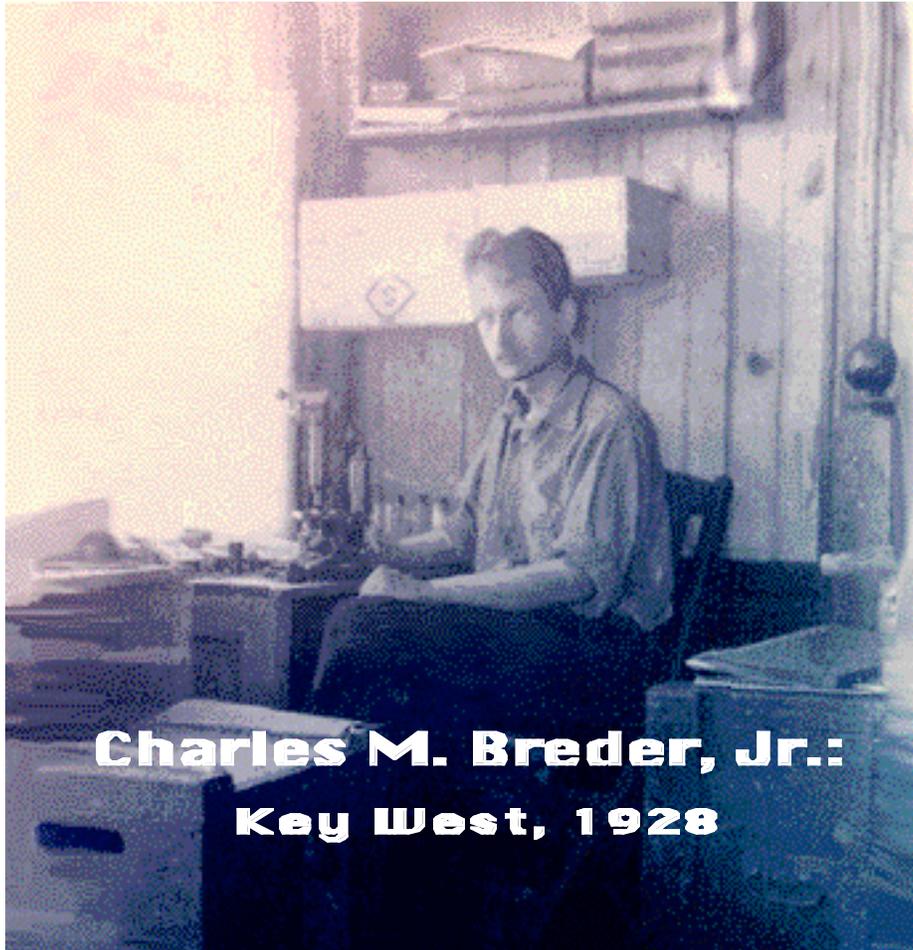

Coastal and Estuarine Data Archaeology and Rescue Program



March 2004



US Department of Commerce
National Oceanic and Atmospheric Administration
Silver Spring, MD



Mote Marine Laboratory
Sarasota, FL

Charles M. Breder, Jr.: **Key West, 1928**

A. Y. Cantillo

NOAA National Ocean Service

E. Collins

NOAA Central Library

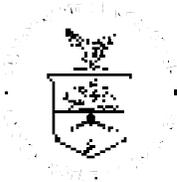
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(Editors)

Introduction by **C. A. Luer**

Mote Marine Laboratory



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Charles M. Breder, Jr.: Key West, 1928

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ABSTRACT

Charles Breder, Jr. kept a detailed account of his excursion to Key West to collect tropical fish specimens for the New York Aquarium in 1928. Breder's observations includes data on flying fish, fish species around Key West (relative abundance, sizes and colors of individuals, sizes of schools, stomach contents, and an occasional opinion of how they tasted), weather, development and testing of equipment, contamination of the Key West Harbor, and daily life in the town. Also included in this diary, but not transcribed, are accounts of work in North Carolina, Interstate Park, and Lakehurst.

INTRODUCTION by Carl A. Luer, Ph.D.

After three decades of Spanish occupation, the United States Navy took possession of the island known as Key West in 1822. In 1828, Key West was incorporated as a town and a year later, Key West got its first post office. In 1831, the first American cigar factory was established in Key West and along with the mainstays of sponging, fishing and farming of pineapples, Key limes, tomatoes and melons, the deep water port began to develop its "metropolitan" flavor.

