23% with Cu, 36% with Pb, 9% with Ni, 30% with Hg, and 34% with Zn. Significant metal contamination was detected by sediment surveys in Tampa Bay, Pensacola Bay, Biscayne Bay, and the St. Johns River.

KEY WORDS: Sediment pollution, Trace metals, Estuarine chemistry, As, Cd, C, Cu, Pb, Ni, Hg, Zn, Al, Li

1656

Seal, T. L., F. D. Calder, G. M. Sloane, S. J. Schropp, and H. L. Windom (1994) Florida coastal sediment contaminants atlas. Florida Department of Environmental Protection, Tallahassee, FL.

TIME COVERAGE: 1994

SUMMARY: This two-volume document (atlas and technical volume) document levels of contaminants in Florida. Data from several institutions were used to produce the document.

KEY WORDS: Coastal waters, Sediment pollution, Trace metals, Organic compounds, Florida, As, Cd, Cr, Cu, Hg, Pb, Ni, Zn, PAHs, PCBs, Phenolic HCs, Aliphatic HCs, Chlorinated hydrocarbons

1657

Seaman, W. (1987) Translating science for coastal decision making. In: Coastal Zone '87, Proc., 5th Symp. on Coastal and Ocean Management. O. T. Magoon, H. Converse, D. Miner, L. T. Tobin, C. Clark, and G. Domurat, (eds.). 1987. American Society of Civil Engineers, New York, NY. 222-237.

TIME COVERAGE: 1987

SUMMARY: A uniform process of technical information assembly and application was conducted for six estuaries in Florida. Consolidation and interpretation of scientific data and transfer of

information has fostered cooperative actions among public and private interests in the areas covered.

KEY WORDS: Information handling, Regional planning, Decision making, Estuaries, Coastal zone, Apalachicola Bay, Choctawhatchee Bay, Tampa Bay, St Johns River, Indian River

1658

Seaman, W., and D. Y. Aska (eds.) (1974) Proc., Research and Information Needs of the Florida Spiny Lobster Fishery. Miami, FL, 1974. Florida Sea Grant Program report 1. Florida Sea Grant Program SUSF-SG-74-20. Florida Sea Grant Program, Gainesville, FL.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Spiny lobster, *Panulirus argus*, Lobster fisheries, Florida

1659

Seaman, W., and M. Collins (1983) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - snook. FWS/OBS-82/11.16. US Fish and Wildlife Service, National Coastal Ecosystems Team, Slidell, LA. 16 pp.

TIME COVERAGE: 1983

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of snook are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Snook, *Centropomus undecimalis*, South Florida

1660

Seba, D. B. (1970) Pesticide bioassay: physical/chemical and biological effects of dieldrin on teleosts. Ph.D. dissertation. University of Miami, Coral Gables, FL. 104 pp.

TIME COVERAGE: 1970

SUMMARY: The rate of dieldrin accumulation in the blood of tarpon was investigated and found to be dependent on environmental conditions and independent of the total toxicity. Indications are that the more slowly the dieldrin was accumulated, the more it can be tolerated by the fish. Efficiency of extraction of dieldrin from the water by fish is very high.

KEY WORDS: Pesticides, Dieldrin, Toxicity, Fish, Florida Keys, *Cyprinodon variegatus*, Sheepshead minnow, Sailfin molly, *Poscilla latipina*, Tarpon, *Megalops atlanticus*

1661

Seba, D. B., and E. F. Corcoran (1969) Surface slicks as concentrators of pesticides in the marine environment. Pesticides Monit. J., 3(3):190-193.

TIME COVERAGE: 1968

SUMMARY: Surface slicks in the marine environment are efficient concentrators of chlorinated pesticides. Surface slicks are associated with high biological activity. Slicks with the highest pesticide load occurred near ocean outfalls.

KEY WORDS: Surface films, Pesticides

1662

Segar, D. A., S. M. Gerchakov, and T. Johnson (1971) Chemistry. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. IV:1-64.

TIME COVERAGE: 1971

SUMMARY: The purpose of this investigation was to obtain a baseline information on the chemistry of the water, sediments and biota of Card Sound so that changes due to the projected discharge can be identified.

KEY WORDS: Estuarine chemistry, South Bay, Turkey Point, Card Sound, Sediment, Nutrients, Salinity, Dissolved organic carbon, Fe, Cu, Zn, Co, Ni, Cd, Pb, Alkalinity

1663

Segar, D. A., S. M. Gerchakov, and T. Johnson (1972) Chemistry. In: An ecological study of south Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. IV:1-4.

TIME COVERAGE: 1972

SUMMARY: Temperature fluctuations within the bottom sediments underlying the thermal plume are smaller in magnitude than those of the overlying water. The heated discharge water had a lower dissolved oxygen content and slightly higher levels of nutrients and dissolved organic carbon than that of the intake water.

KEY WORDS: Estuarine chemistry, South Bay, Turkey Point, Card Sound, Nutrients, Organic carbon, Sediment, Fe, Cu, Zn

1664

Segar, D. A., J. L. Gilio, and R. E. Pellenburg (1973) Some aspects of the biogeochemical cycles of trace metals in a sub-tropical estuary including ecosystem compartment models. In: Symp. on Environmental Biogeochemistry. NSF/Ecology Center, Utah State University, Logan, Utah. 19-20.

TIME COVERAGE: 1973

SUMMARY: Preliminary results of a study of trace metal biogeochemistry in Card Sound were presented. The absolute concentrations of most of the trace elements studied were lower than those reported in other coastal areas. This can be attributed to the absence of clay minerals from sedimentary environments. Metal concentrations in rooted aquatic plants appeared to be partially controlled by sedimentary metal concentrations and are correspondingly low.

KEY WORDS: Ag, Cu, Cd, Mn, Co, Zn, Pb, Fe, V, Biogeochemical cycle, Sedimentary environments, Card Sound

1665

Segar, D. A., R. E. Pellenburg, and J. L. Gilio (1972) Observations on the distribution of Ag, Cu, Co, Ni, Cd, Zn, Pb, Fe and V in coastal ecosystems. Eos, 53(11):1030.

TIME COVERAGE: 1972

SUMMARY: Silver, Cu, Co, Cd, Ni, Pb, Fe, Zn and V in sediment and tissues from Card Sound. Sediments from the sounds are composed mainly of carbonates, quartz and organic material, and are almost totally devoid of clays. Cobalt, Fe and Pb were preferentially concentrated in sediments; Zn, V and Cd were more concentrated in the biota; and Cu was more concentrated in seawater. The concentrations of these elements in Card Sound samples were lower than those found in other coastal areas.

KEY WORDS: Sediment, Biogeochemistry, Minerals, Card Sound, Ag, Cu, Co, Cd, Ni, Pb, Fe, Zn, V, Tissue

1666

Segar, D. A., and R. E. Pellenburg (1973) Trace metals in carbonate and organic rich sediments. Mar. Pollut. Bull., 4(9):138-142.

TIME COVERAGE: 1973

SUMMARY: Levels of trace metals in sediment were determined at two sites in Biscayne Bay and one in Bermuda. In all three cases, the accumulations could be ascribed to local human activities.

KEY WORDS: Card Sound, Turkey Point, V, Fe, Cd, Pb, Ag, Zn, Cu, Ni, Carbonate sediment, Organic sediments

1667

Selby (G. M.) and Associates Inc. (1992) Sunny Isles artificial reef module monitoring program. Selby (G. M.) and Associates Inc. First annual report 1991/92. G. M. Selby and Associates Inc., Melbourne, FL. Various paging.

TIME COVERAGE: 1991 - 1992

SUMMARY: Total counts of fishes and motile invertebrates were made on 31 artificial reefs of three different designs and at reference or background sites.

KEY WORDS: Artificial reefs, Environmental monitoring, Sunny Isles

1668

Semple, K. (1997) Preserve our pilings! Miami New Times, Miami, FL. METRO. Oct. 2 - 8. Accessed at internet site <<http://www.miaminewtimes.com/issues/1997-10-02/metro2.html>>. 8.

TIME COVERAGE: 1997

SUMMARY: Stiltsville is a community of houses located on the water about one mile south of the Cape Florida lighthouse. The houses were built on stilts over the Bay bottom within the jurisdiction of the Biscayne Bay National Park. Stiltsville could be demolished, preserved or left as is until the houses are demolished by natural causes. No new houses are permitted on the site.

KEY WORDS: Stiltsville, Biscayne Bay National Park

1669

Sengupta, S., S. S. Lee, and R. A. Bland (1975) Numerical modeling of circulation in Biscayne Bay. Eos, 56(6):383.

TIME COVERAGE: 1975

SUMMARY: This abstract describes a predictive model for circulation in Biscayne Bay.

KEY WORDS: Mathematical models, Water circulation, Wind-driven circulation

1670

Sengupta, S., S. S. Lee, T. N. Veziroglu, and R. A. Bland (1975) Remote sensing applied to numerical modeling. In: Symp., Remote Sensing, Energy-related Studies: Remote Sensing Applied to Energy Related Problems. T. N. Veziroglu, (ed.). Miami, FL, 1974. Hemisphere, Washington. 335-364.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

1671

Sengupta, S., S. S. Lee, and H. P. Miller (1977) A three-dimensional free-surface numerical model for transport processes in Biscayne Bay. In: Computing Methods in Geophysical Mechanics. R. P. Shaw (ed.). AMD-Vol. 25. American Society of Mechanical Engineers, New York. 199 pp.

TIME COVERAGE: 1977

SUMMARY: A three-dimensional numerical model for predicting wind and tide driven flows was developed and applied to Biscayne Bay.

KEY WORDS: Mathematical models, Wind-driven circulation, Tidal dynamics, Water circulation

1672

Sengupta, S., S. S. Lee, and H. P. Miller (1978) Three-dimensional numerical investigations of tide and wind-induced transport processes in Biscayne Bay. Sea Grant tech. bull. 39. University of Miami Sea Grant Program, Coral Gables, FL. 130 pp.

TIME COVERAGE: 1975, 1977

SUMMARY: A three-dimensional time-dependent free surface hydrodynamic model was developed to study sediment transport and dissolved chemical transport in southern Biscayne Bay.

KEY WORDS: Sediment transport, Nearshore circulation, Coastal morphology, Hydrodynamics, Models, Boundary conditions, Suspended matter

1673

Sengupta, S., S. S. Lee, and C. V. Carter (1980) Three-dimensional time-dependent simulations of hydro-thermal behaviour of Biscayne Bay. Applied Mathematical Modeling, 4(-):28-38.

TIME COVERAGE: 1980

SUMMARY: This paper describes the application of mathematical models to remote sensing data. The model was applied to the thermal plumes off Turkey Point.

KEY WORDS: Mathematical models, Simulation, Water temperature, Water circulation, Nearshore currents, Tidal currents, Estuarine dynamics, Water mixing, Water currents

1674

Sengupta, S., H. P. Miller, and S. S. Lee (1981) Effect of open boundary condition on numerical simulation of three-dimensional hydrothermal behavior of Biscayne Bay, Florida. Internatl. J. Numerical Methods in Fluids, 1(-):145-169.

TIME COVERAGE: 1981

SUMMARY: A three-dimensional time dependent free-surface model was used to simulate the velocity and temperature distribution in Biscayne Bay. Comparisons with tide gauge data and airborne infrared temperature data were made.

KEY WORDS: Mathematical models, Boundary conditions, Hydrothermal activity, Estuarine dynamics, South Bay

1675

Serafy, J. E., J. S. Ault, and M. E. Clarke (1996) Red drum stock enhancement program Biscayne Bay fishery - independent assessment. Final report for contract MRO18. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 98 pp.

TIME COVERAGE: 1994 - 1995

SUMMARY: The purpose of this study was to determine the efficacy of releasing various sized red drum into Biscayne Bay consistent with the red drum enhancement program goals.

KEY WORDS: Red drum, *Sciaenops ocellatus*, Stocking (Organisms), Stock assessment, Species list

1676

Serafy, J. E., J. S. Ault, T. R. Capo, and D. R. Schultz (1999) Red drum, *Sciaenops ocellatus* L., stock enhancement in Biscayne Bay, FL, USA: assessment of releasing unmarked early juveniles. Aquaculture Res., 30(-):737-50.

TIME COVERAGE: 1999

SUMMARY: Cohorts were reared in ponds to early juvenile size. Fish were harvested and released within 24 hrs. Substantial mortality often resulted after harvesting and transport. Seine samples 1 to 6 days after release indicated that fish 'disappeared' from the release sites faster than the rates of mortality. Juvenile great barracuda and adult redfin needlefish were the major predators. Discontinuing the release of unmarked organisms is strongly recommended.

KEY WORDS: Red drum, *Sciaenops ocellatus*, Stocking (Organisms), Juveniles, *Sphyræna barracuda*, Great barracuda, *Strongylura notata*, Redfin needlefish

1677

Serafy, J. E., T. E. Hopkins, and P. J. Walsh (1997) Field studies on the ureogenic gulf toadfish in a subtropical bay. I. Patterns of abundance, size composition and growth. J. Fish Biol., 50(6):1258-1270.

TIME COVERAGE: 1993 - 1994

SUMMARY: Gulf toadfish abundance varied significantly depending on site and season. Catch per unit effort was highest in the southern study sites which tended to provide the combination of shallow depth, nocturnal high levels of dissolved oxygen and *Thalassia* substrate. Significant seasonal differences in abundance were restricted to the three sites where fish abundances were highest.

KEY WORDS: Ornithine-urea cycle, Gulf toadfish, *Opsanus beta*, Abundance, Size distribution, Growth

1678

Serafy, J. E., K. C. Lindeman, T. E. Hopkins, and J. S. Ault (1997) Effects of freshwater canal discharge on fish assemblages in a subtropical bay: field and laboratory observations. Mar. Ecol. Prog. Ser., 160(-):161-172.

TIME COVERAGE: 1997

SUMMARY: A 14-month trawl survey was conducted at eight study sites in Biscayne Bay to compare species composition and structure of juvenile fish assemblages found near the mouths of freshwater flood control canals with those in similar areas with relatively stable salinity regimes. Water temperature, salinity, dissolved oxygen and depth measurements were recorded and bottom vegetation quantified. Fish species composition was similar among sites but more species were collected from stable versus variable salinity areas.

KEY WORDS: Biscayne Canal, Little River, Sunset Harbor, Miami River, Rickenbacker Causeway, Matheson Hammock, Black Point, Turkey Point, Seagrasses, Species list, Stock assessment

1679

Serafy, J. E., C. M. Schmitz, T. R. Capo, M. E. Clarke, and J. S. Ault (1996) Total length estimation of red drum from head dimensions. Prog. Fish-Culturist, 58(-):289-290.

TIME COVERAGE: 1988 - 1996?

SUMMARY: Four head dimensions of red drum were individually regressed against total length to facilitate estimation of the size of hatchery-raised fish released in Biscayne Bay and recaptured by sport anglers.

KEY WORDS: Red drum, *Sciaenops ocellatus*, Fishery

1680

Sewell, J. (1898 - 1933) John Sewell's Memoirs and History of Miami, Florida. Volume 1 [no more published]; Appendix: An eye witness to the attempt to assassinate President-elect Frankling D. Roosevelt, February 15, 1933. J. Sewell, Miami, FL. 237 pp.

TIME COVERAGE: 1898 - 1933

SUMMARY: This book is a history of Miami. One of the chapters describes the Miami Harbor, Government Cut and Miami Beach.

KEY WORDS: History, Biographies, Miami, Miami Harbor, Government Cut, Miami Beach

1681

Sguros, P. L., S. P. Meyers, and J. Simms (1962) Role of marine fungi in the biochemistry of the oceans. I. Establishment of quantitative technique for cultivation, growth measurement and production of inocula. Mycologia, 54(-):521-535.

TIME COVERAGE: 1962

SUMMARY: This paper describes a quantitative technique for cultivation, growth determination and production of inocula

KEY WORDS: Fungi, Deuteromycetes, *Culcitalna achraspora*, Culture media, Growth

1682

Sgueros, P. L., and J. Simms (1963) Role of marine fungi in the biochemistry of the oceans. III. Growth factor requirements of the ascomycete *Halosphaeria mediosetigera*. Can. J. Microbiol., 9(-):585-591.

TIME COVERAGE: 1963

SUMMARY: [Source and culture of fungi reported in an earlier paper by the author.]

KEY WORDS: Fungi, Ascomycetes, *Halosphaeria mediosetigera*, Nutrition

1683

Sgueros, P. L., and J. Simms (1963) Role of marine fungi in the biochemistry of the oceans. II. Effect of glucose, inorganic nitrogen, and tris(hydroxymethyl)amino-methane on growth and pH changes in synthetic media. Mycologia, 55(-):728-741.

TIME COVERAGE: 1963

SUMMARY: This paper describes the use of various formulations of media for culture of fungi.

KEY WORDS: Fungi, Culture media, Growth

1684

Sgueros, P. L., and J. Simms (1964) Role of marine fungi in the biochemistry of the oceans. IV. Growth responses to seawater inorganic macroconstituents. J. Bacteriol., 88(-):346-355.

TIME COVERAGE: 1964

SUMMARY: [Source and culture of fungi reported in an earlier paper by the author.]

KEY WORDS: Fungi, *Halosphaeria mediosetigera*, *Culcitalna achraspora*, Inorganic matter, Sea water, Growth

1685

Shaler, N. S. (1890) The topography of Florida. With a note by Alexander Agassiz. Bull. Museum Comparative Zoology, 17(7):139-159.

TIME COVERAGE: 1890

SUMMARY: This paper is an early study of South Florida geological features.

KEY WORDS: Topography, Landforms, Coral reefs, Florida

1686

Sharp, D. (1999) Stiltsville could be on its last leg. USA Today, The Nation. 17A.

TIME COVERAGE: 1999

SUMMARY: This article describes Stiltsville and the efforts to save it.

KEY WORDS: Stiltsville

1687

Shay, L. K., D. B. Ross, and H. C. Graber (1992) Ocean Surface Current Profiling using HF radar. RSMAS technical report 92-004. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Coral Gables, FL. 34 pp.

TIME COVERAGE: 1992

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Profilers, Coastal currents, Radar, Cape Hatteras, Key Biscayne

1688

Sheldon, J. W. (1978) In situ measurement of water transparency. Photogrammetric Eng. Remote Sensing, 44(-):717-720.

TIME COVERAGE: 1978

SUMMARY: This paper described how the modulation transfer function theory and experimental technique can be used to monitor suspended particulates. The design of a simple low-cost

underwater camera-light source-target system is reported and its use is demonstrated by observing the temporal variation in the transparency of Biscayne Bay water during the passage of a barge-tug vehicle.

KEY WORDS: Water transparency, Underwater photography, Measuring devices

1689

Shepard, F. P., and H. R. Wanless (1971) Our Changing Coastlines. McGraw-Hill, New York, NY. 579 pp.

TIME COVERAGE: 1971

SUMMARY: This book describes changes to the coastline of the US. One of the chapters briefly discusses Biscayne Bay.

KEY WORDS: Coastal landforms, Beach morphology, Sea level variations, Barrier islands, Tidal inlets, Erosion features

1690

Sherwood, C. B., and S. D. Leach (1962) Hydrologic studies in the Snapper Creek Canal area, Dade County, Florida. Florida Geological Survey report of investigations no. 24, part 2. US Geological Survey, Tallahassee, FL. 32 pp.

TIME COVERAGE: 1962

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Hydrology, Ground water, Surface water, Saline intrusion, Snapper Creek Canal

1691

Shigenaka, G. (1990) Chlordane in the marine environment of the United States: review and results from the National Status and Trends Program. NOAA technical memorandum NOS OMA 35. NOAA/NOS, Seattle, WA. 230 pp.

TIME COVERAGE: 1990

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Chlordane, Pesticides, Marine pollution, Pollution monitoring, United States

1692

Shinn, E. A. (1988) The geology of the Florida Keys. Oceanus, 31(1):46-53.

TIME COVERAGE: 1988

SUMMARY: This work describes the geology of the Florida Reef Track and southern Biscayne Bay.

KEY WORDS: Coral reefs, Geology, Florida Keys

1693

Shinn, E. A., and E. F. Corcoran (1987) Contamination by landfill leachate, South Biscayne Bay, Florida. Unpublished report. Miami, FL. 8 pp.

TIME COVERAGE: 1987

SUMMARY: This report describes the results of water sampling in wells drilled at a sanitary landfill near southern Biscayne Bay. Water samples were analyzed for pesticides.

KEY WORDS: Landfill, Leaching, Water pollution, Groundwater pollution, Pesticides, Hydrocarbons, Black Point

1694

Shinn, E. A., J. H. Hudson, R. B. Halley, and B. H. Lidz (1977) Topographic control and accumulation rate of some Holocene coral reefs: south Florida and Dry Tortugas. In: Proc., 3rd Internatl. Coral Reef Symposium. Miami, FL, 1977. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Vol. 2: 1-7.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coral reefs, Thickness, Holocene, Accumulation, Bal Harbour, Florida Keys, Dry Tortugas

1695

Shinn, E. A., B. H. Lidz, J. L. Kindinger, J. H. Hudson, and R. B. Halley (1989) Reefs of Florida and the Dry Tortugas; Miami to Key West, Florida, July 2-7, 1989. Field trip guidebook (28th International Geological Congress) T176. American Geophysical Union, Washington, DC. 53 pp.

TIME COVERAGE: 1989

SUMMARY: This is a field guide to the reefs for the east coast of Florida.

KEY WORDS: Coral reefs, Geology, Florida Keys, Dry Tortugas, Field trip guidebook

1696

Shoemaker, W. S. (1952) A preliminary study of productivity in tropical inshore waters as typified by Hurricane Harbor, Biscayne Key, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 81 pp.

TIME COVERAGE: 1950 - 1951

SUMMARY: Monthly observations were made at a single station for one year. Temperature, salinity, dissolved oxygen, total phosphorus, chlorophyll, plankton and illumination were recorded.

KEY WORDS: Biological production, Coastal waters, Hurricane Harbor, Key Biscayne, Water quality, P, Chlorophyll, Plankton

1697

Shroder, T. (1986) The greening of Islandia. The Miami Herald, Miami, FL. July 20. Tropic. 15.

TIME COVERAGE: 1960s

SUMMARY: Islandia was conceived in the 1960s as the "last sparkling jewel of the ocean", a city in the style of Miami Beach, located at the northern end of Elliott Key. This article describes the activities that led to the abandonment of the Islandia project.

KEY WORDS: Islandia, Elliott Key

1698

Shubow, D. (1969) Sponge fishing on Florida's east coast. Tequesta, 29(-):3-15.

TIME COVERAGE: 1880s - 1969

SUMMARY: This article describes the sponge fishing industry from the 1880s through the time of writing. In the 1880s, schooners harvested the sponge beds of Elliott Key, Soldiers Key and other parts of Biscayne Bay as far north as Miami. During the early part of the century, the sponges of Biscayne Bay were evaluated for commercial purposes and found to be of excellent quality. Sponge industry activities, however, remained low key as the main centers of the fisheries were in Tarpon Spring and Key West. During 1938 - 1952 sponge beds on both coasts of Florida were affected by a blight.

KEY WORDS: Sponge fisheries, Elliott Key, Soldier Key, Miami

1699

Sidjabat, M. M. (1967) Oxidation of hydrogen sulfide in sea water. M.Sc. thesis. University of Miami, Coral Gables, FL. 42 pp.

TIME COVERAGE: 1967

SUMMARY: The fate of hydrogen sulfide in seawater was studied under controlled conditions in the laboratory. Results suggested that hydrogen sulfide is thermodynamically unstable in seawater. Some experiments were carried out onboard ship using water collected on site.

KEY WORDS: Hydrogen sulfide, Oxidation, Sea Water

1700

Siebenaler, J. B. (1953) The Biscayne Bay commercial fishery. Florida Board of Conservation technical series 6. Marine Laboratory, University of Miami, Coral Gables, FL. 20 pp.

TIME COVERAGE: 1950 - 1952

SUMMARY: Over 650,000 pounds of fish were produced from Biscayne Bay in twelve months from 1950 to 1951, and 990,000 from 1951 to 1952. Of the quantity taken over the two-year period, 97.8% were mullet, and only 0.5% could be classified as sport fish. The large quantities of mackerel landed in Miami during the winter months were not caught in Biscayne Bay. Gill net and cast net are the only gear used in the fin-fish fishery. Commercial fishing area were described.

KEY WORDS: Commercial fishing, Commercial species, Fisheries

1701

Sigel, M. M., D. F. Rippe, F. Parsons, and A. R. Beasley (1976) Virus studies in Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 167-171.

TIME COVERAGE: 1976

SUMMARY: Viruses were recovered from Bay and marine fishes. Most of these viruses originated from human excrement discharged into the sea. Other viruses originate from fish.

KEY WORDS: Viruses, Waste disposal, Water pollution

1702

Simmons, J. R. (1973) A seasonal study of nutrient levels and dinoflagellates in waters near Miami, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 74 pp.

TIME COVERAGE: 1972 - 1973

SUMMARY: The purpose of this study was to provide further information to understand the phenomenon of red tides and their relationship to phosphate pollution. Phosphate levels in Biscayne Bay waters were found to be sufficient to support *Gymnodinium breve* blooms. Only sewage outfalls, however, offered optimal conditions for red tide blooms. Such blooms have to occurred so other limiting factors may be operating.

KEY WORDS: Red tides, Dinoflagellates, Nutrients, Cape Florida, Key Biscayne, Bear Cut, West Point, Brewster Reef, *Gymnodinium breve*

1703

Simpson, C. T. (1932) Florida Wild Life: Observations on the Flora and Fauna of the State and the Influence of Climate and Environment on their Development. Macmillan, New York, NY. 199 pp.

TIME COVERAGE: 1932

SUMMARY: This book contains descriptions of various aspects of Florida wildlife and climate including mangroves, fish, sea shells and hurricanes.

KEY WORDS: Fish, Shells, Vegetation, Botanical resources, Florida, Hurricanes, Mangroves, Climate

1704

Simpson, C. T. (1920) In Lower Florida Wilds: a Naturalist's Observations on the Life, Physical Geography, and Geology of the More Tropical Part of the State. Putnam, New York, NY. 404 pp.

TIME COVERAGE: 1920

SUMMARY: This book contains observations on the geology and ecology of South Florida including mangrove forests, the Florida Keys, Cape Sable, the Everglades and the Ten Thousand Islands.

KEY WORDS: Natural history, Vegetation, Florida Keys, Everglades, Florida Bay, Cape Sable, Mangroves, Ten Thousand Islands

1705

Simpson, C. T. (1923) Out of Doors in Florida: the Adventures of a Naturalist, Together with Essays on the Wild life and the Geology of the State. E. B. Douglas, Miami, FL. 412 pp.

TIME COVERAGE: 1923

SUMMARY: This book describes the ecology of Florida with an emphasis in the middle and northern part of the state.

KEY WORDS: Natural history, Geology, Vegetation, Florida

1706

Singletery, R. L. (1970) The biology and ecology of *Amphioplus coniertodes*, *Ophionephthys limicola*, and *Micropholis gracillima* (Ophiuroidea: Amphiuridae). Ph.D. dissertation. University of Miami, Coral Gables, FL. 136 pp.

TIME COVERAGE: 1970

SUMMARY: The biology and ecology of brittle stars collected in Biscayne Bay are described.

KEY WORDS: Brittle stars, *Amphioplus coniertodes*, *Ophionephthys limicola*, *Micropholis gracillima*, Ecophysiology, Growth, Feeding, Breeding seasons, Substrate preferences

1707

Singletery, R. L. (1980) The biology and ecology of *Amphioplus coniertodes*, *Ophionephthys limicola*, and *Micropholis gracillima* (Ophiuroidea: Amphiuridae). Caribbean J. of Science, 16(1/4):39-55.

TIME COVERAGE: 1980

SUMMARY: Comparison was made of three sympatric brittlestars found in soft sediment with a medium grain size of less than 0.3 mm. Only *Ophionephthys* occurred in sediments with larger median grain size. Differences in the biology of these species considerably reduces competition.

KEY WORDS: Brittle stars, Growth, Feeding, Breeding seasons, Substrate preferences, *Amphioplus coniertodes*, *Ophionephthys limicola*, *Micropholis gracillima*

1708

Singletery, R. (1980) The biology and ecology of *Amphioplus coniertodes*, *Ophionephthys limicola*, and *Micropholis gracillima* (Ophiuroidea: Amphiuridae). Caribbean Journal of Science, 16(14):39-55.

TIME COVERAGE: 1980

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Brittle stars, *Amphioplus coniertodes*, *Ophionephthys limicola*, *Micropholis gracillima*, Ecophysiology, Growth, Feeding, Breeding seasons, Substrate preferences

1709

Singletery, R. L. (1971) Thermal tolerance of ten shallow-water ophiuroids in Biscayne Bay, Florida. Bull. Mar. Sci., 21(4):938-943.

TIME COVERAGE: 1971

SUMMARY: The upper instantaneous lethal temperatures of ten species of brittle stars were found to be between 37.5 and 40.5 °C. The lower instantaneous lethal temperatures for three amphiurids were between -2 and 0 °C. The brittle star specimens were collected from mud and calcareous *Halimeda* beds in Biscayne Bay.

KEY WORDS: Brittle stars, Temperature tolerance, Temperature effects

1710

Singletery, R. L., and H. B. Moore (1974) A redescription of the *Amphioplus coniertodes*-*Ophionephthys limicola* community of Biscayne Bay, Florida. Bull. Mar. Sci., 24(3):690-699.

TIME COVERAGE: 1974

SUMMARY: The brittle star community originally discussed in 1962 is re-described.

KEY WORDS: Brittle stars, *Amphioplus coniertodes*, *Ophionephthys limicola*, Community composition

1711

Sites, G. L. (1971) Boater's Guide to Biscayne Bay: Miami to Jewfish Creek. University of Miami Press, Coral Gables, FL. 64 pp.

TIME COVERAGE: 1971

SUMMARY: This is a boater's guide with a guided tour of Biscayne Bay.

KEY WORDS: Navigational charts, Boating, Recreational waters, South Bay, Guide

1712

Skinner, R. H. (1978) The interrelation of water quality, external parasites and gill pathology of some fishes from Biscayne Bay, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 93 pp.

TIME COVERAGE: 1978

SUMMARY: In this study, the interrelationship of water quality, infestation of three species of fish by external parasites, and their gill pathology in natural waters was described. Fish collected in the canals emptying into southwest Biscayne Bay were severely infected.

KEY WORDS: Water quality, Water pollution, Yellowfin mojarra, *Gerres cinereus*, Gray snapper, *Lutjanus griseus*, Needlefish, *Strongylura timucu*, Parasites, Gill disease

1713

Skinner, R. H. (1982) The interrelation of water quality, gill parasites, and gill pathology of some fishes from south Biscayne Bay, Florida. Fishery Bull., 80(2):269-280.

TIME COVERAGE: 1982

SUMMARY: [THIS WORK WAS ALSO REPORTED IN THE PREVIOUS CITATION.] This study investigated monogenetic trematode infestation of the gills and gill pathology of yellowfin mojarra, gray snapper, and needlefish in relation to water quality in southern Biscayne Bay.

KEY WORDS: Water quality, Water pollution, Yellowfin mojarra, *Gerres cinereus*, Gray snapper, *Lutjanus griseus*, Needlefish, *Strongylura timucu*, Parasites, Gill disease, South Bay

1714

Skinner, R. H. (1974) Parasites of the striped mullet, *Mugil cephalus*, from Biscayne Bay, Florida, with descriptions of a new genus and three new species of trematodes. M.Sc. thesis. University of Miami, Coral Gables, FL. 84 pp.

TIME COVERAGE: 1972 - 1973

SUMMARY: Parasites found in mullet collected in Biscayne Bay were described.

KEY WORDS: Striped mullet, *Mugil cephalus*, Parasites, Trematodes, *Micropolyclithrum parvum*, *Schikhobalotrema magnum*, *Epithelionematobothrium fragile*, Thynnascaris, New species

1715

Skinner, R. H. (1975) Parasites of the striped mullet, *Mugil cephalus*, from Biscayne Bay, Florida, with descriptions of a new genus and three new species of trematodes. Bull. Mar. Sci., 25(3):318-345.

TIME COVERAGE: 1972 - 1973

SUMMARY: Parasites found in mullet collected in Biscayne Bay were described.

KEY WORDS: Striped mullet, *Mugil cephalus*, Parasites, Trematodes, *Micropolyclithrum parvum*, *Schikhobalotrema magnum*, *Epithelionematobothrium fragile*, Thynnascaris, New species

1716

Skinner, R. H. (1978) Some external parasites of Florida fishes. Bull. Mar. Sci., 28(3):590-595.

TIME COVERAGE: 1978

SUMMARY: Ectoparasites of nine fish species were identified and 10 new hosts and 12 geographic records were noted.

KEY WORDS: Parasites, Hosts, Fish

1717

Skinner, R. H., and W. C. Jaap (1986) Trace metals and pesticides in sediments and organisms in John Pennekamp Coral Reef State Park and Key Largo National Marine Sanctuary. Report. Florida Dept. of Natural Resources (?), Tallahassee, FL.

TIME COVERAGE: 1985 - 1986

SUMMARY: The purpose of this study was to establish a reliable information base on trace metals, pesticides, PCBs and phthalate concentrations in surface sediments and tissues. The northern-most station is on the border of Biscayne National Park.

KEY WORDS: Trace metals, Pesticides, PCBs, Phthalates, Nutrients, Colliform bacteria, Sediment pollution, Marine organisms, John Pennekamp Coral Reef State Park, Key Largo National Marine Sanctuary, Biscayne National Park

1718

Skinner, R. H., and W. Kandrashoff (1988) Abnormalities and diseases observed in commercial fish catches from Biscayne Bay, Florida. Water Res. Bull., 24(5):961-966.

TIME COVERAGE: 1970 - 1975, 1978 - 1982

SUMMARY: Commercial fish catches of 17 fish species from Biscayne Bay were examined for abnormal and diseased specimens. Disorders occurring consistently in a location exposed to pollutants but uncommon in other areas of the species range point to environmental stress as a possible cause.

KEY WORDS: Fish diseases, Abnormalities, Fish, Commercial species, Water quality, Pollution

1719

Skjoldal, H. R. (1982) Vertical and small-scale horizontal distribution of chlorophyll *a* and ATP in subtropical beach sand. Sarsia, 67(2):79-84.

TIME COVERAGE: 1982

SUMMARY: The vertical distribution of chlorophyll and ATP within the uppermost 12 cm of sand were highly correlated. The contents of chlorophyll and ATP decreased slightly within the uppermost 2-4 cm, while decreasing more rapidly below.

KEY WORDS: Sand, ATP, Chlorophylls, Vertical distribution, Horizontal distribution, Subtropical zones, Crandon Park

1720

Skop, R. A., H. C. Graber, and D. B. Ross (1995) VHR radar measurements of flow patterns in bays and estuaries. In: Proc., IEEE fifth Working Conf. on Current Measurement. St. Petersburg, FL, 1995. William S. Sullwold Pub., Taunton, MA. 143-147.

TIME COVERAGE: 1994

SUMMARY: An Ocean Surface Current Radar (OSCR) system was deployed to measure currents over a portion of Biscayne Bay to determine OSCR capabilities to map current in an environment having low amplitude Bragg resonant waves and containing numerous shoals and small islands. With the exception of very shallow shoal regions, high quality vector current maps could be obtained.

KEY WORDS: Surface currents, Doppler effect, Radar, Tidal currents, Current measurement

1721

Skop, R. A., D. B. Ross, N. J. Peters, and L. Chamberlain (1994) Measurements of coastal currents using a ship based VHF radar system. RSMAS technical report 94-001. Division of Applied Marine Physics, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 25 pp.

TIME COVERAGE: 1994

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coastal currents, Radar, Doppler effect, Current measurement, Key Biscayne, Columbus Iselin (Ship)

1722

Skop, R. A., D. B. Ross, N. J. Peters, and L. Chamberlain (1994) Ship based, VHF radar measurements of coastal currents. In: Proc., MTS 94: Challenges and Opportunities in the Marine Environment. Washington, DC, 1994. Marine Technology Society, Washington, DC. 20-26.

TIME COVERAGE: 1993

SUMMARY: The purpose of the experiment described in this paper was to evaluate the feasibility of using an Ocean Surface Current Radar system to map nearshore coastal currents from a ship.

KEY WORDS: Coastal currents, Doppler effect, Radar, Current measurement, Key Biscayne, Columbus Iselin (Ship)

1723

Skowronek, R. K., and G. R. Fischer (1984) Archeological testing and evaluation of the Legare Anchorage Shipwreck site, Biscayne National Park, summer 1983. PB89-232029. National Park Service, Southeast Archeological Center, Tallahassee, FL. 157 pp.

TIME COVERAGE: 1983

SUMMARY: This report is an assessment of the wreck site of the HMS Fowey lost in 1748 in Biscayne Bay.

KEY WORDS: Archaeology, Wrecks, Legare Anchorage Shipwreck, Biscayne National Park

1724

Slatt, B. J., D. F. S. Natusch, J. M. Prospero, and D. L. Savoie (1978) Hydrogen sulfide in the atmosphere of the northern equatorial Atlantic Ocean and its relation to the global sulfur cycle. Atmospheric Environ., 12(-):981-991.

TIME COVERAGE: 1978

SUMMARY: Concentrations of hydrogen sulfide were measured in Sal Island, Cape Verde Islands and Virginia Key.

The measured concentrations were between four and forty times lower than previously accepted values, indicating that the atmospheric lifetime of hydrogen sulfide may be as short as a few hours.

KEY WORDS: Hydrogen sulfide, Atmospheric chemistry, Biogeochemical cycle, Sulfur cycle, Virginia Key, Equatorial Atlantic Ocean

1725

Slosson, A. T. Collecting on Biscayne Bay, Part II. In: American Women Afield: Writings by Pioneering Women Naturalists. M. M. Bonta (ed.). Texas A&M University Press, College Station, TX. 45-54.

TIME COVERAGE: 1899

SUMMARY: Annie Trumbull Slosson was an entomologist who collected specimens in Florida. Specimens found on the shore of Biscayne Bay are described. [Originally published in Entomological News, May 1899.]

KEY WORDS: Slosson, A. T., Entomology

1726

Slosson, A. T. (1899) Collecting on Biscayne Bay. Entomological News, 10(-):94-96.

TIME COVERAGE: 1899

SUMMARY: This account and the one that follows describes insect collection efforts in South Florida.

KEY WORDS: Insects, Vegetation

1727

Slosson, A. T. (1899) Collecting on Biscayne Bay, pt. 2. Entomological news, 10(-):124-126.

TIME COVERAGE: 1899

SUMMARY: This account and the previous one describes insect collection efforts in South Florida.

KEY WORDS: Insects, Vegetation

1728

Small, J. K. (1919) Coastwise dunes and lagoons: a record of botanical exploration in Florida in the spring of 1918. J. New York Botanical Garden, 20(238):191-207.

TIME COVERAGE: 1918

SUMMARY: This is an account of botanical exploration and investigations in South Florida. Botanical specimens were collected and preserved for a series of illustrations.

