

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

CRUISE REPORT 73-KB-24 LOBSTER

Prepared by Charles Haugen

Vessel: KELP BASS

Dates: September 23 - 27, 1973

Locality: San Clemente Island

- Purpose:
1. To conduct investigations of the distribution, biology, and ecology of lobster at San Clemente Island.
  2. To compare catches from traps with different size meshes.

Procedure: Trapping for lobster was conducted at four sites around San Clemente Island (Figure 1) utilizing both commercial traps (2" x 4" mesh) and small mesh (1" x 1") traps. Traps were set in rows parallel to the beach at depths of from 18 ft. to 200 ft. and allowed to soak overnight. Before the traps were pulled, bottom habitat was evaluated by scuba divers. Trapped lobsters were measured, sexed, and released.

Results: Moderate swells at West Cove prevented trapping in water shallower than about 30 ft. Therefore, subsequent trapping was confined to the inside of the island from a point about 3.5 miles N.W. of White Rock to Mosquito Cove. In all, 564 lobsters were captured in 85 trap-nights. The small mesh traps retained considerably smaller lobsters than did the commercial traps (Table I). In general, traps in shallow water caught more lobsters than those in deeper water (Table II).

Personnel: M. Mazarovich, Vessel Captain  
M. Odemar, Biologist-in-charge  
B. Hardy, Biologist  
C. Haugen, Biologist

TABLE I

Comparison of Sizes of Lobsters Caught  
in Traps of Different Mesh Size

	Mesh size	
	1" x 1"	2" x 4"
Carapace length, range	50-109 mm	62-115 mm
" " , mode	62 mm	69 mm
" " , median	65 mm	72 mm
% legal size	2.4%	12.9%

TABLE II

Relative Abundance of Lobsters at Different Depths

Depth (Ft.)	Ave. No. of Lobsters per trap
18-20	16.25
30-42	8.81
50-63	5.64
78-80	8.09
90-115	4.29
132-164	1.00
190-210	0.17

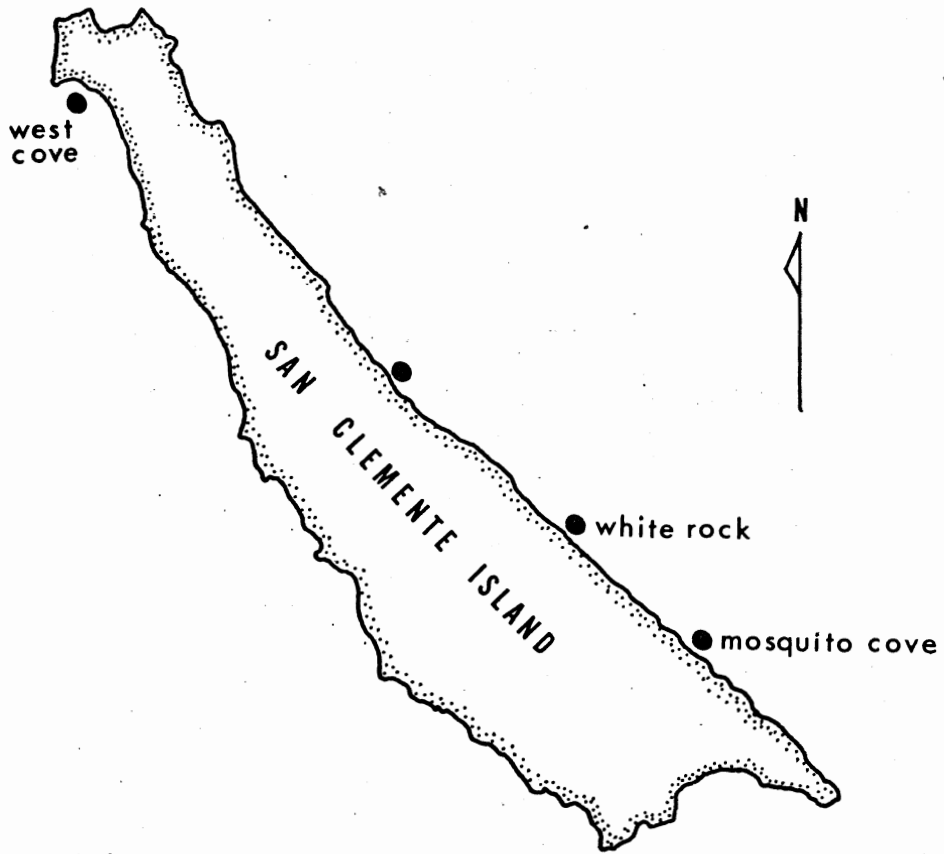


FIGURE 1. Trapping sites at San Clemente Island.