The diary that follows was penned by Charles Breder, Jr. in 1928, a century after Key West's incorporation, and provides a detailed account of his excursion to collect tropical fish specimens for the New York Aquarium. "Modern" access to Key West had been accomplished by Henry Flagler in 1912, when he extended the Florida East Coast Railway from Homestead, FL to Key West with his "Overseas Railroad." Even so, it is not surprising that Breder opted for ocean passage out of New York Harbor via the *S.S. Algonquin*, a ship he identifies in his initial entry dated August 25, complete with data on vessel length, beam, draft and average speed. Rather than spend the four-day journey relaxing on deck, Breder devoted his waking hours to statistical observations on members of Family Exocoetidae (flying fish). His notes not only provide behavioral observations regarding the preference shown by these fish for wind direction and the geometric orientation of their "flight path" in relation to the axis of the ship, but they also provide population densities based on surface areas that Breder calculated from the size and speed of the vessel!

The daily entries for his approximately two-week stay in Key West are filled with observations of dozens of fish species, including comments on relative abundance, sizes and colors of individuals, sizes of schools, stomach contents, and an occasional opinion of how they tasted. Especially intriguing to me are Breder's drawings and descriptions of his attempt to construct a waterproof light to hang overboard for nighttime collecting. The prototype consisted of an

[△] NOAA Central Library, Silver Spring, MD.

[◇] Mote Marine Laboratory, Sarasota, FL.

electric light placed inside a Mason jar, with the top "heavily taped and waxed." Breder's entry admitting that his creation worked for a few minutes before it leaked was written with a sense of disappointment. A modified version of his underwater nightlight replaced the wax with solder and lock nuts. I had to laugh when I read the September 4 entry declaring "...this time the socket blew up."

An interesting feature of Breder's diary entries is a passing comment on the weather. With rain as an occasional excuse for boats not leaving port, the September 3 entry attributes wind and a falling barometer to "...a hurricane reported off Cuba." A check of historical data available through any number of websites confirms an unnamed tropical storm south of Cuba during that time. Even though rain prevented some of his scheduled trips to the reefs, time off the water provided him the opportunity to organize thoughts and notes into publishable data. Six papers would result from the Key West trip.

The Key West Diary falls short of stating a goal in terms of live specimens for the New York Aquarium. Entries during the return trip on the *S.S. San Jacinto*, however, indicate 160 mortalities among the cargo of live fish during the first two days at sea. Whether the specimens ended up in display tanks or in the preserved fish collection is immaterial. It is the annotated accounts of Breder's experiences that represent the true tangible value of the expedition.

PHOTOGRAPHS OF KEY WEST

Plates shown are of Key West in general, or of places mentioned in the diary. The plates include Sombrero Lighthouse, La Concha Hotel, the cigar box factory, the aquarium (under construction), the Key West Harbor, and the turtle kraals. The Monroe County Library, Key West, FL did not have a photo of the old Milton Curry's aquarium, which was destroyed. The library only had a photograph of the 1930's aquarium. The Monroe County historian was not able to locate a photograph of Peter Robert's Fish Market (what Breder called Peter's Point).

NOTES ON LOCATIONS

The area around Key West has changed with time as the result of natural weather events and anthropogenic impact. Some features noted by Breder still exist, and others do not or have changed names. Man Key was an island full of birds, pelicans and gulls. Mangrove Key was composed of four islands just outside of Key West. Mule Key is west of the Key West Harbor. These keys are still identified in charts. No information was found on Sand Key and Barracuda Key.

DIARY AND TRANSCRIPTION

The handwritten diary of Dr. Charles Breder's activities in Key West in 1928 was bequeathed to the Mote Marine Laboratory by Dr. Breder's family. The diary was written in a bound black and brown notebook in ink. Illustrations were done in pencil and ink.

The diary was transcribed by hand. Minor editorial changes, such as closing parenthesis were made. Indecipherable entries were noted with "[?]". Editorial comments such as current names of species were noted in brackets and/or capital letters. Numbers outside the margin of the transcribed text are the page numbers of the original notebook.

Also included in this diary, but not transcribed, are accounts of work in: North Carolina, 1926; Interstate Park, 1926; and Lakehurst, NJ, 1926.