KEY WORDS: Botanical resources, Dunes, Hammocks, Lagoons, Florida

1729

Small, J. K. (1914) Exploration in the Everglades and on the Florida Keys. J. New York Botanical Garden, 15(-):69-79.

TIME COVERAGE: 1914

SUMMARY: This paper describes botanical explorations in the Everglades and the Florida Keys and other areas of southern Florida.

KEY WORDS: Vegetation, Botanical resources, Lake Okeechobee, Everglades, Florida Keys

1730

Small, J. K. (1916) Exploration in southern Florida in 1915. J. New York Botanical Garden, 17(-):37-45.

TIME COVERAGE: 1915

SUMMARY: This paper describes continuing botanical exploration efforts in South Florida.

KEY WORDS: Vegetation, Botanical resources, Florida Keys, Everglades

1731

Small, J. K. (1913) Flora of the Florida Keys; being descriptions of the seed-plants growing naturally on the islands of the Florida reef from Virginia Key to Dry Tortugas. J. K. Small, New York, NY. 162 pp.

TIME COVERAGE: 1913

SUMMARY: This is a botanical guide to the Florida Keys including Virginia Key and the Dry Tortugas.

KEY WORDS: Vegetation, Botanical resources, Florida Keys, Virginia Key, Dry Tortugas, Guide

1732

Small, J. K. (1929) From Eden to Sahara: Florida's Tragedy. Science Press, Lancaster, PA. 123 pp.

TIME COVERAGE: 1922

SUMMARY: This book is a narrative of botanical explorations in Florida. The wholesale devastation of the plant covering, through carelessness, thoughtlessness, and vandalism,

prehistoric and historic, was apparent to the author. Remains of Native American villages, burial mounds and other sites are described.

KEY WORDS: Botanical resources, Vegetation, Archaeology, Middens, Nature conservation, Florida Keys, Cape Sable, Cape Romano, Native Americans, Everglades, Indian Creek, Virginia Key

1733

Small, J. K. (1930) Vegetation and erosion on the Everglade Keys. Scientific Monthly, 30(-):33-50.

TIME COVERAGE: 1930

SUMMARY: This paper describes erosion produced by humus accumulation and other processes related to vegetation.

KEY WORDS: Vegetation, Erosion, Limestone, Oolites, Everglades, Florida Keys, Soldier Key

1734

Smiley, N. (1973) Yesterday's Miami. E. A. Seamann, Miami, FL. 156 pp.

TIME COVERAGE: 1896 - 1970

SUMMARY: This book is a pictorial history of Miami and Miami beach.

KEY WORDS: History, Photographs, Miami Beach, Government Cut

1735

Smith, C. A., L. Lidz, and F. W. Meyer (1982) Data on selected deep wells in south Florida. US Geological Survey, Tallahassee, FL. 144 pp.

TIME COVERAGE: 1982

SUMMARY: This report is a ground water database for South Florida.

KEY WORDS: Ground water, Wells, Aquifers, South Florida

1736

Smith, F. G. W. (1948) Atlantic Reef Corals: a Handbook of the Common Reef and Shallow-Water Corals of Bermuda, Florida, the West Indies, and Brazil. University of Miami Press, Coral Gables, FL.

TIME COVERAGE: 1948

SUMMARY: This book is a guide to the common corals of Bermuda, Florida, the West Indies, and Brazil.

KEY WORDS: Coral, Coral reefs, Bermuda, Bahamas, Florida, West Indies, Brazil, Atlantic Ocean, Guide

1737

Smith, F. G. W. (1971) Atlantic Reef Corals; a Handbook of the Common Reef and Shallow-Water Corals of Bermuda, the Bahamas, Florida, the West Indies, and Brazil. University of Miami Press, Coral Gables, FL. 164 pp.

TIME COVERAGE: 1971

SUMMARY: This is a revised edition of the 1948 printing.

KEY WORDS: Coral, Coral reefs, Bermuda, Bahamas, Florida, West Indies, Brazil, Atlantic Ocean, Guide

1738

Smith, F. G. W. (1945) Effect of water currents upon the attachment and growth of barnacles. Biol. Bull., 89(1):51-70.

TIME COVERAGE: 1945

SUMMARY: Experiments were conducted to determine the effects of water current upon the attachment and growth of barnacles. Rotating discs and glass tubes of graded cross-sectional diameter were employed to provide variations in current velocity.

KEY WORDS: Barnacles, Biological attachment, *Balanus amphitrite*, *Balanus eburneus*, *Balanus improvisus*, Water currents

1739

Smith, F. G. W. (1946) Functions and development of a tropical marine laboratory. Science, 103(-):609-611.

TIME COVERAGE: 1946

SUMMARY: This is a descriptions marine laboratory of the University of Miami.

KEY WORDS: Oceanographic institutions, Tropical oceanography, Miami Marine Laboratory

1740

Smith, F. G. W. (1943/44) Littoral fauna of the Miami area. I. The Madreporapia. Proceedings of the Florida Academy of Sciences, 6(-):41-48.

TIME COVERAGE: 1944

SUMMARY: This paper contains descriptions of the species of corals found in the Miami area.

KEY WORDS: Littoral zone, Coral, Madreporapia, Identification keys

1741

Smith, F. G. W. (1982) Ships that flew. Sea Frontiers, 28(4):203-216.

TIME COVERAGE: 1982

SUMMARY: Miami was the most important flying boat terminal in the world, and became the headquarters for Pan American in 1928. The barge terminal was replaced in 1939 by a building at Dinner Key that eventually became the site of the government of the City of Miami. Chalk's International Airlines is based in Biscayne Bay and flies between Miami and the Bahamas. This airline is the sole remaining flying boat airline.

KEY WORDS: Aircraft, Air transportation, Flying boats, Chalk's International Airline, Pan American Airlines

1742

Smith, F. G. W. (1958) The spiny lobster industry of Florida. Florida Board of Conservation educational series 11. Marine Laboratory, University of Miami, Miami, FL. 34 pp.

TIME COVERAGE: 1958

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Spiny lobster, *Panulirus argus*, Lobster fisheries, Florida

1743

Smith, F. G. W. (1948) Surface illumination and barnacle attachment. Biol. Bull., 94(1):33-39.

TIME COVERAGE: 1948

SUMMARY: The purpose of this work was to investigate the anomalies reported in the response of barnacle larvae to black and white surfaces.

KEY WORDS: Barnacles, *Balanus amphitrite niveus*, *Balanus improvisus*, Biological attachment, Phototaxis

1744

Smith, F. G. W., and N. Marshall (1945) Preliminary report on the Florida crawfish investigation. Report UML-10,506. Marine Laboratory, University of Miami, Miami, FL. 28 pp.

TIME COVERAGE: 1944

SUMMARY: This report is an assessment of the lobster fishery of South Florida to determine if overfishing was taking place and to propose remedial actions.

KEY WORDS: Spiny lobster, *Panulirus argus*, Lobster fisheries, Florida

1745

Smith, F. G. W., R. H. Williams, and C. C. Davis (1950) An ecological survey of the subtropical inshore waters adjacent to Miami. Ecology, 31(1):119-146.

TIME COVERAGE: 1945 - 1946

SUMMARY: Observations were made at a series of stations covering a wide range of environmental conditions. Chemical and physical observations and plankton samples were made at monthly intervals. Results indicated the great part played by land drainage and sewage in the growth of plankton and of sedimentary organisms, the otherwise low nutrient and plankton content of inshore waters, and the presence of a winter as well as summer peak in breeding and growth.

KEY WORDS: Plankton, Fouling organisms, Miami, Northern Bay, Hurricane Harbor, Biscayne Channel, Elliott Key, Triumph Reef, Soldier Key, Chicken Key, Dissolved oxygen, Water quality, Nutrients, Featherbed Bank, Fouling

1746

Smith, H. M. (1896) Notes on Biscayne Bay, Florida, with reference to its adaptability as the site of a marine hatching and experiment station. Report of the Commissioner [US Commission of Fish and Fisheries] for the year ending June 30, 1895, 21(-):169-191.

TIME COVERAGE: 1896

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Fish, Marine mammals, Aquatic reptiles, Marine crustaceans, Oysters, Sponges, Commercial fishing

1747

Smith, M. (1945) East Coast Marine Shells: Descriptions of Shore Mollusks Together with Many Living Below Tide Mark, from Maine to Texas Inclusive, Especially Florida. Edwards Brothers, Ann Arbor, MI. 314 pp.

TIME COVERAGE: 1945

SUMMARY: This is a guide to seashells including those found in Florida.

KEY WORDS: Shells, Marine mollusks, Atlantic Coast, Guide

1748

Smith, N. P. (1999) A closer look at the tides of Biscayne Bay, Card Sound and Barnes Sound. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 219.

TIME COVERAGE: 1970s, 1990s

SUMMARY: Harmonic constants of the principal tidal constituents were calculated for 43 locations in Card Sound, Barnes Sound and Biscayne Bay.

KEY WORDS: Card Sound, Barnes Sound, Tides, Tidal ranges, Rivers, Wetlands, Land reclamation, Biscayne Coastal Wetlands, Canal L-31E

1749

Smith, N. P. (1994) Coastal lagoons, Florida east coast. In: Florida Coastal Ocean Sciences Symposium (FCOSS). Miami, FL, 1994. Coastal Ocean Pollution Center, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 24.

TIME COVERAGE: 1994

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coastal lagoons, East Florida

1750

Smith, R. L. (1973) Abundance and diversity of sponges and growth rates of *Spongia graminea* in Card Sound, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 66 pp.

TIME COVERAGE: 1971 - 1972

SUMMARY: Approximately 60% of the sponges in Card Sound are not attached and are moved by currents. Sponge communities in the center of the Sound have significantly greater species richness and evenness than communities on the eastern and western edges of the sound. Species richness and evenness varies little with time. Only one of the most common species of sponges showed seasonal variation. Effluents from the Card Sound Canal increased the general diversity but not the evenness of sponge communities at the canal mouth and 1.3 km offshore. The increase at the canal mouth is probably due to both increased food supply and newly exposed rock. The increase offshore is attributable only to food supply. Diversity and abundance is limited by lack of suitable substrate for attachment and lack of nutrients to feed the bacteria which are apparently the major food sources of sponges.

KEY WORDS: Sponges, *Spongia graminea*, Abundance, Species diversity, Card Sound

1751

Smith, R. L. (1967) Protein digestion and the resulting amino acid distribution in the digestive tract of the white grunt, *Haemulon plumieri*. M.Sc. thesis. University of Miami, Coral Gables, FL. 105 pp.

TIME COVERAGE: 1967

SUMMARY: The metabolic products of the digestion of proteins by white grunt were investigated. Specimens were collected by hook and line.

KEY WORDS: White grunt, *Haemulon plumieri*, Protein synthesis, Amino acids, Digestion

1752

Smith, R. (1991) Wreck Diving in Miami. D. Udel and R. Smith (Executive producers). Broadcast Quality, Miami, FL. Videorecording, VHS, 20 min.

TIME COVERAGE: 1991

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Diving, Recreational waters, Artificial reefs, Wrecks, Underwater exploration, Miami

1753

Smith, R. C., and H. J. Teas (1977) Biological effects of thermal effluent from the Cutler Power Plant in Biscayne Bay, Florida. In: Proc., Conf. on Waste Heat Management and Utilization. S. S. Lee, and S. Sengupta, (eds.). Miami Beach, FL, 1977. Department of Mechanical Engineering, University of Miami, Coral Gables, FL. Vol.1: II-B:91-106.

TIME COVERAGE: 1956, 1968 - 1969, 1973

SUMMARY: The Cutler Ridge Plant is a fossil fuel power plant that discharges heated water into a small, shallow, partially enclosed portion of Biscayne Bay. A study was conducted on water and sediment temperatures, sediment character and benthic plants. Analysis of aerial photographs showed that there had been an increase in the area of bare sediment near the thermal discharge point from 8.5 ha in 1956, when full capacity of the plant was reached, to 35 ha in 1973. Ground truth checks indicated that the bare region at the effluent canal was an area of macrophyte loss, which corresponded to the highest temperatures.

KEY WORDS: Thermal pollution, Seagrass, *Thalassia*, *Diplanthera*, Cutler Power Plant

1754

Smith, S. M., and S. C. Snedaker (1995) Developmental responses of established red mangrove, *Rhizophora mangle* L., seedlings to relative levels of photosynthetically active and ultraviolet radiation. Florida Scientist, 58(1):55-60.

TIME COVERAGE: 1993 - 1994

SUMMARY: Mature red mangrove seedlings were harvested from a variety of trees and grown under conditions of ambient natural light, UVb-filtered sunlight, and shade to determine the effects of relative levels of UVb/PAR on early root and shoot development. Growth was

generally reduced with exposure to UV suggesting that open exposed environments are suboptimal for development of red mangrove seedling upon establishment.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Ultraviolet radiation, Light effects, Photosynthesis, Matheson Hammock Park

1755

Smith, T. J., M. B. Robblee, H. R. Wanless, and T. W. Doyle (1994) Mangroves, hurricanes, and lightning strikes. BioScience, 44(4):256-262.

TIME COVERAGE: 1992

SUMMARY: Gaps in mangrove forests can be caused by lightning strikes that kill mature trees. Saplings subsequently recolonize the area. After Hurricane Andrew, a number of small circular patches of living trees were observed among the gray, dead trees. The individuals growing in these patches were smaller than the dead trees around them and thus may be the saplings colonizing the light gaps caused by lightning. These saplings may provide the source for recolonization of destroyed forests.

KEY WORDS: Mangrove swamps, Hurricanes, Lightning, Hurricane Andrew, Everglades National Park, Biscayne National Park, Cape Sable, Ten Thousand Islands, Florida Bay

1756

Smith-Vaniz, W. F. (1997) Five new species of jawfishes (*Opistognathus*: Opistognathidae) from the western Atlantic Ocean. Bull. Mar. Sci., 60(3):1074-1128.

TIME COVERAGE: 1997

SUMMARY: Synonymies, diagnoses, descriptions, illustrations, and spot distribution maps were given for 10 species of jawfishes.

KEY WORDS: Jawfishes, *Opistognathus*, New species

1757

Snedaker, S. C., and P. D. Biber (1995) Restoration of mangroves in the United States of America; a case study in Florida. In: Restoration of Mangrove Ecosystems. C. Field (ed.). International Society for Mangrove Ecosystems, Okinawa, Japan. 250 pp.

TIME COVERAGE: 1995

SUMMARY: This citation discusses restoration of mangroves in the US, and Florida is used as a case study. Various aspects of restoration including climate, geology, species and stock selection are discussed.

KEY WORDS: Mangrove swamps, Restoration, Tampa Bay, Florida Keys, Key Biscayne

1758

Snedaker, S. C., and I. M. Brook (1976) Ecology and the food web of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 227-223.

TIME COVERAGE: 1976

SUMMARY: A review of the knowledge concerning the ecology and food-web relationships in Biscayne Bay revealed that relatively few studies described the interaction between organisms and their environment. Biscayne Bay is highly productive. Nutrient-contributing seagrasses, detrital input from the mangroves, and other forms of primary production contribute to a broad base for higher level consumers such as fishes and commercially important crustaceans.

KEY WORDS: Food webs, Ecological associations

1759

Snedaker, S. C., and I. M. Brook (1976) Ecology and the food web of Biscayne Bay. In: Biscayne Bay: past/present/future; papers prepared for Biscayne Bay Symposium I. A. Thorhaug, and A. Volker (eds.). University of Miami, Sea Grant Program, Coral Gables. 315 pp.

TIME COVERAGE: 1976

SUMMARY: This Sea Grant special report contains chapters describing various aspects of the Biscayne Bay ecosystem.

KEY WORDS: Food webs, Ecological associations

1760

Snedaker, S. C., M. S. Brown, E. J. Lahmann, and R. J. Araujo (1992) Recovery of a mixed-species mangrove forest in South Florida following canopy removal. *J. Coastal Res.*, 8(4):919-925.

TIME COVERAGE: 1982

SUMMARY: The upper structure and canopy of a mixed species mangrove forest was removed by tree trimmers. The original pruning objective was to reduce forest height over a period of three years. This was ignored and the trees were trimmed. The objectives of this citation were to determine the extent of canopy removal and the effects on the cut trees, and to determine the rate of canopy reclosure.

KEY WORDS: Mangrove swamps, Mortality causes, Light effects, Restoration

1761

Snedaker, S. C., and M. S. Brown (1981) Water quality and mangrove ecosystem dynamics. EPA grant R804355. EPA, Environmental Research Laboratory, Gulf Breeze, FL. 80 pp.

TIME COVERAGE: 1981

SUMMARY: This research project was initiated to define the reciprocal relationship between water quality and mangrove ecosystem dynamics, and the role of water borne pollutants within that relationship. Field studies were conducted with the intent of locating mangrove communities stressed by either synthetic organic compounds or metal pollutants. None of the 27 sites examined and sampled showed evidence of pollution affecting mangroves. Chromium, Cu, Fe, Mn, Ni, Pb and Zn were detected in all mangrove tissues at concentrations up to six times background relative to marine water and thus appear to be active accumulators. Highest concentrations were found in mangrove sediments. Differences in elemental concentrations of both nutrients and metals were found in each of the three mangrove species which could indicate either species specific discrimination or preferential uptake, or site differences due to differing inundation frequencies or fresh water runoff.

KEY WORDS: Water quality, Mangrove swamps, Pesticides, Metals, Turkey Point, South Florida, Puerto Rico, Mexico, Cr, Cu, Fe, Mn, Ni, Pb, Zn

1762

Snedaker, S. C., and D. P. de Sylva (1987) Impact of climate change on coastal resources: implications for property values, commerce, estuarine environments, and fisheries, with special reference to south Florida. In: Proc., Symp. on Climate Change in the Southern United States: Future Impacts and Present Policy Issues. M. Meo, (ed.). New Orleans, LA, 1987. US Environmental Protection Agency, Office of Policy, Planning, and Evaluation, Washington, DC. 187-215.

TIME COVERAGE: 1987

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Greenhouse effect, Climatic changes, Sea level changes, Coastal zone, Estuaries, Fisheries

1763

Snedaker, S. C., D. P. de Sylva, and D. J. Cottrell (1977) A review of the role of freshwater in estuarine ecosystems. Final report to the Southwest Florida Water Management District. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 126 pp.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Brackishwater environment, Estuaries, Fresh water, Bibliographies

1764

Snedaker, S. C., R. L. Stanford, D. J. Cottrell, and M. S. Brown (1976) Ecological studies on a subtropical terrestrial biome. Final report submitted to Florida Power and Light. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 494 pp.

TIME COVERAGE: 1976

SUMMARY: This is a study of the intertidal mangrove ecosystem interfacing the southeast portion of the Everglades and Card Sound. This extensive report covers fauna, flora, sediment, water quality and other topics.

KEY WORDS: Mangrove swamps, Wetlands, Ecological associations, Intertidal environment, Card Sound, Sediment, Fauna, Flora, Water quality

1765

Sogard, S. M. (1982) Feeding ecology, population structure, and community relationships of a grassbed fish, *Callionymus pauciradiatus*, in southern Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 103 pp.

TIME COVERAGE: 1982

SUMMARY: Demersal fishes residing in inshore seagrass beds were examined with regard to their community structure, diversity and abundance.

KEY WORDS: Spotted dragonet, *Callionymus pauciradiatus*, Feeding behavior, Population structure, Aquatic communities

1766

Sogard, S. M. (1984) Utilization of meiofauna as a food source by a grassbed fish, the spotted dragonet *Callionymus pauciradiatus*. Mar. Ecol. Prog. Series, 17(-):183-191.

TIME COVERAGE: 1980 - 1981

SUMMARY: The feeding ecology of the dragonet was examined. Feeding consisted almost exclusively on meiofauna with copepods comprising an average 89% of the diet.

KEY WORDS: Spotted dragonet, *Callionymus pauciradiatus*, Meiobenthos, Food consumption, Key Largo, Ten Thousand Islands

1767

Sonenshein, R. S. (1997) Delineation and extent of saltwater intrusion in the Biscayne Aquifer, eastern Dade County, Florida, 1995. USGS water resources investigations report 96-4285. US Geological Survey, Tallahassee, FL. One map.

TIME COVERAGE: 1997

SUMMARY: This is a detailed map showing areas of salt water intrusion in Dade County.

KEY WORDS: Saline intrusion, Hydrogeology, Biscayne Aquifer, Dade County

1768

Sonenshein, R. S. (1997) Quantifying seepage below Levee 30, Dade County, Florida. In: Proc., US Geological Survey Program on the South Florida Ecosystem. Ft. Lauderdale, FL, August 25-27, 1997. US Geological Survey open file report 97-385. US Geological Survey, Tallahassee, FL. 87-88.

TIME COVERAGE: 1997

SUMMARY: Levee 30 is part of the eastern boundary of Water Conservation Area 3B and was completed in 1954. Ground water flow models are being developed to calculate a water budget for a transect perpendicular to Levee 30.

KEY WORDS: Seepages, Levees, Levee 30, Dade County

1769

Sonenshein, R. S., C. R. Causaras, and J. E. Fish (1984) Index of hydrologic data for selected sites in Dade County, Florida, 1923-80. USGS open-file report 84-430. US Geological Survey, Tallahassee, FL.

TIME COVERAGE: 1984

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Aquifers, Wells, Water quality, Hydrology, Geology, Dade County

1770

Sonenshein, R. S., and E. J. Koszalka (1996) In: Trends in water-table altitude (1984-93) and saltwater intrusion (1974-93) in the Biscayne Aquifer, Dade County, Florida. Open file report 95-705. US Geological Survey, Tallahassee, FL. 3 maps.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water table, Saline intrusion, Biscayne Aquifer, Dade County

1771

South Florida Water Management District (1995) Biscayne Bay Surface Water Improvement and Management. Two volumes: Planning document and Technical Supporting document. South Florida Water Management District, Planning Department, West Palm Beach, FL. 66 pp and 178 pp + appendices.

TIME COVERAGE: 1995

SUMMARY: This document is an update of the Biscayne Bay Surface Water Improvement and Management (SWIM) Plan adopted in 1988 and modified in 1989.

KEY WORDS: SWIM Plan, Surface water, Water quality, Natural resources, Pollution monitoring, Environmental management

1772

South Florida Water Management District (1992) Dade County - Florida Keys: water supply; background document. Two volumes: Draft background document and appendices. South Florida Water Management District, Planning Department, West Palm Beach, FL. Various paging.

TIME COVERAGE: 1992

SUMMARY: The purpose of this document was to compile key pieces of data and other background information that may be useful in discussing water uses and supply sources in South Florida.

KEY WORDS: Water supply, Water resources, Water use, Water conservation, Dade County, Florida Keys

1773

South Florida Water Management District (1990) Monitoring and operating plan for C-111 interim construction project. Final draft, revision 3 (May 16, 1990). South Florida Water Management District, West Palm Beach, FL. Various paging.

TIME COVERAGE: 1990

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Canals, Canal C-111, Stormwater runoff, Flood control, Manatee Bay, Barnes Sound, Florida Bay

1774

South Florida Regional Planning Council (1978) Natural systems. Report. South Florida Regional Planning Council, Miami, FL. 28 pp.

TIME COVERAGE: 1978

SUMMARY: This report describes the South Florida ecosystem and discusses concerns about its status.

KEY WORDS: Natural resources, Environmental protection, Ecosystem management, South Florida

1775

South Florida Regional Planning Council (1984) OCS facility siting study. Report and separate folder with maps. South Florida Regional Planning Council, Hollywood, FL. 197 pp.

TIME COVERAGE: 1984

SUMMARY: This document describes Outer Continental Shelf leasing activities and potential environmental impact in South Florida.

KEY WORDS: Outer continental shelf, Oil and gas exploration, Offshore operations

1776

South Florida Water Management District (1992?) Protecting Biscayne Bay's aquatic resources: a water quality field trip program for Dade County school children. Teacher's guide.

TIME COVERAGE: 1992

SUMMARY: This is a field trip teachers guide.

KEY WORDS: Field guide, Education

1777

South Florida Water Management District (2000) Save our rivers. 2000 land acquisition and management plan. South Florida Water Management District, West Palm Beach, FL.

TIME COVERAGE: 2000

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water management, Land acquisition

1778

South Florida Regional Planning Council (1984) South Florida oil spill response handbook. Report. The Council, Hollywood, FL. 91 pp.

TIME COVERAGE: 1984

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Oil spills, Accidents, South Florida

1779

South Florida Water Management District (1995) South Florida Ecosystem Restoration Plan. 99 pp.

TIME COVERAGE: 1995

SUMMARY: This is description of the South Florida Ecosystem Restoration Plan which includes Biscayne Bay.

KEY WORDS: Florida Bay, Everglades

1780

South Florida Water Management District (1988-1989) Surface water improvement and management (SWIM) plan for Biscayne Bay and Appendices A - K. SWIM plan. South Florida Water Management District, West Palm Beach, FL.

TIME COVERAGE: 1988-1989

SUMMARY: This document is the original SWIM plan for Biscayne Bay.

KEY WORDS: SWIM Plan, Surface water, Water quality, Natural resources, Pollution monitoring, Environment management

1781

South Florida Water Management District (1994) An update of the Surface Water Improvement and Management Plan for Biscayne Bay. Two volumes: Draft Planning Document and Technical Supporting document and appendices. Lower East Coast Planning Division, The District, West Palm Beach. Various paging and 170 pp + appendices.

TIME COVERAGE: 1994

SUMMARY: This document is an update of the Biscayne Bay Surface Water Improvement and Management (SWIM) Plan adopted in 1988 and modified in 1989.

KEY WORDS: SWIM Plan, Surface water, Water quality, Natural resources, Pollution monitoring, Environmental management

1782

Southeastern Geological Society (1954) Carbonate deposits in south Florida. Field trip 8. Southeastern Geological Society, Tallahassee, FL. 48 pp.

TIME COVERAGE: 1975

SUMMARY: The geology of carbonate deposits in South Florida is described.

KEY WORDS: Carbonate rocks, Carbonate sediment, Geology, South Florida

1783

Spanier, E. (1975) Sound recognition by damselfishes of the genus *Eupomacentrus* from Florida waters. Ph.D. dissertation. University of Miami, Coral Gables, FL. pp.

TIME COVERAGE: 1972 - 1973

SUMMARY: Sounds produced during the courtship activities of four sympatric species of damselfish were recorded in the field. Members of the four species were tested in the field and the laboratory to determine if they could distinguish their own species' sounds from those produced by their congeners. Differential responses clearly demonstrate species-specific recognition by sound and indicate that the pulse interval and the number of pulses/sound are the important parameters for this recognition.

KEY WORDS: Damselfish, *Eupomacentrus dorsopunicans*, *Eupomacentrus leucostictus*, *Eupomacentrus partitus*, *Eupomacentrus planifrons*, Audition, Reproductive behavior, No Name Harbor, Key Biscayne, Norris Cut, Bear Cut, Fowey Rocks, Triumph Reef

1784

Spencer, M. J. (1984) Trace metals in seawater: chelation capacities, conditional stability constants, and water sampler evaluations. Ph.D. dissertation. University of Miami, Coral Gables, FL. 101 pp.

TIME COVERAGE: 1984

SUMMARY: Anodic stripping voltammetry and Cu titrations were used to determine the complexation capacity and conditional stability constants for Cu-organic complexes in seawater.

KEY WORDS: Cu, Sea water, Chelates, Stability constants, Bear Cut, Matheson Hammock, Safety Valve, Fowey Rocks, Rickenbacker Causeway

1785

Springer, S. (1975) Field observations on large sharks of the Florida-Caribbean region. In: Sharks and Survival. P. W. Gilbert (ed.). Heath, Lexington, MA. 578 pp.

TIME COVERAGE: 1975

SUMMARY: This chapter discusses the large-shark distribution and fishery in Florida.

KEY WORDS: Sharks, Shark attacks, Fishery, Florida

1786

Sprogis, J. M. (1975) Changes in benthic diatom assemblages within the thermal effluent at Turkey Point, South Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 85 pp.

TIME COVERAGE: 1975

SUMMARY: The diversity study of attached diatom assemblages clearly delineated variations in thermal stress conditions in the effluent plume of Turkey Point. A strong trend of an inverse relationship between diversity and increased temperature was expressed. Diversity values

were lower in the summer and fall samples, principally at stations influenced by effluents waters.

KEY WORDS: Diatoms, Benthos, Thermal pollution, Turkey Point, South Bay

1787

Sprogis, J. M. (1971) Diatoms. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler (eds.). Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. VII: 1-28.

TIME COVERAGE: 1971

SUMMARY: This citation is a survey of diatoms found at Turkey Point.

KEY WORDS: Diatoms, Thermal pollution, Turkey Point, South Bay, Card Sound, Species list

1788

Srinivas, R., and R. B. Taylor (1995) Coastal processes at Key Biscayne, Florida. Report to the US Army Corps of Engineers. Taylor Engineering, Inc., Jacksonville, FL. 91 pp.

TIME COVERAGE: 1995

SUMMARY: The purpose of this report was to document beach erosion at Key Biscayne and evaluate remediation strategies.

KEY WORDS: Coastal oceanography, Shore protection, Beach erosion, Key Biscayne, Virginia Key, Cape Florida State Park

1789

Srinivas, R., and B. R. Taylor (1996) Longshore transport modeling and performance of beach nourishment alternatives at Key Biscayne, Florida. In: Proc., 9th National Conference on Beach Preservation Technology, The Future of Beach Nourishment. L. S. Tait, (comp.). St. Petersburg, FL, 1996. Florida Shore & Beach Preservation Association, Tallahassee, FL. 176-191.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Longshore sediment transport, Beach nourishment, GENESIS model, Key Biscayne

1790

Stahl, M. S. (1973) The behavior and activity rhythms of *Blennius cristatus* Linnaeus (Pisces: Blenniidae). M.Sc. thesis. University of Miami, Coral Gables, FL. 91 pp.

TIME COVERAGE: 1973

SUMMARY: Field observations were made over a three-year period of the behavior and activity of the intertidal blennie inhabiting a fossilized mangrove reef off Key Biscayne.

KEY WORDS: Blennies, *Blennius cristatus*, Behavior, Activity patterns, Key Biscayne, Bear Cut

1791

Stallman, R. W. (1956) Preliminary findings on ground-water conditions relative to Area B flood - control plans, Miami, Florida. Open-file report 56001. US Geological Survey, Tallahassee, FL. 26 pp.

TIME COVERAGE: 1956

SUMMARY: This report details findings on the ground water conditions in West Miami.

KEY WORDS: Flood control, Ground water, Drainage water, Miami, Biscayne Aquifer

1792

Stanlaw, K. A. (1980) The early nutritional life history of the ctenophore *Nmemiopsis mccradyi*. M.Sc. thesis. University of Miami, Coral Gables, FL. 49 pp.

TIME COVERAGE: 1980

SUMMARY: Adult ctenophores were collected from Biscayne Bay. The nutritional history of the larvae produced by the adults was studied.

KEY WORDS: Ctenophores, *Mnemiopsis mccradyi*, Larval development, Food consumption

1793

Stanley, S. M. (1966) Paleocology and diagenesis of Key Largo Limestone, Florida. AAPG Bull., 50(9):1927-1947.

TIME COVERAGE: 1966

SUMMARY: This paper discusses the paleocology and diagenesis of the Key Largo limestone which forms the upper Florida Keys. The limestone consists of an organic framework of coral colonies and an interstitial skeletal calcarenite.

KEY WORDS: Key Largo Limestone, Coral reefs, Fossils, Paleocology, Diagenesis, Florida Bay, Florida Keys

1794

Statistical Exchange of South Florida (1947) The economic significance of the Keys opened to development by the new Rickenbacker Causeway. Symp., Biscayne Key & Virginia Key. Florida Power & Light Company, Miami, FL. 13 pp.

TIME COVERAGE: 1947

SUMMARY: This report describes the economic impact to South Florida of the newly built Rickenbacker Cswy.

KEY WORDS: Transportation, Rickenbacker Causeway, Resource development, Key Biscayne, Virginia Key

1795

Stauble, D. K. (1991) Beach nourishment sand sources inventory using a geographic information system. In: Proc., 4th Ann. National Beach Preservation Technology Conference, Preserving and Enhancing our Beach Environment. L. S. Tait, (comp.). Charleston, SC, 1991. Florida Shore & Beach Preservation Association, Tallahassee, FL. 88-102.

TIME COVERAGE: 1991

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach nourishment, Sand, Coastal erosion, Geographical Information System (GIS), Coast of Florida Erosion and Storm Effects Study

1796

Stauble, D. K. (1993) An overview of southeast Florida inlet morphodynamics. In: Beach/Inlet Processes and Management: a Florida Perspective (J. Coastal Res. Spec. Issue 18). A. J. Mehta (ed.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 308 pp.

TIME COVERAGE: 1993

SUMMARY: This citation is an overview of the morphodynamics of inlets along the coast of South Florida.

KEY WORDS: Inlets (Waterways), Tidal range, Wave height, Bakers Haulover Inlet, Government Cut, Norris Cut, Bear Cut, Southeast Florida

1797

Stearns, B. (1970) Heat waste. Sea Frontiers, 16(3):154-163.

TIME COVERAGE: 1970

SUMMARY: This article describes the thermal effluents from the Turkey Point Power Plant.

KEY WORDS: Thermal pollution, Temperature effects, Power plants, Turkey Point

1798

Stein, M. (1969) Water quality standards: enforcement and compliance. In: Electric Power and Thermal Discharges: Thermal Considerations in the Production of Electric Power. M. Eisenbud, and G. Gleason (eds.). Gordon and Breach, New York, NY. 423 pp.

TIME COVERAGE: 1969

SUMMARY: This paper discusses the impact of water quality standards on the production of electric power. The Turkey Point facility is described.

KEY WORDS: Thermal pollution, Water quality, Standards, Water use regulations, Turkey Point

1799

Stephens, I. J. (1975) The Port of Miami. South Florida History Mag., 2(5):Various paging.

TIME COVERAGE: 1896 - 1960

SUMMARY: This article describes the early history of the Port of Miami.

KEY WORDS: Port of Miami

1800

Stephenson, T. A., and A. Stephenson (1950) Life between tide-marks in North America. I. The Florida Keys. J. Ecology, 38(2):354-402.

TIME COVERAGE: 1950

SUMMARY: This paper is part of a series dealing with zonation, ecology and geographical relations of the common plants and animals occurring between tide marks. The first paper in the series discusses the Florida Keys including the northern reaches of the chain.

KEY WORDS: Intertidal environment, Littoral zone, Biota, Reef Tract, Florida Keys, Elliott Key, Soldier Key, Species list

1801

Stephens, W. M. (1965) Land crabs. Sea Frontiers, 11(4):194-201.

TIME COVERAGE: 1965

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: West Indian land crab, *Cardisoma guanhumi*, Spawning migrations, Behavior

1802

Stephens, W. M. (1966) Life in the turtle grass. Sea Frontiers, 12(5):264-275.

TIME COVERAGE: 1966

SUMMARY: This is a review paper about fauna in *Thalassia* beds.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Aquatic communities

1803

Stephens, W. M. (1968) Southern Seashores: A World of Animals and Plants. Holiday House, New York, NY. 188 pp.

TIME COVERAGE: 1968

SUMMARY: This is a guide to the flora and fauna of .....

KEY WORDS: Beaches, Intertidal environment, Marine organisms, Guide

1804

Stephens, W. M. (1962) Tree that makes land. Sea Frontiers, 8(4):219-230.

TIME COVERAGE: 1962

SUMMARY: This article describes mangroves and the ecosystem associated with these plants.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Landforms, Mangrove swamps

1805

Stepien, W. P. (1974) Feeding of laboratory-reared larvae of sea bream *Archosargus rhomboidalis* (Linnaeus): Sparidae. M.Sc. thesis. University of Miami, Coral Gables, FL. 81 pp.

TIME COVERAGE: 1972 - 1973

SUMMARY: Fertilized eggs of the sea bream were collected from plankton tows in Biscayne Bay and the larvae reared in the laboratory. Aspects of feeding by larvae were studied.

KEY WORDS: Sea bream, *Archosargus rhomboidalis*, Fish larvae, Feeding, Rearing

1806

Stepien, W. P. (1976) Feeding of laboratory-reared larvae of the sea bream *Archosargus rhomboidalis* (Sparidae). Mar. Biol., 38(1):1-16.

TIME COVERAGE: 1972 - 1973

SUMMARY: Fertilized eggs were collected from plankton tows in Biscayne Bay and the larvae reared on zooplankton. Techniques were developed to estimate feeding rate, food selection, growth efficiency and daily ration.

KEY WORDS: Sea bream, *Archosargus rhomboidalis*, Fish larvae, Feeding, Rearing

1807

Sternberg, L. da S. L., and P. K. Swart (1987) Utilization of freshwater and ocean water by coastal plants of southern Florida. Ecology, 68(6):1898-1905.

TIME COVERAGE: 1986

SUMMARY: The coastal vegetation of South Florida underwent a dramatic change due to the instability of the ocean water-freshwater boundary. These vegetation changes were determined by the response of each particular species to saline ocean water. The results indicated that, with some exceptions, plants toward the interior of the keys were using freshwater while those towards the outside were using ocean water. Results were consistent with the hypothesis that mangroves are fully capable of growing in freshwater but are limited to saline habitats because of competitive exclusion by fast-growing glycophilic plants.

KEY WORDS: Mangrove swamps, Hammocks, Water uptake, Salinity, Fresh water, Isotope ratios, Elliott Key, Cluett Key

1808

Stevely, J. M., J. C. Thompson, and R. E. Warner (1978) The biology and utilization of Florida's commercial sponges. Florida Sea Grant technical paper no. 8. Florida Sea Grant College Program, Gainesville, FL. 45 pp.

TIME COVERAGE: 1978

SUMMARY: Over the past 30 years, the sponge fishery of Florida has been reduced to a small fraction of its former importance. Sponge production from Monroe and Dade County surpass production from the Florida Gulf Coast. Although the market is a fraction of what it was, sponge production does not meet demand.

KEY WORDS: Sponges, Sponge fisheries, Sponge culture, Florida

1809

Stewart, C. C. (1990) The history and impact of Christo's Surrounded Islands: project for Biscayne Bay, Greater Miami, Florida, 1980-1983. M.S. thesis. Florida State University, Tallahassee, FL. 98 pp.

TIME COVERAGE: 1983

SUMMARY: This work describes the creative process of Christo's Surrounded Islands project in Biscayne Bay.

KEY WORDS: Christo, Art

1810

Stewart, H. G. (1970) Biscayne Bay as a natural resource. In: Collected reprints, NOAA Atlantic Oceanographic and Meteorological Laboratories and Pacific Oceanographic Laboratories. 1969, volume 1. An address before the Zoological Society of Florida, October 6, 1969. US Government Printing Office, Washington, D.C. 163-167.

TIME COVERAGE: 1969

SUMMARY: This is an address about the status of Biscayne Bay.

KEY WORDS: Natural resources, Water pollution, Resource conservation

1811

Stock, J. H. (1970) *Endeis flaccida* Calman, 1923, in Florida: a pycnogonid new to the Atlantic Ocean. Entomologische Berichten, 30(1):3-4.

