

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

CRUISE REPORT 74-KB-12

LOBSTER INVESTIGATIONS

Prepared by Robert A. Hardy

Vessel: R/V KELP BASS

Dates: April 24-26, 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 x 4-inch mesh) and small mesh traps (1 x 2 inch and 1 x 1 inch). Traps were fished at depths ranging from 20 - 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 four commercial traps fitted with escape ports. The traps were then soaked overnight to evaluate escapement of sublegals.

Results: Two nights of trapping, with a combined total of 99 trap-sets, resulted in a total catch of 355 lobster. Marked recaptures made up 26.5% of the total while 248 were new captures within our marking size range. The new captures were tail punched and all were released in the general area of capture. None of the recaptured lobster had moulted since being marked.

Female lobsters comprised 65.4% of the total catch and 3.8% of these were ovigerous.

Two test traps, each fitted with two escape ports measuring 6.0 x 9.9 cm (2 3/8 x 3 7/8 inches) allowed 26% of the sublegal lobsters to escape. Two test traps with 6.0 x 9.1-cm (2 3/8 x 3 3/5-inch) escape ports allowed 33% escapement of sublegals.

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