

**RESPONSE OF SQUIDS TO NIGHT LIGHTS AND
REEF BEHAVIOR OF OCTOPUSES**

ROGER HANLON,
and
RAYMOND HIXON

[Converted to electronic format by Damon J. Gomez (NOAA/RSMAS) in 2003. Copy available at the NOAA Miami Regional Library. Minor editorial changes were made.]

Date: September 1-7, 1978

Purpose: Study the behavior and ecology of cephalopods: determine the behavioral responses of squids to various night lighting schemes, and evaluate the role of the octopus as a prominent night predator.

Participants: Roger Hanlon and Raymond Hixon—University of Texas

Accomplishments: Four squid species were attracted to night lights set up by the experimenters. Observations of their behavior near the underwater lamp indicated that all species were attracted individually and not as a school, and that they did not subsequently group together. They seemed to be in a dazed or mesmerized state (see Figure 22).

The Salt River Canyon does not support as large an octopus population as other reef areas observed in the Caribbean. Three species of benthic octopuses were present in the area; all three are nocturnal. Two of the species were found only in the restricted habitat characterized by cobble-filled tributaries with slope angles of approximately 15 to 20 degrees. Various aspects of their hunting and movement patterns were observed. During the dive, several octopuses were collected for laboratory observation. One larval species was collected and taken to the University of Texas for rearing. If successful, it will be a first, and the experimenters will be able to determine what this animal looks like as an adult, something unknown throughout 40 years of investigation of that species.

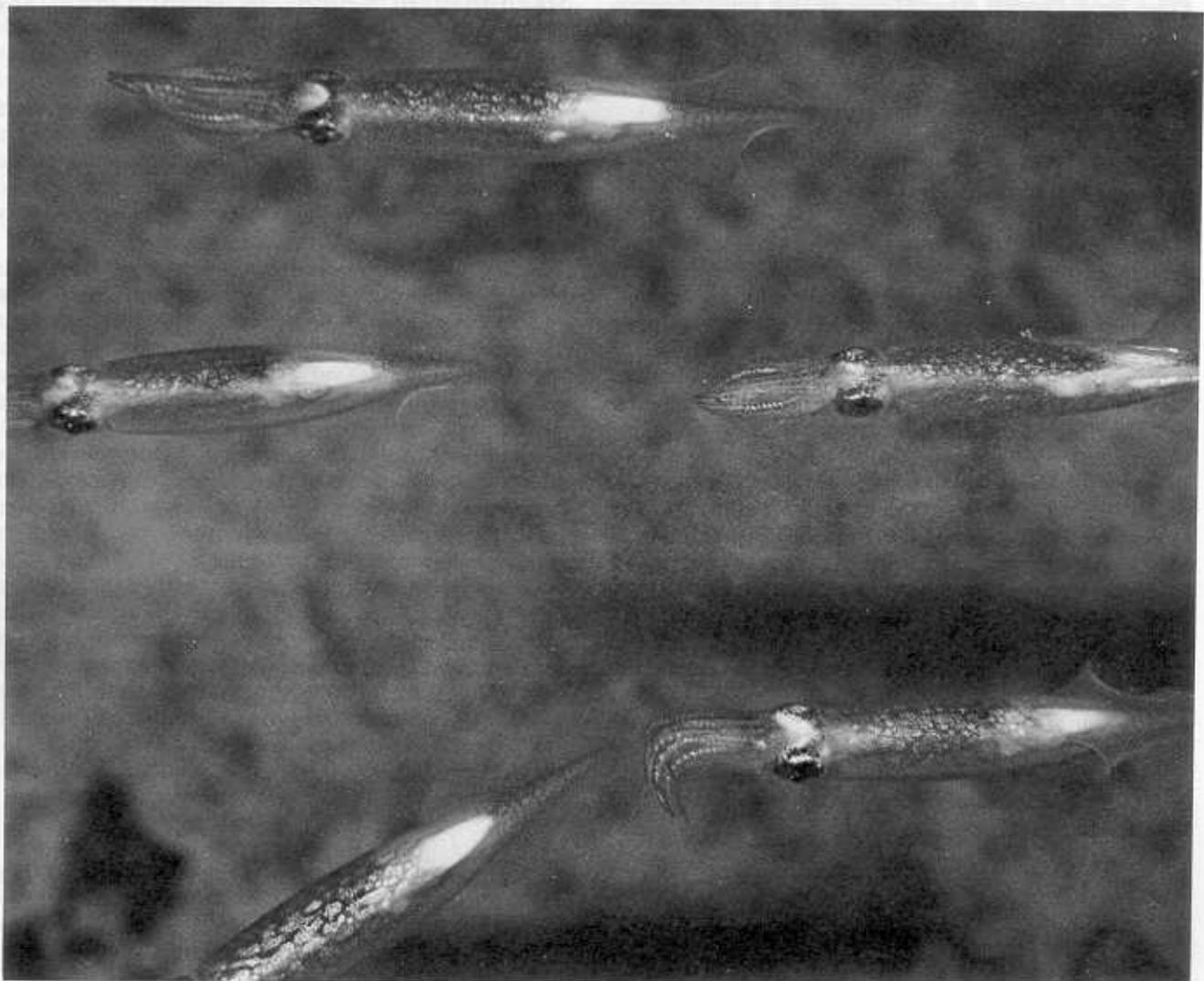


Figure 22.—School of Squid (*Loligo plei*) under a night-light station