TIME COVERAGE: 1970

SUMMARY: This is a short note describing the presence in the Atlantic of a species of pycnogonid.

KEY WORDS: Pycnogonida, *Endeis flaccida*, Virginia Key, Key Biscayne

1812

Stoddard, A. D., and G. Campbell (1998) Public health assessment, Homestead Air Force Base, Homestead, Dade County, Florida. CERCLIS no. FL7570024037. Reproduced by NTIS, PB99109365. Agency for Toxic Substances and Disease Registry, Division of Health Assessment and Consultation, Federal Facilities Assessment Branch, Atlanta, GA. Various paging.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Pollutants, Public health, Toxicity tests, Boundary Canal, Outfall Canal, Homestead Air Force Base

1813

Stone, T., and D. Suman (1995) Miami's bay-bottom burden: the Biscayne Bay sewage pipeline. In: Urban Growth and Sustainable Habitats: Case Studies of Policy Conflicts in South Florida's Coastal Environment. D. Suman, M. Shilvani, and M. L. Villanueva (eds.). Division of Marine Affairs and Policy, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 175 pp.

TIME COVERAGE: 1995

SUMMARY: This paper discusses the Biscayne Bay sewage pipeline and problems related to its replacement.

KEY WORDS: Sewage, Wastewater treatment, Pipelines, Department of Environmental Resources Management, Miami Dade Water and Sewer Authority Department, Virginia Key, Cross Bay Line

1814

Strom, R. N., R. S. Braman, W. C. Jaap, P. Dolan, K. B. Donnelly, and D. F. Martin (1992) Analysis of selected trace metals and pesticides offshore of the Florida Keys. Florida Scientist, 55(1):1-13.

TIME COVERAGE: 1988

SUMMARY: Trace metals and pesticides in sediment and organisms collected off the Florida Keys from Biscayne Bay to the Dry Tortugas. In general, concentrations of trace metals increased from sediments to producer to consumer organisms. Though concentrations were low, some deviations were ascribed to human inputs.

KEY WORDS: Cu, Pb, Cd, As, Sn, Hg, Pesticides, Pollution monitoring, Biscayne National Park, Florida Keys, Dry Tortugas, Sediment

1815

Stubbs, S. A. (1940) Studies of foraminifera from seven stations in the vicinity of Biscayne Bay. Proc. Florida Acad. Sciences for 1939, 4(-):225-230.

TIME COVERAGE: 1940

SUMMARY: Sixty-one species of foraminifera representing 23 genera and 11 families were described.

KEY WORDS: Foraminifera, Soldier Key, Ragged Keys, Cape Florida, Black Point, Species list

1816

Suarez, S. S. (1974) The reproductive biology of *Ogilbia cayorum*, a viviparous brotulid fish. M.Sc. thesis. University of Miami, Coral Gables, FL. 74 pp.

TIME COVERAGE: 1974

SUMMARY: This work is a study of the reproductive biology of the key brotula. Some specimens were collected in Biscayne Bay.

KEY WORDS: Key brotula, *Ogilbia cayorum*, Reproduction, Animal reproductive organs, Fish physiology

1817

Sumner, H. C. (1945) North Atlantic hurricanes and tropical disturbances of 1945. Mon. Wea. Rev., 74(-):1-5.

TIME COVERAGE: 1945

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Hurricane of 1945

1818

Sutherland, D. L., J. A. Bohnsack, D. E. Harper, C. M. Holt, M. W. Hulsbeck, and D. B. McClellan (1991) Preliminary report: reef fish size and species selectivity by wire fish traps in south Florida waters. In: Proc., 40th annual Gulf and Caribbean Fisheries Institute. G. T. Waugh, and M. H. Goodwin, (eds.). Curacao, Netherland Antilles, 1987. Gulf and Caribbean Fisheries Institute, Charleston, SC. 108-125.

TIME COVERAGE: 1986 - 1987

SUMMARY: The relationship between mesh size of fish traps and catch composition by species and size was studied off Key Biscayne. The number of fish captured per trap haul decreased with larger mesh size.

KEY WORDS: Trap fishing, Catch composition, Mesh selectivity, Reef fish, Key Biscayne

1819

Swain, A. (1988) Port of Miami inlet dynamics. In: Hydrodynamics and Sediment Dynamics of Tidal Inlets. D. G. Aubrey, and L. Weishar (eds.). Lecture notes on coastal and estuarine studies 29. Springer-Verlag, New York, NY. 456 pp.

TIME COVERAGE: 1988

SUMMARY: Results showed that structural effects on crosscurrents at the entrance of the Port of Miami were effective when even length jetties were used. Non structural changes such as deepening the inlet at jetty ends further reduced the magnitude of currents. Jetty modification plans were evaluated to alleviate the crosscurrents at the ocean entrance and inner harbor channels.

KEY WORDS: Inlets (Waterways), Wind-driven currents, Tidal currents, Port of Miami

1820

Swain, E. D., B. Howie, and J. Dixon (1996) Description and field analysis of a coupled ground-water/surface-water flow model (MODFLOW/BRANCH) with modifications for structures and wetlands in southern Dade County, Florida. Water-resources investigations report 96-4118. US Geological Survey, Tallahassee, FL. 67 pp.

TIME COVERAGE: 1996

SUMMARY: A coupled surface-water model and ground-water model were tested to simulate the interacting wetlands/surface-water/ground-water system of southern Dade County.

KEY WORDS: Hydrology, Models, Ground water, Surface water, Wetlands, MODFLOW, BRANCH, Dade County

1821

Swain, E. D., G. M. Tillis, and A. Kapadia (1997) Determining freshwater discharge through coastal structures in southeastern Florida. In: Proc., US Geological Survey Program on the South Florida Ecosystem. Ft. Lauderdale, FL, August 25-27, 1997. US Geological Survey open file report 97-385. US Geological Survey, Tallahassee, FL. 92.

TIME COVERAGE: 1997

SUMMARY: Freshwater discharges through canals in South Florida were determined for 16 coastal structures in Dade County and 7 in Broward County.

KEY WORDS: Fresh water, Hydraulic structures, Coastal structures, Dade County

1822

Swakon, E. A. (1977) Modeling of tide and wind induced flow in south Biscayne Bay and Card Sound. M.Sc. thesis. University of Miami, Coral Gables, FL. 143 pp.

TIME COVERAGE: 1976

SUMMARY: [SEE NEXT CITATION FOR DESCRIPTION OF THE WORK.]

KEY WORDS: Mathematical models, Tidal currents, Wind-driven currents, South Bay, Card Sound

1823

Swakon, E. A., S. P. Langley, and P. Robinson (1995) Permitting a large pipeline project across Biscayne Bay. Proc., 68th WEFTEC '95 (Water Environment Conference & Exposition). Miami Beach, FL, 1995. Water Environment Conference & Exposition, Alexandria, VA. 55-62.

TIME COVERAGE: 1993 - 1995

SUMMARY: Since 1990, Miami-Dade has been planning to replace the Cross Bay pipeline between Miami and Virginia Key. The options considered have faced severe environmental restrictions since Biscayne Bay is a protected Aquatic Preserve. Permits for replacement of the pipe were issued in 1993 and the in-water portion of pipeline replacement was completed in 1994. By 1995, some natural re-growth of seagrasses was noted in the disturbed bottoms area.

KEY WORDS: Pipelines, Permits, Sewage disposal, Environmental impact, Sea grass, Cross Bay Line

1824

Swakon, E. A., S. P. Langley, and P. Robinson (1995) Permitting a large pipeline project across Biscayne Bay. In: Proc., WEFTEC '95 (68th Water Environment Conference & Exposition). Miami Beach, FL, 1995. Water Environment Federation, Alexandria, VA. 55-62.

TIME COVERAGE: 1995

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Pipelines, Permits, Sewage disposal, Environmental impact, Seagrass

1825

Swakon, E. A., and J. D. Wang (1977) Modeling of tide and wind induced flow in south Biscayne Bay and Card Sound. Sea Grant technical bulletin 37. University of Miami Sea Grant Program, Coral Gables, FL. 156 pp.

TIME COVERAGE: 1976

SUMMARY: A model using the finite element technique to solve the vertically integrated equations of motion and continuity was applied to south Biscayne Bay and Card Sound to investigate the wind and tide induced flow.

KEY WORDS: Water circulation, Winds, Tidal currents, Card Sound, Models, Hydrodynamic equations, Convection, South Bay

1826

Swanson, L. J. (1973) Effects of elevated temperatures on food utilization by juvenile gray snappers, *Lutjanus griseus* (Linnaeus). M.Sc. thesis. University of Miami, Coral Gables, FL. 40 pp.

TIME COVERAGE: 1973

SUMMARY: Temperature exerts a strong influence upon the food consumption, conversion of food, and growth rate of juvenile gray snappers. Specimens for this laboratory study were collected in Goulds Canal.

KEY WORDS: Gray snapper, *Lutjanus griseus*, Temperature effects, Food consumption, Turkey Point, Goulds Canal

1827

Swart, P. K., J. J. Leder, P. Kramer, and B. Frederick (1992) Climate records in corals from the Florida Keys. Eos, 73(14):150.

TIME COVERAGE: 1745 - 1992?

SUMMARY: This abstract describes the results of the use of levels C and O isotopes in coral to study climate. At the Biscayne Bay sampling site where the isotopic record extended for over 250 years, the oxygen isotopic record, correlated with variations in rainfall in Miami over the past 90 years.

KEY WORDS: Climatic data, Coral, *Montastrea annularis*, Carbon isotopes, Florida Keys

1828

Swart, P. K., and R. Price (1999) The origin of variations in the stable oxygen, hydrogen, and carbon isotopes of waters in the coastal waters of South Florida. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 216.

TIME COVERAGE: 1999

SUMMARY: Based on a six-year time series of H, C and O isotopes from Florida Bay, and shorter time series from Whitewater Bay, the Ten Thousand Islands, Biscayne Bay and the Everglades, it is clear that "normal" estuarine isotopic behavior is not applicable. In South Florida, isotopic compositions are controlled by run off, evaporation, degradation of organic material, and mixing with marine waters.

KEY WORDS: Florida Bay, Whitewater Bay, Ten Thousand Islands, Everglades, Isotopic composition, C, O, H, Oxygen isotopes, Hydrogen isotopes, Carbon isotopes, Coastal waters,

1829

Swayze, L. J. (1980) Altitude of water table and chloride concentration at selected wells, Alexander Orr and Southwest Well-Field area, Biscayne Aquifer, Dade County, Florida. USGS open file report 81-54. US Geological Survey, Tallahassee, FL. One map.

TIME COVERAGE: 1980

SUMMARY: This is a map of the altitude of water table and chloride concentration in the Biscayne aquifer.

KEY WORDS: Water table, Water levels, Chlorides, Maps, Alexander Orr Well Field, Southwest Well Field, Biscayne Aquifer

1830

Swayze, L. J. (1978) Water-level contour map of the Biscayne Aquifer, Alexander Orr and Southwest Well-Field areas, Dade County, Florida. USGS open file report 79-1266. US Geological Survey, Tallahassee, FL. One map.

TIME COVERAGE: 1978

SUMMARY: This is a map of the water levels of the Biscayne aquifer.

KEY WORDS: Maps, Water levels, Biscayne Aquifer, Alexander Orr Well Field, Southwest Well Field

1831

Swiadek, J. W. (1997) The impacts of Hurricane Andrew on mangrove coasts in southern Florida: a review. J. Coastal Res., 13(1):242-245.

TIME COVERAGE: 1992

SUMMARY: Coastal mangroves in South Florida were seriously damaged by Hurricane Andrew. Damage was primarily related to high wind velocity and surge. Shore erosion was generally less than 15 m and was caused by wave action and storm surge. The erosion may continue or expand since wave and currents can reprofile unprotected subsurface and intertidal sediments uprooted by mangrove trees.

KEY WORDS: Mangrove swamps, Storm surge, Hurricane Andrew, Biscayne National Park, Everglades National Park

1832

Szmant, A. M. (1987) Biological investigations of the Black Creek vicinity, Biscayne National Park. Research/Resources Management rep. SER-87. National Park Service, Southeast Regional Office, Atlanta, GA. 64 pp.

TIME COVERAGE: 1986

SUMMARY: This report examined the changes in floral composition of the Black Creek area of Biscayne National Park, possible replacement of *Thalassia* by *Halodule*, and factors responsible for the change. No correlation was found between the distribution of *Thalassia* and sediment depth, nutrient or freshwater seepage out of the sediments. Lower water column salinity, nutrients and water color were found in the affected area.

KEY WORDS: Seagrass, *Thalassia*, *Halodule*, Algae, Canals, Black Creek, Biscayne National Park

1833

Tabb, D. C. (1958) Differences in the estuarine ecology of Florida waters and their effect on populations of the spotted weakfish, *Cynoscion nebulosus* (Cuvier and Valenciennes). In: Trans., Twenty-third North American Wildlife Conf. J. B. Trefethen, (ed.). St. Louis MO, 1958. Wildlife Management Institute, Washington, DC. 392-401.

TIME COVERAGE: 1958

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuaries, Brackishwater environment, Spotted weakfish, *Cynoscion nebulosus*, Florida

1834

Tabb, D. C. (1958) Investigation of possible effects on the marine environment of dredging and filling the Ragged Keys. Report to Florida State Board of Conservation. Faculty File. Marine Laboratory, University of Miami, Miami, FL. 13 pp.

TIME COVERAGE: 1958

SUMMARY: This is a report of the possible effects of a proposed bulkhead and fill project that would have consolidated the Ragged Keys in southern Biscayne Bay. The proposed consolidation would have shifted the currents in the area and destroyed ecosystems and navigation channels.

KEY WORDS: Dredging, Environmental impact, Aquatic environment, Ragged Keys

1835

Tabb, D. C. (1958) Report on the bait shrimp fishery of Biscayne Bay, Miami, Florida. ML 6030. Marine Laboratory, University of Miami, Miami, FL. 12 pp.

TIME COVERAGE: 1958

SUMMARY: This study provides information on the effects of trawling operations upon the algae and spermatophytes; and the fishes in bait shrimp catches, their sizes, and extent of mortality.

KEY WORDS: Bait fishing, Grass shrimp, *Penaeus duorarum*, Pink shrimp, Trawling

1836

Tabb, D. C., T. R. Alexander, T. M. Thomas, and N. Maynard (1967) The physical, biological and geological character of the area south of C-111 Canal in extreme southeastern Everglades National Park, Florida. Reports on Grants and Contracts. Institute of Marine Science, University of Miami, Miami, FL.

TIME COVERAGE: 1967

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Canal C-111, Salinity, Ecosystems, Vegetation, Topography, Aquatic organisms, Barnes Sound, Manatee Bay, Everglades National Park

1837

Tabb, D. C., and E. S. Iversen (1971) A survey to the literature relating to the south Florida ecosystem (with pertinent references from outside the geographic boundaries of the subject area). Final report to US Department of the Interior, National Park Service, Contract No. 14-10-6-990-043. Part I. ML 71098. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 205 pp.

TIME COVERAGE: 1971

SUMMARY: This is a bibliography of South Florida.

KEY WORDS: Bibliographies, Ecosystems, South Florida

1838

Tabb, D. C., and N. Kenny (1969) A brief history of Florida's live bait shrimp fishery with description of fishing gear and methods. In: Proc., World Scientific Conference on the Biol. and Culture of Shrimps and Prawns,. M. N. Mistakidis, (ed.). Mexico City, Mexico, 1967. FAO fisheries report 57. Food and Agriculture Organization of the United Nations, Rome, Italy. 1119-1134.

TIME COVERAGE: 1969

SUMMARY: This paper is a brief history of the live bait shrimp fishery in Florida. The three main species are *Penaeus duorarum*, *P. aztecus* and *P. satiferus*. Bait shrimping has been restricted in Biscayne Bay to an area south of the Rickenbacker Cswy. since 1953. Trawl gear is described.

KEY WORDS: Bait fishing, Shrimp, *Penaeus duorarum*, Trawl nets, Trawling, Fishing gear, *Penaeus aztecus*, *Penaeus satiferus*

1839

Tabb, D. C., W. T. Yang, Y. Hirono, and J. Heinen (1972) A manual for culture of pink shrimp, *Penaeus duorarum*, from eggs to postlarvae suitable for stocking. Sea Grant special bulletin 7. University of Miami Sea Grant Program, Coral Gables, FL. 59 pp.

TIME COVERAGE: 1972

SUMMARY: This report describes methods developed at the University of Miami for commercial culture of pink shrimp

KEY WORDS: Shrimp culture, Pink shrimp, *Penaeus duorarum*, Rearing, Brine shrimp, *Artemia salina*, Diatoms

1840

Tait, L. S. (. (1993) Lessons of Hurricane Andrew. Excerpts, 15th annual National Hurricane Conference. Orlando, FL, April 13 - 16, 1993. Federal Emergency Management Agency, Washington, DC.

TIME COVERAGE: 1992

SUMMARY: This report is a compilation of articles describing hurricane Andrew and its effect on South Florida.

KEY WORDS: Hurricanes, Disasters, Hurricane Andrew

1841

Tannehill, I. R. (1945) Hurricanes: Their Nature and History, Particularly Those of the West Indies and the Southern Coasts of the United States. Princeton University Press, Princeton, NJ. 275 pp.

TIME COVERAGE: 1945

SUMMARY: This book describes hurricanes and describes the most important storms of the 20th C to the time of writing. The Hurricane of 1926 is briefly discussed.

KEY WORDS: Hurricanes, Caribbean, Gulf of Mexico, Atlantic coast

1842

Taplin, K. A., and J. M. Hubertz (1994) Analyzing wave and storm surge impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project. In: Proc. Symp., Hurricanes of 1992: Lessons Learned and Implications for the Future. R. A. Cook, and M. Soltani, (eds.). Miami, FL, 1993. American Society of Civil Engineers, New York, NY. 587-596.

TIME COVERAGE: 1992

SUMMARY: This paper discussed the wave conditions impacting the shoreline during Hurricane Andrew including the response of the beach fill project to the storm's waves and water levels. Using information derived from a wave hindcast study and measured physical data, the actual beach fill response was simulated using numerical modeling techniques. The overall performance of the beach fill project was discussed.

KEY WORDS: Storm surge, Beach erosion, Wave effects, Hurricane Andrew, Dade County Beach Erosion Control and Hurricane Protection Project

1843

Targett, N. M., and A. Mitsui (1979) Toxicity of subtropical marine algae using fish mortality and red blood cell hemolysis for bioassays. J. Phycol., 15(2):181-185.

TIME COVERAGE: 1979

SUMMARY: Fish mortality (*Eucinostomus argenteus*) and fish erythrocyte (*Archosargus rhomboidalis*) hemolysis were used to survey for the presence of toxic principles in aqueous extracts of 19 species of marine macroalgae found in South Florida. Considerable differences were found between and within each bioassay. Only the extract of *Anadyomene stellata* was found to be toxic in both bioassays.

KEY WORDS: Algae, Toxicants, Mortality causes, Erythrocytes, Fish diseases, Key Largo, *Eucinostomus argenteus*, *Archosargus rhomboidalis*

1844

Targett, T. E. (1979) A contribution to the biology of the puffers *Sphoeroides testudineus* and *Sphoeroides spengleri* from Biscayne Bay, Florida. Fishery Bull., 77(1):292-295.

TIME COVERAGE: 1974

SUMMARY: Size ranges and spawning behavior of puffers are described. Specimens were collected in Virginia Key.

KEY WORDS: Pufferfish, Checkered puffer, Reproduction, Feeding behavior, Geographical distribution, Growth, Bandtail puffer, *Sphoeroides testudineus*, *Sphoeroides spengleri*, Virginia Key

1845

Targett, T. E. (1975) Food resource partitioning between the pufferfishes *Sphoeroides testudineus* and *S. spengleri* from Biscayne Bay, Florida and other aspects of their biology. M.Sc. thesis. University of Miami, Coral Gables, FL. 59 pp.

TIME COVERAGE: 1973 - 1974

SUMMARY: [SEE NEXT CITATION FOR DESCRIPTION OF THE WORK.]

KEY WORDS: Checkered puffer, *Sphoeroides testudineus*, Bandtail puffer, *Sphoeroides spengleri*, Pufferfish, Feeding, Food availability, Interspecific relationships, Intraspecific relationships, Competition

1846

Targett, T. E. (1978) Food resource partitioning by the pufferfishes *Sphoeroides spengleri* and *S. testudineus* from Biscayne Bay, Florida. Mar. Biol., 49(-):83-91.

TIME COVERAGE: 1973 - 1974

SUMMARY: The partitioning of food resources by two coexisting pufferfishes from Biscayne Bay was investigated. Mollusks and crustaceans were important prey groups. Partitioning was found between the two species overall, between overlapping size ranges, and between both species' most abundant size group.

KEY WORDS: Checkered puffer, *Sphoeroides spengleri*, Bandtail puffer, *Sphoeroides testudineus*, Pufferfish, Feeding, Food availability, Interspecific relationships, Intraspecific relationships, Competition, Virginia Key

1847

Task Force on Dade County Waterways Regulation (1973) Final report. Report. Task Force on Dade County Waterways Regulation, Miami, FL. Various paging.

TIME COVERAGE: 1973

SUMMARY: This task force was established to develop amendments to existing codes and ordinances to control eye sores along the Miami River. The recommendations included increasing boat registration, improved steps for dealing with derelict craft, regulations on pollution from boats, and ordinances regarding shoreline facilities.

KEY WORDS: Water use, Boating, Legal aspects, Coastal zone management, Dade County, Miami River

1848

Task Force on Dade County Waterways Regulation (1973) Final report. Sea Grant special bulletin 12. University of Miami Sea Grant Program, Miami, FL.

TIME COVERAGE: 1973

SUMMARY: The Task Force recommended that a managerial entity be established which would report directly to the County Manager, and which would be charged with the task of coordinating the responsible governmental agencies. Recommendations were also made on watercraft ownership and use, pollution from watercraft, shoreline facilities, and enhancement of shoreline use.

KEY WORDS: Water use, Boating, Legal aspects, Coastal zone management, Dade County

1849

Tavares, S. A. (1999) Coastal permitting & enforcement in Miami-Dade County. M.A. report. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coastal zone management, Legal aspects, Environmental legislation, Permits, Property rights, Dade County

1850

Taylor, B. F. (1984) Ecology of subtropical, shallow water environments: chemistry of copper and chlorine introduced into marine systems during energy production. DOE/EV/O3801-T12. DE85 003703. Final report for contract DE-AS05-76VO3801. NTIS, Washington, DC.

TIME COVERAGE: 1984

SUMMARY: This citation reported on studies of the interaction of Cu with dissolved organic compounds, the assessment of oxidants generated in seawater by chlorination, methods for the quantification of organic compounds in seawater.

KEY WORDS: Cu, Chlorine, Dissolved organic matter

1851

Taylor, D. L. (1971) Taxonomy of some common Amphidinium species. British Phycol. J., 6(-):129-133.

TIME COVERAGE: 1971

SUMMARY: The taxonomy of these species is described. Some samples were collected in Biscayne Bay.

KEY WORDS: Dinoflagellates, Amphidinium, Taxonomy

1852

Taylor, D. L. (1971) Ultrastructure of the 'zooxanthella' *Endodinium chattonii* in situ. J. Mar. Biol. Assoc. U. K., 51(1):227-234.

TIME COVERAGE: 1971

SUMMARY: Studies of the ultrastructural morphology of *Endodinium chattonii* reveal new taxonomic characters which support the generic separation of this algae and the only rather completely described symbiotic dinoflagellate *Symbiodinium microadriaticum*. A revision of the taxonomy of symbiotic dinoflagellates is proposed.

KEY WORDS: Dinoflagellates, *Endodinium chattonii*, Ultrastructure, Taxonomy, Bay of Naples, Bay of Biscay, *Symbiodinium microadriaticum*, Dinoflagellates

1853

Taylor, R. B. (1971) Numerical modeling of tidal circulation of inlet systems as applied to the Broad Creek, Angelfish Creek, and Old Rhodes Channel complex in south Florida. Tech. report 71034. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 96 pp.

TIME COVERAGE: 1971

SUMMARY: The objective of this study was to prove the feasibility of computing tidal transport through a complex system of natural tidal inlets.

KEY WORDS: Mathematical models, Tidal currents, Inlets (Waterways), Broad Creek, Angelfish Creek, Old Rhodes Channel, Turkey Point, Card Sound

1854

Taylor, R. B. (1971) Numerical modeling of tidal circulation of inlet systems as applied to the Broad Creek, Angelfish Creek, and Old Rhodes Channel complex in south Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 96 pp.

TIME COVERAGE: 1971

SUMMARY: The objectives of this research were to prove the feasibility of computing tidal transport through a complex system of natural inlets using tidal height data and inlet geometry by developing a numerical model which can be represented by a network of hydraulic flow resistances across which the applied hydraulic head difference is equivalent to the estuary-ocean tidal height difference, and to determine the amount of tidal exchange between Card Sound and the Atlantic Ocean.

KEY WORDS: Mathematical models, Tidal currents, Inlets (Waterways), Broad Creek, Angelfish Creek, Old Rhodes Channel, Turkey Point, Card Sound

1855

Taylor, R. B., and R. G. Dean (1974) Exchange characteristics of tidal inlets. In: Proc., 14th Coastal Engineering Conference. Copenhagen, Denmark, 1974. American Society of Civil Engineers, New York, NY. 2268-2289.

TIME COVERAGE: 1974

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water circulation, Water mixing, Flushing, Tidal inlets, Broad Creek, Caesar's Creek, Angelfish Creek, South Bay

1856

Taylor, W. R. (1960) Marine Algae of the Eastern Tropical and Subtropical Coasts of the Americas. University of Michigan Press, Ann Arbor, MI. 870 pp.

TIME COVERAGE: 1960

SUMMARY: This book is a guide to marine algae of the tropical coasts of the Americas.

KEY WORDS: Algae, Tropical environment, Subtropical zones, Atlantic coast, Guide

1857

Teas, H. J. (1977) Ecology and restoration of mangrove shorelines in Florida. Env. Conservation, 4(1):51-58.

TIME COVERAGE: 1977

SUMMARY: Mangroves were planted at several sites in Florida and planting success evaluated. Mangroves of several sizes were planted at a variety of sites that differed in shoreline energy, tidal depth, root-parasite prevalence, substrate type, salinity and public access. Counts and measurements after periods of up to 4 years indicated that shoreline energy, tidal depth and vandalism were the most important factors limiting mangrove establishment and survival. Planting costs were also provided.

KEY WORDS: Mangrove swamps, Coastal zone, Restoration

1858

Teas, H. J. (1974) Mangroves of Biscayne Bay: a study of the mangrove communities along the mainland in Coral Gables and south to US Highway 1 in Dade County, Florida. Report. University of Miami, Coral Gables, FL. 107 pp.

TIME COVERAGE: 1974

SUMMARY: Mangroves along Biscayne Bay can be classified into five communities: Coastal Band, Dense Scrub, Sparse Scrub, White and Mixed, and Black Marsh. The Coastal Band of mature mangroves along the shore is the most productive, and the dwarfed Sparse Scrub the least. Red mangroves along Biscayne Bay suffer from depravation by the marine isopod *Sphaeroma* and from tumors, and all mangrove species suffer from lightning damage and storm erosion. The historical, legal and biological aspects of the bulkhead line were evaluated.

KEY WORDS: Mangrove swamps, Red mangrove, *Rhizophora mangle*, Black mangrove, *Avicennia germinans*, White mangrove, *Laguncularia racemosa*

1859

Teas, H. J. (1974) Mangrove planting in south Florida. In: Proc., 1st Ann. Conf. on Restoration of Coastal Vegetation in Florida. Tampa, FL, 1974. Hillsborough Community College, Tampa, FL. 27-28.

TIME COVERAGE: 1974

SUMMARY: This short citation discusses mangrove planting efforts in various areas including Biscayne Bay.

KEY WORDS: Mangrove swamps, Transplantation

1860

Teas, H. J. (1980) Mangrove swamp creation. In: Proc., Rehabilitation and Creation of Selected Coastal Habitats. J. C. Lewis, and E. W. Bunce, (eds.). Sapelo Island, GA, 1976. Biological Services Program FWS/OBS-80/27. US Fish and Wildlife Service, Office of Biological Services, Washington, DC. 63-90.

TIME COVERAGE: 1980

SUMMARY: This citation describes the conditions necessary for the creation of a mangrove swamp. Biscayne Bay is used as an example.

KEY WORDS: Mangrove swamps, Red mangrove, *Rhizophora mangle*, Black mangrove, *Avicennia germinans*, White mangrove, *Laguncularia racemosa*

1861

Teas, H. J. (1976) Productivity of Biscayne Bay mangroves. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 103-112.

TIME COVERAGE: 1976

SUMMARY: Mangroves of Biscayne Bay have been classified into five community types: coastal band, dense scrub, sparse scrub, sparse swamp, and white and mixed community. Four of these five communities developed in their present form or location because of the salt water encroachment that followed draining of the Everglades, cutting agricultural and mosquito ditches, and blocking of overland freshwater flow by roads and levees. Because of the documented spread of mangroves into the marl lands, it may be that in spite of losses of shoreline to landfill activities, there is a greater area of mangroves along Biscayne Bay today than in 1900.

KEY WORDS: Mangrove swamps, Biological production, Detritus

1862

Teas, H. J. (1979) Silviculture with saline water. In: The Biosaline Concept: An Approach to the Utilization of Underexploited Resources. A. Hollaender, J. C. Aller, E. Epstein, A. San Pietro, and O. R. Zaborsky (eds.). Plenum Press, New York, NY. 117-161.

TIME COVERAGE: 1979

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Mangrove swamps, Saline water, Forest industry

1863

Teas, H. J., M. De Groot, E. Duerr, and B. E. Grayson (1995) Sodium uptake, accumulation and loss in leaves of red mangrove (*Rhizophora mangle*). In: Biology of Salt Tolerant Plants. M. A. Khan, and I. A. Ungar (eds.). University of Karachi, Karachi, Pakistan. 246-251.

TIME COVERAGE: 1995

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Red mangrove, *Rhizophora mangle*, Leaves, Oil pollution, Turkey Point

1864

Teas, H. J., E. O. Duerr, and J. R. Wilcox (1987) Effects of South Louisiana crude oil and dispersants on *Rhizophora* mangroves. Mar. Pollut. Bull., 18(3):122-124.

TIME COVERAGE: 1987

SUMMARY: Sprays of seawater or dispersant were found to have no value in saving oiled *Rhizophora mangle* mangroves. Mangroves treated with dispersed oil showed no greater mortality than those untreated.

KEY WORDS: *Rhizophora mangle*, Oil pollution, Turkey Point Power Plant, Red mangrove

1865

Teas, H. J., and W. Jurgens (1978) Aerial planting of *Rhizophora* mangrove propagules in Florida. In: Proc., 5th annual Conf. on Restoration of Coastal Vegetation in Florida. D. P. Cole, (ed.). Tampa, FL, 1978. Hillsborough Community College, Tampa, FL. 1-25.

TIME COVERAGE: 1978

SUMMARY: This citation describes aerial planting of mangrove propagules. Several types of missiles encasing the propagules were evaluated.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Plant culture, Sandy Key

1866

Teas, H. J., H. R. Wanless, and R. E. Chardon (1976) Effects of man on the shore vegetation of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 133-156.

TIME COVERAGE: 1765 - 1976

SUMMARY: The shoreline vegetation of Biscayne Bay changed significantly since the turn of the century. Shore vegetation was eliminated in most of the northern Bay and seriously impacted elsewhere. Vegetation history was reconstructed at five sites: Interama, Cocoplum, Saga, section 33 of T56, R40 (south of Black Point), and Card Point.

KEY WORDS: Vegetation, Coastal zone, Man-induced effects, Interama, Cocoplum, Saga, Card Point

1867

Tebeau, C. W. (1974) South Florida water management. In: Environments of south Florida: Present and Past. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 362-366.

TIME COVERAGE: 1974

SUMMARY: This citation describes water management activities in South Florida.

KEY WORDS: Water management, Everglades

1868

Tebo, L. B., R. L. Estes, and R. R. Lassiter (1968) Temperature studies lower Biscayne Bay, Florida. October. Federal Water Pollution Control Administration, Southeast Water Laboratory, Atlanta, GA. 87 pp.

TIME COVERAGE: 1968

SUMMARY: This study was conducted to obtain baseline water temperature data prior to the installation of the nuclear facilities at Turkey Point.

KEY WORDS: Water temperature, Turkey Point, South Bay

1869

Tedesco, L. P. (1991) Generation of carbonate fabrics and facies by repetitive excavation and infilling of burrow networks in recent and ancient sequences. Ph.D. dissertation. University of Miami, Coral Gables, FL. 434 pp.

TIME COVERAGE: 1991

SUMMARY: Excavation of deep, open burrow networks coupled with subsequent infilling with surficial sediment produces a new sedimentary deposit and results in obliteration or severe diagenetic transformation of precursor depositional facies. Repetitive excavation and infilling is responsible for creating the preserved depositional facies of many marine deposits.

KEY WORDS: Burrows, Burrowing organisms, Facies, Carbonate sediments, Bioturbation, Thalassinid crustaceans, Caicos Platform, Safety Valve

1870

Tedesco, L. P. (1994) Vertical fluxes resulting from bioirrigation: the significant effect of deep burrowing arthropods. Bull. Mar. Sci., 54(3):1086.

TIME COVERAGE: 1994

SUMMARY: This abstract describes vertical fluxes resulting from deep burrowing arthropods. Sediment expelled from burrows is overwhelmingly less than 175  $\mu$  in settling diameter and represents grains swept up and out of the burrow by currents generated by the shrimp.

KEY WORDS: Burrows, Burrowing organisms, Bioturbation, Callinassa, Alpheus, Upogebia

1871

Tedesco, L. P., and R. C. Aller (1997)  $^{210}\text{Pb}$  chronology of sequences affected by burrow excavation and infilling: examples from shallow marine carbonate sediment sequences, Holocene south Florida and Caicos Platform, British West Indies. J. Sedimentary Res., 67(1):36-46.

TIME COVERAGE: 1997

SUMMARY: This paper reviews the  $^{210}\text{Pb}$  chronology of sequences affected by megafaunal bioturbation. Bioturbation was found to be an important process below 10 - 20 cm in modern sediment deposits. As a result, entire facies transgressed during sea level rise or formed during distinct physical events can be largely obliterated and biogenically replaced by more recent overlying material on time scales of approximately 100 - 600 years.

KEY WORDS: Burrowing organisms, Carbonate sediments, Biogenic sedimentary structures, Safety Valve, Caicos Platform

1872

Tedesco, L. P., J. A. Risi, H. R. Wanless, and F. V. Hernly (1996) The evolution of shallow marine environments of South Florida following Hurricane Andrew. Abstracts with programs - Geological Society of America, 28(7):A-274.

TIME COVERAGE: 1992

SUMMARY: Four years after Hurricane Andrew passed over South Florida, areas of destabilized bottom continue to evolve and little recovery had occurred. The most pronounced long-term change occurred on the high energy shallow marine carbonate banks forming the seaward margin of Biscayne Bay. These banks experienced accelerated surge currents at areas of shoaling or confinement. Seagrass blowouts covered a broad expanse of the seaward bank margin and up to 1 m initial erosion of muddy substrate resulted. Destabilized areas exposed to lower energy storm events continued to be reworked. Andrew activated skeletal sand shoals in the backreef area that had been previously stabilized by *Thalassia*. Some areas of previously dense seagrass had a series of blowouts. These blowouts continue to erode on both the northern and southern flanks in response to lower energy storm events. Recolonization attempts by calcareous alga and seagrasses are mostly thwarted by the mobile bottom of the high energy backreef. Recolonization by *Halodule* and *Syringodium* has stabilized lower energy mud banks in the interior of the Bay.

KEY WORDS: Shallow water, Sea grass, Carbonate sediments, erosion, Hurricane Andrew

1873

Tedesco, L. P., and H. R. Wanless (1991) Generation of sedimentary fabrics and facies by repetitive excavations and storm infilling burrow networks, Holocene of south Florida and Caicos Platform, B.W.I. Palaios, 6(1):326-343.

TIME COVERAGE: 1991

SUMMARY: Excavation of deep, open burrow networks and subsequent infilling with sediment from the surface produces an entirely new sedimentary deposit and results in obliteration to severe diagenetic transformation of precursor depositional facies. The carbonate mudbanks of Biscayne and Florida Bays are discussed.

KEY WORDS: Burrows, Bioturbation, Biogenic deposits, Callianassa, Sediment texture, Mud banks, South Florida, Caicos Platform, Florida Bay

1874

Tedesco, L. P., and H. R. Wanless (1995) Growth and burrow-transformation of carbonate banks: comparison of modern skeletal banks of south Florida and Pennsylvanian phylloid banks of south-eastern Kansas, USA. In: Carbonate Mud-mounds: Their Origin and Evolution. C. L. V. Monty, D. W. J. Bosence, P. H. Bridges, and B. R. Pratt (eds.). Special publication number 23 of the International Association of Sedimentologists. Blackwell Scientific, Oxford, UK. 537 pp.

TIME COVERAGE: 1995

SUMMARY: The fabric and facies of both modern and ancient carbonate skeletal banks have been difficult to interpret because they contain characteristics that appear equivocal with respect to reconstruction of growth history, paleoenvironment and energy setting. Modern skeletal banks such as the Safety Valve are built predominantly by pulses of physically deposited, layered grainstone to mudstone. Intense burrowing by excavating organisms and infilling of open burrows by storms between mudstone depositional events, converts layered mudstone into the mottled skeletal packstone that dominated skeletal banks.

KEY WORDS: Mud banks, Carbonate sediments, Sand banks, Burrows, Safety Valve Bank, South Florida, Kansas

1875

Tedesco, L. P., H. R. Wanless, and L. A. Scusa (1993) Impact of Hurricane Andrew on sandy coastlines and shallow marine banks of South Florida. Abstracts with programs (Geological Society of America), 25(4):73.

TIME COVERAGE: BB 362

SUMMARY: Shallow marine carbonate banks forming the seaward margin of Biscayne Bay faced directly into currents transporting surge waters into the Bay. Erosion and scour was limited to areas where current velocity was increased because of shoaling onto the banks or confinement in channels to areas where current velocities exceeded 150 cm/sec, seagrasses were eroded and mud substrates scoured to depths of up to 1 m. A bankward thinning wedge of skeletal gravel to sand, sourced from erosional areas, was deposited on the banks. The response of sandy coastlines was dependent on the orientation of the coastline with respect to onshore surge directions. Beaches on the north-central portion of Cape Florida were oriented perpendicular to onshore surge and had overwash lobes of sand transported onto the island. Beaches on the southern portion of Cape Florida were oriented at an angle to the storm surge. Dunes were scaped and onshore surge channels formed, but the beach was not flooded by storm surge water. Beaches in both areas were reprofiled into a broad, gently sloping storm ramp which initially showed little shoreline erosion. Wave attack from strong easterlies has reprofiled the storm ramp, resulting in as much as 30 m of post-storm erosion to Cape Florida's beaches.

