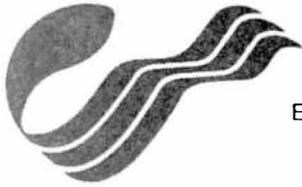


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CANADIAN FIELD RESEARCH STUDIES FOR 1989
IN THE NORTHEAST PACIFIC

by

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Canadian field research studies for 1989 in the northeast Pacific

Field research was directed primarily at projects involving rockfishes, sablefish, Pacific hake, lingcod, Pacific cod, English sole and spiny dogfish. Field studies to examine the impact of groundfish species on the abundance of herring in the Vancouver Area were continued. Species assemblage surveys and stomach analyses of groundfish were also conducted in Hecate Strait in the Charlotte Area. A new project was initiated to study community interactions in the Strait of Georgia in the Vancouver Area.

(a) Rockfishes

A charter to determine size and age composition of slope rockfish stocks was completed in August.

(b) Sablefish

On-board monitoring of commercial catches and collection of biological samples were continued. The larval survey to investigate factors controlling year-class strength of sablefish was continued in the Vancouver Area (La Pérouse Bank project).

(c) Pacific hake

Hydroacoustic and trawl surveys were conducted to monitor the offshore Pacific hake stock in the Vancouver Area (La Pérouse Bank project).

(d) Lingcod

A post-larval survey was initiated to determine reproductive success in the Vancouver Area (Strait of Georgia).

(e) Pacific cod, English sole

A research cruise was carried out in the Charlotte Area (Hecate Strait) in February to map abundances of spawning Pacific cod. In addition, Pacific cod and English sole ovaries were collected for fecundity estimation and histological studies.

(f) Dogfish

A survey is planned for the Vancouver Area (Strait of Georgia) in October.

(g) Hecate Strait Project

Studies were continued in 1989 to define species-assemblage distributions for Hecate Strait (Charlotte Area) based on systematic trawl surveys. Stomach samples were analyzed to establish feeding patterns of species assemblages. An additional research cruise was carried out to survey assemblages of groundfish in May-June.

(h) La Pérouse Project

Studies were conducted to examine groundfish-herring interactions and abundance/recruitment of hake and sablefish in the Vancouver Area off the west coast of Vancouver Island (La Pérouse Bank).

(i) Strait of Georgia Project

A project to study community interactions in the Strait of Georgia (Vancouver Area) started in 1988. Spiny dogfish have been shown to be a major predator of young salmon. It is proposed that the carrying capacity for hatchery-reared chinook and coho salmon is controlled by predation. Other predators of salmon included hake and lamprey.