ACKNOWLEDGMENTS

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PHOTOGRAPHS



Plate 1. Old docks, Key West Harbor (Photo F-109, #484, Monroe County Library, Key West, FL).



Plate 2. La Concha Hotel, Duval Street (Photo F-108, #1466, Monroe County Library, Key West, FL).



Plate 3. Cigar Box Factory, Key West (Photo F-500, #896, Monroe County Library, Key West, FL).



Plate 4. Overview of the harbor, Key West, (19--). [Photoprint, black and white (8 x 10 in). rc05480. Reference Collection, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>. This is part 4 of 4 numbered rc05746-8 and rc05480. The photograph shows the upper harbor where the terminal of the F.E.C. Railway was located.]



Plate 5. Construction of an open-air aquarium (1935) [Photonegative, black and white (3 x 5 in). PR06058. Print Collections, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>.]



Plate 6. View of the harbor from the La Concha Hotel (January 20, 1926). [Photoprint, black and white (8 x 10 in). rc18018. Reference Collection, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>.]



Plate 7. Sombrero Key lighthouse (19--). The lighthouse was built in 1858 and had iron skeleton tower 160' high. The light is 142' above water. [Photoprint, black and white (10 x 8 in). rc05651. Reference Collection, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>].



Plate 8. View of the courthouse from the La Concha Hotel, Key West (January 20, 1926). [Photoprint, black and white (8 x 10 in). rc05338. Reference Collection, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>.]



Plate 9. Looking north from the roof of the La Concha Hotel (19--). [Photoprint, black and white (4 x 3 in). N046597. General Collection, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>].

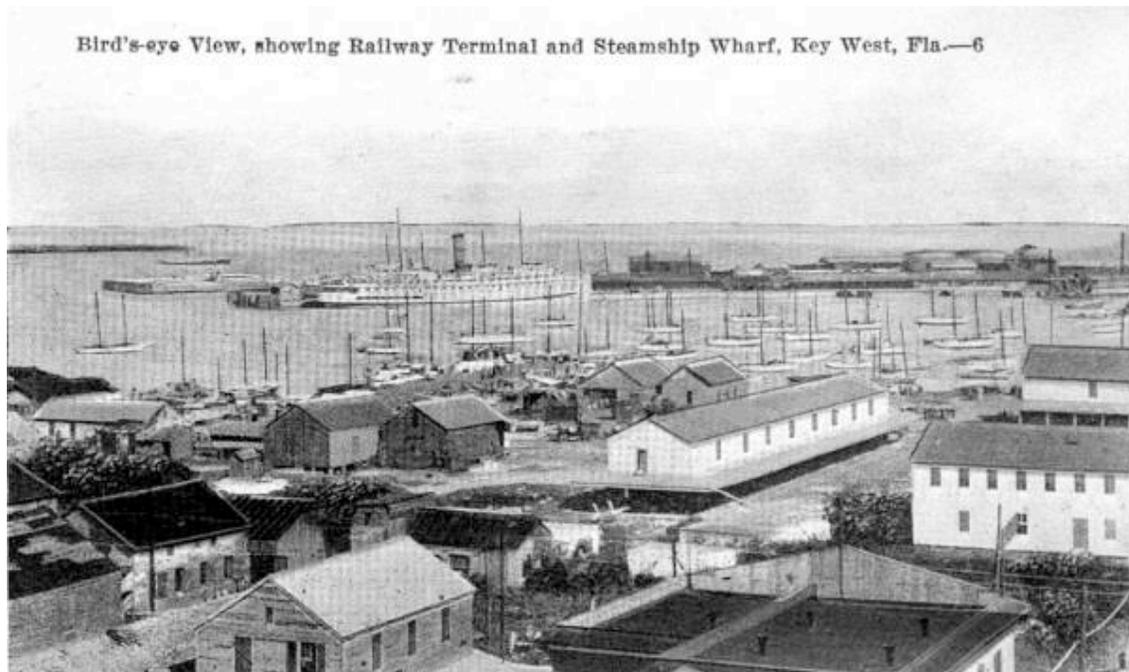


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Plate 11. Barrels of privy waste on docks ready for dumping at sea, Key West (1929). [Photonegative, black and white (4 x 5 in). N033456. General Collection, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>].

