

**DIEL AND DEPTH VARIATION IN POPULATION
DENSITIES OF COMMERCIALY IMPORTANT
CARNIVOROUS FISHES**

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Purpose: Investigate population densities of commercially important carnivorous fishes along the walls of the Salt River Canyon. Examine variations in densities over depth and time of day.

Participants: Deborah Arneson, Principal Investigator—Commercial Fisheries Laboratory, Dept. of Agriculture of Puerto Rico, and Linda Meiklejohn—University of Puerto Rico

Accomplishments: Thirty-seven species of fishes were recorded from eleven families. Each of the following families contributed more than 10 percent of the total number of fishes recorded for each wall (east = 275, west = 540):

Lutjanidae (snappers), *Serranidae* (groupers), *Pomadasyidae* (grunts), *Mullidae* (goat fishes), and *Carangidae* (jacks).

For total number of fishes, there appeared to be no statistically significant differences over time or depth or between most of the transect areas. Bottom type seemed to be the most important factor influencing numbers of fishes.