KEY WORDS: Coastal landforms, Sand banks, Beaches, Hurricane Andrew, Cape Florida

1876

Tedesco, L. P., H. R. Wanless, L. A. Scusa, J. A. Risi, and S. Gelsanliter (1995) Impact of Hurricane Andrew on South Florida's sandy coastlines. In: Impacts of Hurricane Andrew on the Coastal Zones of Florida and Louisiana: 22-26 August 1992 (J. Coastal Res. Spec. Issue 21). G. W. Stone, and C. W. Finkl (eds.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 364 pp.

TIME COVERAGE: 1992 - 1993

SUMMARY: Beaches on the north-central portion of Cape Florida were oriented nearly perpendicular to onshore surge and had overwash lobes of sand transported onto the island. Beaches on the southern portion of Cape Florida were oriented at an oblique angle to the storm surge. Dunes were scaped and large channels formed but the beach was not significantly overwashed by storm surge waters. Beaches on both areas were reshaped into a broad, gently sloping storm ramp which initially showed little shoreline erosion following the storm. Wave attack from strong easterlies subsequently reshaped the storm ramp resulting in vertical growth of the berm and seaward portion of the backshore and landward migration of the beach face. Between September 1992 and March 1993, portions of the Cape Florida shorelines migrated landward as much as 15 m. Because this land migration of the beach face was associated with net increase of sand in the backshore region, it was concluded to be the result of the reshaping of the hurricane ramp, rather than a part of the normal seasonal beach migration cycle. By June 1993, the shoreline had returned to roughly pre-storm position.

KEY WORDS: Beach erosion, Storm surge, Tidal inlets, Overwash, Hurricane Andrew, South Florida, Key Biscayne, Cape Florida

1877

Tellock, J. A. (1988) Age and growth of laboratory-reared larval snook, *Centropomus undecimalis*, from otolith microstructure. M.Sc. thesis. University of Miami, Coral Gables, FL. 63 pp.

TIME COVERAGE: 1985 - 1986

SUMMARY: Age and growth of larval snook were determined for larvae reared in the laboratory from stock collected in Biscayne Bay and in the Naples/Marco Island area.

KEY WORDS: Snook, *Centropomus undecimalis*, Laboratory culture, Age determination, Growth, Otolith reading, Larval development, Naples Bay, Marco Island

1878

Textoris, S. D. (1989) Patch reefs in the Pleistocene of South Florida and their implications. Abstracts with programs (Geological Society of America), 21(6):A161.

TIME COVERAGE: 1989

SUMMARY: The Pleistocene patch reef support the supposition that the Florida Keys formed, in part, as a barrier reef during the late Pleistocene. Termination of the reef growth occurred when they either were smothered by the oolite or exposed subaerially with the withdrawal of the sea from the area.

KEY WORDS: Coral reefs, Miami Limestone, Key Largo Limestone, Pleistocene, Florida Keys

1879

Teytaud, A. R. (1971) Laboratory studies on sex recognition in the blue crab, *Callinectes sapidus* Rathbun. M.Sc. thesis. University of Miami, Coral Gables, FL. 63 pp.

TIME COVERAGE: 1971

SUMMARY: This work reported the results of behavioral studies conducted to determine the function of these displays in intraspecific sex recognition. A few specimens were collected in Biscayne Bay most were obtained from commercial trap fishermen operating in Card Sound.

KEY WORDS: Blue crab, *Callinectes sapidus*, Sexual behavior, Courtship, Card Sound

1880

Thane-Fenchel, A. (1970) Interstitial gastrotrichs in some south Florida beaches. Ophelia, 7(-):113-138.

TIME COVERAGE: 1970

SUMMARY: The interstitial fauna of gastrotrichs in calcareous and silicious sands of some beaches in southern Florida were described, including some species new to science. Most species were found to eat diatoms.

KEY WORDS: Gastrotrichs, Psammon, Sand, Bear Cut, Key Biscayne, Matheson Hammock

1881

Thomas, C. (1987) Uptake and effects of petroleum hydrocarbons on *Rhizophora mangle* L. M.Sc. thesis. University of Miami, Coral Gables, FL. 175 pp.

TIME COVERAGE: 1987

SUMMARY: Reproductively mature red mangroves were subjected to various concentrations of mineral, lubricating and crude oils for several time periods. The effect of petroleum oils on both the growth and hydrocarbon content of the plant tissues was oil- and time-specific. The order of toxicity was mineral < lubricating < crude oil.

KEY WORDS: Red mangrove, *Rhizophora mangle*, Petroleum hydrocarbons, Card Sound

1882

Thomas, J. D., and J. L. Barnard (1985) *Perioculodes cerasinus*, n. sp., the first record of the genus from the Caribbean Sea (Amphipoda: Oedicerotidae). Proc. Biol. Soc. Wash., 98(1):98-106.

TIME COVERAGE: 1985

SUMMARY: This species, a probable cryptic fossorial amphipod, is described. Specimens were collected in Tobago, Belize, the Florida Keys and Biscayne Bay.

KEY WORDS: Amphipods, New species, Distribution records, Animal morphology, Taxonomy, Belize, Caribbean, *Perioculodes cerasinus*, Florida Keys

1883

Thomas, L. P. (1961) Distribution and salinity tolerance in the amphiid brittlestar, *Ophiophragmus filigraneus* (Lyman, 1875). Bull. Mar. Sci. Gulf Caribb., 11(1):158-160.

TIME COVERAGE: 1961

SUMMARY: This paper is a brief discussion of the ecology and distribution of the brittlestar and its salinity tolerance.

KEY WORDS: Brittle stars, *Ophiophragmus filigraneus*, Salinity tolerance, Ecological distribution

1884

Thomas, L. P. (1965) A monograph of the amphiid brittlestars of the Western Atlantic. Ph.D. dissertation. University of Miami, Coral Gables, FL. 489 pp.

TIME COVERAGE: 1965

SUMMARY: This is a taxonomic study of brittlestars found in the Western Atlantic.

KEY WORDS: Brittle stars, Ophiuroids, Amphiuroids, Taxonomy, Western Atlantic

1885

Thomas, L. P. (1960) A note on the feeding habits of the West Indian sea star *Oreaster reticulatus* (Linnaeus). Quart. J. Fla. Acad. Sci., 23(2):167-168.

TIME COVERAGE: 1960

SUMMARY: This paper describes a specimen of the Indian sea star eating a sponge.

KEY WORDS: Sea star, *Oreaster reticulatus*, Feeding, Sponges

1886

Thomas, L. P. (1962) The shallow water amphiid brittle stars (Echinodermata, Ophiuroidea) of Florida. Bull. Mar. Sci. Gulf Caribb., 12(4):623-694.

TIME COVERAGE: 1962

SUMMARY: Shallow water amphiid brittle stars collected in Florida are described in detail.

KEY WORDS: Brittle stars, Ophiuroids, Taxonomy, Florida

1887

Thomas, L. P. (1975) Shallow-water marine environments of the Caribbean; a collection of reports done by students in MBS 675. Report compiled by L. P. Thomas. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1975

SUMMARY: The papers in this collection are unedited field trip reports written by students of the Marine Field Ecology course.

KEY WORDS: Shallow water, Aquatic environment, Key Biscayne, Ragged Keys, Matheson Hammock, Shell Key, Soldier Key, Bache Shoal

1888

Thomas, L. P. (1959) A systematic study of the shallow water brittle stars of the family Amphiuroidae of Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 156 pp.

TIME COVERAGE: 1959

SUMMARY: This is a taxonomic study of the brittlestars of Florida.

KEY WORDS: Brittle stars, Amphiuroidae, Taxonomy

1889

Thomas, L. P. (1962) Two large ophiidermatid brittlestars new to Florida. Quart. J. Fla. Acad. Sci., 25(1):65-69.

TIME COVERAGE: 1962

SUMMARY: Two large brittle stars newly found in Florida waters are described. Some specimens were collected in Biscayne Bay.

KEY WORDS: Brittle stars, *Ophioderma guttatum*, *Ophioderma squamosissimum*

1890

Thomas, L. P., D. R. Moore, and R. C. Work (1961) Effects of Hurricane Donna on the turtle grass beds of Biscayne Bay, Florida. Bull. Mar. Sci. Gulf Caribb., 11(-):191-197.

TIME COVERAGE: 1960

SUMMARY: The dry and wet weight of *Thalassia* washed ashore during Hurricane Donna was estimated. Damage to the *Thalassia* beds was considered light. Agents destructive to turtle grass other than winds were discussed.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Hurricane Donna, Hurricanes

1891

Thomas, R. F., and L. K. Opresko (1973) Observations on *Octopus joubini*: four laboratory reared generations. Nautilus, 87(-):61-65.

TIME COVERAGE: 1973

SUMMARY: Four consecutive generations of octopii were reared in the laboratory from an initial female collected off Key Biscayne.

KEY WORDS: *Octopus joubini*, Rearing, Laboratory culture, Key Biscayne

1892

Thomas, T. M. (1974) A detailed analysis of climatological and hydrological records of south Florida with reference to man's influence upon ecosystem evolution. In: *Environments of South Florida: Present and Past*. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 82-122.

TIME COVERAGE: 1974

SUMMARY: This citation summarized the climatological and hydrological records of south Florida with emphasis on anthropogenic impact on environmental evolution.

KEY WORDS: Climatology, Hydrologic cycle, Rainfall, Air temperature, Water table, Saline intrusion, Man-induced effects

1893

Thorhaug, A. (1965) Aspects of the developmental morphology and biology of the genus *Penicillus*, a green marine alga. M.Sc. thesis. University of Miami, Coral Gables, FL. 119 pp.

TIME COVERAGE: 1965

SUMMARY: Field studies of the distribution, relative density, seasonal variations, and favorable environments in Biscayne Bay and the Florida Keys regions showed that *Penicillus* is an important organism in shallow water communities. Plants were found to be more abundant in the summer and to grow predominantly on sandy or muddy bottoms.

KEY WORDS: Algae, *Penicillus*, Plant morphology, Biological development, Florida Keys

1894

Thorhaug, A. (1981) Biology and management of seagrass in the Caribbean. Ambio, 10(6):295-298.

TIME COVERAGE: 1981

SUMMARY: The seagrass ecosystems of the Caribbean and the effects of human impact on these systems, including dredge and fill operations, oil, chemical pollution and thermal pollution, were discussed. The seagrass replanting efforts in Biscayne Bay were described.

KEY WORDS: Seagrass, Ecosystem management, Pollution, Caribbean

1895

Thorhaug, A. (1974) An ecological study of South Biscayne Bay and Card Sound: the *Thalassia* microcosm. TID-26605. Annual report to US Atomic Energy Commission [AT-(40-1)-4493]. National Technical Information Service, Springfield, Va. 182 pp.

TIME COVERAGE: 1971 - 1974

SUMMARY: Freshwater runoff from the Model Land canal in Card Sound appears to lower the population around the mouth of the canal. High growth rates of *Thalassia* were encountered in areas with high sediment organic carbon content. Turbidity in normal circumstances does not appear to retard growth. Seagrass acts as a chief primary producer in Card Sound and along the western shore of South Biscayne Bay.

KEY WORDS: *Thalassia*, Seagrass, Algae, Card Sound, Turkey Point

1896

Thorhaug, A. (1975) An ecological study of the effects of nuclear power plants on benthic macroplant microcosms in subtropical and tropical estuaries. Ann. progress rep. to ERDA, 1974 - 1975. NTIS ORO-4493-2. National Technical Information Service, Springfield, VA. 8 pp.

TIME COVERAGE: 1974 - 1975

SUMMARY: This is a progress report on studies carried out in Biscayne Bay and Card Sound.

KEY WORDS: Nuclear power plants, Thermal pollution, Benthos, Seagrass, *Thalassia*, Algae, Turkey Point, Card Sound, South Bay

1897

Thorhaug, A. (1976) An ecological study of the effects of power plants on benthic macroplant microcosms in subtropical and tropical estuaries. Ann. progress rep. to ERDA, 1975-1976. NTIS ORO-4493-3. National Technical Information Service, Springfield, VA. 20 pp.

TIME COVERAGE: 1975-1976

SUMMARY: This is a progress report on studies carried out in Biscayne Bay and Card Sound.

KEY WORDS: Power plants, Thermal pollution, Seagrass, Algae, Benthos, Metals, Card Sound, South Bay

1898

Thorhaug, A. (1977) Ecology and management of an estuary at the edge of the American Caribbean: Biscayne Bay. Marine Res. in Indonesia, 19(-):39-56.

TIME COVERAGE: 1977

SUMMARY: The fragility of the Biscayne Bay seagrass and mangrove dominated estuary was demonstrated by repeated destruction of these ecosystems by man's activities, such as dredging, filling, drainage, sewerage, thermal pollution, and others.

KEY WORDS: Estuaries, Environment management, Ecosystem management, Urbanization

1899

Thorhaug, A. (1974) Effect of thermal effluents on the marine biology of southeastern Florida. In: Proc. Symp., Thermal Ecology. J. W. Gibbons, and R. R. Sharitz, (eds.). Augusta, GA, 1973. AEC symposium series. Technical Information Center, US Atomic Energy Commission, Oak Ridge, TN. 518-531.

TIME COVERAGE: 1968 - 1972

SUMMARY: This paper examines the effect of heated effluents from the Turkey Point Power Plant. Significant changes related to the temperature levels of the effluents occurred in the

benthic communities. A second larger canal was opened in 1972. Effects of silt and heat on the marine communities dominated by *Thalassia* and various species of algae were compared to baseline data collected in Card Sound in 1971.

KEY WORDS: Thermal pollution, Temperature effects, Turtle grass, *Thalassia testudinum*, Algae, Turkey Point Power Plant, Card Sound

1900

Thorhaug, A. (1980) Environmental management of a highly impacted, urbanized tropical estuary: rehabilitation and restoration. Helgolander Meeresuntersuchungen, 33(-):614-623.

TIME COVERAGE: 1980

SUMMARY: The principles of the dynamics and interrelationships within the dominant subtropical and tropical Caribbean seagrass community of Biscayne Bay were studied before, during and after impact. Artificial restoration of *Thalassia* in the Bay were described.

KEY WORDS: Resource management, Brackishwater pollution, Conservation, *Thalassia testudinum*

1901

Thorhaug, A. (1988) Fish aggregation and fisheries nursery restoration by seagrass rehabilitation. Bull. Mar. Sci., 44(2):1070-1071.

TIME COVERAGE: 1988

SUMMARY: This abstracts discussed the aggregation of fish in seagrass beds newly planted near artificial reefs, and their role as nursery grounds.

KEY WORDS: Artificial reefs, Nursery grounds, Seagrass, Attracting techniques, Habitat improvement (Physical)

1902

Thorhaug, A. (1979) The flowering and fruiting of restored *Thalassia* beds: a preliminary note. Aquatic Bot., 6(-):189-192.

TIME COVERAGE: 1976 - 1977

SUMMARY: *Thalassia* from an area previously denuded by thermal effluents flowered and reached sexual maturity. This is the first report of a restored *Thalassia* bed reseeding the recipient area into which it was transplanted.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Transplantation, Restoration

1903

Thorhaug, A. (1971) Grasses and macroalgae. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. X: 1-63.

TIME COVERAGE: 1969 - 1971

SUMMARY: This is an assessment of the conditions and seagrasses and macroalgae at Turkey Point.

KEY WORDS: Seagrass, *Thalassia testudinum*, Algae, Thermal pollution, South Bay, Turkey Point, Card Sound

1904

Thorhaug, A. (1979) Growth of *Thalassia* restored by seedlings in a multiply-impacted estuary. In: Proc., 6th annual Conf. on Wetlands Restoration and Creation. D. P. Cole, (ed.). Tampa, FL, 1979. Hillsborough Community College, Tampa, FL. 263-278.

TIME COVERAGE: 1979

SUMMARY: This paper describes the use of *Thalassia* seedlings in restoration efforts.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Restoration, North Bay, Margaret Pace Park

1905

Thorhaug, A. (1983) Habitat restoration after pipeline construction in a tropical estuary: seagrasses. Mar. Pollut. Bull., 14(11):422-425.

TIME COVERAGE: 1983

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: *Halodule wrightii*, *Syringodium filiforme*, *Thalassia testudinum*, Seagrass, Estuaries, Restoration, Resource management, Florida Keys, NOT BISCAYNE - CHECKED

1906

Thorhaug, A. (1985) Large-scale seagrass restoration in a damaged estuary. Mar. Pollut. Bull., 16(2):55-62.

TIME COVERAGE: 1985

SUMMARY: This paper describes a large scale planting of seagrasses in northern Biscayne Bay. Test plots were planted in a heavily disturbed part of the Bay from Coconut Grove northward. A great variety of survival and growth rates occurred in the test plots within and among species.

KEY WORDS: *Halodule wrightii*, *Syringodium filiforme*, *Thalassia testudinum*, Seagrass, Estuaries, Restoration, Resource management

1907

Thorhaug, A. (1987) Large-scale seagrass restoration in a damaged estuary. Mar. Pollut. Bull., 18(8):442-446.

TIME COVERAGE: 1987

SUMMARY: This paper describes four large-scale plantings of *Halodule* and *Thalassia* in northern Biscayne Bay. More than 48 ha of the badly damaged part of the Bay were productive as the result of the plantings, and the beds were expanding. Animals were observed to rapidly colonize the areas planted.

KEY WORDS: *Thalassia*, *Halodule*, *Syringodium*, Seagrass, Nature conservation, Estuaries, Restoration

1908

Thorhaug, A. (1979) Mitigation of estuarine fisheries nurseries: seagrass restoration. In: The Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats. G. A. Swanson, (ed.). Fort Collins, CO, 1979. General tech. rep. RM-65. Rocky Mountain Forest and Range Experiment Station, US Forest Service, Fort Collins, CO. 677-669.

TIME COVERAGE: 1979

SUMMARY: This paper describes a new method of seeding of *Thalassia*.

KEY WORDS: Seagrass, *Thalassia*, Restoration, Estuarine fisheries

1909

Thorhaug, A. (1971) Plant community investigation. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. XII: 1-10.

TIME COVERAGE: 1971

SUMMARY: This citation describes the composition of the *Thalassia* community as well as the growth characteristics, life span, turnover rate and developmental patterns of selected species.

KEY WORDS: Seagrass, *Thalassia*, Seaweeds, *Penicillus*, *Halimeda*, South Bay, Card Sound

1910

Thorhaug, A. (1979) Restoration of impacted Florida estuaries. Florida Scient., 42(Suppl. 1):27.

TIME COVERAGE: 1978

SUMMARY: This abstract describes the restoration of *Thalassia testudinum* beds. In north Biscayne Bay, damage since 1896 have resulted in denudation of the dominant vegetation. The first two major plantings of *Thalassia*, after a series of test plots showing feasibility, were done summer 1978. 40,000 *Thalassia* seedlings were put in each of two sites with 4,000 plugs of *Halodule wrightii*. The *H. wrightii* grew vigorously in all sites, as did *Thalassia*, with blades up to 18 cm, 4 roots per plant up to cm two months after planting.

KEY WORDS: *Thalassia testudinum*, *Halodule wrightii*, Restoration, Revegetation, Hydrocharitaceae, *Cymodo ceaceae*

1911

Thorhaug, A. (1979) Restoration of heavily impacted tropical estuaries via seagrass transplantation. 14th Mtg., Association of Island Marine Laboratories of the Caribbean. Santo Domingo, 1978. 18.

TIME COVERAGE: 1979

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Turtle grass, *Thalassia testudinum*, Transplantation, Environmental restoration

1912

Thorhaug, A. (1981) Seagrasses in the Gulf of Mexico, Florida and Caribbean including restoration and mitigation of seagrasses. In: Proc., US Fish and Wildlife Service Workshop on Coastal Ecosystems of the Southeastern United States. R. C. Carey, P. S. Markovits, and J. B. Kirkwood, (eds.). Big Pine Key, FL, 1980. FWS/OBS-80/59. Contract 4-16-0004-80-010. Coastal Ecosystems Project, Office of Biological Services, US Fish and Wildlife Service, Washington, DC. 161-183.

TIME COVERAGE: 1981

SUMMARY: This paper is a discussion of restoration and mitigation of seagrasses including the effect of pollutants, dredging, oil contamination, and thermal pollution.

KEY WORDS: Seagrass, *Thalassia testudinum*, *Halodule*, *Syringodium filiforme*, Restoration, Gulf of Mexico, Caribbean, Florida

1913

Thorhaug, A. (1974) Transplantation of the seagrass *Thalassia testudinum* Konig. Aquaculture, 4(-):177-183.

TIME COVERAGE: 1973 - 1974

SUMMARY: This is a transplantation study of *Thalassia* at Turkey Point. The techniques and results are discussed.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Transplantation, Turkey Point

1914

Thorhaug, A. (1976) Transplantation techniques for the seagrass *Thalassia testudinum*. Sea Grant tech. bull. 34. University of Miami Sea Grant Program, Coral Gables, FL, FL. 6 pp.

TIME COVERAGE: 1976

SUMMARY: This report describes transplantation techniques for *Thalassia*.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Transplantation

1915

Thorhaug, A. (1976) Tropical macroalgae as pollution indicator organisms. Micronesica, 12(-):49-65.

TIME COVERAGE: 1971

SUMMARY: Tropical and subtropical macroalgae were used as indicators of thermal pollution in the marine environment. The long term upper thermal limit was found to be within one to two degrees of the mean summer ambient temperatures.

KEY WORDS: Algae, Indicator species, Thermal pollution, Tropical environment, Turkey Point, Florida Keys, Dry Tortugas, Puerto Rico, Curacao, Bermuda, Venezuela, Card Sound, *Halimeda incrassata*, *Penicillus capitatus*, *Acetabularia crenulata*, *Valonia macrophysa*, *Valonia ventricosa*, *Valonia utricularis*, *Valonia ocellata*, *Valonia aegrophilia*, *Laurencia poitei*, *Udotea flabellum*, *Rhipocephalus phoenix*, *Batophora oestedii*, *Udotea conglutinata*, *Avranvilla nigricans*, *Cladophora fuliginosa*, *Sargassum pteropleuron*, *Halimeda opuntia*, *Caulerpa cupressoides*, *Caulerpa paspaloides*, *Caulerpa sertularoides*

1916

Thorhaug, A. (1976) The vascular plants of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 95-102.

TIME COVERAGE: 1976

SUMMARY: This paper describes the major vascular plants found in Biscayne Bay: *Thalassia testudinum*, *Halodule wrightii* and *Syringodium filiforme*. The functions of these plants are: food source; shelter and protection; sediment stabilizer; and chemical sink in terms of cycling of elements.

KEY WORDS: Seagrass, Turtle grass, *Thalassia testudinum*, Cuban shoal grass, *Halodule wrightii*, Manatee grass, *Syringodium filiforme*

1917

Thorhaug, A., and C. B. Austin (1976) Restoration of seagrasses with economic analysis. Env. Conservation, 3(4):259-267.

TIME COVERAGE: 1976

SUMMARY: The efforts that have been made to replant various seagrass species using different techniques are reviewed. The seeding method appears to be the most practical operation for *Thalassia*. An economic model and analysis for restoration costs was presented and a wide range of uses of restoration of seagrass beds were enumerated.

KEY WORDS: Seagrass, Transplantation, Economic analysis, Restoration

1918

Thorhaug, A., S. D. Bach, and K. F. Kellar (1972) Laboratory studies of temperature tolerances of major Biscayne Bay organisms. Quart. J. Fla. Acad. Sci., 35(Suppl. 1):34.

TIME COVERAGE: 1972

SUMMARY: Thermal lethal limits studies of organisms in Biscayne Bay were reported.

KEY WORDS: Temperature tolerance, Estuarine organisms

1919

Thorhaug, A., and S. D. Bach (1973) Productivity of red and green macro-algae in a south Florida estuary before and after the opening of a thermal effluent canal. J. Phycol., 9(Suppl.):10.

TIME COVERAGE: 1973

SUMMARY: A two-year study in Card Sound revealed no significant changes in the normal seasonal pattern of productivity and standing crops of four major calcareous macro-algae except in the area of deposition of suspended matter directly in front of the canal mouth where the plants were apparently smothered. Standing crop of other green algae showed a similar pattern. The distribution of red algal macrophyte associations was affected by the increased in flow rate due to the canal since this group, primarily *poitei*, forms large rolling mats that are subject to influence by currents.

KEY WORDS: Algae, Thermal pollution, Turkey Point, Card Sound, *Penicillus*, *Halimeda*, *Udotea*, *Rhipocephalus*, *Laurencia poitei*

1920

Thorhaug, A., G. L. Beardsley, and R. Hixon (1974) Large scale transplantation of *Thalassia* in south Florida. In: Proc., 1st Ann. Conf. on Restoration of Coastal Vegetation in Florida. Tampa, FL, 1974. Hillsborough Community College, Tampa, FL. 18-20.

TIME COVERAGE: 1974

SUMMARY: This citation describes transplantation efforts of *Thalassia* in Biscayne Bay.

KEY WORDS: Seagrass, *Thalassia*, Transplantation, Turkey Point

1921

Thorhaug, A., N. Blake, and P. B. Schroeder (1978) The effect of heated effluents from power plants on seagrass (*Thalassia*) communities quantitatively comparing estuaries in the subtropics and tropics. Mar. Pollut. Bull., 9(-):181-187.

TIME COVERAGE: 1971

SUMMARY: This paper synthesizes ecological studies of four effluent canals from power plants releasing heat in shallow estuaries: tropics, edge of tropics, and subtropics. The marine tropics differ from marine temperate zones in their capacity to assimilate man's activities.

KEY WORDS: Seagrass, *Thalassia*, Thermal pollution, Power plants, Turkey Point, Card Sound, Guayanilla Bay, Tampa Bay

1922

Thorhaug, A., T. Devany, J. C. Bauer, and S. Pepper (1971) The effect of temperature on *Penicillus capitatus* survival in laboratory and field investigations. J. Phycol., 7(Suppl.):5-6.

TIME COVERAGE: 1970 - 1971

SUMMARY: Between 15 and 31 °C, *Penicillus* remained vigorous up to 4 months in the laboratory. Below 14 and above 34 °C, *Penicillus* were not able to survive more than 9 days. During a survey of a region receiving heated effluents the following observations were made: +5 °C, depletion of all *Penicillus*; +4 °C, no vigorous *Penicillus* observed; +3 °C, some abundance of *Penicillus* in early summer, rapid decrease in mid summer in abundance and vigour; and +2 to 1 °C, comparable to non-heated areas.

KEY WORDS: Algae, *Penicillus capitatus*, Temperature effects

1923

Thorhaug, A., and J. Garcia-Gomez (1972) Ecological investigations of the macroalgae in Biscayne Bay and Card Sound, Florida. I. Preliminary results of the red algal complex. Unpublished manuscript. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 12 pp.

TIME COVERAGE: 1972

SUMMARY: This is a preliminary report on the *Laurencia* complex in Biscayne Bay and Card Sound.

KEY WORDS: Algae, *Laurencia poitei*, Card Sound

1924

Thorhaug, A., and J. Garcia-Gomez (1972) Preliminary laboratory and field growth studies of the *Laurencia* complex. J. Phycol., 8(Suppl.):10.

TIME COVERAGE: 1972

SUMMARY: This abstract describes preliminary efforts to grow *Laurencia* in the laboratory and in the field.

KEY WORDS: Algae, *Laurencia*, Growth

1925

Thorhaug, A., and R. Hixon (1975) Revegetation of *Thalassia testudinum* in a multiple-stressed estuary, north Biscayne Bay, Florida. In: Proc., 2nd Ann. Conf. on Restoration of Coastal Vegetation in Florida. R. R. Lewis, (ed.). Hillsborough Community College, Tampa, FL. 12-27.

TIME COVERAGE: 1975

SUMMARY: This paper describes the revegetation of *Thalassia* beds in north Biscayne Bay.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Seagrass, Phytobenthos, Revegetation, North Bay

1926

Thorhaug, A., and K. F. Kellar (1972) Laboratory and field growth studies of four green calcareous algae. I. Preliminary results. *J. Phycol.*, 8(Suppl.):10.

TIME COVERAGE: 1972

SUMMARY: This abstract describes efforts to grow green calcareous algae under thermally stressed and non-stressed conditions.

KEY WORDS: Algae, Growth, Halimeda, Penicillus, Udotea, Rhipocephalus

1927

Thorhaug, A., E. H. Man, and H. Ruvin (1990) Biscayne Bay: a decade of restoration progress. In: Environmental Restoration: Science and Strategies for Restoring the Earth. J. J. Berger (ed.). Island Press, Washington, DC. 398 pp.

TIME COVERAGE: 1990

SUMMARY: This citation describes the multijurisdictional restoration program of Biscayne Bay.

KEY WORDS: Environmental restoration, Biscayne Bay Committee

1928

Thorhaug, A., and J. H. Marcus (1983) Energy-related pollution of semi-tropical and tropical nearshore ecosystems. Annual report 1981-1982 to the Dept. of Energy, Contract No. DE-AS05-79EV10049. Department of Biological Sciences, Florida International University, Miami, FL. Unpaginated.

TIME COVERAGE: 1983

SUMMARY: This report is an evaluation of energy-related disturbances, such as heat, turbidity and salinity changes, to marine tropical ecosystems.

KEY WORDS: Energy resources, Pollution, Coastal zone, Seagrass, Mangrove swamps, Coral reefs, Subtropical zones, Tropical environment

1929

Thorhaug, A., H. B. Moore, and H. D. Albertson (1971) Laboratory thermal tolerances. In: An Ecological Study of South Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. XI: 1-33.

TIME COVERAGE: 1971

SUMMARY: The thermal tolerances of some 18,000 individual plants and animals found in Turkey Point were determined in the laboratory. An abrupt death point occurred rather than the expected Gaussian curve. Upper lethal limits for selected estuarine organisms were provided.

KEY WORDS: Estuarine organisms, Temperature tolerance

1930

Thorhaug, A., H. B. Moore, H. D. Albertson, F. O. Bingham, K. F. Kellar, J. Garcia-Gomez, and M. Fernandez (1972) Laboratory thermal studies. In: An ecological study of south Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. IX:1-35.

TIME COVERAGE: 1972

SUMMARY: The upper limits of thermal tolerances of 42 species and/life stages were studied in the laboratory. Several organisms found in Biscayne Bay and Card Sound has upper lethal

limits within 1 to 3 °C of the mid-summer temperatures encountered in the environment thus indicating a small margin of safety if exposed to heated effluents.

KEY WORDS: Estuarine organisms, Temperature tolerance

1931

Thorhaug, A., P. A. Penhale, and P. B. Schroeder (1977) An ecological study of the effects of power plants on benthic macroplant microcosms in subtropical and tropical estuaries. Progress report to ERDA, 1976-1977. National Technical Information Service, Springfield, VA. 32 pp.

TIME COVERAGE: 1977

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Power plants, *Thalassia testudinum*, Seagrass, Thermal pollution, Chemical pollutants, Pollution effects, Benthos, Algae, Turkey Point, South Bay

1932

Thorhaug, A., and S. Pepper (1972) The effect of heated effluents on a population of *Thalassia testudinum* in Biscayne Bay. Quart. J. Fla. Acad. Sci., 35(Suppl. 1):33.

TIME COVERAGE: 1972

SUMMARY: *Thalassia* beds near the Turkey Point plant and in Card Sound were studied. Areas with water temperatures consistently +4 - 5 °C showed considerable damage to the seagrass beds.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Thermal pollution, Temperature effects

1933

Thorhaug, A., M. A. Roessler, S. D. Bach, R. Hixon, I. M. Brook, and M. N. Josselyn (1979) Biological effects of power-plant thermal effluents in Card Sound, Florida. Env. Conservation, 6(2):127-137.

TIME COVERAGE: 1979

SUMMARY: This paper describes a multidisciplinary study of Card Sound before, during and after thermal effluents were released from a power plant. Biomass, growth, and production of *Thalassia* and macroalgae were estimated. Except for an area of 2 - 3 ha adjacent to the canal mouth, little damage to the benthic community was observed. This is very different from the effect of the first canal emanating from the same power plant at Turkey Point, where a large area was affected. The reasons for the reduced effects seemed to be: (1) the effluents were emitted at a lower temperature; (2) effluents were emitted for only one year; (3) effluents were emitted into deep (3 - 5 m) water; (4) the bottom vegetation at the point of effluence had already been decimated decades previously by canal construction, and subsequent freshwater drainage kept it at low density.

KEY WORDS: Thermal pollution, Benthos, Card Sound, Pollution effects, Nuclear power plants, Thermal effluents

1934

Thorhaug, A., M. A. Roessler, and D. C. Tabb (1976) Man's impact on the biology of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 315 pp.

TIME COVERAGE: 1976

SUMMARY: This paper discusses the anthropogenic impact on the biota of Biscayne Bay. Shoreline and vegetation at the mouths of the canals has been altered and the canals themselves create new niches for organisms. Dredge and fill operations have had direct and indirect effects on the biota, specially in the northern part of the Bay. Sewage pollution has caused changes at the outfalls.

KEY WORDS: Man-induced effects, Pollution, Drainage water, Dredging, Sewage disposal, Thermal pollution, Resource conservation

1935

Thorhaug, A., and M. A. Roessler (1977) Seagrass community dynamics in a subtropical estuarine lagoon. *Aquaculture*, 12(-):253-277.

TIME COVERAGE: 1971 - 1974

SUMMARY: The temporal and spatial distribution of major plant and animal species in seagrass communities were investigated in Biscayne Bay including Card Sound. The major species of plants were *Thalassia testudinum*, *Laurencia poitei*, and *Penicillus capitatus*.

KEY WORDS: Mangroves, Models, Productivity, Nursery grounds

1936

Thorhaug, A., and P. B. Schroeder (1977) A comparison of the biological effects of heated effluents from two fossil fuel plants: Biscayne Bay, Florida, in the subtropics; Guayanilla Bay, Puerto Rico, in the tropics. In: *Proc. Conf. Waste Heat Management and Utilization*. S. S. Lee, and S. Sengupta, (eds.). Miami Beach, FL, 1977. University of Miami, Department of Mechanical Engineering, Miami, FL. 3:XI.B.134-XI.B.164.

TIME COVERAGE: 1970 - 1973

SUMMARY: This paper describes studies of *Thalassia* beds affected by heated effluents of power plants in Biscayne Bay and Guayanilla Bay. *Thalassia* mortality is dependent upon the temperature of the effluent water.

KEY WORDS: Thermal pollution, Power plants, Waste heat, *Thalassia testudinum*, Turkey Point, Guayanilla Bay, Puerto Rico

1937

Thorhaug, A., D. A. Segar, and M. A. Roessler (1973) Impact of a power plant on a subtropical estuarine environment. *Mar. Pollut. Bull.*, 4(-):166-169.

TIME COVERAGE: 1972

SUMMARY: The impact of the cooling canal of the Turkey Point Power Plant on southern Biscayne Bay is discussed.

KEY WORDS: Temperature effects, Power plants, Brackishwater environment, Estuarine organisms, Turtle grass, *Thalassia testudinum*, Turkey Point, Card Sound

1938

Thorhaug, A., R. Stearns, and S. Pepper (1972) Grass and microalgae. In: An ecological study of south Biscayne Bay and Card Sound. R. G. Bader, and M. A. Roessler Progress rep. to the US Atomic Energy Commission [AT (40-1) - 3801 - 4] and Florida Power and Light Co. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. VIII:1-73.

TIME COVERAGE: 1970 - 1971

SUMMARY: This report documented growth and standing crops of *Thalassia* and macroalgae in a control area, examined the thermally affected area as the temperature of the effluent decreased, and quantified benthic floral productivity.

KEY WORDS: Seagrass, *Thalassia testudinum*, Algae, Thermal pollution, South Bay, Turkey Point, Card Sound

1939

Thorhaug, A., and A. Volker (eds.) (1976) Biscayne Bay: Past / Present / Future. Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1976

SUMMARY: This report assessed the condition of Biscayne Bay up to the 1970s.

KEY WORDS: Environmental assessment

1940

Thorp, E. M. (1936) Calcareous shallow-water marine deposits of Florida and the Bahamas. Papers from Tortugas Laboratory of Carnegie Institution of Washington, 29(-):37-143.

TIME COVERAGE: 1936

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Calcium carbonates, Carbonate sediments, Shallow water, Reef Tract, Bahamas

1941

Thorp, E. M. (1939) Florida and Bahama marine calcareous deposits. In: Symp., Recent Marine Sediments. P. D. Trask, (ed.). Reprinted 1955. American Association of Petroleum Geologists, Tulsa, OK. 283-297.

TIME COVERAGE: 1939

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Calcium carbonate, Carbonate sediments, Florida Keys, Bahamas

1942

Thurlow, C. I., D. D. Carrier, and D. M. Martin (1973) Biscayne Bay, Florida: tidal survey 1973. Unpublished manuscript (copy available at UM/RSMAS and NOAA/AOML). NOAA/National Ocean Survey, Rockville, MD. Unpaged.

TIME COVERAGE: 1929, 1973

SUMMARY: The purpose of this investigation was to determine tidal datums and establish additional fixed points of elevation referred to mean high water to be used for the delineation of coastal boundaries in Biscayne Bay. Elevations of geodetic bench marks were compared to the National Geodetic Vertical Datum of 1929.

KEY WORDS: Tidal datum, Mean sea level

1943

Tilley, D. R., and M. T. Brown (1998) Wetland networks for stormwater management in subtropical urban watersheds. Ecol. Eng., 10(2):131-158.

TIME COVERAGE: 1998

SUMMARY: A quantitative method suitable for planning wetland stormwater treatment at the regional, multibasin scale was developed based on simple zero order kinetics (uptake rates) and average nutrient loading conditions and applied to urbanized watersheds south of Miami. The method yielded a hierarchically organized network of wetlands for processing stormwaters. Results indicated that at the neighborhood scale, phosphorus runoff required the largest wetland treatment area. At the sub-basin scale, the loading of total suspended solids, derived from land use, needed the largest treatment area.

KEY WORDS: Wetlands, Stormwater runoff, Water treatment, Dade County, Nutrients

1944

Tilmant, J. T. (1979) Observations on the impact of shrimp roller frame trawls operated over hard-bottom communities, Biscayne Bay, Florida. Report series no. P-553. National Park Service, Biscayne National Monument, Homestead, FL. Unpaged.

TIME COVERAGE: 1979

SUMMARY: This report describes the effects of shrimp roller frames on bottom communities. Highest evidence of damage was to stony corals where 80% of the corals were turned over or crushed. Over 50% of the sponges were damaged and 38% of the gorgonians were uprooted. Most algae were not significantly affected with the exception of *Halimeda* and *Sargassum*. Eleven months after shrimp trawling ceased, the benthic community had not recovered.

KEY WORDS: Bottom trawls, Shrimp fisheries, Sponges, Scleractinians, Gorgonians, Algae

1945

Tilmant, J. T., and R. D. Conant (1980) Distribution, abundance and growth of commercially important sponges within south Biscayne Bay, Dade County, Florida. Florida Scient., 43(Suppl. 1):19.

