

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director



ESTIMATED TIME 1 Hour

DATE: January 3, 1996

SUBJECT: Research Priorities

ACTION REQUIRED

Final review of research priorities for submission to NMFS.

BACKGROUND

In November the plan teams recommended the research priorities as listed in item C-7(a). We circulated these to both the Center and Region on December 22 seeking NMFS comments. We have not received a response yet, probably due to the government shutdown. After receiving any comments from NMFS and the SSC at this meeting, the Council needs to forward the priorities to NOAA for use in preparation of its annual budget.

**Bering Sea and Aleutian Islands Plan Team
1995 Research Needs**

1. Life history and distribution patterns of Greenland turbot.
2. Vertical distribution of pollock by sex, size, and age. Trawl locations conducted during the acoustic survey may bias age analysis. Generally, the net is towed through a concentration of pollock, which may also be not representative of the size distribution.
3. Stock structure information for Atka mackerel and Pacific cod. How do they migrate between the Bering Sea and Gulf of Alaska? Should BSAI and GOA stocks should be assessed together as one?
4. Abundance and distribution data for forage fish. Forage fish species are an important part of the Bering Sea ecosystem, yet little is known about these stocks
5. Effects of bottom trawling and other gear types on habitat. In situ studies and comparisons of open and closed areas were suggested.
6. Examine the fishing power of the bottom trawl survey for pollock. Does it reflect population trends? Survey data indicate stable populations in both the BSAI and GOA areas.

Gulf of Alaska Plan Team Statement of Additional Research Priorities/Concerns

The Team strongly supports the ongoing development of alternative survey efforts in the GOA, which may yield more reliable information for species such as Atka Mackerel and some rockfish that are not sampled particularly well by the current bottom trawl survey. Nearshore rockfish, which are currently unsurveyed, should be a focus of attention.

Additional survey efforts in lower Cook Inlet around the time of the bottom trawl survey would be particularly useful in evaluating the effect of increased fishing effort in that area in recent years. As the State of Alaska is already operating a crab survey in portions of the southern inlet, the possibility of having the State cover Federal waters in that part of the inlet more extensively should be explored.

The Team strongly supports expansion of the bottom trawl survey to deep-water locations (> 500 m) so that adult thornyhead rockfish and other deep-water species can be better sampled. The last GOA sampling of this depth strata, which contains the primary thornyhead habitat, occurred in 1984. Because recent assessments have recommended that ABCs and overfishing mortality levels be set at low values, with little cushion between them, there is a continuing threat that reaching the overfishing level will force closure of other GOA fisheries which intercept thornyheads. If such closures are to occur, their need should be established on the basis of recent survey data from thornyhead habitat.

Evaluation of Pacific cod tagging information by Shimada and Kimura (1994) indicates a dynamic pattern of seasonal migration for fish tagged in the Bering Sea. The Team feels that additional tagging effort, particularly in the GOA, may provide some insights into divergent age-composition patterns observed between the survey and fishery. Better migrational information is also a key requirement for the development of an integrated BSAI/GOA stock assessment model for Pacific cod.

The Team noted the problem with unreported bycatch mortality of rockfishes, Pacific cod and other groundfishes in the unobserved sector of the fleet. Currently unreported mortality of demersal shelf rockfish is estimated by ADFG, but no information is available for estimating unreported mortality of other rockfishes. Bycatch mortality estimates advanced for Pacific cod in the halibut fishery, which were formulated when halibut were harvested during a derby opening, may not accurately represent conditions in the existing IFQ fishery. The Team was informed that the Halibut Commission has been advised that it cannot currently collect information on groundfish bycatch through its logbook program for halibut. Given the lack of observer coverage in the halibut fishery, the Team requests that NMFS explore arrangements for collection of bycatch information for groundfish in the halibut fishery. Additional research should be focused on documenting landings of Pacific cod on halibut trips during the 1995 fishery.

In order to better understand sablefish recruitment variability, the Team would like more effort directed towards questions pertaining to the geographical distribution and movement of juvenile sablefish.

For many species/assemblages, Team and Council discussion of management alternatives would benefit from the additional information regarding "natural" rates of coincident catch across species and the relationship of these rates to observed bycatch and discard information. In cases where discard rates are particularly high, the Team requests that chapter authors attempt to document for the species in question, rates/amounts of discard by gear and target fishery, and also by season if there are noteworthy seasonal swings in discard rates. Where possible, documentation of the reason for discard (e.g., trip limit, TAC closure, market consideration) would also be useful. Knowledge of background bycatch rates by gear and area are also needed to evaluate whether directed fishing standards are set at appropriate levels with respect to discard objectives.