

1980 U.S. RESEARCH SURVEYS AND RESEARCH PLANS  
FOR 1981 IN THE NORTHEASTERN PACIFIC OCEAN

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1. Research activities in the northeastern Pacific Ocean during 1980

Three major surveys and pre-recruit studies were conducted--

(a) Gulf of Alaska Groundfish Survey

A winter survey of the groundfish resources in the Kodiak Island region was conducted from February to April 1980. The NOAA ship Miller Freeman completed 182 demersal and midwater trawl stations. Catches were sorted by species, weighed, and counted. Biological data were collected for principal species and included length frequencies by sex, age structure (scales and otoliths), and length-weight data.

(b) West Coast Survey

A second major triennial bottom trawl/hydroacoustic survey of the Pacific whiting and shelf rockfish resources off California, Oregon, Washington, and Vancouver Island occurred during July to October 1980. The charter vessels Pat San Marie and Mary Lou completed 623 bottom trawl stations, and the NOAA vessel Miller Freeman conducted midwater trawls and hydroacoustic assessments throughout the study area. Samples were collected from between the 30 and 200 fm isobaths.

Catches were sorted, weighed, and counted by species. Length frequencies by sex, age structures, stomach samples, and other biological data were collected from target species and other species of interest as time allowed.

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(c) Gulf of Alaska Juvenile Groundfish Survey

A survey of juvenile groundfish in the bays and mid-continental shelf regions of the Gulf of Alaska was conducted from June to September, 1980. The studies consisted of an NMFS research program designed to integrate results from the independent sampling programs of the International Pacific Halibut Commission, Alaska Department of Fish and Game, and NMFS Kodiak Laboratory. Objectives of the program were to (1) identify critical habitats, (2) evaluate the potential value of different geographical areas for indexing annual juvenile abundance, (3) study food web relationships, (4) examine relationships to environment, and (5) evaluate the potential value of past and future series of surveys for estimating annual juvenile abundances.

Environmental data and observations of juvenile groundfish were collected from approximately 550 trawling positions within bay and nearshore continental shelf areas from Unalaska Island to Yakutat Bay. Fine-mesh shrimp trawls were used in the bays and a 400-mesh Eastern trawl was used on the continental shelf.

2. Research activities planned in the northeastern Pacific Ocean during 1981

Two resource assessment surveys are planned for 1981; however, survey plans and vessel assignments have not been finalized.

(a) Winter Survey

A multi-vessel demersal and midwater survey is scheduled for the western Gulf of Alaska. Although all groundfish species will be covered, emphasis will be directed toward Pacific cod and walleye pollock. Biological data to

be collected on principal species include age structures, length frequencies by sex, length-weight measurements, maturity, and catch weights and numbers.

(b) Summer Survey

A multi-vessel groundfish survey is scheduled to be conducted throughout the Gulf of Alaska from Dixon Entrance to Unimak Pass from June to August. Biological data will be collected on all principal species.