TIME COVERAGE: 1980

SUMMARY: Four commercial sponge species were found in commercial densities in Biscayne Bay. Highest concentrations were found in longitudinal bands parallel to the western shore and adjacent to the Keys. Occurrence of sponges was limited to mid Bay. Density was highest at hard bottom sites. Tagged sponges revealed highly variable growth rates.

KEY WORDS: Sponges, *Spongia barbara*, *Spongia cheiris*, *Spongia graminea*, *Hippiospongia lachne*, Abundance, Growth, Ecological distribution, Florida Keys

1946

Tilmant, J. T., T. W. Curry, R. Jones, A. Szmant, J. C. Zieman, M. Flora, M. B. Robblee, D. Smith, R. W. Snow, and H. R. Wanless (1994) Hurricane Andrew's effects on marine resources. BioScience, 44(4):230-237.

TIME COVERAGE: 1992

SUMMARY: The effects of Hurricane Andrew on the marine resources of Biscayne Bay was examined. The small underwater impact contrasted sharply with the destruction of mangroves and upland forest communities.

KEY WORDS: Hurricanes, Shallow water, Marine resources, Water quality, Sediment movement, Seagrass, Reefs, Marine organisms, Hurricane Andrew, Florida Bay, Everglades National Park, Safety Valve

1947

Tisserand Delclos, L. (1979) Foraminiferes de deux localities de la baie de Floride et des environs: Joe Kemp Key et Key Biscayne. Notes du Laboratoire de Paleontologie de l'Universite de Geneve, 4(2):19-25 (French).

TIME COVERAGE: 1979

SUMMARY: This paper describes foraminifera of Joe Kemp Key and Key Biscayne.

KEY WORDS: Foraminifera, Florida Bay, Joe Kemp Key, Key Biscayne

1948

Tomb, G. (1997) Island gets second life as tropical escape. The Miami Herald, Miami, FL. April 17. Local. 1B.

TIME COVERAGE: 1997

SUMMARY: During Baynanza 1997, Spoil Island No. 2 was renamed Morningside Key. The key was cleaned and picnic tables and other recreational amenities were installed.

KEY WORDS: Spoil Island No. 2, Morningside Key

1949

Tomlinson, P. B. (1969) On the morphology and anatomy of turtle grass, *Thalassia testudinum* (Hydrocharitaceae). III. Floral morphology and anatomy. Bull. Mar. Sci., 19(-):286-305.

TIME COVERAGE: 1969

SUMMARY: This paper describes the morphology and anatomy of the flowers of *Thalassia*.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Plant morphology, Anatomy

1950

Tomlinson, P. B. (1972) On the morphology and anatomy of turtle grass, *Thalassia testudinum* (Hydrocharitaceae). IV. Leaf anatomy and development. Bull. Mar. Sci., 22(-):75-93.

TIME COVERAGE: 1972

SUMMARY: This paper describes leaf anatomy and development of *Thalassia*.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Plant morphology, Anatomy, Matheson Hammock Park

1951

Tomlinson, P. B., and G. A. Vargo (1966) On the morphology and anatomy of turtle grass, *Thalassia testudinum* (Hydrocharitaceae). I. Vegetative morphology. Bull. Mar. Sci., 16(4):748-761.

TIME COVERAGE: 1966

SUMMARY: This is a study of the vegetative morphology of *Thalassia*.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Plant morphology, Anatomy

1952

Toner, M. (1979) Bay's first surveyor wouldn't recognize how it looks today. The Miami Herald, Miami, FL. April 22. 19-A.

TIME COVERAGE: 1979

SUMMARY: This article discusses the earliest survey of Biscayne Bay and subsequent changes to the area.

KEY WORDS: Charts, Urban development

1953

Toner, M. (1979) Bouncing back: sponge industry thriving again in south Biscayne Bay. The Miami Herald, Miami, FL. April 22. 19-A.

TIME COVERAGE: 1979

SUMMARY: This article discusses the comeback of the sponge fisheries in Biscayne Bay.

KEY WORDS: Sponges, Fisheries

1954

Toner, M. (1979) Diseased, deformed fish tell tale of sick Bay. The Miami Herald, Miami, FL. Section A. 1A.

TIME COVERAGE: 1979

SUMMARY: This article describes the diseased and deformed fish found by W. Kandrashoff in Biscayne Bay.

KEY WORDS: Fish diseases, Abnormalities, Fish, Commercial species, Water quality, Pollution, Kandrashoff, W.

1955

Toner, M. (1979) Scientists, students plant Bay's future. The Miami Herald, Miami, FL. April 22. 19-A.

TIME COVERAGE: 1979

SUMMARY: This article discusses the seagrass planting efforts in the Bay.

KEY WORDS: Seagrasses

1956

Toner, M. (1979) Wildlife clings tenaciously to ailing bay. The Miami Herald, Miami, FL. April 23. Section A.

TIME COVERAGE: 1979

SUMMARY: This article discusses the conditions of wildlife in Biscayne Bay.

KEY WORDS: Wildlife, Birds

1957

Toops, C., and W. E. Dilley (1986) Birds of South Florida: An Interpretive Guide. River Road Press, Conway, AK.

TIME COVERAGE: 1986

SUMMARY: This is a guide to the birds of south Florida.

KEY WORDS: Birds, Marine birds, South Florida, Guide

1958

Torrance, D. C. (1992) Research destruction and opportunity in storm's wake. Science, 257(-):1339-1340.

TIME COVERAGE: 1992

SUMMARY: Hurricane Andrew severely impacted ongoing research projects in the South Florida area. The storm also provided opportunities for new research studying the impact of the storm on Bay and offshore ecosystems.

KEY WORDS: Hurricane Andrew, Research programs, Biscayne National Park, Fairchild Tropical Garden

1959

Townshend, F. T. (1875) Wild Life in Florida with a Visit to Cuba. Hurst and Blackett, London, UK. 319 pp.

TIME COVERAGE: 1875

SUMMARY: This book describes a journey through the northern part of the state to the Tampa area, then on to Cuba, Key West, and up the east coast to Jacksonville.

KEY WORDS: Natural resources, Biographies, Florida, Cuba

1960

Tracy, B. A., and W. A. Brandon (1995) A combined wave and surge hindcast for the coast of Florida during Hurricane Andrew. In: Impacts of Hurricane Andrew on the Coastal Zones of Florida and Louisiana: 22-26 August 1992 (J. Coastal Res. Spec. Issue 21). G. W. Stone, and C. W. Finkl (eds.). Coastal Education and Research Foundation, Ft. Lauderdale, FL. 364 pp.

TIME COVERAGE: 1992

SUMMARY: A combined wave and surge hindcast model was applied to Biscayne Bay and Miami Beach and storm surges calculated. The shallow water in the area limited the wave heights produced during the storm.

KEY WORDS: Wave hindcasting, Storm surge, Hurricane Andrew, Florida

1961

Trimble, P. (1990) Frequency analysis of one and three-day rainfall maxima for central and southern Florida. Tech. memo. DRE 291. South Florida Water Management District,

TIME COVERAGE: 1990

SUMMARY: This citation examined rainfall in central and southern Florida. Twenty years of data were available for some of the rain gauge stations. Maps of rainfall maxima during various time intervals were provided.

1962

Tuomey, M. (1851) Notice of the geology of the Florida Keys, and of the southern coast of Florida. Amer. J. Science and Arts, Second series, 11(-):390-394.

TIME COVERAGE: 1851

SUMMARY: This paper describes the geology of the coast of South Florida.

KEY WORDS: Geology, Limestone, Oolites, Florida Keys, Everglades, South Florida, Key Biscayne

1963

Turgeon, D. D., J. Hameedi, M. R. Harmon, E. R. Long, K. D. McMahon, and H. H. White (1998) Sediment toxicity in U.S. coastal waters. Report. NOAA/NOS/NCCOS, Silver Spring, /MD.

TIME COVERAGE: 1998

SUMMARY: This report discusses and compares sediment toxicity in several US estuaries.

KEY WORDS: Sediment pollution, Coastal waters

1964

Turgut, A. (1997) Inversion of bottom/subbottom statistical parameters from acoustic backscatter data. J. Acous. Soc. Am., 102(2, pt.1):833-852.

TIME COVERAGE: 1997

SUMMARY: Inversion of statistical parameters of a bottom/subbottom scattering model was investigated by using genetic algorithms for both synthetic and real data. Inverted statistical parameters for a sandy site at Biscayne Bay confirmed the results of simultaneous tomographic measurements indicating that scattering by subbottom inhomogeneities plays a minor role for this particular site.

KEY WORDS: Bottom scattering, Sound scattering, Acoustic models

1965

Tyler (L. L.) Publishing Company (1926) A Pictorial History of the Florida Hurricane, September 18, 1926. L. L. Tyler Publishing Company, Miami, FL. 32 pp.

TIME COVERAGE: 1926

SUMMARY: This is a pictorial description of the aftermath of the Hurricane of 1926.

KEY WORDS: Hurricanes, Photographs, Miami, South Florida, Hurricane of 1926

1966

Udey, L. R. (1976) Anaerobic bacteria as possible disease agents in fish. Unpublished manuscript. Department of Microbiology, University of Miami School of Medicine, Miami, FL. 4 pp.

TIME COVERAGE: 1976

SUMMARY: This report discusses anaerobic bacteria as causes of disease in fish.

KEY WORDS: Fish diseases, Anaerobic bacteria, Pathogens, Mugil cephalus, Eubacterium tarantellus

1967

Udey, L. R. (1978) Anaerobic bacteria as possible disease agents in fish. Marine Fisheries Review, 40(10):10-12.

TIME COVERAGE: 1978

SUMMARY: Anaerobic bacteria were isolated from the brains of mullet exhibiting a "twirling" syndrome during the occurrence of several large fish kills in Biscayne Bay.

KEY WORDS: Fish diseases, Anaerobic bacteria, Mullet, *Mugil cephalus*, *Eubacterium tarantellus*

1968

Udey, L. (unpublished) A fish health survey of north Biscayne Bay: June 1976 to June 1977. Unpublished report. Rosenstiel School of Marine and Atmospheric Science, Miami, FL. Unpaginated.

TIME COVERAGE: 1976 - 1977

SUMMARY: This is an unpublished report of the abnormalities found in fish collected in Biscayne Bay.

KEY WORDS: Kandrashoff, W., Fish abnormalities

1969

Udey, L. R., E. Young, and B. Sallman (1976) *Eubacterium* sp. ATCC 29255: an anaerobic bacterial pathogen of marine fish. Fish Health News, 5(2):3-4.

TIME COVERAGE: 1976

SUMMARY: During the past few years, large fish kills involving black mullet, snook and striped mojarra occurred in Biscayne Bay. A detailed investigation resulted in the isolation of a gram-

positive anaerobic bacteria from the dead and moribund fish and classified as a new species of the genus *Eubacterium*.

KEY WORDS: Eubacterium, Anaerobic bacteria, Fish diseases, Fish kill

1970

Udey, L. R., E. Young, and B. Sallman (1977) Isolation and characterization of an anaerobic bacterium, *Eubacterium tarantellus* sp. nov., associated with striped mullet (*Mugil cephalus*) mortality in Biscayne Bay, Florida. J. Fisheries Research Board of Canada, 34(-):402-409.

TIME COVERAGE: 1977

SUMMARY: Dead, moribund and normal mullet were obtained from the saltwater basins of two tributary canals to Biscayne Bay. An anaerobic bacterium was extracted from the brain tissues of the mullet. This bacterium caused neurological impairment on the fish.

KEY WORDS: Anaerobic bacteria, *Eubacterium tarantellus*, Striped mullet, *Mugil cephalus*, Fish diseases

1971

Uhl Wilson, S. (ed.) (1975) Biscayne Bay: environmental and social systems. Sea Grant spec. rep. 1. University of Miami Sea Grant Program, Coral Gables, FL. 52 pp.

TIME COVERAGE: 1975

SUMMARY: This report describes Biscayne Bay, its uses, and how man has modified it and its shores. The various environmental systems are described in detail including geology, climate and weather, tides and currents, water quality, biota, jurisdictions, and land use.

KEY WORDS: Social system, Geology, Circulation, Flora, Fauna, Water quality, Industry and commerce

1972

University of Florida (1970) Addendum to Turkey Point water temperature study: prediction of water temperatures resulting from plant discharge, August, 1968 meteorological conditions. Report, Department of Coastal and Oceanographic Engineering. University of Florida, Department of Coastal and Oceanographic Engineering, Engineering and Industrial Experiment Station, Gainesville, FL. 5 pp.

TIME COVERAGE: 1970

SUMMARY: This report utilized the same procedures presented in an earlier report to predict water temperatures in the discharge canal and in Card Sound.

KEY WORDS: Water temperature, Bay dynamics, Waste disposal, Turkey Point, Card Sound

1973

University of Florida (1959) Bakers Haulover Inlet tidal model study on beach erosion and navigation. Report sponsored by Dade County in cooperation with Corps of Engineers, U.S. Army, Jacksonville District and the village of Bal Harbour. Coastal Engineering Laboratory, University of Florida, Gainesville, FL. 27 pp.

TIME COVERAGE: 1958

SUMMARY: The purpose of this study was: to evaluate the contribution of the inlet to the erosion of the seashore on both side of the inlet and to suggest regulatory steps to decrease or eliminate this effect, and to investigate the possibility for improving hazardous navigation conditions due to the high current velocities in the inlet.

KEY WORDS: Inlets, Tidal models, Beach erosion, Tidal effects, Navigational channels, Shore protection, Current velocity, Bakers Haulover Inlet

1974

University of Florida (1969) Beach erosion and stabilization considerations for Bal Harbour Village. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 18 pp.

TIME COVERAGE: 1969

SUMMARY: The purpose of this study was to investigate the beach erosion problem at Bal Harbour and to recommend a pilot stabilization program.

KEY WORDS: Beach erosion, Shore protection, Bakers Haulover Inlet, Bal Harbour

1975

University of Miami (1981) Biscayne Bay urban waterfront charrette. Report prepared for the Metropolitan Dade County, Florida Planning Department. University of Miami, Department of Architecture and Planning of the School of Engineering and Architecture, Coral Gables, FL. 96 pp.

TIME COVERAGE: 1981

SUMMARY: The purpose of the publication was to report the proceedings on a one-day charrette held for the purpose of discussing the planning and design of the urbanized waterfront of Biscayne Bay.

KEY WORDS: Urbanization, Land use, Man-induced effects, Coastal structures, Coastal zone management

1976

University of Miami (1991) Boat use patterns and boat traffic study, Biscayne Bay, Dade county, Florida. Final report. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Boating Research Center, Miami, FL. 135 pp.

TIME COVERAGE: 1990

SUMMARY: The purpose of this study was to determine boat use patterns and traffic to develop manatee protection and marina site evaluation plans.

KEY WORDS: Boats, Traffic management, Recreational waters, Manatees

1977

University of Florida (1958) Coastal engineering study at Bakers Haulover. Report. University of Florida. Coastal Engineering Laboratory, Gainesville, FL. 27 pp.

TIME COVERAGE: 1958

SUMMARY: The purpose of this study was to secure data regarding beach erosion and the development of beach and offshore profiles on the beach north of Bakers Haulover Inlet.

KEY WORDS: Beach erosion, Coastal erosion, Shore protection, Bakers Haulover Inlet

1978

University of Florida (1969) A coastal engineering study related to stabilization of Lummus Park beaches. Report, Engineering and Industrial Experiment Station. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 21 pp.

TIME COVERAGE: 1969

SUMMARY: This report describes the possible use of a groin to stabilize sand at Lummus Park, Miami Beach, located near Government Cut.

KEY WORDS: Beach erosion, Coastal currents, Shore protection, Lummus Park, Miami Beach, Government Cut

1979

University of Florida (1981) Coastal construction control line study for Dade County, Florida. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 52 pp + exhibits.

TIME COVERAGE: 1981

SUMMARY: The purpose of this study was to engineering and topographic surveys, erosion trends, predictable storm tides, wave runup, vegetation line and other technical data needed to determine the Coastal Construction Control Line for South Florida.

KEY WORDS: Coast defenses, Sea level changes, Beach erosion, Tidal effects, Wave effects, Shore protection, North Bay, Key Biscayne, Virginia Key, Miami Beach

1980

University of Florida (1970) Discharge temperature predictions at Turkey Point facility for two fossil and one nuclear fueled units. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. Unpaged.

TIME COVERAGE: 1970

SUMMARY: This report presented water temperature calculations for the Turkey Point facility based on a power generation system consisting of the present two fossil-fueled generators,

KEY WORDS: Water temperature, Waste heat, Card Sound, Turkey Point

1981

University of Florida (1973) Field investigations of the mixing and flushing characteristics of the Biscayne Bay/Card Sound system. Report UF/COEL-73/13, Coastal and Oceanographic Engineering Laboratory. University of Florida, Engineering and Industrial Experiment Station, Gainesville, FL. 27 pp + appendices.

TIME COVERAGE: 1973

SUMMARY: This report described the status and some results of the field study program conducted to obtain *in situ* data concerning the mixing and flushing characteristics of the Biscayne Bay/Card Sound system.

KEY WORDS: Water mixing, Flushing, Card Sound, South Bay

1982

University of West Florida (1985) Florida's sandy beaches: an access guide. Beach Access Project. University of West Florida Press, Pensacola, FL.

TIME COVERAGE: 1985

SUMMARY: This is guide to the accessible sandy beaches of the state.

KEY WORDS: Beaches, Public access, Coastal landforms, Florida, Guide

1983

University of Florida (1975) Flushing strategy for the Biscayne Bay - Card Sound system as determined by numerical modeling. Report COEL-75/005, Coastal and Oceanographic Engineering Laboratory. University of Florida, Engineering and Industrial Experiment Station, Gainesville, FL. 44 pp.

TIME COVERAGE: 1975

SUMMARY: The purpose of this study was to establish through idealized considerations the optimal timing of releases relative to natural climatological or tidal events such that the overall residence time in the receiving Bay waters would be a minimum, and to demonstrate the relative effectiveness of these results by modeling a release program through a reasonably representative year.

KEY WORDS: Flushing, Mathematical models, South Bay, Turkey Point, Card Sound

1984

University of Florida (1972) Hydrographic study of Mashta Island on Key Biscayne, Dade County, Florida. Report, Engineering and Industrial Engineering Station. University of Florida, College of Engineering, Gainesville, FL. 8 pp.

TIME COVERAGE: 1971

SUMMARY: This study was carried out to investigate the possibility of adverse hydrographic effects which could be associated with the dredging and filling of submerged land adjacent to Mashta Island, located in Key Biscayne.

KEY WORDS: Hydrography, Dredging, Mashta Island, Key Biscayne

1985

University of Miami (1958) Investigation of possible effects of dredging and filling Elliott and Old Rhodes Key. Report to Florida State Board of Conservation. University of Miami, Marine Laboratory, Miami, FL. 4 pp.

TIME COVERAGE: 1958

SUMMARY: Observations were conducted to determine the probable effects of bulkheading and filling behind the bulkhead, and the probable biological consequences of obtaining fill from the Caesar's Creek delta.

KEY WORDS: Dredging, Elliott Key, Old Rhodes Key, Caesar's Creek, Environmental impact, Coastal structures, Sea walls, Species list

1986

University of Miami (1990) Marina hurricane evacuation study, Dade County, Florida. Report prepared for the Dade County Planning Department and the Office of Emergency Management. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Boating Research Center, Miami, FL. 83 pp.

TIME COVERAGE: 1990

SUMMARY: The purpose of this study was to generate primary data on potential hurricane evacuation plans of berthed boat owners. Potential evacuation patterns were analyzed in order to evaluate alternative evacuation programs and policies.

KEY WORDS: Marinas, Hurricanes, Evacuation, Dade County

1987

University of Miami (1954) Marine borer investigation: final report. Marine Laboratory, University of Miami, Coral Gables, FL. 36 pp.

TIME COVERAGE: 1954

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Shipworms, Boring organisms, Teredo, Life history, Animal physiology, Creosote, Fouling control

1988

University of Florida (1971) Numerical modeling of hydromechanics of Biscayne Bay/Card Sound system. Part I: Non-dispersive characteristics. Report, Engineering and Industrial Experiment Station. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 36 pp + appendices.

TIME COVERAGE: 1971

SUMMARY: This report presented the background for and some results obtained from a numerical calculation procedure developed to simulate the tidal, wind-driven and other induced flows in the Biscayne Bay/Card Sound System.

KEY WORDS: Mathematical models, Bay dynamics, Tidal dynamics, Winds, Waste disposal, Turkey Point, Card Sound

1989

University of Florida (1971) Numerical modeling of hydromechanics of Biscayne Bay/Card Sound system. Part II: Dispersive characteristics. Report, Engineering and Industrial Experiment Station. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 30 pp + appendices.

TIME COVERAGE: 1971

SUMMARY: This report presented the background for and some results obtained from a numerical calculation procedure developed to simulate the tidal, wind-driven and other induced flows in the Biscayne Bay/Card Sound System.

KEY WORDS: Mathematical models, Bay dynamics, Tidal dynamics, Winds, Waste disposal, Turkey Point, Card Sound

1990

University of Florida (1972) Numerical modeling of hydromechanics of Biscayne Bay/Card Sound system. Part II: Dispersive characteristics. University of Florida, Department of Coastal and Oceanographic Engineering, Engineering and Industrial Experiment Station, Gainesville, FL.

TIME COVERAGE: 1972

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Mathematical models, Bay dynamics, Mixing processes, Waste disposal, Dispersion, Turkey Point, Card Sound

1991

University of Florida (1958) Preliminary report on coastal engineering aspects in bay fill problems with special reference to Biscayne Bay. Report, Engineering and Industrial Experiment Station. University of Florida, Coastal Engineering Laboratory, Gainesville, FL. 8 pp + appendices.

TIME COVERAGE: 1958

SUMMARY: This study discusses the effects of fills on wave action, currents, hurricanes, fish and wildlife, and other areas.

KEY WORDS: Coast defenses, Hydraulic structures, Coastal engineering

1992

University of Florida (1969) Recirculation and temperature field considerations: Turkey Point facility. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 24 pp + appendices.

TIME COVERAGE: 1969

SUMMARY: Temperature calculation procedures employed in this study predicted temperatures which were probably slightly higher than those which would actually occur.

KEY WORDS: Water circulation, Water temperature, Bay dynamics, Waste disposal, Turkey Point, Card Sound

1993

University of North Carolina (1974) Rocky sea fronts and inter-tidal rocks. In: Coastal Ecological Systems of the United States. H. T. Odum, B. J. Copeland, and E. A. McMahan (eds.). The Conservation Foundation, Washington, DC. 2v.

TIME COVERAGE: 1974

SUMMARY: This citation describes organisms found in rocky sea fronts and rigid man-made surfaces that stand against waves in the intertidal zones. Biscayne Bay is used as one of the examples.

KEY WORDS: Intertidal environment, Rocky shores, Ecological zonation, Algae, Waste disposal

1994

University of Florida (1972) Study report to determine behavior of project fill for beach erosion control, Virginia Key and Key Biscayne, Florida. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. Unpaged.

TIME COVERAGE: 1970

SUMMARY: The purpose of this report is to determine the behavior of project fill for beach erosion control projects in Virginia Key and Key Biscayne.

KEY WORDS: Beach nourishment, Sand, Shore protection, Virginia Key, Key Biscayne

1995

University of Florida (1970) Temperature predictions at mouth of planned discharge canal in Card Sound, Turkey Point facility. Report. University of Florida, Department of Coastal and Oceanographic Engineering, Gainesville, FL. 23 pp + appendices.

TIME COVERAGE: 1968 - 1969

SUMMARY: This report presented the results of temperature calculations for the Turkey Point Plant. The calculations represent the temperature that would have occurred at the mouth of the planned discharge canal in Card Sound if the system, including the two nuclear units, had been operating during summer months.

KEY WORDS: Water temperature, Waste disposal, Card Sound, Turkey Point

1996

University of Miami (1965-1971) Temperature and salinity readings, IMS pier. University of Miami, Institute of Marine Sciences, Miami, FL.

TIME COVERAGE: 1965-1968, early 1971

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water temperature, Salinity, Virginia Key

1997

University of Miami (1971) Thermal pollution at Turkey Point, Biscayne Bay, Florida. Report. EPA contracts WP-01351-01-A1 and #18050 DFU. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 211 pp.

TIME COVERAGE: 1968 - 1971

SUMMARY: The objective of this study was to predict the effects of the heated discharge from the Turkey Point nuclear power units on benthic fauna; to measure the effects of the fossil fuel units; and to study the benthic fauna and fishes of southern Biscayne Bay and Card Sound.

KEY WORDS: Thermal pollution, Fish, Benthos, Species list, Salinity, Card Sound

1998

University of Georgia, and Skidaway Institute of Oceanography (1973) The geological inventory of Cumberland Island, Everglades National Park, Gulf Islands National Seashores and Biscayne National Monument. Final report: Contract CX001-3-0052 to the Office of Natural Science, National Park Service. University of Georgia Marine Institute and Skidaway Institute of Oceanography, Savannah, GA. 8 pp + appendices.

TIME COVERAGE: 1973

SUMMARY: This report contains information on geology, an annotated bibliography, catalog of aerial photographs, and other material available about the study area prior to 1973.

KEY WORDS: Geology, Bibliographies, Maps, Navigational charts, Cumberland Island, Everglades National Park, Gulf Islands National Seashore, Biscayne National Monument, Caesar's Creek

1999

Unknown (1996) Biscayne Bay. *Fathom*, 7(4):6-7.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuaries, Natural resources

2000

US Army Corps of Engineers (1999) Central and Southern Florida Project comprehensive review study. Jacksonville District, US Army Corps of Engineers, Jacksonville, FL.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Ecosystem management, Everglades, South Florida

2001

US Army Corps of Engineers, and US Shipping Board (1925) The ports of Jacksonville, Fernandina, Miami, Key West, Tampa, and South Boca Grande, Florida. Port series no 8. U.S. Government Printing Office, Washington, DC. 309 pp.

TIME COVERAGE: 1925

SUMMARY: This report contains a description of the Port of Miami including the approaches, dock facilities, and water-borne commerce. A composite aerial photograph of Miami, Miami Beach and the port area is included.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami, Jacksonville, Fernandina, Key West, Tampa, South Boca Grande

2002

US Army Corps of Engineers, and US Shipping Board (1931) The ports of Miami and Tampa, Florida. Port series no 8, part 2. U.S. Government Printing Office, Washington, DC. 116 pp.

TIME COVERAGE: 1931

SUMMARY: This report contains a description of the Port of Miami including the approaches and dock facilities. A chart of the port area is included.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami, Tampa

2003

US Army Corps of Engineers, and US Shipping Board (1936) The ports of Miami and Tampa, Florida. Port series no 8, part 2. U.S. Government Printing Office, Washington, DC. 181 pp.

TIME COVERAGE: 1936

SUMMARY: This report contains a description of the Port of Miami including the approaches and dock facilities. A chart of the port area and a photograph of the docks are included.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami, Tampa

2004

US Coast Guard (1983) Final Rickenbacker Causeway improvements, including bridge construction across Biscayne Bay to Virginia Key and Key Biscayne, Dade County, Florida. Draft environmental impact statement, 83-0530F. US Coast Guard, Washington, DC?

TIME COVERAGE: 1983

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Highway planning, Bridges, Environmental impact statement, Rickenbacker Causeway, Virginia Key, Key Biscayne

2005

US Coast Guard (1982) Proposed Rickenbacker Causeway improvements, including bridge construction across Biscayne Bay to Virginia Key and Key Biscayne, Dade County, Florida. Draft environmental impact statement, 82-0578D. U.S. Coast Guard, Washington, DC?

TIME COVERAGE: 1982

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Highway planning, Bridges, Environmental impact statement, Rickenbacker Causeway, Virginia Key, Key Biscayne

2006

US Environmental Protection Agency Conference in the Matter of Pollution of the Navigable Waters of Dade County, Florida, and Tributaries, Embayments and Coastal Waters. Miami, FL, Feb. 18-19, 1971. Transcript of proceedings, second session. US Environmental Protection Agency, Water Quality Office, Atlanta, GA.

TIME COVERAGE: 1971

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Pollution control, Waste disposal, Sewage

2007

US Fish and Wildlife Service, Florida State Board of Conservation, and University of Miami (1950-1978) Florida landings. Reports. Published 1950-1978. Issued 1950-1963 1964-1969, by U.S. Fish and Wildlife Service and the Florida State Board of Conservation; 1970, by US Fish

and Wildlife Service and Florida Department of Natural Resources; and 1971-1978, by NOAA/National Marine Fisheries Service and Florida Department of Natural Resources.

TIME COVERAGE: 1950-1978

SUMMARY: [COPIES NOT AVAILABLE.]

KEY WORDS: Landing statistics, Fishery statistics, Florida

2008

US Air Force (1998) Military Canal special study report. Draft report. US Air Force, Air Force Base Conversion Agency, Homestead, FL. Various paging.

TIME COVERAGE: BB

SUMMARY: This report was prepared to interpret the sediment data collected by EPA during the 1997 Military Canal Special Study. EPA data was used to evaluate toxicological effects of ecological receptors and the potential impacts to Biscayne National Park.

KEY WORDS: Homestead Air Reserve Base, Military Canal, Pollution, Biscayne National Park, Sediment

2009

US Air Force, and Federal Aviation Administration (1999) Disposal of portions of the former Homestead Air Force Base, Florida. Draft Supplemental Environmental Impact Statement. Summary and two appendices.

TIME COVERAGE: 1999

SUMMARY: This document is the draft of the supplemental environmental impact statement for the disposal and consequent reuse of portions of the former Homestead Air Force Base, which suffered considerable damage during Hurricane Andrew. The proposed action is to transfer the 1,632 acres of surplus property including the runway to Miami-Dade County for use as a commercial airport. Alternative plans including a commercial spaceport are under consideration.

KEY WORDS: Homestead Air Force Base, Hurricane Andrew, Environmental impact

2010

US Army Corps of Engineers (1946) Beach erosion study of Bakers Haulover Inlet, Fla. Examinations of rivers and harbors. 79th Congress, 2d Session, House document 527. US Government Printing Office, Washington, DC. 19 pp.

TIME COVERAGE: 1946

SUMMARY: This report details erosion of the beach north of Bakers Haulover Inlet and improvements to remedy the situation.

KEY WORDS: Beach erosion, Inlets (Waterways), Bakers Haulover Inlet

2011

US Army Corps of Engineers (1961) Beach erosion control report on cooperative study of Virginia Key and Key Biscayne, Florida. Serial no. 49. US Army Engineer District, Jacksonville, Corps of Engineers, Jacksonville, FL. 23 pp + appendices.

TIME COVERAGE: 1961

SUMMARY: The problem in these areas is one of instability and recession of the shoreline in the study area due to deficiency in supply of littoral material entering the area and to loss of material into offshore waters.

KEY WORDS: Beach erosion, Beach nourishment, Shore protection, Coast defenses, Virginia Key, Key Biscayne

2012

US Army Corps of Engineers (1962) Beach erosion control report on cooperative study of Virginia and Biscayne Keys, Florida. 87th Congress, 2d Session, House document no. 561. US Government Printing Office, Washington, DC. 74 pp.

TIME COVERAGE: 1962

SUMMARY: This report discusses beach erosion at Virginia Key and Key Biscayne.  
KEY WORDS: Beach erosion, Shore protection, Virginia Key, Key Biscayne

2013

US Army Corps of Engineers (1912) Biscayne Bay, Fla. 62nd Congress, 2d Session, House document no. 554. US Government Printing Office, Washington, DC. 25 pp.

TIME COVERAGE: 1912

SUMMARY: This report is a preliminary and survey of Biscayne Bay with a view of providing a channel to the mouth of the Miami River.

KEY WORDS: Harbors, Port installations, Marine transportation, Navigational channels, Miami

2014

US Army Corps of Engineers (1932) Biscayne Bay, Fla. 72d Congress, 1st Session, Senate document no. 95. US Government Printing Office, Washington, DC. 19 pp.

TIME COVERAGE: 1932

SUMMARY: This report evaluated Biscayne Bay and commerce in the area.

KEY WORDS: Navigational channels, Air transportation, Dinner Key, Pan American Airways

2015

US Army Corps of Engineers (1968) Cooperative beach erosion control study and hurricane protection study of Dade County, Fla., from Government Cut to north county line. 90th Congress, 2d Session, House document 335. US Government Printing Office, Washington, DC. 103 pp.

TIME COVERAGE: 1968

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Erosion control, Beach erosion, Storm surge, Shore protection, Hurricanes, Coastal structures, Dade County, North Bay

2016

US Army Corps of Engineers (1937) Current and sand movement study at Miami Beach, Fla. 75th Congress, 1st Session, House document no. 169. US Government Printing Office, Washington, DC. 16 pp.

TIME COVERAGE: 1937

SUMMARY: This report describes beach erosion and sand movement at Miami Beach.

KEY WORDS: Ocean currents, Bottom currents, Sand, Miami Beach

2017

US Army Corps of Engineers (1965) Dade County, Florida. Beach erosion control and hurricane protection report. Serial no. 54. US Army Engineer District, Jacksonville, FL. Various paging.

TIME COVERAGE: 1965

SUMMARY: The purpose of this beach erosion control and hurricane protection study was to determine the most practical and economic method of restoring adequate recreational and protective beaches and providing continued stability of that ocean shore.

KEY WORDS: Erosion control, Beach erosion, Hurricanes, Storm surge, Shore protection, Coastal structures, Dade County, North Bay

2018

US Army Corps of Engineers (1968) Dade County, Florida. 90th Congress, 2d Session, House document no. 335. US Government Printing Office, Washington, DC. 103 pp.

TIME COVERAGE: 1968

SUMMARY: This report describes a beach erosion control study and an interim hurricane survey of Dade County.

KEY WORDS: Beach erosion, Hurricanes, Storm surge, Shore protection, Dade County

2019

US Army Corps of Engineers (1971) Dade County. In: National shoreline study: regional inventory report, South Atlantic - Gulf Region, Puerto Rico and the Virgin Islands. Report. US Army Engineer Division, South Atlantic Corps of Engineers, Atlanta, GA. D58-D64.

TIME COVERAGE: 1971

SUMMARY: This citation documents the nature and extent of shore erosion, conceptual plans for shore protection, and breakdown of the shoreline by type of ownership and use.

KEY WORDS: Coastal zone, Dade County

2020

US Army Corps of Engineers (1975) Dade County beaches, Florida. General design memorandum and supplement. Army Corps of Engineers, Jacksonville, FL.

TIME COVERAGE: 1975

SUMMARY: This document is a description of the restoration of the Miami Beach, Key Biscayne and Virginia Key sand beaches.

KEY WORDS: Shore protection, Beaches, Beach nourishment, Erosion control, Bal Harbour, Surfside, Miami Beach, North Bay, Miami Beach, Key Biscayne, Virginia Key, Cape Florida

2021

US Army Corps of Engineers (1972) Detail design memorandum: Virginia Key and Key Biscayne, Florida; beach erosion control project. Second periodical nourishment and groins, Virginia Key. Serial no. 14. Jacksonville District, Corps of Engineers, Jacksonville, FL. 9 pp.

TIME COVERAGE: 1972

SUMMARY: This report contains detailed planning for the authorized nourishment and groins for Virginia Key public beaches.

KEY WORDS: Beach erosion, Beach nourishment, Groins, Virginia Key, Key Biscayne

2022

US Army Corps of Engineers (1958) Evaluation report on hurricane-protective measures for Biscayne Bay, Fla. Serial no. 50. US Army Engineer District, Jacksonville, Office of the District Engineer, Jacksonville, FL. Various paging.

TIME COVERAGE: 1958

SUMMARY: A serious problem of hurricane tidal flooding was found for the highly developed areas of Miami and Miami Beach. Preliminary studies indicated that a barrier across Biscayne Bay and the island developments was economically feasible.

KEY WORDS: Hurricanes, Flood control, Shore protection, Miami, Miami Beach

2023

US Army Corps of Engineers (1900) Examination of Biscayne Bay, Florida. 56th Congress, 1st Session, House document 662. US Government Printing Office, Washington, DC. 28 pp.

TIME COVERAGE: 1900

SUMMARY: This is another report on the ongoing investigations of navigation and commerce in Biscayne Bay.

KEY WORDS: Harbors, Port installations, Marine transportation, Norris Cut, Bear Cut, Cape Florida, Miami

2024

US Army Corps of Engineers (1980) Final environmental impact statement: port expansion program, Biscayne Bay, Dade County, Florida. Final environmental impact statement. Jacksonville District, US Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1980

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Expansion program, Port of Miami

2025

US Army Corps of Engineers (1975) Final impact statement: beach erosion control and hurricane surge protection project, Dade County, Florida. Report, two volumes. US Army Engineer District, Jacksonville, FL. Various paging.

TIME COVERAGE: 1975

SUMMARY: This is the environmental impact statement of the restoration of Miami Beach with sand dredged from the ocean bottom.

KEY WORDS: Erosion control, Beach erosion, Storm surge, Miami Beach, Shore protection, Coastal structures, Hurricanes, Dade County, Miami Beach, Virginia Key, Key Biscayne

2026

US Army Corps of Engineers (1993) Hurricane Andrew storm summary and impacts on the beaches of Florida. Special report. US Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1992

SUMMARY: The purpose of this study was to determine the effect of Hurricane Andrew on the beaches of South Florida.

KEY WORDS: Hurricanes, Damage, Beaches, Shore protection, Hurricane Andrew

2027

US Army Corps of Engineers (1919) Miami Harbor (Biscayne Bay), Fla. Examinations of rivers and harbors. 65th Congress, 3d Session, House document no. 1588. US Government Printing Office, Washington, DC. 26 pp.

TIME COVERAGE: 1919

SUMMARY: This report describes the Port of Miami.

KEY WORDS: Harbors, Marine transportation, Port installations, Miami

2028

US Army Corps of Engineers (1922) Miami Harbor, Fla. 67th Congress, 4th Session, House document 516. US Government Printing Office, Washington, DC. 32 pp.

TIME COVERAGE: 1922

SUMMARY: This report evaluated the Miami Harbour and commerce in the area.

KEY WORDS: Harbors, Marine transportation, Port installations, Navigational channels, Miami

2029

US Army Corps of Engineers (1936) Miami Harbor, Fla. 74th Congress, 2d session, House document 86. US Government Printing Office, Washington, DC. 24 pp.

TIME COVERAGE: 1936

SUMMARY: This report evaluated the Miami Harbor and commerce in the area.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami

2030

US Army Corps of Engineers (1939) Miami Harbor, Fla. Examinations of rivers and harbors. 76th Congress, 1st Session, House document no. 470. US Government Printing Office, Washington, DC. 29 pp.

TIME COVERAGE: 1939

SUMMARY: This report is a survey of the Port of Miami.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami, Port of Miami

2031

US Army Corps of Engineers (1942) Miami Harbor, Fla. Report. US Government Printing Office, Washington, DC. 46 pp.

TIME COVERAGE: 1942

SUMMARY: This report describes the Port of Miami and planned dredging activities.

KEY WORDS: Harbors, Port installations, Port of Miami

2032

US Army Corps of Engineers (1947) Miami Harbor, Fla. In: Examinations of rivers and harbors. 79th Congress, 2d Session, Senate document 251. US Government Printing Office, Washington, DC. 46 pp.

