# North Pacific Fishery Management Council

Richard B. Lauber, Chairman
Clarence G. Pautzke, Executive Director

605 West 4th Avenue Anchorage, Alaska 99501



Mailing Address: P.O. Box 103136 Anchorage, Alaska 99510

> Telephone: (907) 271-2809 FAX (907) 271-2817

Certified: Seclus
Date: 4/15/91

# MINUTES Scientific and Statistical Committee January 8, 1991 Teleconference Call

The Scientific and Statistical Committee of the North Pacific Fishery Management Council held a teleconference call on January 8, 1991 to discuss research priorities for 1991. Members participating included:

Richard Marasco, Chairman Doug Eggers, Vice Chairman Jack Tagart Larry Hreha Gordon Kruse Dan Huppert John Burns
Bill Aron
Don Rosenberg
Terry Quinn
Bill Clark

The SSC reviewed research recommendations made in 1990 and those developed by the groundtish teams for 1991. The SSC continues to support ongoing research activities that support management activities of the Council. The SSC's list of research needs is:

A. Alaska Fishery Monitoring Data Entry, Storage and Analysis System

The creation of a computer-based data management system will facilitate the entering and analysis of data collected by domestic observers and data reports submitted by industry for use in fisheries management. Analysis of these data will lead to improved bycatch management, biomass estimates, and assessment of the impacts of management options,

- B. Expanded Ecosystem Studies
  - --Studies of marine mammal/fishery interactions, relationship of oceanographic conditions and recruitment, and predator/prey studies.
- C. Critical Assessment Problems
  - 1. Pollock stock structure, assessment and management

Expanding domestic fisheries in both the eastern Bering Sea and Gulf of Alaska coupled with foreign fisheries in the "Donut Hole" require improved understanding of stock structure and stock assessment techniques.

#### 2. Groundfish stock assessment and management

Knowledge of stock structure, life history, and population dynamics are required. Also needed are techniques for ageing groundfish species and determining biomass using age structure analysis. In particular, sablefish assessment is critically dependent on trawl-longline calibration and ageing remains a critical issue. For rockfish, the triennial survey is inadequate to assess rockfish populations and there is a need for special surveys.

#### 3. Crab assessment and management

Studies to increase the precision of population abundance estimates and harvest management of major stocks of king and Tanner crabs in the Bering Sea. Imprecision in current biomass estimates result in wide guideline harvest ranges, increased reliance on inseason fishery performance, and uncertainty about optimal harvest strategies. The studies include additional survey sites in areas of high variance in abundance, independent mark-recapture estimates of population size, and the development of methods to incorporate multiple years of assessment data and other ancillary data such a population size structure and fishery performance, into one comprehensive annual abundance estimation approach.

#### 4. Behavior of fish to fishing gear

Catchability coefficients play an important role in the development of biomass estimates from survey results. Assumptions currently used need examination.

## D. Expand survey activities in the Gulf of Alaska and Bering Sea/Aleutian Islands

The spatial and temporal distribution of research survey activity has been limited by funding constraints in recent years. A need exists to conducted surveys of the Aleutian Islands management area, the slope portion of the Bering Sea management area and the rockfish resource in GOA.

## E. Socioeconomic research and regulatory analysis

Creation of a computer based data management system, that includes, for example, costs, prices, employment, effort, and interindustry transactions and baseline economic and social analyses are required to allow timely assessment of the social and economic impacts of management alternatives.