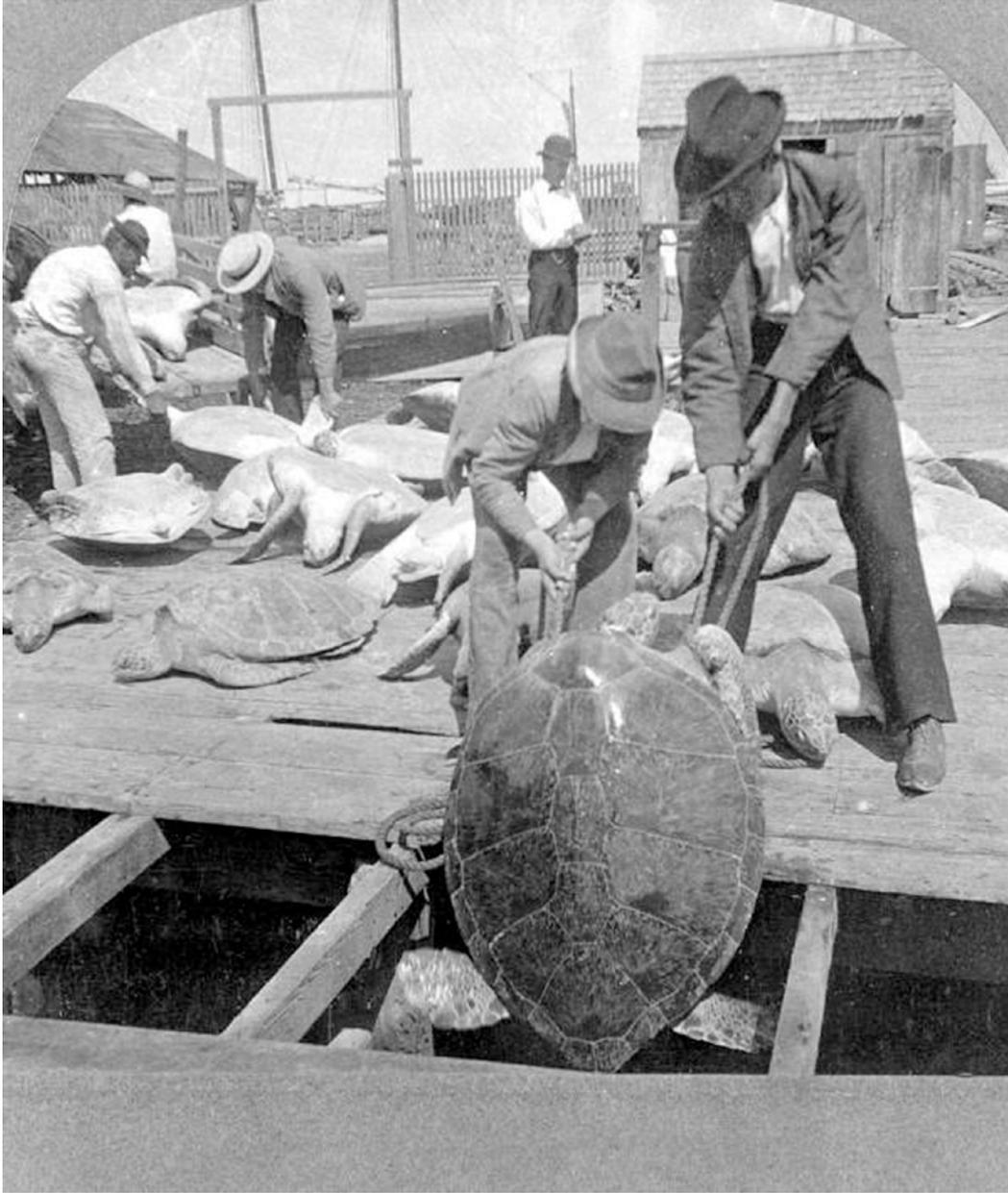


Plate 12. Loading green turtles for shipping (1898). [Photonegative, black and white (3 x 5 in). PR12653. Print Collections, Florida State Photo Archive. <<http://fpc.dos.state.fl.us/>>. Same as photograph F-500, #151, The Turtle Kraals, Monroe County Library, Key West, FL.]



Plates 13 and 14. Shark fishing, Pearl Banks (Photos #98 and #5879, Monroe County Library, Key West, FL).