

CANADIAN FIELD RESEARCH STUDIES FOR 1983
IN THE NORTHEAST PACIFIC

by

A. Cass and G. A. McFarlane

Department of Fisheries and Oceans
Fisheries Research Branch
Pacific Biological Station
Nanaimo, British Columbia V9R 5K6

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Groundfish research at the Pacific Biological Station provides the major basis for stock management in waters off Canada's Pacific coast. The following is a summary of field research conducted in 1983.

(1) Flatfishes

Bottom trawl surveys to assess year-class abundance of juvenile flatfishes in Hecate Strait were continued. The surveys are designed to predict recruitment for stock assessment purposes. English sole tagging studies using oxytetracycline for age validation were conducted in Hecate Strait.

(2) Pacific cod

Age validation studies of known age juvenile Pacific cod are planned if the 1982 year-class is sufficiently abundant.

(3) Rockfishes

Trawl surveys were conducted to estimate rockfish abundance and biological characteristics for the area from 54°N latitude to Cape Omaney. Trawl surveys were also conducted to examine abundance and biology of Pacific ocean perch in the water deeper than 165 f at the mouth of Goose Island Gully in Queen Charlotte Sound.

(4) Sablefish

Field studies were continued in 1983 to monitor the contribution of the strong 1977 year-class to the fishery. On-board monitoring and collection of biological samples by area and quarter year were continued.

(4) Pacific hake and walleye pollock

Cooperative Canada-U.S. hydroacoustic and trawl surveys of offshore hake were undertaken during August and September to estimate the abundance and examine the distribution and biology.

Field studies on the spawning biology of hake and pollock in the Strait of Georgia were continued. A benthic core survey was conducted to examine the historical trend in abundance of pelagic fishes in the Strait of Georgia. An ecological analysis of production rates of hake and pollock eggs and larvae in the Strait of Georgia was continued.

(5) Lingcod

Tagging studies of lingcod initiated in 1982 were continued in 1983 to examine biological characteristics and exploitation rates in the Strait of Georgia.

(6) Dogfish

Dogfish tagging studies were continued in the Strait of Georgia and in Hecate Strait to determine stock delineation, age validation, long-term movements of adults and the feasibility of using tag and recapture information to estimate abundance.

Field research plans for 1984

Canadian research plans for 1984-85 are not yet finalized.