TIME COVERAGE: 1947

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Harbors, Port installations, Marine transportation, Miami

2033

US Army Corps of Engineers (1990) Miami Harbor channel, Florida. General design memorandum. Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1990

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Harbors, Navigational channels, Shipping lanes, Miami

2034

US Army Corps of Engineers (1991) Miami Harbor channel, Florida: design memorandum. Report. US Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1991

SUMMARY: This report describes including proposed deepening of access channels to the Harbor.

KEY WORDS: Harbors, Navigational channels, Shipping lanes, Miami

2035

US Army Corps of Engineers (1942) Miami River, Fla. Report. US Army Corps of Engineers, Washington, DC. 25 pp.

TIME COVERAGE: 1942

SUMMARY: This report describes a project to widen the Miami River.

KEY WORDS: Navigational channels, Harbors, Miami River

2036

US Army Corps of Engineers (1946) Miami River, Fla. In: Examinations of rivers and harbors. 79th Congress, 1st Session, House document 91. US Government Printing Office, Washington, DC. 25 pp.

TIME COVERAGE: 1946

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: River engineering, Miami River

2037

US Army Corps of Engineers (1990) Navigation study for Miami Harbor (Miami River), Florida: final feasibility report - 10011. Final feasibility report - 10011. US Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1990

SUMMARY: The purpose of this study was to determine the type and amount of Federal participation that can be used to resolve problems and develop opportunities for the water and land related resources along the Miami River and Seybold Canal.

KEY WORDS: Navigational channels, Pollution control, Dredging, Miami River, Seybold Canal, Port of Miami

2038

US Army Corps of Engineers (1982) The port of Miami, Fla. In: The ports of Miami, Port Everglades, Palm Beach, and Port Canaveral, Florida. Port series 16, Revised 1982. US Government Printing Office, Washington, DC. 1-64.

TIME COVERAGE: 1982

SUMMARY: This document describes the Port of Miami and contains aerial photographs of the Bay.

KEY WORDS: Harbors, Port installations, Marine transportation, Aerial photography

2039

US Army Corps of Engineers (1948) The ports of Miami and Port Everglades, Florida. Port series no. 16 (revised 1947). US Government Printing Office, Washington, DC. 178 pp.

TIME COVERAGE: 1948

SUMMARY: This report contains detailed surveys of the Port of Miami and Port Everglades.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami, Port Everglades

2040

US Army Corps of Engineers (1982) The ports of Miami, Port Everglades, and Palm Beach, Florida. Port series no 16 (revised 1982). US Government Printing Office, Washington, DC. 144 pp.

TIME COVERAGE: 1982

SUMMARY: This report contains a description of the Port of Miami.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami

2041

US Army Corps of Engineers (1991) The ports of Miami, Port Everglades, and Palm Beach, Fla. Port series no 16 (revised 1991). NDC 91-P-3. US Government Printing Office, Washington, DC. 150 pp.

TIME COVERAGE: 1991

SUMMARY: This report contains a description of the Port of Miami.

KEY WORDS: Harbors, Port installations, Marine transportation, Miami

2042

US Army Corps of Engineers (1895) Preliminary examination of entrance to Biscayne Bay, Florida. 53rd Congress, 3d session, House document no. 343. US Government Printing Office, Washington, DC. 5 pp.

TIME COVERAGE: 1895

SUMMARY: This report describes the entrance to Biscayne Bay and possible effects on local commerce.

KEY WORDS: Harbors, Marine transportation, Navigational channels, Miami

2043

US Army Corps of Engineers (1958) Preliminary-examination report on hurricane-protective measures for Biscayne Bay, Fla. Serial no. 50. US Army Engineer District, Jacksonville, Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1958

SUMMARY: This report examined hurricane flooding in Biscayne Bay.

KEY WORDS: Hurricanes, Shore protection, Storm surge, Miami Beach, Miami

2044

US Army Corps of Engineers (1984) Section 103 detailed project report and environmental impact statement for Key Biscayne, Florida. Report. US Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1984

SUMMARY: The purpose of this beach study was to investigate the Atlantic shore of Key Biscayne to determine the need for beach erosion control and shore protection measures, and the feasibility and the estimated costs.

KEY WORDS: Beach erosion, Wave effects, Storm surge, Coastal zone, Shore protection, Beach nourishment, Key Biscayne, Bill Baggs State Park

2045

US Army Corps of Engineers (1988) Specifications for beach erosion control and hurricane protection, north of Haulover Park, Dade County, Florida. Report. US Army Engineer Division, South Atlantic, Jacksonville, FL.

TIME COVERAGE: 1988

SUMMARY: This report summarizes detailed analyses of protective shore protection works recommended in a 1982 feasibility report.

KEY WORDS: Erosion control, Beach erosion, Hurricanes, Haulover Beach Park, Sunny Isles

2046

US Army Corps of Engineers (1897) Survey of Biscayne Bay, Florida. 54th Congress, 2d Session, House document 295. US Government Printing Office, Washington, DC. 9 pp.

TIME COVERAGE: 1897

SUMMARY: This report presents the results of a survey of Biscayne Bay and possible dredging of a channel to aid navigation.

KEY WORDS: Navigational channels, Port installations, Cape Florida, Miami River

2047

US Army Corps of Engineers (1958) Survey report on Bakers Haulover Inlet, Florida. Serial no. 44. US Army Engineer District, Jacksonville, FL. Various paging.

TIME COVERAGE: 1958

SUMMARY: This report discusses plans to widen Bakers Haulover Inlet.

KEY WORDS: Inlets (Waterways), Navigational channels, Coastal erosion, Current velocity, Tidal effects, Shore protection, Bakers Haulover Inlet

2048

US Army Corps of Engineers (1962) Survey report on hurricane-protective measures for Biscayne Bay, Fla. Serial no. 128. US Army Engineer District, Jacksonville, Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1962

SUMMARY: This report studied the feasibility of various hurricane protection measures to reduce physical property damage.

KEY WORDS: Hurricanes, Shore protection, Coast defenses

2049

US Army Corps of Engineers (1965) Survey report on hurricane-protective measures for Biscayne Bay, Fla. House Document 213, 1st Session, 89th Congress. US Army Engineer District, Jacksonville, FL. 81 pp.

TIME COVERAGE: 1965

SUMMARY: This report is a feasibility study of various hurricane-protection measures to reduce property damage in Biscayne Bay. In view of absence of local support for the proposed levee, the Corps of Engineers recommended against the adoption of the project.

KEY WORDS: Erosion control, Beach erosion, Hurricanes, Storm surge, Shore protection, Coastal structures, Dade County, North Bay

2050

US Army Corps of Engineers (1957) Survey-review report on Miami Harbor, Florida. Report. US Army Engineer District, Jacksonville, Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1957

SUMMARY: This report details plans to build a freight and passenger terminal in Dodge Island.

KEY WORDS: Harbors, Port installations, Miami

2051

US Army Corps of Engineers (1995) Updated reconnaissance report: Biscayne Bay, Florida. Report. US Army Corps of Engineers, Jacksonville, FL. Various paging.

TIME COVERAGE: 1995

SUMMARY: This report determined the feasibility of developing and operating a hydrodynamic simulation model of Biscayne Bay.

KEY WORDS: Water quality, Water circulation, Biological production, Hydrology

2052

US Army Corps of Engineers (1981) Water resources development in Florida 1981. Report. US Army Engineer Division, South Atlantic, Atlanta, GA. 191 pp.

TIME COVERAGE: 1981

SUMMARY: This report describes the status of water resources in the state of Florida.

KEY WORDS: Water resources, Beach erosion, Flood control, Navigational channels, Harbors, Florida

2053

US Army Corps of Engineers (1989) Water resources development in Florida 1989. Report. US Army Engineer Division, South Atlantic, Atlanta, GA. 100 pp.

TIME COVERAGE: 1989

SUMMARY: This report describes the status of water resources in the state of Florida.

KEY WORDS: Water resources, Beach erosion, Flood control, Navigational channels, Harbors, Florida

2054

US Army Corps of Engineers (1993) Water resources development in Florida 1993. Report. US Army Engineer Division, South Atlantic, Atlanta, GA. 112 pp.

TIME COVERAGE: 1993

SUMMARY: This report describes the status of water resources in the state of Florida.

KEY WORDS: Water resources, Beach erosion, Flood control, Navigational channels, Harbors, Florida

2055

US Congress (1973) Protecting America's estuaries: Florida; hearings before a subcommittee of the Committee on Government Operations. Committee on Government Operations. Conservation and Natural Resources Subcommittee. House of Representatives, 93rd Congress, 1st Session, May 25, 1973. Two volumes: 1-A and 1-B. US Government Printing Office, Washington, DC. 2520 pp.

TIME COVERAGE: 1973

SUMMARY: These volumes are hearing on environmental protection of estuaries.

KEY WORDS: Estuaries, Environmental protection, Resource conservation, Florida

2056

US Environmental Protection Agency (1973) Final environmental impact statement, north Dade County, Florida. US Environmental Protection Agency, Atlanta, GA.

TIME COVERAGE: 1973

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Wastewater treatment, Waste disposal, Dade County

2057

US Fish and Wildlife Service (1998) Multi-species recovery plan for the threatened and endangered species of South Florida. Technical/agency draft. US Fish and Wildlife Service, Vero Beach, FL. ~850 pp (CD-ROM; also available in the Internet).

TIME COVERAGE: 1998

SUMMARY: [Volume I: the species. Volume II: the ecosystem.]

KEY WORDS: Threatened species, Eendangered species, Recovery plans

2058

US Fish and Wildlife Service (1958) A report on the fish and wildlife resources in relation to plans for protection from hurricane tides, Biscayne Bay, Florida. Report. US Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, Atlanta, GA. 20 pp + tables and figures.

TIME COVERAGE: 1958

SUMMARY: This report discusses the effects on fish and wildlife of a levee across Biscayne Bay to reduce damage by hurricane tides.

KEY WORDS: Sport fishing, Commercial fishing, Levees, Storm surge barriers

2059

US Fish and Wildlife Service (1999) South Florida multi-species recovery plan. Southeast Region, US Fish and Wildlife Service, Atlanta, GA.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Rare species, Resource conservation, Protected resources, Ecosystem management, South Florida

2060

US Geological Survey (1996) Ecosystem history of Biscayne Bay. USGS fact sheet FS-171-95. US Geological Survey, Reston, VA. 2 pp.

TIME COVERAGE: 1996

SUMMARY: This fact sheets contains a short description of the Biscayne Bay ecosystem.

KEY WORDS: Ecosystems, Aquatic communities

2061

US Geological Survey (1973) Resource and land information for south Dade County, Florida. Geological Survey investigation I-850. US Government Printing Office, Washington, DC. 66 pp.

TIME COVERAGE: 1973

SUMMARY: This report offers a sampling of the information required to develop alternative solutions for some representative problems and weighs the pros and cons of some selected alternatives.

KEY WORDS: Natural resources, Land use, Environment management, Dade County, Everglades

2062

US Geological Survey (1977) USGS water quality data and statistical summary, 1972-1976. Data report. US Geological Survey, Tallahassee?, FL. Various paging.

TIME COVERAGE: 1977

SUMMARY: This data report includes Appendix D: DERM yearly water quality data output to Biscayne Bay 1972-1976 and Appendix E: Water quality summary by station (dry season)

KEY WORDS: Water quality, Canals

2063

Vairavamurthy, A. (1989) 3-mercaptopropionic acid: abiotic formation of a novel thiol in organic rich marine sediments. Ph.D. dissertation. University of Miami, Coral Gables, FL. 194 pp.

TIME COVERAGE: 1989

SUMMARY: The origin and distribution of organic S compounds in marine sediments are largely unknown. A major thiol in anoxic marine environments is 3-mercaptopropionic acid. This work studied the reactions involving this thiol in marine sediments.

KEY WORDS: Organic sediments, Sulfur compounds, Thiols, Anoxic sediments

2064

Vairavamurthy, A., and K. Mopper (1987) Abiotic formation of 3-mercaptopropionate and other thiols in coastal marine sediments. In: Abstracts of papers, 194th natl. mtg., American Chemical Society. New Orleans, LA, 1987. American Chemical Society, Washington, DC. ENVR 180.

TIME COVERAGE: 1987

SUMMARY: 3-Mercaptopropionate acid is a dominant thiol in anoxic Bay sediments. This compound is formed abiotically by nucleophilic addition of hydrogen sulfide to acrylate under conditions typical of marine sediments.

KEY WORDS: Mercaptans, Thiols, Anoxic sediments

2065

Vairavamurthy, A., and K. Mopper (1990) Field method for determination of traces of thiols in natural waters. Anal. Chim. A., 236(-):363-370.

TIME COVERAGE: 1990

SUMMARY: A procedure for the determination of thiols in seawater and sediment interstitial waters was described and applied to samples collected in Biscayne Bay.

KEY WORDS: Thiols, Analytical techniques, Water analysis

2066

Vairavamurthy, A., and K. Mopper (1987) Geochemical formation of organosulphur compounds (thiols) by addition of H<sub>2</sub>S to sedimentary organic matter. Nature, 329(6140):623-625.

TIME COVERAGE: 1987

SUMMARY: Organosulfur compounds constitute a significant fraction of organic matter in recent and ancient iron-poor marine sediments. The widespread occurrence of 3-mercaptopropionic acid in sediments of Biscayne Bay and evidence for its formation by the abiotic reaction between hydrogen sulphide and acrylic acid is discussed.

KEY WORDS: Geochemistry, Organic matter, Diagenesis, Hydrogen sulfide, Sulfate reduction, Thiols, Sediment

2067

Valle, J. C. (1978) Modeling of dispersion in south Biscayne Bay. M.Sc. thesis. University of Miami, Coral Gables, FL.

TIME COVERAGE: 1978

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Dispersion, Mathematical models, Hydrodynamics, Snapper Creek, Black Creek Canal, Mowry Canal, South Bay

2068

Vallee, J. A. (1965) Some aspects of the biochemistry and physiology of the blood of *Ascidia nigra*. Ph.D. dissertation. University of Miami, Coral Gables, FL. 103 pp.

TIME COVERAGE: 1965

SUMMARY: The biochemistry and physiology of the blood of tunicates collected from seawalls in Key Biscayne were studied.

KEY WORDS: Tunicates, *Ascidia nigra*, Blood, Key Biscayne

2069

Valverdes, H. R., A. C. Trembanis, and O. H. Pilkey (1999) Summary of beach nourishment episodes on the U.S. east coast barrier islands. J. Coastal Res., 15(5):1100-1118.

TIME COVERAGE: 1999

SUMMARY: Since 1923, approximately 350 million cubic yards of sand have been deposited on the US East Coast barrier island shorelines from Long Island to Fisher Island by more than 573 beach nourishment projects. Beach nourishment to control coastal erosion has increased rapidly since the 1960s.

KEY WORDS: Beach nourishment, Barrier islands, Sunny Isles, Haulover Park, Bal Harbour, Miami Beach, Virginia Key, Key Biscayne, Fisher Island

2070

Van de Kreeke, J. (1976) Tides in Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL.

TIME COVERAGE: Various years

SUMMARY: Tides renew the waters of Biscayne Bay and this paper describes the tidal mechanism of this system. Tidal amplitudes decrease and phase lags increase going from north to south. As a first approximation we levels in each basin, North, Central, and South Biscayne Bay, and Card Sound fluctuate uniformly. The major changes in amplitude and phase occur across the shallows and causeways separating the basins. Information on currents was limited to North Biscayne Bay, Card Sound, Bear Cut, Government Cut, Angelfish Creek and Broad Creek.

KEY WORDS: Tides, Tidal currents, Card Sound, Bear Cut, Government Cut, Angelfish Creek, Broad Creek

2071

Van de Kreeke, J., and J. D. Wang (1984) Hydrography of north Biscayne Bay. Part I: Results of field measurements. Report for DERM and Sea Grant. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. Various paging.

TIME COVERAGE: 1982

SUMMARY: Results of field measurements carried out in northern Biscayne Bay were presented in this report. The field program was designed to obtain data on tides to calibrate and verify a two-dimensional tidal model, and to provide information on currents, waves and salinities for biological and chemical studies in the area.

KEY WORDS: Hydrography, Tides, Tidal currents, Wave motion, Salinity, North Bay, Conductivity

2072

Van Landingham, S. L. (1970) Physiochemical aspects of marine microalgae fluctuations along Bear Cut, Dade Co., Fla. J. Phycol., 6(Suppl.):6.

TIME COVERAGE: 1969

SUMMARY: Diurnal series of microalgae and plankton were collected at the surface and just above the bottom. Salinity, light penetration, C-14 uptake and tides were recorded. Samples were dominated by diatoms (Bacillariophyta). Bottom samples showed a striking pulse of Pyrrophyta, which in four of ten samples predominated over the Bacillariophyta. In every case but one, bottom samples contained more diatom cells than surface samples. Over 240 taxa of diatoms were encountered. Bottom samples had a predominance of microalgae. Variations of microalgae with respect to time may have been the results of flushing of the basin by the "pumping" action of strong salinities at high and low tides.

KEY WORDS: Algae, Plankton, Diatoms, Spatial variations, Bear Cut, Virginia Key

2073

Van Landingham, S. L., and J. W. Jossi (1972) Studies on diurnal variations in microalgae at a small artificial inlet along Virginia Key, Dade County, Florida, U.S.A. In: Proc., 1st Symp. on Recent and Fossil Marine Diatoms. R. Simonsen, (ed.). Bremerhaven, Germany, 1970. Cramer, Lehre. 145-170.

TIME COVERAGE: 1968

SUMMARY: Algal species, temperature, salinity, light penetration, C-14 assimilation and tidal cycle were determined. Bacillariophyta dominated all other groups in all surface samples. Pyrrophyta were dominant in six of the ten bottom samples. Bacillariophyta were dominant in the remainder. Abundance of diatoms in the bottom samples exceeded those at the surface in all cases but one.

KEY WORDS: Algae, Diatoms, Bacillariophyta, Pyrrophyta, Chlorophyta, Diurnal variations, Bear Cut, Virginia Key

2074

Van Leer, J. C., and H. L. Craig (1975) Eight-week Cyclesonde test off Bear Cut; a contribution to the Continental Shelf Current Measurement System program. RSMAS technical report 75-2. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Coral Gables, FL. 32 pp.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Cyclesonde, Profilers, Bear Cut

2075

Van Name, W. G. (1945) The North and South American ascidians. Bulletin of the American Museum of Natural History, 84(-):1-476.

TIME COVERAGE: 1945

SUMMARY: This citation is a description of the species of tunicates found in the Americas.

KEY WORDS: Ascidians, Tunicates

2076

Van Uden, N., and J. W. Fell (1968) Marine yeasts. In: Advances in Microbiology of the Sea. M. R. Droop, and E. J. F. Wood (eds.). Academic Press, London, UK. 239 pp. 167-201.

TIME COVERAGE: 1968

SUMMARY: This citation describes marine yeasts including the species found in Biscayne Bay.

KEY WORDS: Yeasts, Marine environment

2077

Van Uden, N., and M. C. Kolipinski (1962) *Torulopsis haemulonii* nov. spec., a yeast from the Atlantic Ocean. Antonie van Leeuwenhoek, 28(-):78-80.

TIME COVERAGE: 1962

SUMMARY: This species of yeast was isolated from the gut contents of fish and from Biscayne Bay seawater.

KEY WORDS: Yeasts, *Torulopsis haemulonii*, New species, Taxonomy

2078

VanArman, J. (1984) South Florida's estuaries. In: Environments of South Florida: Present and Past II. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL. p.

TIME COVERAGE: 1984

SUMMARY: This citation briefly describes the major estuaries in Florida including Biscayne Bay.

KEY WORDS: Estuaries, Estuarine organisms, Naples Bay, Rookery Bay, Estero Bay, Caloosahatchee Bay, Marco Island, Faka Union Bay, Fakachatchee Bay, Everglades National Park, Biscayne Bay, Intercoastal Waterway, Loxahatchee Bay, St. Lucie River Estuary

2079

VanArman, J. (1991) Surface water improvement and management (SWIM) planning at the South Florida Water Management District. In: Coastal Zone '91. Proc., 7th Symp. on Coastal and Ocean Management. O. T. Magoon, H. Converse, V. Tippie, L. T. Tobin, and D. Clark, (eds.). Long Beach, CA, 1991. American Society of Civil Engineers, New York, NY. 935-948.

TIME COVERAGE: 1989

SUMMARY: Surface water improvement and management (SWIM) plans for Lake Okeechobee, Biscayne Bay and the Indian River Lagoon were developed in 1989. The SWIM planning process, legislation and objectives are described.

KEY WORDS: Water management, Water quality, Water supply, SWIM Plan, Lake Okeechobee, Indian River Lagoon, South Florida Water Management District

2080

VanArman, J., S. Bellmund, and L. Gulick (1988) Interim Surface Water Improvement and Management (SWIM) plan for Biscayne Bay. South Florida Water Management District, West Palm Beach, FL. Two volumes (text and appendices A-K); Issued in compliance with the Surface Water Improvement and Management Act (Chapter 87-97, Laws of Florida) and Rule 17-43.035, F.A.C. (Florida Department of Environmental Regulation).

TIME COVERAGE: 1988

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water quality, Fresh water, Natural resources, Habitat, Environmental restoration, Conservation, Resource management, SWIM Plan

2081

VanArman, J., S. Bellmund, and L. Gulick (1989) Surface water improvement and management (SWIM) plan for Biscayne Bay. Revised. Two volumes (Text and Appendices A-K, reprinted 1991). South Florida Water Management District, West Palm Beach, FL. 118 pp + appendices.

TIME COVERAGE: 1989

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Water quality, Fresh water, Natural resources, Habitat, Environmental restoration, Conservation, Resource management, SWIM Plan

2082

VanArman, P. (1977) The larval development of *Hippolyte zostericola* (Smith) and *H. curacaoensis* Schmitt (Decapoda: hippolytidae) from Biscayne Bay, Florida. M.Sc. thesis. Florida Atlantic University, Boca Raton, FL. 162 pp.

TIME COVERAGE: 1975 - 1976

SUMMARY: Ovigerous female caridean shrimp were collected off Bear Cut and near the Miami Seaquarium in Virginia Key. The hatched larvae were raised in the laboratory and their development studied.

KEY WORDS: *Hippolyte zostericola*, *Hippolyte curacaoensis*, Caridean shrimp, Larval development, Crustacean larvae, Virginia Key

2083

Vander Linden, K. (1996) The Miami River: past, present and future. M.A. internship report. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 44 pp.

TIME COVERAGE: 1996

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: River basin management, Shipping, Miami River

2084

Vaughan, F. A. (1976) Food habits and growth of sea bream, *Archosargus rhomboidalis* (Linnaeus) on plant and animal food, with some comparisons to pinfish, *Lagodon rhomboides* (Linnaeus). M.Sc. thesis. University of Miami, Coral Gables, FL. 70 pp.

TIME COVERAGE: 1975

SUMMARY: [SEE NEXT CITATION FOR DESCRIPTION OF THE WORK.]

KEY WORDS: Sea bream, *Archosargus rhomboidalis*, Pinfish, *Lagodon rhomboides*, Food consumption, Growth, Virginia Key

2085

Vaughan, F. A. (1978) Food habits of the sea bream, *Archosargus rhomboidalis* (Linnaeus), and comparative growth on plant and animal food. Bull. Mar. Sci., 28(3):527-536.

TIME COVERAGE: 1974 - 1975

SUMMARY: This paper describes the food habits and utilization of plant and animal food by the sea bream in Biscayne Bay. Changes in the proportion of various food items were noted.

KEY WORDS: Sea bream, *Archosargus rhomboidalis*, Food consumption, Growth, Seaquarium flats, Gables-by-the-Sea

2086

Vaughan, T. W. (1910) A contribution to the geologic history of the Floridian Plateau. Papers from the Tortugas Laboratory. Vol. 4. Carnegie Institute of Washington, Washington, DC. 185 pp.

TIME COVERAGE: 1910

SUMMARY: This paper is an early work on the geology of the Floridian Plateau. Photographs of some areas of South Florida are included.

KEY WORDS: Geology, Ocean floor, Sediment, Coral reefs, Floridian Plateau, Florida Keys, Florida Bay

2087

Vaughan, T. W. (1910) The geologic work of mangroves in southern Florida. Smithsonian Misc. Collections, 52(-):461-464.

TIME COVERAGE: 1910

SUMMARY: This paper describes the geological importance of mangroves.

KEY WORDS: Mangrove swamps, *Rhizophora mangle*

2088

Vaughan, T. W. (1910) Geology of the Keys, the marine bottom deposits, and recent corals of southern Florida. Carnegie Institution of Washington year book 1909, 8(-):140-144.

TIME COVERAGE: 1910

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coral, Florida Keys, Dry Tortugas

2089

Vaughan, T. W. (1911) The recent madreporaria of southern Florida. Carnegie Institution of Washington year book 1910, 9:135-144.

TIME COVERAGE: 1911

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coral, Growth, Dry Tortugas

2090

Vearil, J. W., and C. T. Smith (1994) Hurricane Andrew and the Central and Southern Florida Project. In: Proc. Symp., Hurricanes of 1992: Lessons Learned and Implications for the Future.

R. A. Cook, and M. Soltani, (eds.). Miami, FL, 1993. American Society of Civil Engineers, New York. 597-606.

TIME COVERAGE: 1992

SUMMARY: The Central and Southern Florida Project was a multi-purpose water resource project. Preparations for and operations by the Army Corps of Engineers of the Project in response to Hurricane Andrew from a water management perspective were detailed. The impacts of the hurricane and rehabilitation work of the Project required due to the effects of the storm were discussed.

KEY WORDS: Winds, Water management, Flood control, Hurricane Andrew, Central and Southern Florida Project

2091

Veri, A. R., W. W. Jenna, and D. E. Bergamaschi (1975) Environmental Quality by Design: South Florida. University of Miami Press, Coral Gables, FL. 192 pp.

TIME COVERAGE: 1975

SUMMARY: This book discusses South Florida land use patterns and environment.

KEY WORDS: Environmental protection, Natural resources, Urbanization, Land use, South Florida, Everglades, Florida Keys

2092

Verma, A. P., and R. G. Dean (1970) Numerical modeling of hydromechanics of bay systems. In: Proc., Civil Engineering in the Oceans II. Miami Beach, FL, 1969. American Society of Civil Engineers, New York. 1069-1087.

TIME COVERAGE: 1970

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Mathematical models, Tidal prediction, Thermal pollution, Waste disposal, Power plants, Card Sound, Barnes Sound

2093

Veziroglu, T. N., and S. S. Lee (1974) Application of remote sensing for prediction and detection of thermal pollution. Prepared for NASA contract NAS10-8498; 95 pp.; NASA CR-139182; NTIS N75-10572. Clean Energy Research Institute, School of Engineering and Environmental Design, University of Miami, Coral Gables, FL. Microfiche copy.

TIME COVERAGE: 1974

SUMMARY: [ONLY MICROFICHE AVAILABLE.]

KEY WORDS: Remote sensing, Thermal pollution, Power plants, Turkey Point, Cutler Ridge

2094

Villanueva, M. L., and D. W. Pybas (eds.) (1994) Recommendations for hurricane preparations and responses for boating communities and industries. Tech. paper 75. Florida Sea Grant College Program, Gainesville, FL. 69 pp.

TIME COVERAGE: 1992

SUMMARY: The need to re-evaluate marine hurricane policies and programs was addressed during a workshop and the recommendations were presented in this report.

KEY WORDS: Hurricanes, Boats, Marinas, Warning services, Safety, Hurricane Andrew

2095

Villanueva, M. L., and D. W. Pybas (1995) Recommendations for pre-hurricane preparations and post-hurricane response and recovery plans. In: Coastal Zone '95. Proc., 9th Conf. B. L. Edge, (ed.). American Society of Civil Engineers, New York, NY. 274-275.

TIME COVERAGE: 1992

SUMMARY: This citation discusses pre-hurricane preparations and post-hurricane response by boaters.

KEY WORDS: Disasters, Planning, Recovery, Hurricanes, Hurricane Andrew

2096

Villella, J. B., E. S. Iversen, and C. J. Sindermann (1970) Comparison of the parasites of pond-reared and wild pink shrimp (*Penaeus duorarum* Burkenroad) in south Florida. Trans. Amer. Fisheries Soc., 99(1):789-794.

TIME COVERAGE: 1969

SUMMARY: The incidence of parasites in pond-raised shrimp, and the absence or reduced incidence of certain parasite species in pond-raised shrimp are discussed. Additional parasite species were found in wild shrimp.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Parasites, Shrimp culture, Turkey Point, Dry Tortugas

2097

Volker, A. (1976) Scientists studying massive fish kills. Museum, 7(9):11-13.

TIME COVERAGE: 1976

SUMMARY: This citation discusses fish kills in Biscayne Bay and potential causes.

KEY WORDS: Fish kill, Mullet, Mojarra, Snook, Kandrashoff, W.

2098

Von Oesen, H. M. (1973) A beach restoration project study Bal Harbour Village, Florida. Shore and Beach, 41(2):3-4.

TIME COVERAGE: 1973

SUMMARY: This citation is a description of the beach restoration of Bal Harbour next to Haulover Inlet.

KEY WORDS: Beach nourishment, Bal Harbour

2099

Von Sternberg, R. M. (1995) Repetitive DNA fragments as taxonomic markers for *Penaeus* sibling taxa (Decapoda: Dendrobranchiata: Penaeidae) from the southern terminus of the Florida peninsula, U.S.A. Ph. D. Dissertation. Florida International University, Miami, FL. 70 pp.

TIME COVERAGE: 1995

SUMMARY: Sympatric populations of *Penaeus duorarum* and *P. brasiliensis* from Biscayne Bay revealed species-specific satellite DNA organizational patterns with the restriction endonuclease EcoRI. The species-specific satellite DNA patterns can be explained as resulting from differential amplification/deletion events having altered monomer arrays after the divergence of these two species. Two discontinuous populations of pink shrimp (Biscayne Bay and Dry Tortugas) were found to exhibit distinct EcoRI satellite fragment patterns. BamHI repetitive fragments specific to the Dry Tortugas population were also detected.

KEY WORDS: Pink shrimp, DNA, Dry Tortugas, *Penaeus duorarum*, *Penaeus brasiliensis*

2100

Voss, G. L. (1974) Biological survey and development recommendations for Fair Isle, Biscayne Bay, Fla. Unpublished manuscript. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 15 pp.

TIME COVERAGE: 1974

SUMMARY: This report is a biological survey of Fair Isle, a man-made island south of the Mercy Hospital grounds, and possible damage due to dredge and fill since 1970. The major and initial damage occurred in 1924 when seagrass beds were covered by the spoil bank subsequently known as Fair Isle.

KEY WORDS: Biological surveys, Resource development, Fair Isle

2101

Voss, G. L. (1977) Biological survey and development recommendations for Convoy Point, Biscayne Bay, Fla. Unpublished manuscript. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 20 pp.

TIME COVERAGE: 1977

SUMMARY: This report contains a survey of Convoy Point and recommendations for possible improvement and use.

KEY WORDS: Biological surveys, Resource development, Convoy Point

2102

Voss, G. L. (1988) Coral Reefs of Florida. Pineapple Press, Sarasota, FL. 80 pp.

TIME COVERAGE: 1988

SUMMARY: This book is a short review of the coral reefs of Florida.

KEY WORDS: Coral reefs, Resource conservation, Man-induced effects, Florida, Guide

2103

Voss, G. L. (1972) An environmental impact study of Bayfront Park and Old Harbor, Miami, Florida. Unpublished consulting report to Edward D. Stone, Jr. & Associates, Ft. Lauderdale, FL. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 11 pp.

TIME COVERAGE: 1972

SUMMARY: An evaluation of the old port facilities located in Biscayne Blvd. found the area to be contaminated even after pollution abatement procedures had been in place for some time.

KEY WORDS: Environmental impact, Public access, Water policy, Bayfront Park

2104

Voss, G. L. (1973) An environmental impact study of Watson Island, Miami, Florida. Unpublished consulting report to Edward D. Stone, Jr. & Associates, Ft. Lauderdale, FL. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 21 pp.

TIME COVERAGE: 1973

SUMMARY: The area from the mouth of the Miami River north to the west end of the MacArthur Cswy. was still polluted and was expected to remain so until major changes were made in the Miami River. The waters of the area are turbid, reducing illumination and limiting the growth of marine plants. Bottom sediments were very fine grained. There were indications of eutrophication. Surveys in 1954-57 and 1959 showed the area to be almost totally devoid of attached benthic life. Fishing in the area is minimal. The waters of the ship basins are traps for the collection and sinking of debris and garbage.

KEY WORDS: Environmental impact, Land use, Water policy, Miami, Watson Island

2105

Voss, G. L. (1976) The invertebrates of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 173-179.

TIME COVERAGE: 1976

SUMMARY: Many invertebrate populations in Biscayne Bay have been decimated through shoreline changes, reduced flushing, seagrass destruction, and pollution. Comparisons between life on natural rocky shores, rip-rap and vertical bulkheads showed that the bulkheads were the least desirable structures. The richest populations were found in seagrass beds.

KEY WORDS: Marine invertebrates, Ecological distribution, Environmental impact, Restoration

2106

Voss, G. L. (1956) Protective coloration and habitats of the shrimp *Tozeuma carolinensis* Kingsley (Caridea: Hippolytidae). Bull. Mar. Sci. Gulf Caribb., 6(4):359-363.

TIME COVERAGE: 1956

SUMMARY: The caridean shrimp was reported as inhabiting colonies of alcyonarians, clinging to the branches by means of the pereopods and uropods. When on grassy bottom, the animal has a light greenish color but when inhabiting the alcyonarians, the body and proximal parts of the appendages are dark bluish purple.

KEY WORDS: Shrimp, *Tozeuma carolinensis*, Color, Protective behavior, Soldier Key

2107

Voss, G. L. (1952) A revision of the loliginid squids of the western Atlantic. M.Sc. thesis. University of Miami, Coral Gables, FL. 83 pp.

TIME COVERAGE: 1952

SUMMARY: This is a taxonomic study of squids. Some specimens were collected in Biscayne Bay.

KEY WORDS: Squid, Loliginidae, Taxonomy, Western Atlantic

2108

Voss, G. L. (1976) Seashore Life of Florida and the Caribbean: a Guide to the Common Marine Invertebrates of the Atlantic from Bermuda to the West Indies and the Gulf of Mexico. E. A. Seamann, Miami, FL.

TIME COVERAGE: 1976

SUMMARY: This is a guide to the seashore life of Florida and the Caribbean.

KEY WORDS: Marine invertebrates, Florida, Caribbean, Bahamas, Gulf of Mexico, Guide

2109

Voss, G. L. (1980) Seashore life of Florida and the Caribbean: a Guide to the Common Marine Invertebrates and Plants of the Atlantic from Bermuda and the Bahamas to the West Indies and the Gulf of Mexico. Banyan Books, Miami, FL. 199 pp.

TIME COVERAGE: 1980

SUMMARY: This is a revised and enlarged edition of the 1976 guide.

KEY WORDS: Marine invertebrates, Florida, Caribbean, Bahamas, Gulf of Mexico, Guide

2110

Voss, G. L., F. M. Bayer, C. R. Robins, M. F. Gomon, and E. T. LaRoe (1969) The marine ecology of the Biscayne National Monument. Rep. to the National Park Service. Institute of Marine and Atmospheric Sciences, University of Miami, Miami, FL. 128 pp.

TIME COVERAGE: 1969

SUMMARY: This report documents the marine ecology of the Biscayne National Monument in order to assist in the formulation of a sound ecological base upon which to formulate the general management policy. The report includes geology, climatology, fauna, flora, species lists, and research and management recommendations.

KEY WORDS: Marine ecology, Biota, Ecosystem management, Biscayne National Monument, Species list, Geology, Climatology

2111

Voss, G. L., J. S. Bunt, D. P. de Sylva, W. Drost-Hansen, H. Frohlich, W. A. Glooschenko, H. B. Moore, M. W. Provost, C. R. Robins, and D. C. Tabb (1969) Report of the committee on inshore and estuarine pollution. UML 17,470. Report to the Hoover Foundation. University of Miami, Institute of Marine Science, Miami, FL. 42 pp.

TIME COVERAGE: 1969

SUMMARY: This report examined the thermal tolerance of tropical organisms and listed recommendations to forestall environmental degradation.

KEY WORDS: Thermal pollution, Salinity tolerance, Pesticides, Environmental protection, Pollution control

2112

Voss, G. L., and R. T. Hanlon (1975) A guide to the sea grasses of Florida, the Gulf of Mexico, and the Caribbean region. Field guide series 4. University of Miami Sea Grant Program, Coral Gables, FL. 30 pp.

TIME COVERAGE: 1975

SUMMARY: This is a field guide to the seagrasses of Florida, the Gulf Coast and the Caribbean.

KEY WORDS: Seagrass, Identification keys, Florida, Gulf of Mexico, Caribbean, Field guide

2113

Voss, G. L., L. K. Opresko, and R. F. Thomas (1973) The potentially commercial species of octopus and squid of Florida, the Gulf of Mexico and the Caribbean Sea. Sea Grant field guide series 2. University of Miami Sea Grant College Program, Coral Gables, FL. 33 pp.

TIME COVERAGE: 1973

SUMMARY: This is a field guide to octopus and squid species found in Florida, the Gulf of Mexico and the Caribbean, including fishing methods and species identification.

KEY WORDS: Octopus, Squid, Cephalopod fisheries, Identification keys, Florida, Gulf of Mexico, Caribbean, Field guide

2114

Voss, G. L., and N. A. Voss (1955) An ecological survey of Soldier Key, Biscayne Bay, Florida. Bull. Mar. Sci. Gulf Caribb., 5(-):203-229.

TIME COVERAGE: 1955

SUMMARY: This paper is a detailed ecological description of Soldier Key. A large concentration of sea life was found in the offshore or ocean side of the key, and scarcity of such forms was found on the Bay side.

KEY WORDS: Marine invertebrates, Marine ecology, Ecological distribution, Soldier Key

2115

Voss, N. A. (1959) Studies on the pulmonate gastropod *Siphonaria pectinata* (Linnaeus) from the southeast coast of Florida. Bull. Mar. Sci. Gulf Caribb., 9(1):84-99.

TIME COVERAGE: 1959

SUMMARY: Studies and observations on this limpet were presented in this paper. The feeding, habitat, spawning, larval development, environmental and geographical variation, geographical distribution and growth of the species were discussed. The veliger, egg masses and newly settled young are illustrated.

KEY WORDS: Striped false limpet, *Siphonaria pectinata*, Life cycle, Ecological distribution, Bear Cut, Soldier Key, Ragged Keys

2116

Wade, R. A. (1962) The biology of the tarpon, *Megalops atlanticus*, and the ox-eye, *Megalops cyprinoides*, with emphasis on larval development. Bull. Mar. Sci. Gulf Caribb., 12(4):545-622.

TIME COVERAGE: 1962

SUMMARY: Larval and juvenile development of the tarpon and the ox-eye were compared. A developmental series was compiled from the plankton specimens and material collected from many sources. The series is illustrated and described.

