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

CRUISE REPORT 74-KB-19 LOBSTER INVESTIGATIONS

Prepared by Charles Haugen

Vessel: R/V KELP BASS

Dates: July 23 - 25, 1974

Locality: Santa Catalina Island

Purpose: 1. To collect California spiny lobster, *Panulirus* interruptus, for life history studies.

2. To evaluate escape ports in commercial traps.

Procedure: Trapping for lobster was conducted in areas of suitable habitat in the vicinity of Isthmus Cove utilizing both commercial traps (2x4-inch mesh) and small-mesh (lxl inch and lx2 inch) traps. Several of the commercial traps were fitted with two escape ports and several with four measuring 6.0x20.3 cm (2 3/8x8 inches). All lobsters caught

were measured, sexed, and released.

Results: Two nights of trapping totaling 106 trap pulls resulted in a catch of 648 lobsters of which 348 were of legal size (53.7%). Females comprised 50.8% of the catch and of these, 17.0% were ovigerous.

Recaptures of marked lobsters accounted for 34.6% of the catch. For the first time in our study, marked lobsters were recaptured after molting. Twenty-four of the recaptured lobsters, only one of which was female, had molted and grown. Apparent growth ranged from 0.8 mm to 7.9 mm (0.03-0.31 inches) and averaged 4.6 mm (0.18 inches).

Traps fitted with two escape ports caught an average of 1.55 short and 3.55 legal lobsters per pull. Those fitted with four escape ports averaged 0.22 short and 4.00 legal lobsters.

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