

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

Cruise Report 62-S-2 - California Halibut
Prepared by P.H. Young, Biologist-in-Charge

Vessel: N.B. SCOFIELD

Dates: Departed from San Pedro 26 February, 1962.
Returned to San Pedro 22 March, 1962.

Locality: Mainland coast from Seal Beach (Los Angeles County) to Naples (Santa Barbara County). Principal effort off Ventura in 11 to 15 fathoms.

Purpose: To secure a sample of California halibut stratified by sex and length for determining age-weight-length relationships.

To determine the temperature profile on the trawling grounds.

To secure a collection and/or a record of the fish, molluscs and crustaceans found in association with halibut.

Results: A very satisfactory sample of California halibut was secured by trawling. The nets were an eastern-type not specifically adapted for halibut. An estimated 1,000 halibut were caught. The otoliths and one of the pre-opercular bones were removed from about 500 of these fish.

Male halibut predominated in the catch of fish up to 20 inches. Males and females were in equal numbers between 20 and 22½ inches, but females outnumbered males in the larger sizes: as much as 21 to 1 for fish longer than 35 inches.

Temperature profiles taken with a bathythermograph at the beginning of each trawl, showed that readings were about the same from top to bottom. Evidence of a thermocline was almost non-existent.

Day to day temperatures varied about 2°, ranging between 51° and 53°F.

Trawls varied from one to three hours in duration. Fish found in association with halibut were saved for Laboratory examination. Species most commonly taken were:

hornyhead turbot	<u>Pleuronichthys verticalis</u>
diamond turbot	<u>Hypsopsetta guttulata</u>
fantail sole	<u>Xystreurys liolepis</u>
white croaker	<u>Genyonemus lineatus</u>
barred perch	<u>Amphistichus argenteus</u>
midshipman	<u>Porichthys</u> sp.
combfish	<u>Zaniolepis</u> sp.

Running tallies were maintained for species such as:

shovelnose guitarfish	<u>Rhinobatos productus</u>
Pacific angel shark	<u>Squatina californica</u>
thornback	<u>Platyrhinoideis triseriata</u>
skates	<u>Raja spp.</u>
bat ray	<u>Myliobatis californicus</u>
dogfish	<u>Squalus acanthias</u>
yellow crab	<u>Cancer anthonyi</u>
sheep crab	<u>Loxorhynchus sp.</u>
moon snails	<u>Polinices</u>

Personnel: R.B. Mitchell, Master Fisheries Vessel
P.H. Young, Biologist-in-charge
J.W. Schott, Biologist
P. Petrich, Vessel Oper. Supvr. (Mar. 20)
W. McGuire, Fish and Game Warden (Mar. 12)
T.H. Meagher, Fish and Game Warden (Mar. 12)