KEY WORDS: Tarpon, *Megalops atlanticus*, Ox-eye, *Megalops cyprinoides*, Larval development, Juveniles

2117

Waite, T. D. (1976) Man's impact on the chemistry of Biscayne Bay. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 279-285.

TIME COVERAGE: 1971 - 1975

SUMMARY: Water quality data for Biscayne Bay was evaluated to determine anthropogenic effects. No clear trends in the three-year data set was determined. Pollution inputs to the Bay are probably due to runoff from urban areas.

KEY WORDS: Water quality, Man-induced effects, Water pollution, Stormwater runoff, Zn, Al, Oil wastes, Coral Gables Waterway

2118

Waite, T. D., and L. J. Greenfield (1977) Stormwater runoff characteristics and impact on urban waterways. Florida Scient., 40(3):239-249.

TIME COVERAGE: 1974 - 1975

SUMMARY: Runoff water quality was determined in residential areas of Miami. Runoff from parking areas contained high levels of bacteria and macronutrients. Pollution input from rain water was also monitored and correlated with a general air pollution index. High levels of contamination in the canals occurred during periods of high rainfall.

KEY WORDS: Stormwater runoff, Water pollution, Water quality, Coral Gables Waterway, Coliform bacteria, Nutrients

2119

Wakefield, J. W. (1939) Pollution studies in Biscayne Bay. Report. Florida State Board of Health, Bureau of Engineering, Jacksonville, FL. Unpaged.

TIME COVERAGE: 1928

SUMMARY: This report describes the results of a sanitary survey of Biscayne Bay. The author concluded that the waters of the Bay were polluted by discharge of the Miami River and numerous sewer outfalls but that it is contained and does not spread far into the Bay.

KEY WORDS: Water pollution, Sewage disposal, Miami Military Academy, Tahiti Beach

2120

Wakeford, A. (1998) Conflicting uses of Crandon Park how do they coexist? Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land use, Recreation, Crandon Park, Key Biscayne

2121

Wakimoto, R. M., and P. G. Black (1994) Damage survey of Hurricane Andrew and its relationship to the eyewall. Bull. Amer. Meteorological Soc., 75(2):189-200.

TIME COVERAGE: 1992

SUMMARY: A damage map documenting Hurricane Andrew's destructive landfall was presented. Vectors representing the direction of winds causing damage to trees and structures were shown. A superposition of radar data from Miami and Key West on top of the damage map provided the first detailed examination of the relationship between the eyewall and the surface flow field as estimated from the damage vectors.

KEY WORDS: Hurricanes, Wind speed, Damage, Hurricane Andrew

2122

Waller, B. G. (1986) Saltwater intrusion in a highly transmissive unconfined aquifer. In: Proc., Water Forum '86: World Water Issues in Evolution. American Society of Civil Engineers, New York, NY. 97-104.

TIME COVERAGE: 1986

SUMMARY: This paper describes the development of salt water intrusion into the aquifer as the hydrology of South Florida changed with time.

KEY WORDS: Saline intrusion, Canals, Biscayne Aquifer, Dade County

2123

Waller, B. G., and B. Howie (1988) Determining nonpoint-source contamination by agricultural chemicals in an unconfined aquifer, Dade County, Florida: procedures and preliminary results. In: Ground-Water Contamination: Field Methods. A. G. Collins, and A. I. Johnson (eds.). ASTM special technical publication 963. AST, Philadelphia, PA. 459-467.

TIME COVERAGE: 1985 - 1988?

SUMMARY: Preliminary results of water quality sampling indicate that agriculture has had a minimal effect on ground water quality. Only nitrate and nitrite from fertilizers were found at elevated concentrations.

KEY WORDS: Ground water, Wells, Water sampling, Quality assurance, Agricultural pollution, Nonpoint sources, Biscayne Aquifer, Dade County

2124

Waller, B. G., H. Klein, and L. J. Lefkoff (1984) Attenuation of stormwater contaminants from highway runoff within unsaturated limestone, Dade County, Florida. USGS water resources investigations rep. 84-4083. US Geological Survey, Tallahassee, FL. 12 pp.

TIME COVERAGE: 1984

SUMMARY: Infiltration of stormwater in heavily urbanized parts of Dade County constitutes a prime source of recharge to the unconfined Biscayne aquifer. Pounded stormwater at the test site contained greater concentrations of Pb, Zn, Mn, N (except nitrate) and P than that water which percolated through the unsaturated limestone. Attenuation of some stormwater contaminants in surface soils and limestone was indicated at the test site adjacent to a busy roadway.

KEY WORDS: Stormwater runoff, Chemical pollutants, Limestone, Biscayne aquifer, Dade County

2125

Waller, B. G., and J. L. Labowski (1987) Leachate migration from the solid waste disposal facility near Biscayne National Park, south Florida. In: Coastal Zone '87. Proc., 5th Symp. on Coastal and Ocean Management. O. T. Magoon, H. Converse, D. Miner, L. T. Tobin, D. Clark, and G. Domurat, (eds.). Seattle, WA, 1987. American Society of Civil Engineers, New York, NY. 681.

TIME COVERAGE: 1987

SUMMARY: Leachate from the Dade County Solid Waste Disposal Facility was migrating seaward and to the south from the site. Water quality indicators indicative of leachate migration were primarily ammonium, organic nitrogen, phenols and chemical oxygen demand. Cadmium, Cr and Pb were auxiliary indicators.

KEY WORDS: Waste disposal, Leaching, Ground water, Black Creek Canal, Goulds Canal

2126

Walsh, P. J., E. Danulat, and T. P. Mommsen (1990) Variation in urea excretion in the gulf toadfish *Opsanus beta*. Mar. Biol., 106(3):323-328.

TIME COVERAGE: 1989

SUMMARY: Urea excretion by gulf toadfish collected in Biscayne Bay was monitored and found to be significant. Excretion rates and plasma urea concentrations were not affected by antibiotic treatments which decreased intestinal microbe populations suggesting that recycling by gut microbe urease is not significant in this species. High levels of variability in urea excretion rates and variation in response to air exposure suggest that urea synthetic rates are affected by immediate past environmental conditions.

KEY WORDS: Toadfish, *Opsanus beta*, Urea, Excretion

2127

Walsh, P. J., B. C. Tucker, and T. E. Hopkins (1994) Effects of confinement/crowding on ureogenesis in the gulf toadfish *Opsanus beta*. J. Experimental Biol., 191(-):195-206.

TIME COVERAGE: 1992 - 1993

SUMMARY: Confinement of toadfish to small volumes of water initiated a switch to nearly complete reliance on ureogenesis for nitrogen excretion within approximately 24 hrs. The switch is probably due to confinement *per se* rather than to measurable build up of ammonia. Specimens used were caught by fishermen in Biscayne Bay.

KEY WORDS: Ornithine-urea cycle, Biological stress, Gulf toadfish, *Opsanus beta*

2128

Walter, M. A. (1976) Quantitative observations on the nutritional ecology of ctenophores with special reference to *Mnemiopsis mccradyi*. M.Sc. thesis. University of Miami, Coral Gables, FL. 70 pp.

TIME COVERAGE: 1976

SUMMARY: Ctenophores were collected in Biscayne Bay and their feeding activity related to the available food in the water. Natural food concentrations were simulated in the laboratory and it was found that ctenophores were unable to grow. This suggested that these animals depend on encountering patches of copepods at higher concentrations in order for them to feed successfully.

KEY WORDS: Ctenophores, *Mnemiopsis mccradyi*, Food consumption, Animal nutrition

2129

Walton, T. L. (1978) Beach erosion - long and short term implications (with special emphasis on the State of Florida). Florida Sea Grant technical paper no. 8. University of Florida, Sea Grant Coastal and Oceanographic Engineering Department, Gainesville, FL. 141-164.

TIME COVERAGE: 1978

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Beach erosion, Sea level changes, Wave effects, Coastal inlets, Florida

2130

Walton, T. L. (1977) Beach nourishments in Florida and on the lower Atlantic and Gulf coasts. Florida Sea Grant technical paper no. 2. Florida Sea Grant College Program, Gainesville, FL. 64 pp.

TIME COVERAGE: 1969, 1973

SUMMARY: This citation describes beach nourishment projects including those in Bal Harbour, Virginia Key and Key Biscayne. The information provided includes the volume of material placed on the beach, location of fill and borrow areas, length of the fill, and characteristics of the fill and borrow materials.

KEY WORDS: Beach nourishment, Shore protection, Bal Harbour, Virginia Key, Key Biscayne, Florida Keys

2131

Walton, T. L., and J. A. Purpura (1977) Beach nourishment along the southeast Atlantic and Gulf coasts. Shore and Beach, 45(3):10-18.

TIME COVERAGE: 1977

SUMMARY: This citation describes beach nourishment project in several locations including Key Biscayne.

KEY WORDS: Beach nourishment, Beach erosion, Virginia Key, Key Biscayne, Atlantic coast, Gulf coast

2132

Wang, H., and L. Lin (1994) Coastal and oceanographic impact of Hurricane Andrew. In: Proc. Symp., Hurricanes of 1992: Lessons Learned and Implications for the Future. R. A. Cook, and M. Soltani, (eds.). Miami, FL, American Society of Civil Engineers, New York, NY. 791-798.

TIME COVERAGE: 1992

SUMMARY: The storm damages caused by Andrew were disproportionately high when compared with hurricanes of similar strength to hit the US in the past. Extensive wind damage to residential homes and commercial type structures clearly was the main factor contributing to the high cost. Beach erosion and damages to water front property and coastal protective structures were insignificant. However, a larger impact from storm tides and wave forces can be expected if a hurricane would hit the open Florida coast.

KEY WORDS: Winds, Storm surge, Coastal erosion, Hurricane Andrew

2133

Wang, J. D. (1978) Verification of finite element hydrodynamic model CAFE. In: Proc., 26th annual Hydraulic Division Specialty Conf., Verification of Mathematical and Physical Models in Hydraulic Engineering. College Park, MD, 1978. American Society of Civil Engineers, New York, NY. 500-508.

TIME COVERAGE: 1978

SUMMARY: This paper describes the verification of the Circulation Analysis with Finite Elements (CAFE) model in Biscayne Bay.

KEY WORDS: Hydraulic models, CAFE, Finite element method, Fluid flow, Tidal dynamics

2134

Wang, J. D., J. S. Ault, B. K. Haus, J. Luo, and J. Rivera (1999) Modeling the southeast Florida coastal ecosystem - Hydrodynamic transport, salinity, and trophodynamics. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 208-210.

TIME COVERAGE: 1999

SUMMARY: Numerical hydrodynamic models of Biscayne Bay have been developed based on the vertically integrated equations of motion for hydrodynamics dynamically coupled with the advection-diffusion equation for salinity. The model is described.

KEY WORDS: Numerical models, Coastal waters, Hydrodynamics, Salinity, Trophodynamic cycle, Florida Bay

2135

Wang, J. D., and S. V. Cofer-Shabica (1988) The effects of freshwater canal discharges on salinities in Biscayne National Park. Unpublished report. Biscayne National Park, Homestead, FL.

TIME COVERAGE: 1988

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Canals, Fresh water, Salinity, Biscayne National Park

2136

Wang, J. D., S. V. Cofer-Shabica, and J. Chin Fatt (1988) Finite element characteristic advection model. J. Hydraulic Eng., 114(9):1098-1114.

TIME COVERAGE: 1988

SUMMARY: Finite element characteristic advection model was used to determine salinity distributions in Biscayne Bay resulting from canal discharges.

KEY WORDS: Advection, Transport processes, Mathematical models, Salinity, Drainage, Canals

2137

Wang, J. D., E. Daddio, and M. D. Horwitz (1978) Canal discharges into south Biscayne Bay. Report to DERM. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 76 pp.

TIME COVERAGE: 1978

SUMMARY: The small scale mixing and transport processes that take place in the vicinity of Snapper Creek, Black Creek and Mowry Canal were quantified through dye dispersion experiments.

KEY WORDS: Canals, Snapper Creek, Black Creek, Mowry Canal, Drainage water, South Bay

2138

Wang, J. D., and J. Van de Kreeke (1982) Biscayne Bay circulation study. Report prepared for Dade County Department of Environmental Resources Management. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. Various paging.

TIME COVERAGE: 1982

SUMMARY: The main emphasis of the first of this two-year study was data gathering and analysis. Water level variations and currents were measured at all open boundaries of the Bay and discharges computed. Similar measurements were completed for the channels connecting the units within the Bay.

KEY WORDS: Circulation

2139

Wang, J. D., and J. Van de Kreeke (1984) Hydrography of north Biscayne Bay. Part II: Modeling. Prepared for DERM and Sea Grant. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 80 pp.

TIME COVERAGE: 1984

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Hydrography, Models, Tidal currents, Tides, Flow measurement, North Bay

2140

Wang, J. D., and J. Van de Kreeke (1986) Tidal circulation in north Biscayne Bay. J. of waterway, port, coastal and ocean engineering, 112(6):615-631.

TIME COVERAGE: 1986

SUMMARY: The hydrodynamic exchange of north Biscayne Bay was analyzed using field measurements and numerical models. Alternatives for enhancing hydrodynamic transport and circulation by modifying the geometry of the Bay were evaluated.

KEY WORDS: Water exchange, Bay dynamics, Tidal dynamics, Coastal lagoons, North Bay

2141

Wangersky, E. D., and C. E. Lane (1960) Interaction between the plasma of the loggerhead turtle and toxin of the Portuguese man-of-war. Nature, 185(4709):330-331.

TIME COVERAGE: 1960

SUMMARY: Loggerhead turtles eat Portuguese man-of-war. The latter are equipped with a potent toxin contained in nematocysts that can penetrate even the exoskeleton of a crab. The loggerhead turtle lacks blood immune bodies which can deactivate the toxin. It is possible that turtles are not susceptible of the venoms of the type injected by the Portuguese man-of-war.

KEY WORDS: Loggerhead turtle, *Caretta caretta*, Portuguese man-of-war, *Physalia physalis*, Biological poisons, Blood

2142

Wanless, H. R. (1988) An evaluation of the past, present and future shore conditions on Key Biscayne, Southeast Florida. Unpublished manuscript. The Author, Miami, FL. 14 pp + appendices.

TIME COVERAGE: 1988

SUMMARY: Because of severe physical changes to the shore system, Key Biscayne has become isolated from the natural replenishment of sand for the past 60 yrs, evolving into a pile of sand which yields to limestone in the north and east and to muds in the south and west. This report evaluated the nature of Key Biscayne's shoreline and the factors that will influence its future stability.

KEY WORDS: Coasts, Beach erosion, Shore protection, Key Biscayne

2143

Wanless, H. R. (1981) Fining-upwards sedimentary sequences generated in seagrass beds. J. Sed. Petrol., 51(2):445-454.

TIME COVERAGE: 1981

SUMMARY: Shallow marine clastic and carbonate environments of southeast Florida contain fining-upwards sedimentary sequences being generated by *Thalassia testudinum* beds. Lateral seaward migration of flute-shaped sand pockets (storm blowouts) in the grass platform produces a lenticular fining-upwards package. Migration and vegetative restabilization of recurring blowouts on a grass platform can produce a composite sequence containing numerous complete or stacked incomplete fining-upward packages.

KEY WORDS: Marine environment, Sedimentation, Environmental effects, Mechanics, Seagrass, Key Biscayne

2144

Wanless, H. R. (1976) Geologic setting and recent sediments of the Biscayne Bay region, Florida. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 1-31.

TIME COVERAGE: 1976

SUMMARY: This paper describes the geology of Biscayne Bay, Card Sound and Barnes Sound.

KEY WORDS: Sedimentation, Holocene, Sedimentary environments, Sediment distribution, Card Sound, Barnes Sound

2145

Wanless, H. R. (1970) Influence of preexisting bedrock topography on bars of "lime" mud and sand, Biscayne Bay, Florida. AAPG Bull., 54(-):875.

TIME COVERAGE: 1970

SUMMARY: Two distinct geometries of "lime" mud and sand bars (parallel with and transverse to topographic restriction) have formed in association with a linear bedrock ridge of Key Largo Limestone along the eastern shore of Biscayne Bay.

KEY WORDS: Nearshore bars, Sand bars, Mud flats, Shoals

2146

Wanless, H. R. (1989) The inundation of our coastlines; past, present and future with a focus on south Florida. Sea Frontiers, 35(5):264-271.

TIME COVERAGE: 1989

SUMMARY: This articles summarizes the rise in sea level. Maps of the South Florida shoreline 5000 years ago, 3500 years ago and at present are shown.

KEY WORDS: Sea level changes, Coastal zone, Flooding, Shore protection, South Florida

2147

Wanless, H. R. (1987) Key Biscayne's "mangrove reef", a reflection of barrier island and sea level history. In: Symposium on South Florida geology. F. J. R. Maurrasse, (ed.). Memoir 3. Miami Geological Society, Coral Gables, FL.

TIME COVERAGE: 1987

SUMMARY: The "mangrove reef", a rocky intertidal platform at the north end of Key Biscayne, was shown to be composed of calcified black mangrove roots of Late Holocene age. Similar exposures are occasionally exposed elsewhere along eroding portions of Key Biscayne and Virginia Key. The significance of these features can only be determined by understanding the stratigraphic and sea level history of the area.

KEY WORDS: Mangrove swamps, Reefs, Sea level changes, Key Biscayne, Virginia Key

2148

Wanless, H. R. (1974) Mangrove sedimentation in geologic perspective. In: *Environments of south Florida: Present and Past*. P. J. Gleason (ed.). Memoir 2. Miami Geological Society, Miami, FL. 190-200.

TIME COVERAGE: 1974

SUMMARY: Coastal mangrove swamps are a passive sedimentary environment, offering some resistance to erosion, in which peat accumulates predominate if the area is protected from strong physical agitation and detrital sediment influx. Coastal swamps have produced transgressive, regressive, oscillating and equilibrium accumulates on the South Florida and Bahamas Platforms during the post-glacial, Holocene, sea-level rise. The varied patterns of coastal swamp sedimentation are related to the complex pre-existing and evolving co-existing topography through its influence on wave and current patterns, detrital sediment influx and freshwater drainage. Physical and chemical attributes of mangrove swamps can strongly influence the character of adjacent sedimentary environments.

KEY WORDS: Mangrove swamps, Sedimentation, Peat, Biogenic sediments

2149

Wanless, H. R. (1984) Mangrove sedimentation in geologic perspective. In: *Environments of south Florida: Present and Past II*. P. J. Gleason (ed.). Miami Geological Society, Coral Gables, FL. 551 pp.

TIME COVERAGE: 1984

SUMMARY: Coastal mangrove swamps are a passive sedimentary environment in which peat accumulates predominate if the area is protected from strong physical agitation and detrital sediment influx. Coastal swamps have produced transgressive, regressive, oscillating and equilibrium accumulates on the South Florida and Bahamas Platforms during the post-glacial, Holocene, sea-level rise. The varied patterns of coastal swamp sedimentation are related to the complex pre-existing topography through its influence on wave and current patterns, detrital sediment influx and freshwater drainage.

KEY WORDS: Mangrove swamps, Sedimentation, Biogenic deposits

2150

Wanless, H. R. (1976) Man's impact on sedimentary environments and processes. In: *Biscayne Bay: Past / Present / Future*. A. Thorhaug, and A. Volker (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 315 287-299.

TIME COVERAGE: 1976

SUMMARY: This paper describes anthropogenic changes to the morphology, sedimentary environments and sedimentary dynamics of Biscayne Bay. Man's impact results mainly from five influences: creation of artificial cuts across Miami Beach, obstruction and modification to the natural sediment movements on the ocean beaches, dredge and fill projects for waterways and land fill, construction of drainage canals across marginal freshwater marshes, and increased turbidity.

KEY WORDS: Sedimentary environments, Man-induced effects, Beach erosion, Dredging, Turbidity, North Bay

2151

Wanless, H. R. (1991) Observational foundation for sequence modeling. In: Sedimentary Modeling: Computer Simulations and Methods for Improved Parameter Definition. E. K. Franseen, W. L. Watney, C. G. S. C. Kendall, and W. Ross (eds.). Kansas Geological Survey bulletin 233. Kansas Geological Survey, Lawrence, KS.

TIME COVERAGE: 1991

SUMMARY: The design of useful models for predicting sequences and facies patterns of sedimentary cycles depends on an observational foundation that includes the recognition and adequate understanding of fundamental depositional sequences. Models should work from the fundamental depositional sequence. Caution should be used when applying models designed for one scale of sedimentary sequence to another scale.

KEY WORDS: Sedimentation, Stratigraphy, Sea level changes, Great Bahama Bank, Florida Bay, Caicos platform

2152

Wanless, H. R. (1982) Sea level is rising - so what? J. Sed. Petrol., 52(4):1051-1054.

TIME COVERAGE: 1982

SUMMARY: (Editorial)

KEY WORDS: Sea level changes, South Florida, Bermuda

2153

Wanless, H. R. (1967) Sediments of Biscayne Bay - distribution and depositional history. M.Sc. thesis. University of Miami, Coral Gables, FL. 260 pp.

TIME COVERAGE: 1967

SUMMARY: The objectives of this study included the examination of the transgressive character of the Holocene sedimentary record in Biscayne Bay and to compare, if possible, these sedimentary sequences with the classical Holocene transgressive records, and to examine the sedimentary accumulations in the Bay area in terms of depositional controls responsible for their development.

KEY WORDS: Sediment distribution, Sedimentation, Holocene, Sea level changes, Barnes Sound, Card Sound

2154

Wanless, H. R. (1969) Sediments of Biscayne Bay - distribution and depositional history. Tech. report 69-2. University of Miami, Institute of Marine and Atmospheric Sciences, Miami, FL. 260 pp.

TIME COVERAGE: 1969

SUMMARY: [THIS CITATION IS A REPRINT OF THE MS THESIS BY THE AUTHOR.]

KEY WORDS: Sediment distribution, Sedimentation, Holocene, Sea level changes, Barnes Sound, Card Sound

2155

Wanless, H. R. (1975) Sedimentary dynamics and significance of sea grass beds. Florida Scient., 38(Suppl. 1):20.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Seagrass, Sediment dynamics

2156

Wanless, H. R. (1977) Sediments of Biscayne Bay - distribution and depositional history. In: Field Guide to Some Carbonate Rock Environments, Florida Keys and Western Bahamas. H. G. Multer Kendall/Hunt, Dubuque, IO. 415 pp.

TIME COVERAGE: 1977

SUMMARY: This is the guidebook for a field trip in South Florida.

KEY WORDS: Sediment distribution, Sedimentation, Holocene, Sea level changes, Barnes Sound, Card Sound

2157

Wanless, H. R. (1978) Storm generated stratigraphy of carbonate mud banks, south Florida. Abstracts with programs (Geological Society of America), 10(-):512.

TIME COVERAGE: 1978

SUMMARY: Southward migration and expansion of east-west trending carbonate mud banks within Biscayne Bay and Florida Bay have generated sedimentary sequences composed of four lithologies, produced by an interaction of hurricane and repetitive winter storm sedimentation. A molluscan-foraminiferal grainstone to packstone forms the basal 0 - 15 cm over Pleistocene bedrock. This is a winter storm winnowed lag of sediment produced in bays adjacent to banks and/or carried into the bays during hurricanes. The overlying 0.2 - 1 m is a crudely layered molluscan-foraminiferal packstone thought to represent hurricane layers. These are deposited as widespread layers in the bays but are only preserved where covered by migrating or expanding mudbank flanks. The bulk of the mud banks is a pelleted mudstone (2 - 3 m in thickness) formed by lee side accretion of fine sediment during winter storm. Hurricanes may also add mud to lee flanks. Winter storm waves will strip any hurricane mud layers from north facing flanks. North facing flanks of banks contain a surficial molluscan grainstone to packstone. Shell is derived from winnowing of eroding north facing flanks as well as from southward transport from adjacent bays. Winter storm waves move lobes of this grainstone onto the bank flat.

KEY WORDS: Mud banks, Storms, Carbonate sediments, Florida Bay, Hurricanes

2158

Wanless, H. R., and E. A. Burton (1981) Hydrodynamics of carbonate fecal pellets. J. Sed. Petrol., 51(1):27-36.

TIME COVERAGE: 1981

SUMMARY: Sand-sized carbonate fecal pellets are a common dominant constituent of many shallow marine tropical environments. Samples of sediment containing pellets were collected in Soldier Key, Crane Key, and Sugarloaf Key. Settling analyses provided a first approximation of the hydrodynamic behavior of carbonate fecal pellets.

KEY WORDS: Fecal pellets, Carbonate sediments, Sediment transport, Soldier Key, Crane Key, Sugarloaf Key, Florida Bay, Florida Keys

2159

Wanless, H. R., D. J. Cottrell, M. G. Tagett, L. P. Tedesco, and E. R. Warzeski (1995) Origin and growth of carbonate banks in South Florida. In: Carbonate mud-mounds: their origin and evolution. C. L. V. Monty, D. W. J. Bosence, P. H. Bridges, and B. R. Pratt (eds.). Spec. pub. 23 of the International Association of Sedimentologists. Blackwell Scientific, Oxford, UK. 537 pp.

TIME COVERAGE: 1995

SUMMARY: Carbonate banks in and on the margins of Florida Bay and Biscayne Bay are intimately associated with either pre-existing limestone topography or transgressed ridges of coastal peat and coastal storm-levee buildups. These associations may be obscured by subsequent migration or expansion of the marine banks and by subsequent transformation of the initiating coastal deposits to marine deposits by repetitive alternations of excavation of marine burrow networks and storm infilling of networks with marine sediment.

KEY WORDS: Sand banks, Mud banks, Carbonate rocks, Diagenesis, Safety Valve Bank, Featherbed Bank, Caesar's Creek Bank, Southeast Florida, Florida Bay

2160

Wanless, H. R., D. J. Cottrell, R. W. Parkinson, and E. Burton (1984) Sources and circulation of turbidity, Biscayne Bay, Florida. Final report to Dade County and Florida Sea Grant. University of Miami, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 499 pp.

TIME COVERAGE: 1984

SUMMARY: This report outlines the causes of increases in turbidity in Biscayne Bay. Resuspension of flocculate bottom sediments from dredged areas within the Bay appear to be the main cause of persistently high turbidity levels. Recommendations to prevent further deterioration include preservation and planting of mangroves and seagrass communities, and control of boat traffic.

KEY WORDS: Turbidity, Suspended particulate matter, Water circulation, Dredging, Man-induced effects

2161

Wanless, H. R., J. J. Dravis, L. P. Tedesco, and V. Rossinsky (1989) Carbonate environments and sequences of Caicos Platform; Caicos, British West Indies to Miami Florida, July 20-26, 1989. Field trip guidebook T374. American Geophysical Union, Washington, DC. 75 pp.

TIME COVERAGE: 1989

SUMMARY: This is the guidebook for a field trip in South Florida.

KEY WORDS: Carbonate sediments, Platforms (Geology), Sedimentary structures, Caicos Platform, South Florida

2162

Wanless, H. R., R. W. Parkinson, and L. P. Tedesco (1994) A geological perspective of south Florida coastal environments. In: Florida Coastal Ocean Sciences Symposium (FCOSS). Miami, FL, 1994. Ocean Pollution Research Center, Rosenstiel School of Marine and Atmospheric Science, Miami, FL. 37-38.

TIME COVERAGE: 1994

SUMMARY: The geological development of South Florida is described. During the past 65 years, the 18-22 cm sea-level rise has modified significantly the coastal ecosystem. If the rate of sea-level rise continues, we can expect: an increase level of coastal turbidity and nutrients; storm driven loss of coastal wetlands; storm driven modification and migration of coastal levees, mud and sand banks, and barrier islands; deepening of coastal bays; and breaching of low area along the Keys to create new tidal passes.

KEY WORDS: Sea level changes, Coastal morphology, South Florida

2163

Wanless, H. R., and R. W. Parkinson (1989) Late Holocene sealevel history of south Florida: control on coastal stability. Abstracts with programs (American Geological Society), 21(6):A35-A36.

TIME COVERAGE: 1989

SUMMARY: [ABSTRACT OF THE CITATION THAT FOLLOWS.]

KEY WORDS: Sea level changes, Holocene, Coastal zone

2164

Wanless, H. R., and R. W. Parkinson (1989) Late Holocene sealevel history of southern Florida: control on coastal stability. In: Proc. 8th Symp. on Coastal Sedimentology, Coastal Sediment Mobility. W. F. Tanner, (ed.). Tallahassee, FL, 1989. Department of Geology, Florida State University, Tallahassee, FL. 197-214.

TIME COVERAGE: 1989

SUMMARY: Tide gauges record a dramatic increase in the rate of relative sealevel rise beginning in about 1932. The late Holocene conditions in South Florida were examined to help predict the effect of this and future increases.

KEY WORDS: Holocene, Sea level changes, Coastal zone

2165

Wanless, H. R., R. W. Parkinson, and L. P. Tedesco (1994) Sea level control on stability of Everglades wetlands. In: Everglades: the Ecosystem and its Restoration. S. M. Davis, and J. C. Ogden (eds.). St. Lucie Press, Delray Beach, FL. 199-223.

TIME COVERAGE: 1994

SUMMARY: The expansive coastal wetlands and freshwater marshes of South Florida are a result of the very slow relative rise of sea level during the past 3200 years. Prior to that time, relative sea level was rising too fast for coastal swamp, marl, or sand environments to stabilize. The establishment of a broad, coastal wetland during the past 3200 years has provided a natural barrier to marine waters and permitted freshwater environments of the Everglades to expand. Tide gauges throughout the US record a dramatic increase in the rate of relative sea level rise beginning about 1930. Continuation of these rates will cause dramatic to catastrophic modifications of both the coastal and freshwater wetland of South Florida.

KEY WORDS: Sea level changes, Holocene, Hurricanes, Everglades

2166

Wanless, H. R., and L. P. Tedesco (1993) Depositional and early diagenetic controls on texture and fabric of carbonate mudbanks, South Florida. In: Carbonate Microfabrics. R. Rezak, and D. L. Levoie (eds.). Frontiers in Sedimentary Geology. Springer-Verlag, New York, NY. 313 pp.

TIME COVERAGE: 1993

SUMMARY: This citation summarizes the processes of growth and early biological modification in modern carbonate mudbanks and shows how they define a predictable texture and fabric.

KEY WORDS: Mud banks, Sedimentary structures, Carbonate sediments, Florida Bay

2167

Wanless, H. R., L. P. Tedesco, and B. E. Hall (1999) Historical changes in mangrove, seagrass and calcareous algal communities in South Florida. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 213-215.

TIME COVERAGE: 1920s to present

SUMMARY: Seagrass and mangrove communities have undergone dramatic changes during the past century. The mud banks bordering the seaward margin of the Safety Valve and seaward of Caesar's Creek have been repeatedly stressed by hurricanes, including the Hurricane of 1928 and Hurricane Betsy, both of which were slow moving storms. Repeated storm erosion of seagrass communities of the Safety Valve is related to the more exposed location and sandier substrate. Hurricane Andrew eroded the Halimeda mounds in the Safety Valve. The Hurricane of 1935 smothered much of Caesar's Creek Bank with sediment from Biscayne Bay. This carbonate mud layer was colonized gradually and by 1960 it had regained the seagrass cover. By 1990, this layer was bioturbated and was 15 cm below the surface. Baker's Haulover initiated colonization by *Thalassia testudinum* in the shallow areas of north Biscayne Bay. Mangrove communities have undergone changes due to sea level rise, human modification of inland wetland water levels and coastal wetland salinity, major storms and freezes, and changing substrate.

KEY WORDS: Mangroves, Seagrass, Calcareous algae, Safety Valve, Caesar's Creek, Hurricane of 1928, Hurricane Betsy, Bakers Haulover, *Thalassia testudinum*, Hurricane Andrew, Halimeda, Temporal variations, Mangrove swamps, Seagrass, Algae, Florida Bay

2168

Wanless, H. R., L. P. Tedesco, D. J. Cottrell, and M. G. Tagett (1994) Holocene environmental history of carbonate banks in Florida Bay and Biscayne Bay, South Florida. Bull. Mar. Sci., 54(3):1087.

TIME COVERAGE: 1994

SUMMARY: Skeletal sand and mud banks in Biscayne Bay either extend from gaps in the seaward limestone ridge or are positioned bayward of the protection of a physical bank growth, extension and migration. The internal stratigraphy of the marine carbonate banks record pulses of physical growth followed by seagrass recolonization.

KEY WORDS: Banks, Carbonate rocks, Holocene, Florida Bay

2169

Ward, B. (1988) An oceanarium for Miami. Thesis (Architecture). Montana State University, Billings, MT. 56 pp.

TIME COVERAGE: 1988

SUMMARY: [NOT AVAILABLE.]

KEY WORDS: Marine aquariums

2170

Ward, H. L. (1954) Parasites of marine fishes of the Miami region. Bull. Mar. Sci. Gulf Caribb., 4(3):244-261.

TIME COVERAGE: 1954

SUMMARY: Parasites were collected from the viscera of nine species of marine fish. The parasites are identified and the occurrence discussed.

KEY WORDS: Helminths, Parasites, Trematodes, Cestodes, Acanthocephalans, Nematodes, Marine fish, Miami

2171

Warzeski, E. R. (1976) Growth history and sedimentary dynamics of Caesars Creek Bank. M.Sc. thesis. University of Miami, Coral Gables, FL. 195 pp.

TIME COVERAGE: 1976

SUMMARY: Sediments of Caesar's Creek Bank, a large carbonate mud bank associated with a major tidal pass, were examined. The most important event in the bank's history was submergence of the bedrock sill separating Caesar's Creek from southern Biscayne Bay initiating the tidal bank phase between 4600 and 4000 BP.

KEY WORDS: Mud banks, Caesars Creek Bank, Carbonate sediments, Biogenic deposits

2172

Warzeski, E. R. (1976) Storm sedimentation in the Biscayne Bay region. In: Biscayne Bay: Past / Present / Future. A. Thorhaug, and A. Volker, (eds.). Biscayne Bay Symp. I. University of Miami Sea Grant Program Spec. Rep. 5. University of Miami, Coral Gables, FL. 33-49.

TIME COVERAGE: 1976

SUMMARY: Storm erosion and transport occur almost entirely during winter cold front and hurricanes in Biscayne Bay. Man-made features are generally more vulnerable to storm damage than natural sediment accumulations. Bridge abutments, causeways and land-fill islands that constrict the flow of storm surge are commonly washed away.

KEY WORDS: Storms, Storm surge, Sedimentation, Wave effects

2173

Warzeski, E. R., K. J. Cunningham, R. N. Ginsburg, J. B. Anderson, and Z. D. Ding (1996) A Neogene mixed siliciclastic and carbonate foundation for the Quaternary carbonate shelf, Florida Keys. J. Sed. Res. Section B, 66(4):788-800.

TIME COVERAGE: 1996

SUMMARY: New core holes and marine seismic profiles show the distribution and paleoenvironments of a siliciclastic foundation sandwiched between the much-studied Quaternary carbonates of the Middle and Upper Florida Keys and Oligocene to Miocene carbonates of the Arcadia Formation.

KEY WORDS: Neogene, Siliciclastic deposits, Quaternary, Carbonates, Florida Keys

2174

Wasilewski, J. A. (1993) The American crocodile: a lesson of survival. Tropical Trails, -(Spring):3-7.

TIME COVERAGE: 1993

SUMMARY: This article reviews the ecology of the crocodile and its survival to present time.

KEY WORDS: American crocodile, *Crocodylus acutus*, Rare species

2175

Water Resources Engineers (1976) Environment impact assessment, water quality analysis, Biscayne Bay. Contract WQ5ACO25. Sponsored by the National Commission on Water Quality. PB-252 095. National Technical Information Service, Springfield, VA. 213 pp.

TIME COVERAGE: 1976

SUMMARY: This report evaluated the condition of the Bay and potential effects of changes in effluent discharges.

KEY WORDS: Water quality, Water treatment, Environmental impact, Pollution control

2176

Webb, R. S., and D. W. Pybas (1994) Preliminary characterization of the branch and stem gall/canker disease etiology of red mangrove (*Rhizophora mangle*). Unpublished report. University of Florida, School of Forest Resources and Conservation, Gainesville, FL. 10 pp.

TIME COVERAGE: 1994

SUMMARY: Branch galls were collected from mangroves at eleven sites in Florida. Fungi isolated from the galls were identified.

KEY WORDS: Galls, Red mangrove, *Rhizophora mangle*, Biscayne National Park

2177

Weinberg, N. L., and W. G. Grantham (1971) Development of an underwater acoustics laboratory course. J. Acoustical Soc. America, 49(-):697-705.

TIME COVERAGE: 1971

SUMMARY: This citation describes an underwater acoustics course using Bear Cut as the experimental site.

KEY WORDS: Acoustics, Education, Laboratories, Institute of Marine and Atmospheric Sciences, University of Miami, Bear Cut

2178

Weisbord, N. E. (1974) Late Cenozoic corals of south Florida. Bulletins of American Paleontology, 66(285):259-544.

TIME COVERAGE: 1974

SUMMARY: This citation is a guide to fossil corals found in South Florida.

KEY WORDS: Coral, Cenozoic, South Florida, Field guide

2179

Weiss, C. M. (1948) The abnormal development of tunicates attached to glass surfaces adjacent to antifouling paints. Ecology, 29(2):215-218.

TIME COVERAGE: 1948

SUMMARY: Abnormal and inhibited growth of tunicates was demonstrated on glass surfaces adjacent of antifouling paints.

KEY WORDS: Tunicates, *Symplesma viride*, Antifouling substances, Paints, Glass

2180

Weiss, C. M. (1947) The comparative tolerances of some fouling organisms to copper and mercury. Biol. Bull., 93(-):56-63.

TIME COVERAGE: 1947

SUMMARY: Anti-fouling paints were tested off Miami and Tahiti Beaches and barnacles were found to be the earliest organisms to attach themselves to the test panels.

KEY WORDS: Fouling organisms, Cu, Hg, Toxicity tolerance

2181

Weiss, C. M. (1947) The effect of illumination and stage of tide on the attachment of barnacle cyprids. Biol. Bull., 93(3):240-249.

TIME COVERAGE: 1947

SUMMARY: The rate of attachment of barnacles during daylight and night exposures, and the effect of artificial illumination of the collecting surface at night were investigated. Maximum attachment occurred during daylight hours.

KEY WORDS: Barnacles, Biological attachment, *Balanus improvisus*, Light effects, Tidal effects

2182

Weiss, C. M. (1948) Observations on the abnormal development and growth of barnacles as related to surface toxicity. Ecology, 29(1):116-119.

TIME COVERAGE: 1948

SUMMARY: Barnacles attached to and growing on copper antifouling paints, copper alloys, and zinc were found to have the edge of the base deeply scalloped and the plates of the shell distorted. These specimens also had an extensive calcification of the base and were loosely attached to the substratum. This reaction was not found in barnacles attached to mercury antifouling paints or lead surfaces.

KEY WORDS: Barnacles, Abnormalities, Paints, Metals

2183

Weiss, C. M. (1948) An observation on the inhibition of marine wood destroyers by heavy fouling accumulation. Ecology, 29(1):120.

