

Management plan teams will be organized for each fishery management unit identified by the Council. Team members (will be selected from State and Federal conservation agencies, universities, private institutions or individuals known to possess specific knowledge or expertise considered desirable in the preparation of management plans. The Scientific and Statistical Committee will recommend to the Council a list of proposed members, participating agencies or institutions and suggest a lead agency to direct plan preparation. It will be the Council's responsibility to confirm the composition of the team and to identify the lead Following formalization of the management team, guidance will be given to it by the Council concerning the general objective. and scheduling of plan preparation. The team will organize the plan and its contents in accordance with a standard outline. The scientific inputs to the plan will be drafted from published reports and papers of participating State and Federal agencies, any relevant data source including information derived from oral testimonies. It will be the responsibility of the team chairman to insure that the best available data is analyzed and used in drawing up draft plans. Lead agencies (chairman) will be responsible for scheduling meetings, typing and reproducing preliminary drafts, coordinating the activities of the team and distributing task among its members. plan, however, should as much as possible reflect a consensus view of its members. In preparing of the drafts, the team is advised to seek assistance from other expertise to insure an



adequate review of the scientific and technical content of the plan. The Scientific and Statistical Committee will propose a list of specialists with whom the management team may contact for outside review or assistance, but the team manager should feel free to contact any outside sources which he feels may be helpful in plan preparation. It will be the responsibility of the team to review the critiques of outside expertise and make final judgement on changes if any are required in the plan. The draft report of the management team would ultimately be submitted to the Council for appropriate review by its Advisory groups. Procedures for interaction between the management plan team and Council advisory group during plan preparation are specified below.\*

<sup>\*</sup>Suggest flow diagram be presented when Council agrees or interfaces it.

JBAFT

PROPOSAL

to

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

OFFICE OF SEA GRANT

for

INSTITUTIONAL SUPPORT

at the

UNIVERSITY OF ALASKA

TITLE

## ALASKA SEA GRANT PROGRAM

Amount Requested: \$91,600 Matching Fund Proposed: \$24,100

Duration: Eight Months

Proposed Starting Date: March 1, 1977

Year of Activity:

Previous Grant Amount: \$559,100.00

This proposal has not been submitted to any other agency.

We, the undersigned, certify that, in the event this proposal is accepted, in whole or in part, our signatures on this proposal constitute acceptance of and compliance with statutes and regulations of the U.S. government and the U.S. Pepartment of Commerce as detailed in Part Three, "The National Sea Grant Program Program Description and Suggestions for Preparing Proposals," dated May 1, 1972, and that pages 20-44 of that publication are incorporated by reference as part of this proposal.

Donald H. Rosenberg, Director Alaska Sea Grant Program O'Neill Resources Building University of Alaska Fairbanks, Alaska 99701 (907) 479-7086 SS# 556-52-0332

Robert W. Hiatt, President Bunnell Building University of Alaska Fairbanks, Alaska 99701 (907) 479-7311 SS# 576-30-7316

February 3, 1977 Modification 1

DRAFT

Program:

RENEWABLE MARINE RESOURCES

Project:

R/14-02

Title:

Market Demand for Tanner Crab. Proposed as a Supplement to Market Structure of Alaska Seafood Processing

Industries (Project R/14-01)

Principal Investigator:

Unit:

F. L. Orth

School of Management

Funding Information:

Present level:

SG: \$0

Proposed level: SG: \$91,600

UA: \$24,100

UA: \$0 Date Initiated: 1 Mar. 77

Est. Comp. Date: 31 Oct. 78

### BACKGROUND AND NEED

A three-year study, funded by Alaska Sea Grant (See Appendix A) of the market structure and performance of Alaska's seafood processing industries with emphasis on those industries processing crab and shrimp products, began in November, 1976. Another study, designed to develop an economic profile of the harvesting sector of Alaska's shellfisheries, has recently been initiated by the Alaska Commercial Fisheries Entry Commission and is being funded by National Marine Fisheries Service. The purpose of these studies is to investigate, interpret, and document the basic structural and technological characteristics of the harvesting and processing sectors of Alaska's primary shellfisheries for use by state and federal resource-management agencies and industry participants.

