

The Resources Agency of California
Department of Fish and Game
Marine Resources Operations
California State Fisheries Laboratory
Terminal Island, California

Cruise Report 64-S-1 -- Exploratory
Prepared by John G. Carlisle, Jr.

Vessel: N.B. Scofield

Dates: Departed from San Pedro February 25, 1964.
Returned to San Pedro March 11, 1964.

Locality: Southern California coastal waters from northern Channel Islands to the California-Mexican boundary.

- Purpose:**
1. To conduct ecological surveys of representative areas and to evaluate methods and goals for possible future work.
 2. To continue exploration of offshore areas for bottom-trawling grounds.
 3. To collect a sample of kelp bass, Paralabrax clathratus, for reproduction studies.

Results: Due to continual gales it was not possible to occupy trawling stations during more than half of the cruise. Eight midwater trawling stations were occupied and three bottom trawling stations. All twos were for 30 minutes, although the total time from beginning to completion of a deep mid depth haul is at least 2½ hours. Where possible, all fishes and invertebrates were identified and enumerated and common fishes were measured. Unidentified and unusual animals were saved for specialists. A number of rare cephalopods were obtained and turned over to Dr. Stillman Berry who is conducting a Department sponsored study. A large pelagic octopus of the genus Alloposus was taken off San Diego, and may be a first for California waters. So far we have been unable to identify one small fish taken off San Diego. Many other interesting bathypelagic fishes, including lantern fish, lightfishes, and an angler fish were collected.

SANTA BARBARA ISLAND AREA

Bottom trawls were made in depths of 220-245 fathoms. Fair numbers of Dover sole Microstomus pacificus, a few sablefish, Anoplopoma fimbria and ratfish Hydrolagus coliei, as well as 10 longnose skates,

Raja rhina were taken along with a few other flatfishes and a fair number of rockfishes. This area appears to be generally trawlable on the basis of two exploratory cruises. A number of unusual cephalopods, and large catches of bathypelagic fishes were made. Work had to be terminated in this area as weather and sea conditions worsened. Work could not be resumed until conditions improved seven days later off San Diego.

SAN DIEGO AREA

Bottom trawl work was discontinued near the end of the cruise when the net was torn up west of Pt. Loma. Several midwater hauls were made off San Diego and La Jolla, producing many interesting bathypelagic fishes and invertebrates. A night haul was made west of Pt. Loma with 200 fathoms of cable out which produced results comparable to those obtained with 700 fathoms in daytime hauls.

SANTA CATALINA AND SAN CLEMENTE ISLANDS AREA

Good collections of deep-water fishes and invertebrates were made off Santa Catalina Island and between there and San Clemente Island.

Good kelp bass fishing at Santa Catalina Island produced a sample of kelp bass needed by the Sportfish Project for studies in reproduction.

Poor kelp bass fishing was experienced at San Clemente Island.

Personnel: R. B. Mitchell, Vessel Captain
John G. Carlisle, Jr. Biologist-in-charge
Ronald W. Little, Seasonal Aid
Park H. Young, Biologist, March 10, 11

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- ▣ Midwater Trawl Stations
- Bottom Trawl Stations