TIME COVERAGE: 1944 - 1945

SUMMARY: Greatest destruction by wood-destroying marine organisms was observed in pieces of wood with little or no fouling attachment, whereas heavily fouled surfaces showed little or no wood destruction.

KEY WORDS: Wood, Fouling organisms, Teredo, Limnoria

2184

Weiss, C. M. (1948) The seasonal occurrence of sedentary marine organisms in Biscayne Bay, Florida. Ecology, 29(2):153-172.

TIME COVERAGE: 1942 - 1946

SUMMARY: Records of monthly accumulations of fouling organisms were kept for four years at several sites in Biscayne Bay. Results showed marked seasonal variation in occurrence of intensity of the same fouling organisms.

KEY WORDS: Fouling organisms, Seasonal variations, Barnacles, Tunicates, Bryozoans, Tahiti Beach, Miami Beach, Species list

2185

Weiss, C. M. (1948) Seasonal and annual variations in the attachment and survival of barnacle cyprids. Biol. Bull., 94(1):236-243.

TIME COVERAGE: 1943 - 1945

SUMMARY: Daily barnacle attachment and water quality data were recorded. No relationship between settling and changes in temperature were established. Seasonal variations were observed.

KEY WORDS: Barnacles, Biological attachment, Diurnal variations, Periodic variations, Miami Beach

2186

West, J. A., and G. C. Zuccarello (1995) New records of *Bostrychia pinnata* and *Caloglossa ogasawaraensis* (Rhodophyta) from the Atlantic U.S. Botanica Marina, 38(4):303-306.

TIME COVERAGE: 1995

SUMMARY: Collections of red algae were made in the southwestern US including the Miami River. The plants in culture do not reproduce. All the culture isolates developed as tetrasporophytes.

KEY WORDS: *Bostrychia pinnata*, *Caloglossa ogasawaraensis*, Red algae, Miami River, Algae, Rhodophyta

2187

Wetherell, V., and A. Nielsen (1991) Biscayne Bay - Card Sound: Aquatic preserve management plan. Report. Bureau of Submerged Lands and Preserves, Florida Dep. of Natural Resources, Tallahassee, FL. 184 pp.

TIME COVERAGE: 1991

SUMMARY: Biscayne Bay-Card Sound Aquatic Preserve is located in Monroe County and covers approximately 17,000 acres of seagrass meadows, hard bottom communities and mangrove wetlands. The preserve is characterized as a relatively pristine, shallow lagoon system of the northern Florida Keys and southern Biscayne Bay. The preserve encompasses critical habitat for the endangered West Indian manatee, and is particularly recognized as one of the only remaining habitat areas for the American crocodile. Impacts to the resources include propeller and grounding damage to grassbeds, extended boat anchoring which shades grassbeds, fishing and marine life collecting which introduce gear and chemicals that impact species. Development is also a growing threat to the preserve, particularly from developments on north Key Largo and Pumpkin Key.

KEY WORDS: Seagrass, Community composition, Marine parks, Habitat, Florida Keys,

2188

Weymouth, R. (1997) Economic considerations for Virginia Key Beach Park. Unpublished student report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Land use, Recreation, Economic analysis, Virginia Key

2189

Whelan, C. W. (1998) Extraction of nearshore directional wave spectra from VHF radar Doppler spectra. M.Sc. thesis. University of Miami, Coral Gables, FL. 51 pp.

TIME COVERAGE: 1998

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Wave spectra, Radar, Doppler effect, Nearshore currents, Key Biscayne

2190

Whelan, M. P. (1994) Structural waste generated by Hurricane Andrew. M. S. thesis. Florida International University, Miami, FL. 94 pp.

TIME COVERAGE: 1992

SUMMARY: This study provided an accurate evaluation of the three most popular roof coverings used in South Florida and damaged experienced by these coverings during Hurricane Andrew. Experimental values included estimated wind speed, percent of damage, distance from Biscayne Bay, distance to eye wall, and roof covering.

KEY WORDS: Hurricane Andrew, Structural damage

2191

White, W. A. (1970) The geomorphology of the Florida peninsula. Geological bulletin 51. Florida Department of Natural Resources, Bureau of Geology, Tallahassee, FL. 164 pp.

TIME COVERAGE: 1970

SUMMARY: This paper describes the geology of South Florida.

KEY WORDS: Geomorphology, Landforms, Florida

2192

Whited, C. (1986) Biscayne Bay is nature's living classroom. The Miami Herald, Miami, FL. December 6. Local. 1B.

TIME COVERAGE: 1986

SUMMARY: This brief article describes Bay ecology and the planned Biscayne Nature Center.

KEY WORDS: Biscayne Nature Center

2193

Whoriskey, P. (1999) Stiltsville headed for a watery grave. The Miami Herald, Miami, FL. April 1. 1.

TIME COVERAGE: 1999

SUMMARY: This article discusses the continuing controversy over the status of Stiltsville, and its possible designation as a historical landmark.

KEY WORDS: Stiltsville, Biscayne National Park

2194

Wicker, J. A. (2000) Low-level monitoring of bottlenose dolphins in Biscayne Bay. Florida Scientist, 63(Suppl. 1):13.

TIME COVERAGE: 1994 - 2000?

SUMMARY: Low level monitoring in the Bay has been ongoing since 1994. All bottlenose dolphins that inhabit Biscayne Bay have been identified via photoidentification. Seasonality of abundance in the Bay was assessed.

KEY WORDS: Dolphins, *Tursiops truncatus*, Monitoring, Human interaction

2195

Wickham, D. A. (1967) Observations on the activity patterns in juveniles of the pink shrimp, *Penaeus duorarum*. Bull. Mar. Sci., 17(4):769-786.

TIME COVERAGE: 1967

SUMMARY: The daily pattern of locomotor and burrowing activity of juveniles of pink shrimp was observed in the laboratory under constant conditions of light intensity, water current, and water level. A bimodal pattern of nocturnal activity with a period of diurnal burrowing was observed near the times of the new and the full moon. This study indicated that activity of pink shrimp at any given time in the field is probably a resultant of the interaction of the environmental stimuli which are present and the rhythmic patterns of the previously experienced stimuli.

KEY WORDS: Pink shrimp, *Penaeus duorarum*, Juveniles, Circadian rhythms

2196

Wiegel, R. L. (1992) Dade County, Florida, Beach Nourishment and Hurricane Surge Protection Project. Shore & beach, 60(4):2-28.

TIME COVERAGE: 1992

SUMMARY: This paper summarizes data on the background, design, construction, maintenance and performance of the Dade County Beach Nourishment and Hurricane Surge Protection Project. An addendum regarding the effects of Hurricane Andrew was included.

KEY WORDS: Beach nourishment, Hurricanes, Storm surge, Beach Erosion Control and Hurricane Protection Project, Dade County, Hurricane Andrew

2197

Wiggins, L. (1995) The birth of the City of Miami. Tequesta, 55(-):5-38.

TIME COVERAGE: 1890s

SUMMARY: In 1895 the Brickell and Tuttle families, and H. M. Flagler were instrumental in the incorporation of the City of Miami. The Brickells and Tuttlés owned land. Flagler owned the railroad. This article describes the process.

KEY WORDS: History

2198

Wilding, N. J. (1968) Osmotic behavior and water balance in *Acanthopleura granulata* (Gmelin) (Mollusca, Polyplacophora). M.Sc. thesis University of Miami, Coral Gables, FL. 46 pp.

TIME COVERAGE: 1968

SUMMARY: This work is a study of the physiology and ecology of chitons.

KEY WORDS: Chitons, *Acanthopleura granulata*, Osmoregulation, Water balance, Soldier Key, Ragged Keys

2199

Willard, D. A., G. L. Brewster-Wingard, S. E. Ishman, B. R. Wardlaw, T. M. Cronin, and C. W. Holmes (1998) Ecosystem changes in south Florida over the last few millennia: climatic and anthropogenic controls. Abstracts with programs (Geological Society of America), 30(7):118.

TIME COVERAGE: 1998

SUMMARY: Analyses of biotic components (pollen, ostracodes, foraminifera and mollusks) from dated sediment cores collected in the Everglades, Florida Bay and Biscayne Bay provide a record of changes in hydroperiod, fires, salinity and seagrass dynamics. Over the past 200 years, Florida Bay and Biscayne Bay have been driven primarily by climatic and oceanographic factors. These patterns were disrupted in the 20th century resulting in higher salinity and seagrass abundance, probably reflecting water management practices and climatic changes.

KEY WORDS: Ecosystems, Climatic changes, Anthropogenic factors, Paleoecology, South Florida, Florida Bay, Everglades, Sediment cores

2200

Willard, D. A., G. L. Brewster-Wingard, T. M. Cronin, S. E. Ishman, and C. W. Holmes (1999) Impact of hydraulic changes on the Everglades/Florida Bay ecosystem: a regional, paleoecological perspective. Proc., 1999 Florida Bay and Adjacent Marine Systems Science Conf. Key Largo, FL, November 1-5, 1999. University of Florida, Gainesville, FL. 196-197.

TIME COVERAGE: 1900 - present?

SUMMARY: The response of the Everglades/Florida Bay ecosystem to hydrologic changes over the past century was investigated using floral and faunal assemblages in sediment cores as proxies for vegetation and environmental parameters. The combined terrestrial and marine records indicate that the major, system-wide biotic changes occurred by 1940, which coincides with the construction of primary canals and the Tamiami Trail which disrupted the sheet flow.

KEY WORDS: Sediment, Canals, Florida Bay, Hydrologic changes

2201

Willey, G. R. (1949) Excavations in Southeast Florida. Yale University publications in anthropology no. 42. Yale University Press, New Haven, CT. 137 pp.

TIME COVERAGE: 1949

SUMMARY: This is a description of the culture and artifact of the people who lived in southeast Florida in pre-Columbian times.

KEY WORDS: Archaeology, Belle Glade, Broward County, Dade County

2202

Williams, J. M., F. Doehring, and I. W. Duedall (1993) Heavy weather in Florida: 180 hurricanes and tropical storms in 122 years. Oceanus, 36(1):19-26.

TIME COVERAGE: 1871 - 1992

SUMMARY: Of the nearly 1000 cyclones of hurricane or tropical storm intensity formed from 1871 through 1992, about 180 have struck or passed near Florida. There appears to be a temporal pattern to tropical cyclones. From 1901 to 1930, there were fewer tropical storms than during the previous 30-yr period and the pattern of strikes shifted to more strikes from the southeast.

KEY WORDS: Storms, Hurricanes, Florida, Hurricane of 1926, Hurricane Andrew, Hurricane Betsy

2203

Williams, M. (1990) Trouble in paradise: in shadow of Miami, Stiltsville's days numbered. Atlanta Journal, April 8. Dixie Living. M01.

TIME COVERAGE: 1990

SUMMARY: Description of Stiltsville and plans to prevent rebuilding of the houses.

KEY WORDS: Stiltsville

2204

Williams, R. H. (1955) Florida seaweeds and their commercial use. Florida Board of Conservation educational series 7 (revised by G. L. Voss). Marine Laboratory, University of Miami, Coral Gables, FL. 18 pp.

TIME COVERAGE: 1955

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Seaweeds, Seaweed products, Florida

2205

Williams, R. H. (1945-1946) Seaweed utilization in south Florida. Quart. J. Fla. Acad. Sci., 8(2):161-170.

TIME COVERAGE: 1946

SUMMARY: This paper describes potential uses of seaweed, such as fertilizer and stockfeed, in Florida. Agar-bearing species were absent in Biscayne Bay and growth experiments were conducted to see if these plants could grow in South Florida conditions.

KEY WORDS: Seaweeds, Seaweed products, Agar

2206

Williams, W. (1983) Florida's Fabulous Waterbirds: Their Stories. National Art Services, Tampa, FL. (Unpaged.).

TIME COVERAGE: 1983

SUMMARY: This book contains photographs and brief descriptions of waterbirds found in Florida.

KEY WORDS: Aquatic birds, Florida

2207

Willingham, C. A. (1966) Studies on the mechanisms of mild steel corrosion in the marine environment with special reference to the sulfate reducing bacteria. Ph.D. dissertation University of Miami, Coral Gables, FL. 122 pp.

TIME COVERAGE: 1966

SUMMARY: A significant number of enrichment cultures obtained from marine environments are corrosive to metallic irons. This work showed that sulfate reduction and anaerobic bacterial corrosion were not necessarily linked. Some samples were obtained in Virginia Key.

KEY WORDS: Sulfate reduction, Corrosion, Anaerobic bacteria, Virginia Key

2208

Willoughby, H. L. (1898) Across the Everglades: A Canoe Journey of Exploration. Florida Classics Library, Salerno, FL. 192 pp.

TIME COVERAGE: 1898

SUMMARY: This is an early account of exploration of the Everglades. The author departed Miami and traveled south via Biscayne Bay to Cape Sable. He traveled in the Everglades roughly west to east. The episode of the Seminoles and the vaseline is included in this book.

KEY WORDS: History, Everglades, Soldier Key, Florida Keys, Exploration, Cape Sable, Card Sound

2209

Willoughby, H. E., and P. G. Black (1996) Correction of Hurricane Andrew in Florida: dynamics of a disaster. Bulletin of the American Meteorological Society, 77(5):962.

TIME COVERAGE: 1992

SUMMARY: Correction to paper by same authors.

KEY WORDS: Wind speed, Hurricane Andrew

2210

Willoughby, H. E., and P. G. Black (1996) Hurricane Andrew in Florida: dynamics of a disaster. Bulletin of the American Meteorological Society, 77(3):543-549.

TIME COVERAGE: 1992

SUMMARY: This paper describes the effect of Hurricane Andrew on South Florida.

KEY WORDS: Wind speed, Hurricane Andrew

2211

Wilson, M. (1993) The time bomb. The Miami Herald, Miami, FL. Tropic Magazine. 13-23.

TIME COVERAGE: 1987 - 1993

SUMMARY: In 1987, Dade County officials realized that an ancient sewer main was about to turn Biscayne Bay into the world's largest toilet. This article describes the six-year effort to remedy this situation.

KEY WORDS: Sewage, Pollution, Cross Bay Line

2212

Wilson, S. U. (ed.) (1975) Biscayne Bay: environmental and social systems. Sea Grant special report 1. University of Miami Sea Grant Program, Coral Gables, FL. 52 pp.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Natural resources, Environmental management, Regional planning, Water policy

2213

Wiman, S. K., and W. G. McKendree (1975) Distribution of *Halimeda* plants and sediments on and around a patch reef near Old Rhodes Key, Florida. J. Sed. Petrol., 45(2):415-421.

TIME COVERAGE: 1975

SUMMARY: This paper describes the distribution of the green algae *Halimeda* and sediments in the platform lagoon off Old Rhodes Key to determine the overall contribution by this plant to the calcium carbonate regime. Seven species of *Halimeda* were found. *Halimeda* is a sediment producer and indirectly influences sediment accumulation by serving as a substrate for the attachment of other sediment-contributing organisms, binding sediment below the water-sediment interface, and trapping particles in suspension by locally reducing current velocities.  
KEY WORDS: Algae, *Halimeda*, Seagrass, Coral reefs, Sedimentation, Corsair Patch Reef, Old Rhodes Key

2214

Windom, H. L., S. J. Schropp, F. D. Calder, J. D. Ryan, R. G. Smith, L. C. Burney, F. G. Lewis, and C. H. Rawlinson (1989) Natural trace metal concentrations in estuarine and coastal marine sediments of the southeastern United States. Environ. Sci. Technol., 23(3):314-320.

TIME COVERAGE: 1989

SUMMARY: Sediment samples were collected from estuarine and coastal marine areas of the US and analyzed for As, Co, Cr, Cu, Fe, Pb, Mn, Ni and Zn. The concentrations of As, Co, Cr, Cu, Fe, Pb, Mn, Ni and Zn covaried significantly with Al suggesting that natural aluminosilicate minerals are the dominant natural metal bearing phases. Cadmium and Hg did not covary with Al apparently due to the important contribution of organic phases. Many of the sediment samples from Biscayne Bay were contaminated with Pb and Zn

KEY WORDS: Sediment, Estuaries, Coastal waters, Sediment chemistry, Al, As, Co, Cr, Cu, Fe, Hg, Pb, Mn, Ni, Zn, Marine pollution, Savannah River, Pensacola Bay

2215

Winner, B. E. (1985) A Field Guide to Molluscan Spawn. Winner, B. E., North Palm Beach, FL. 139 pp.

TIME COVERAGE: 1985

SUMMARY: This citation is a field guide for the identification of spawn of marine gastropods, and an introduction to the various procedures of reproduction and fertilization. Many of the marine species discussed in the book can be found in Biscayne Bay.

KEY WORDS: Marine mollusks, Freshwater mollusks, Spawning, Field guide

2216

Wiseman, R. J. (1997) The geology, soils and hydrology of Virginia Key. Unpublished report. Division of Marine Affairs, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL.

TIME COVERAGE: 1997

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Geology, Hydrology, Soils, Virginia Key

2217

Woelkerling, W. J. (1976) South Florida benthic marine algae: keys and comments. Sedimenta 5. Comparative Sedimentology Laboratory, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. 145 pp.

TIME COVERAGE: 1976

SUMMARY: This is a taxonomic guide to algae found in South Florida.

KEY WORDS: Algae, Benthos, Identification keys, South Florida

2218

Wood, E. J. F., W. E. Odum, and J. C. Zieman (1969) Influence of sea grasses on the productivity of coastal lagoons. In: Simp., Lagunas Costeras. A. Ayala-Castanares, and F. B. Phleger, (eds.). Mexico City, Mexico, 1967. Universidad Nacional Autonoma de Mexico, Mexico City, Mexico. 495-502.

TIME COVERAGE: 1969

SUMMARY: This citation describes the role of seagrasses in the productivity of coastal lagoon ecosystems.

KEY WORDS: Seagrass, Coastal lagoons, Biological production

2219

Wood, E. J. F., and J. C. Zieman (1969) The effects of temperature on estuarine plant communities. Chesapeake Sci., 10(3 & 4):172-174.

TIME COVERAGE: 1969

SUMMARY: This paper described the effect of thermal pollution and proposes the use of marine plants as indicators of environmental degradation caused by heat.

KEY WORDS: Turtle grass, Thalassia, Thermal pollution, Temperature effects

2220

Woodburn, K. D. (1963) Guide to the conservation of shorelines, submerged bottoms and saltwaters with special reference to bulkhead lines, dredging and filling. Educational bulletin 14. Marine Laboratory, Florida Board of Conservation, St. Petersburg, FL. 8 pp.

TIME COVERAGE: 1963

SUMMARY: Guidelines were proposed for the conservation of shorelines and wetlands. Bulkheads should be no farther offshore than Mean Low Tide. No dredging should be allowed beyond the bulkhead lines except for navigational channels and public projects. Offshore flats, bars, grasses, etc., should be left in their natural state. The bulkhead line should follow the natural contours of the shoreline. Draglining of navigable canals into upland developments should be discouraged. Pristine areas should be acquired and preserved. Upland shorelines suitable for urbanization should be developed under the highest waterfront standards.

KEY WORDS: Shore protection, Sea walls, Submerged shorelines, Water quality, Dredging, Coastal zone management

2221

Woodburn, K. D. (1962) Proposed dredge and fill area, south Biscayne Bay, Dade County, Florida. SAKSP Permits 62-278. FSBCML 62-17. BL no. 62-10. Florida State Board of Conservation, Marine Laboratory, St. Petersburg, FL. 9 pp.

TIME COVERAGE: 1962

SUMMARY: Large scale dredging bayward of the bulkhead line would affect at least 400 acres of productive Bay bottom and set a precedent for the attrition of marine resources in southern Biscayne Bay as has occurred in northern Biscayne Bay.

KEY WORDS: Dredging, Sea walls, South Bay

2222

Woodburn, K. D. (1960) Spoil disposal recommendations for proposed dredging and fill by Sea-Dade Corporation in lower Biscayne Bay, Dade County, Florida. FSBCML 60-14, DS no. 60-2. Florida State Board of Conservation, Marine Laboratory, St. Petersburg, FL. 3 pp.

TIME COVERAGE: 1960

SUMMARY: This report describes a proposed dredge and fill operation in Featherbed Bank, one of the most productive marine habitats in the Bay.

KEY WORDS: Dredge spoil, Waste disposal, South Bay, Featherbed Bank

2223

Woodman, J. (1967) The Book of Key Biscayne: Being the Romance of Cape Florida. The Author, Miami, FL. 67 pp.

TIME COVERAGE: 1700s - 1967

SUMMARY: This is a short history of Key Biscayne from the beginning of the Spanish Conquista to the time of publication.

KEY WORDS: History, Key Biscayne, Cape Florida

2224

Woodmansee, R. A. (1958) The seasonal distribution of the zooplankton off Chicken Key in Biscayne Bay, Florida. Ecology, 39(-):247-262.

TIME COVERAGE: 1947 - 1948

SUMMARY: The seasonal cycle of zooplankton species was compared to water temperature, salinity and local rainfall. Seasonal distribution showed a sustained summer minimum followed by a brief but well defined maximum in October. The composition of the plankton community was described.

KEY WORDS: Zooplankton, Seasonal distribution, Chicken Key, Species list

2225

Woodmansee, R. A. (1949) The zooplankton off Chicken Key in Biscayne Bay, Florida. M.Sc. thesis. University of Miami, Coral Gables, FL. 110 pp.

TIME COVERAGE: 1947 - 1948

SUMMARY: The purpose of this work was to determine the seasonal occurrences of the various planktonic forms found off Chicken Key.

KEY WORDS: Zooplankton, Seasonal distribution, Chicken Key

2226

Wright, L. (1977) Troubled waters. New Times Magazine, May 13(-):27-43.

TIME COVERAGE: 1977

SUMMARY: This article describes the deterioration of some coastal habitats, including Biscayne Bay.

KEY WORDS: Fish diseases, Tumors, Chemical pollution, Pesticides, PCBs, Carcinogens, Kandrashoff, W.

2227

Wright, P. B., and H. B. Moore (1970) A contribution to the ecology of *Cyclinella tenuis* (Mollusca: Bivalvia). Bull. Mar. Sci., 20(3):793-801.

TIME COVERAGE: 1970

SUMMARY: This citation discusses the ecology of *Cyclinella tenuis*.

KEY WORDS: Venus clams, *Cyclinella tenuis*, Population density, Life history

2228

Wu, C. C., and K. A. Emanuel (1995) Potential vorticity diagnostics of hurricane movement. Part II: Tropical Storm Ana (1991) and Hurricane Andrew (1992). Mon. Weather Rev., 123(1):93-109.

TIME COVERAGE: 1992

SUMMARY: This citation applies a new method for understanding hurricane movement using potential vorticity diagnostics to Tropical Storm Ana and Hurricane Andrew.

KEY WORDS: Hurricanes, Cyclones, Vorticity, Tropical depressions, Hurricane Andrew

2229

Yang, W. T. (1971) The larval and postlarval development of *Parthenope serrata* reared in the laboratory and the systematic position of the Parthenopinae (Crustacea, Brachyura). Biol. Bull., 140(1):166-189.

TIME COVERAGE: 1965

SUMMARY: The larval development of this crab species was studied in the laboratory based on larvae produced by ovigerous females collected in Biscayne Bay.

KEY WORDS: Crabs, *Parthenope serrata*, Crustacean larvae, Laboratory culture

2230

Yang, W. T. (1967) A study of zoeal, megalopal, and early crab stages of some oxyrhynchous crabs (Crustacea: Decapoda). Ph.D. dissertation. University of Miami, Coral Gables, FL. 459 pp.

TIME COVERAGE: 1967

SUMMARY: This is a study of the early development of crabs. Some specimens were collected in Biscayne Bay.

KEY WORDS: Crabs, Majidae, Zoeae, Megalops, Crustacean larvae

2231

Yao, Y., L. M. Roulier, K. M. Higgins, M. L. Hayes, R. B. Halley, and J. H. Hudson (1999) Digitized images of coral growth bands, fluorescent growth bands and their age assignments from cores of *Montastrea faveolata*, Biscayne National Park, Upper Florida Keys. Open File rep. 99-340. USGS, Tallahassee, FL. CD-ROM.

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Coral, *Montastrea faveolata*, Growth, Core analysis, Age determination, Biscayne National Park

2232

Ye, S., and A. L. Andrady (1991) Fouling of floating plastic debris under Biscayne Bay exposure conditions. Mar. Pollut. Bull., 22(12):608-613.

TIME COVERAGE: 1991

SUMMARY: Studies under restricted floating, and restricted submerged exposure conditions suggest that most plastic samples undergo fouling to an extent to cause the sample to be negatively buoyant in seawater. Rapid defouling of the submerged fouled samples was observed. The findings suggest that free-floating plastics at sea may, under certain conditions, undergo fouling-induced sinking followed by resurfacing as floating debris.

KEY WORDS: Plastic debris, Fouling, Buoyancy

2233

Young, C. S. (1990) Cruising Guide to Eastern Florida. Pelican Publishing Company, Gretna, LA. 392 pp.

TIME COVERAGE: 1990

SUMMARY: This is cruising guide to eastern Florida including Biscayne Bay.

KEY WORDS: Boating, Marinas, Recreational waters, Intracoastal Waterway, East Florida, Guide

2234

Young, D. R., D. F. Baumgartner, S. C. Snedaker, L. R. Udey, M. S. Brown, and E. F. Corcoran (1990) Effects of wastewater treatment and seawater dilution in reducing lethal toxicity of municipal wastewater to sheepshead minnow (*Cyprinodon variegatus*) and pink shrimp (*Penaeus duorarum*). Res. J. Water Pollut. Control Fed., 62(-):763-770.

TIME COVERAGE: 1990

SUMMARY: This study was conducted to determine the effects of treatment and seawater dilution of municipal wastewater on marine organisms. Almost 100% mortality occurred for shrimp exposed to unchlorinated 30:1 seawater dilutions of primary-settled wastewater. Mortality could not be attributed to chemicals measured in the seawater.

KEY WORDS: Wastewater treatment, Dilution, Toxicity tests, Sheepshead minnow, *Cyprinodon variegatus*, Pink shrimp, *Penaeus duorarum*

2235

Young, G. K., M. T. Tseng, R. S. Taylor, G. F. Tierney, and M. R. Childrey (1971) Hydrodynamic and thermal analyses of Biscayne Bay. DOI NPS contract 14-10-9-900-269. Water Resources Engineers, Inc., Springfield, VA. Various paging.

TIME COVERAGE: 1970

SUMMARY: The purpose of this study was to assess the environmental impact of hydraulic and heat loading modifications proposed by the Florida Power and Light Co.

KEY WORDS: Hydrodynamics, Florida Power and Light Co., Thermal analyses

2236

Young, R. S., E. R. Thieler, and O. H. Pilkey (1993) Geologic and oceanographic factors mitigating the storm surge and flood damage of Hurricane Andrew in south Florida. Geology, 21(2):99.

TIME COVERAGE: 1992

SUMMARY: This paper discusses the reduced open-ocean-shoreline storm surge and coastal storm damage from Hurricane Andrew. Storm surge and waves from the hurricane were reduced because of the affected part of Florida is fronted by the reef flat of the Biscayne National Park, and on a larger scale, the Bahamas platform acted as a barrier.

KEY WORDS: Hurricanes, Storm surge, Flooding, Hurricane Andrew

2237

Yvon, S. A., J. M. C. Plane, C. F. Nien, D. J. Cooper, and E. S. Saltzman (1996) Interaction between nitrogen and sulfur cycles in the polluted marine boundary layer. J. Geophys. Res., 101(D1):1379-1386.

TIME COVERAGE: 1996

SUMMARY: Simultaneous measurements were reported of nitrate radical, nitrogen dioxide, ozone, and dimethylsulfide in the nighttime marine boundary layer over Biscayne Bay. These field observations were analyzed and used to initialize a boundary layer box model which examines the relative importance of the various sinks for nitrogen dioxide.

KEY WORDS: Boundary layers, Nitrogen cycle, Sulfur cycle

2238

Zale, A. V., and S. G. Merrifield (1989) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - reef-building tube worm. Biological rep. 82 (11.115). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 12 pp.

TIME COVERAGE: 1989

SUMMARY: The life history, growth characteristics, ecological role, environmental requirements, and morphology of the reef-building tube worm are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Tube dwellers, *Phragmatopoma lapidosa*, Reef formation, Life history

2239

Zale, A. V., and S. G. Merrifield (1989) Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (South Florida) - ladyfish and tarpon. Biological rep. 82(11.104). US Fish and Wildlife Service, National Wetlands Research Center, Slidell, LA. 17 pp.

TIME COVERAGE: 1989

SUMMARY: The nomenclature, taxonomy, morphology, life history, growth characteristics, fishery, ecological role, and environmental requirements of ladyship and tarpon are discussed. This report is one in a series on the life histories of marine life.

KEY WORDS: Ladyfish, *Elops saurus*, Tarpon, *Megalops atlanticus*, South Florida

2240

Zamanillo, J. (1999) Archeological monitoring and testing of the wetland restoration project at Bill Baggs Cape Florida State Recreation Area, Biscayne bay, FL. Tech. report #166. Archeological and historical Conservatory,

TIME COVERAGE: 1999

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Archeology, Bill Baggs Cape Florida State Recreation Area

2241

Zaneski, C. T. (1997) Air base decision praised: conservationists laud Clinton plan as "good first step". The Miami Herald, Miami, FL. January 19. Local. 8B.

TIME COVERAGE: 1997

SUMMARY: This article described the Clinton Administration decision to require studies of how the planned redevelopment of Homestead Air Force Reserve Base will affect the Biscayne Bay and the Everglades. The Base was destroyed by Hurricane Andrew.

KEY WORDS: Homestead Air Force Base, Hurricane Andrew

2242

Zaneski, C. T. (1995) Biscayne Bay - muddy no more. The Miami Herald, Miami, FL. May 7. Local. 1B.

TIME COVERAGE: 1995

SUMMARY: This article describes efforts to reduce the amount of suspended material in Biscayne Bay waters including restoration of mangrove wetlands, planting of native trees and shrubs on the man-made islands, edging shorelines with limestone boulders and creation of artificial reefs in silty depressions in the bay bottom.

KEY WORDS: Suspended sediment, Restoration

2243

Zaneski, C. T. (1999) Contaminated canal: EPA study confirms toxins from air base. The Miami Herald, Miami, FL. January 15. -.

TIME COVERAGE: 1999

SUMMARY: Military canal connects the Homestead Air Force Base with Biscayne Bay. The canal carries runoff from the base and it is considered to be contaminated.

KEY WORDS: Homestead Air Force Base, Military Canal, Pollution

2244

Zaneski, C. T. (1995) Grass proves restoration clearly works. The Miami Herald, Miami, FL. May 7. Local. Section B. 1-2.

TIME COVERAGE: 1995

SUMMARY: During the 1980s, scientists identified mud as a major culprit in the deterioration of Biscayne Bay. Natural sediment traps such as mangroves were installed and the results have proved promising.

KEY WORDS: Sediment, Mangroves

2245

Zaneski, C. T. (1997) Honoring hero of the Bay: Hoover heir fought for environment. The Miami Herald, Miami, FL. March 15. Local. 1B.

TIME COVERAGE: 1960s

SUMMARY: This article describes the plan to build a massive oil refinery east of Homestead Air Force Base. Opposition to the plan was organized by H. W. Hoover, heir to the vacuum cleaner fortune. Hoover's effort terminated the refinery scheme and made possible Biscayne National Park.

KEY WORDS: Oil refinery, Biscayne National Park

2246

Zaneski, C. T. (1998) A natural treasure at risk: boaters take toll on park. The Miami Herald, Miami, FL. August 10. Section A.

TIME COVERAGE: 1998

SUMMARY: This articles describes the problem of propeller scarring of seagrass beds in Biscayne National Park.

KEY WORDS: Seagrasses, Propeller scars, Biscayne National Park

2247

Zaneski, C. T. (1997) "We can take the Bay back". The Miami Herald, Miami, FL. November 10. Local. 1B.

TIME COVERAGE: 1997

SUMMARY: This article described the continuing efforts to rehabilitate Biscayne Bay.

KEY WORDS: Sediment, Mangroves, Restoration

2248

Zeiller, W. (1981) The management of West Indian manatees (*Trichechus manatus*) at the Miami Seaquarium. In: Proc., The West Indian Manatee in Florida. R. L. Brownell, and K. Ralls, (eds.). Orlando, FL, 1978. Florida Audubon Society, Maitland, FL. 103-110.

TIME COVERAGE: 1978

SUMMARY: This citation describes the Miami Seaquarium manatee management procedures and facilities. Lorelei, the first manatee calf known to be have conceived in captivity, was born in 1975 at the Seaquarium.

KEY WORDS: West Indian manatee, *Trichechus manatus*, Captivity, Aquaria, Miami Seaquarium

2249

Zeiller, W. (1965) Miami Seaquarium marine microbiological survey. 2 parts: 8 pp + graphs.. Miami Seaquarium, Miami, FL.

TIME COVERAGE: 1964

SUMMARY: This report describes the results of microbiological testing in and around the Miami Seaquarium

KEY WORDS: Microbiological analysis, Bacteriology, Miami Seaquarium, Virginia Key

2250

Zeiller, W. (1971) The purple wind. Sea Frontiers, 17(6):372-377.

TIME COVERAGE: 1971

SUMMARY: This article describes the Portuguese man-of-war and the ecosystem associated with this animal.

KEY WORDS: Siphonophores, Portuguese man-of-war, *Physalia physalis*, Purple sail, *Verella vellella*, Violet sea snail, lanthina, Nudibranchs, Sea slugs, *Fiona pinnata*, Man-of-war fish, Nomeus

2251

Zieman, J. C. (1976) The ecological effects of physical damage from motor boats on turtle grass beds in southern Florida. Aquatic Bot., 2(-):127-139.

TIME COVERAGE: 1973

SUMMARY: Turtle grass beds do not recover rapidly following physical disturbance of the rhizome system. This is a commonly caused in shallow waters by propellers of motor boats. Several stations in Biscayne and Florida Bays were visited to inspect boat tracks and to sample disturbed and undisturbed sediments. Cuts in *Thalassia* beds commonly require more than 2 years to recolonize.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Motor boats, Damage

2252

Zieman, J. C. (1982) The ecology of the seagrasses of south Florida: a community profile. FWS/OBS-82/25. US Fish and Wildlife Service, Office of Biological Services, Washington. 158 pp.

TIME COVERAGE: 1982

SUMMARY: This citation is an excellent discussion of the seagrass ecosystem. Included are descriptions of the seagrass community, trophic relationships, interfaces with other systems, and anthropogenic impacts.

KEY WORDS: Seagrass, Aquatic communities, Ecosystem management, Species list, South Florida

2253

Zieman, J. C. (1970) The effects of a thermal effluent stress on the sea-grasses and macroalgae in the vicinity of Turkey Point, Biscayne Bay, Florida. Ph.D. dissertation. University of Miami, Coral Gables, FL. 129 pp.

TIME COVERAGE: 1970

SUMMARY: Naturally occurring plant distributions in the Turkey Point effluent area was due primarily to substrate type. Decreases in the plant populations due to the heated effluent were detected when the ambient Bay water reached 26 - 28 °C. Elevated temperatures in the summer caused depressions in both species numbers and algal species diversity, and was accompanied by an increase in blue-green algae. *Thalassia* was the most resistant plant to the heat stress but once killed off it did not return.

KEY WORDS: Seagrass, Algae, Temperature effects, Thermal pollution, Turkey Point, *Thalassia testudinum*

2254

Zieman, J. C. (1972) Origin of circular beds of *Thalassia* (Spermatophyta: Hydrocharitaceae) in south Biscayne Bay, Florida, and their relationship to mangrove hammocks. Bull. Mar. Sci., 22(3):559-574.

TIME COVERAGE: 1972

SUMMARY: Circular to tear-drop beds of *Thalassia* were found in southwestern Biscayne Bay. The circular areas almost always occurred over depressions in the bedrock that are filled with autochthonous mangrove peat. The circular beds were often surrounded by a white halo of worm and callianassid burrows. Dated mangrove peat from beneath a *Thalassia* bed was 3680 years old. A possible interpretation is that in this area the mangrove shoreline receded as sea level rose and *Thalassia* then colonized the planned-off hammocks.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Mangrove swamps

2255

Zieman, J. C. (1975) Quantitative and dynamic aspects of the ecology of turtle grass, *Thalassia testudinum*. In: Estuarine Research. 2nd Internatl. Estuarine Research Conf. L. E. Cronin, (ed.). Myrtle Beach, SC, 1973. Academic Press, New York, NY. Vol.1: 541-562.

TIME COVERAGE: 1975

SUMMARY: This citation is a discussion of the ecology of *Thalassia*.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Biological production, Brackishwater environment

2256

Zieman, J. C. (1975) Seasonal variation of turtle grass, *Thalassia testudinum* König, with reference to temperature and salinity effects. Aquatic Bot., 1(-):107-123.

TIME COVERAGE: 1969 - 1970

SUMMARY: Productivity, standing crop, leaf length, blade density, and other biotic variables of *Thalassia testudinum* undergo seasonal changes and reach maximum values during the warmer summer months. The data were collected at 5 stations in southern Biscayne Bay along the thermal gradient of the Turkey Point Power Plant cooling canal.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Seasonal variations, Temperature effects, Salinity effects, Turkey Point Power Plant

2257

Zieman, J. C. (1968) A study of the growth and decomposition of the sea-grass, *Thalassia testudinum*. M.Sc. thesis. University of Miami, Coral Gables, FL. 50 pp.

TIME COVERAGE: 1968

SUMMARY: This work is a study of the growth and decomposition of *Thalassia*. Measured were growth rate, dynamics of the blade community, and the time required for blades to be replaced. *Thalassia* did not appear to be grazed directly. Rather the leaf material was allowed to decay and then consumed as detritus.

KEY WORDS: Turtle grass, *Thalassia testudinum*, Growth, Degradation, Soldier Key

2258

Zieman, J. C., and E. J. F. Wood (1975) Effects of thermal pollution on tropical-type estuaries, with emphasis on Biscayne Bay, Florida. In: Tropical Marine Pollution. E. J. F. Wood, and R. E. Johannes (eds.). Elsevier oceanography series 12. Elsevier, Amsterdam, The Netherlands. 192 pp.

TIME COVERAGE: 1975

SUMMARY: [COPY NOT AVAILABLE.]

KEY WORDS: Estuaries, Thermal pollution, Turkey Point

2259

Zika, R. G., E. Saltzman, W. L. Chameides, and D. D. Davis (1982) H<sub>2</sub>O<sub>2</sub> levels in rainwater collected in south Florida and the Bahama Islands. J. Geophys. Res., 87(C7):5015-5017.

TIME COVERAGE: 1982

SUMMARY: No systematic trends were found in measurements of hydrogen peroxide in rainwater collected in Miami and the Bahamas. The data suggest that a substantial fraction of the hydrogen peroxide found in precipitation is generated by aqueous phase reactions within the cloudwater rather than via rainout and washout of gaseous hydrogen peroxide.

KEY WORDS: Hydrogen peroxide, Rain