Early on in the deliberations of the North Pacific Fisheries Management Council and its Scientific and Statistical Committee, an additional research need has been identified as requiring immediate attention. A study of demand, and projected growth of demand for tanner crab, disagregated by principal market area, and a description of existing marketing channels, are needed for evaluating the market impacts of increasing utilization and/or changing allocation of the tanner crab resource. While large increases in utilization may be biologically feasible, the Council wishes to insure that the economic consequences of expanded use are favorable.

In order to provide a timely response to the Council's needs, an increase in the scope and funding level of the seafood processing market structure study is being proposed. Extending the

existing research project is desirable because: 1) there is a significant degree of subject-matter complementarity between market structure research and demand analysis and 2) the demand analysis needs to be supplemented by a base-line description of marketing channels and the latter is already incorporated in the existing project. The marketing channels research needs to be elevated in priority and accelerated within the existing project in response to the immediate needs of the Council.

#### OBJECTIVES

To provide information which will assist the North Pacific Fisheries Management Council in making informed judgments on the allocations of tanner crab resources. The specific objectives of the proposed research are:

- 1. To develop quantitative estimates of demand in principal market areas at alternative price levels.
- To develop descriptive, base-line information on marketing channels for use in evaluating the distributional impacts the Council's decisions.
- 3. To integrate the above research objectives, to the degree practicable, with related research efforts in the existing seafood processing market structure project and other ongoing research.

#### APPROACH

Analysis of the demand for tanner crab will require (secondary) time-series data on:

- 1. the price and quantity of tanner crab in each year
- 2. the price and quantity of king crab in each year
- 3. the price of other substitute products
- 4. consumer income, and
- 5. population

It would be desirable, although it is not known yet whether it will be feasible, to obtain the above data by market area, domestic and foreign.

The above information will provide the basis for constructing a statistical demand model which will be used for projecting

demand for tanner crab under alternative assumed future price and income movements. Alternatively, the statistical demand function can provide estimates of the effect on price of the changes in supply associated with the Council's decisions.

To supplement the quantitative demand analysis proposed above, is the proposed effort to quantitatively describe marketing channels for tanner and king crab products for 1975 and 1976. This information would greatly assist the Council in evaluating the locational impacts of its allocation decisions. keting channels research will require the collection of primary data from the processing industry. It appears that there will be good cooperation from domestic processing firms operating in domestic, or domestic and foreign, market channels. operation of purely foreign firms, while necessary, cannot be assessed at this time. A marketing channels description would provide information like that provided by the Florida Sea Grant shrimp processing study (see attached figure). Ideally a description of marketing channels would allow one to trace the entire domestic and foreign tanner crab harvest (by specie) from area of harvest to processing location (Alaska, Seattle, at sea, Japan, etc.) to final market, by product form (canned, frozen or fresh), by region (Pacific Coast, Rocky Mountain states, etc.), and by type of buyer (institution, wholesale, retail). The extent of the coverage actually achieved will be dependent upon industry cooperation, the degree of detail in which information is generally recorded, and the cost associated with extracting same.

It is intended that a preliminary report to the Council be provided by October 1, 1977, and that periodic updating be provided until study completion and issuance of a final report by October 31, 1978.

#### INTERACTION

The principal investigator is a member of an advisory panel of economists to the Scientific and Statistical Committee of the North Pacific Council. Interaction with all other relevant research has been established for the existing seafood processing market structure study and will be continued through the interactions surrounding the Council's activities. It is intended that National Marine Fisheries Service on the West Coast be brought into as close an association with this research as possible and that National Marine Fisheries Service assistance will be coordinated through the Alaska Regional Office.

## REFERENCES

- Alaska Sea Grant Program 1976-1977 Proposal. Renewable Marine Resources, R/14-Y. Market Structure of Alaska Seafood Processing Industries
- National Marine Fisheries Service, Economic and Marketing Research Division, Washington, D.C. Aspects of the Structure and Market Behavior of the Tanner Crab Industries of the United States and Japan. September, 1976.

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