

State of California - The Resources Agency
Department of Fish and Game
Marine Resources Region
Long Beach, California

CRUISE REPORT 74-KB-6
LOBSTER INVESTIGATIONS

Prepared by Robert A. Hardy

Vessel: R/V KELP BASS

Dates: February 20-22, 1974

Locality: Santa Catalina Island

Purpose: 1. To collect spiny lobster, *Panulirus interruptus* for life history studies and marking.
2. To evaluate escape ports in commercial traps.

Procedure: Trapping for lobster was conducted in areas of suitable lobster habitat in the vicinity of Isthmus Cove utilizing both commercial traps (2 ft x 4 inch mesh) and small mesh (1 inch x 1 inch) traps. Traps were fished at depths ranging from 20 to 70 ft. All lobster caught were measured and sexed and all those between 48 mm and 111 mm were marked with coded tail punches corresponding to 3 mm carapace length (C.L.) size groupings.

Lobsters of known size were placed in two commercial traps fitted with escape ports measuring 12 inches x 2-3/8 inches. The traps were then soaked overnight to evaluate escape-ment of sublegals.

Results: Two nights of trapping, with a combined total of 61 trap sets pulled, resulted in a total catch of 160 lobster. One hundred thirty two new captures were within our marking size range and 22 were recaptures, (14.3%). The new captures were tail punched and all were released in the general area of capture. None of the recaptured lobster had molted since being marked.

The number of plastered females increased from 5% in January to 77% of the females captured during this cruise, indicating a peak mating period.

The escape ports in the test traps functioned fairly well with only 33% of the 24 sublegal lobsters retained after a one night soak.

Personnel: Marco Mazarovich, Vessel Captain
Robert Hardy, Biologist-in-charge
Chuck Haugen, Biologist
Rolf Mall, Biologist