



Alaska Fisheries Development Foundation, Inc.

BULLETIN

MAY - JUNE 1982

OPPORTUNITIES FOR SMALL BOATS

The pioneer fisherman of fifty years ago, bucking the tides in his 30-foot dory, might feel today that most of the modern-day fishing industry has outgrown him.

And well he might. Alaska's tremendous offshore stocks of underutilized species--cod, pollock, Atka mackerel-- are only accessible to large vessels. Yet most of Alaska's commercial fishing fleet is comprised of small boats measuring 50 feet or less.

These small boats, now able to fish commercially only several months a year, need to develop industries of their own which can boost them toward year-round economic viability.

The Foundation has begun a project called "Regional Fishery Development for Small Boats," to study three promising small boat fisheries in Alaska: Southeast Alaska squid; Kodiak area flatfish; and Western Alaska halibut.

The project began April 20th, with an intensive study of the squid fishery--from biomass estimates to marketing--followed by field research conducted in four areas of Southeastern Alaska. The work was done in cooperation with David Street, a Ketchikan seine fisherman. Preliminary results indicate a healthy market for squid both as a seafood product and for bait.

Little is known about Alaska's squid population, but as this project proceeds, it is the hope of all involved that more detailed information and accurate field testing may bring more focus to this fishery.

The second phase of the project is a study of flatfish trawling, to assess the viability of that resource for small vessels.

**OPPORTUNITIES
FOR
SMALL BOATS
(continued)**

The project will involve the catching, processing and marketing of approximately 100,000 pounds of flatfish from Kodiak waters, with the cooperation of a fisherman and processor. The project is expected, through cost analysis and other factors, to pave the way for other small-boat fishermen to venture into a new industry.

The third phase of the project involves halibut fisheries in the Nunivak Island-Nelson Island areas. Bering Sea Fishermen's Association personnel will train residents in the use of longline gear, as well as assisting in the conversion of the present jigging system to longlining. Halibut will also be preserved and processed by the participants, flown to Anchorage, and sold. The successful completion of this project will help fishermen of other remote areas make the transition from a purely subsistence fishery to a combination fishery that which includes both subsistence and commercial use of local resources.

The combined efforts put forth in these three projects will serve to open new doors for fishermen who are now limited to selective fisheries, and to increase the potential success for small vessels in Alaska.

**LONGLINE
BAITING
SYSTEMS**

As most of us know, the trouble with underutilized fisheries is that it means there are also underutilized fishing boats. AFDF has stood behind several projects aimed at assisting small boat owners in developing new fishing industries in Alaska to augment the salmon, herring or halibut fisheries that last only part of the year.

A new project entitled, "Baiting Systems for Longline Gear" will focus on another aspect of industry development: Equipping fishing boats adequately enough that they can participate in secondary fisheries.

The Foundation has contracted John Enge, Jr. and Kurt Wohlhueter of Petersburg to study and develop an efficient, versatile, dependable longline baiting system that could replace the labor-intensive present baiting process without prohibitive expense.

The project is aimed at increasing harvest efficiency for longliners by developing a baiting system that can be used with conventional or snap-on longline systems, that maintains consistent efficiency, minimizes hook damage, aids in crew safety, and can be quickly installed and removed.

The development will run from preliminary design stages through field testing of the resulting equipment, and will include demonstrations to allow fishermen themselves (primarily in Southeastern Alaska) to observe the operation of the system.

**PRODUCTION
BEGINS AT
AKUTAN**

White fish production has now begun at the new Trident Seafoods plant at Akutan in the Aleutian Chain.

On the shoreline of Akutan Harbor a construction site has been blasted out of the side of a mountain. Here, in on this rocky shore hundreds of miles from road or power line, the largest white fish processing plant ever built on the West Coast is taking shape.

Beginning this summer, the 100,000 square foot storage and processing plant will be capable of processing over 300,000 pounds of fish every day--over 33,000 metric tons annually. At present prices this would mean gross income to Alaskan fishermen topping \$2.5 million annually. One-third of the processing facility will focus on white fish processing, with the remainder devoted to salmon, herring, and crab.

This single plant will be able to handle more fish than was caught in the entire state of Oregon last year. Some experts estimate the harvestable stocks of cod and pollock in the Aleutian area to be one million metric tons--over six times the annual harvest of Alaskan salmon.

Though the basic systems for handling fish in the plant were in place in April, the advent of spawning season for Pacific cod meant that the fish were not only very difficult to find but also less than top quality, especially for salting. By mid-June, however, resource availability had improved to a surprising extent.

Several deliveries of over 100,000 pounds have been made by trawlers, the fish are now in good condition, and total production is now approaching 1 million pounds of round fish. The end product, after heading, gutting, splitting, and a three-week salt-curing process, will be wet-salted cod, most likely bound for European markets.

**NEW EXECUTIVE
DIRECTOR
TAKES HELM**

Christopher K. Mitchell, former manager of foreign fish procurement for Van Camp Seafood Company and veteran of nearly 20 years in fishing-related industry, has taken the helm as Executive Director of the Foundation.

Mitchell has served in several facets of the fishing industry, including fisheries development, operations management, consulting, and research and marketing. He has lived in Africa, Asia, and the South Pacific, and has travelled to more than 39 countries.

**NEW EXECUTIVE
DIRECTOR
(continued)**

John Enge, President and Chairman of the Executive Search committee said, "We were fortunate to have many very qualified candidates. We are pleased that Mr. Mitchell has accepted our offer, as he has an unusual blend of experiences, including processing and harvesting involvement, coupled with a development background. We felt this background was very important at this stage of our evolution."

Outgoing Director Sara Hemphill said, "I am very enthused about the selection of the new Executive Director. The choice was not an easy one, but I was convinced when he asked me tougher questions than those asked by Brad Matsen." (Editor of Alaska Fishermen's Journal.)

Mitchell arrived on the Foundation's doorstep in May; Sara Hemphill will remain in the office for a brief transitional period, and will officially say farewell in early June.

**FOUNDATIONS
LAUNCH
COOPERATIVE
PROPOSALS**

Some of the Saltonstall-Kennedy proposals pitched recently had more than specified regional appeal. Several foundations across the country banded together to submit cooperative proposals that would serve a nationwide needs with work done on the local and regional levels.

One such proposal was for a cooperative project to develop quality assurance guidelines for underutilized species -- a project significant not only to Alaska and the Foundation's goals, but to underutilized species development concerns nationwide.

Alaska took the lead in another cooperative effort and wrote a proposal to oversee the construction of the booth and other planning logistics for the U.S. Pavilion at the 1983 ANUGA World Food Fair. At ANUGA '81, where the Foundations first performed this service for the participating companies, the benefits secured by coordination among regions and advance planning were clearly shown. The proposed project will refine the system so the service can be provided cost-effectively.

The advantage intrinsic to these cooperative efforts is that regional concerns are better represented while the impact of significant results is shared nationwide -- and reaches all sectors of the fisheries industry, from fishermen to processors, brokers, and other fishing-related businesses.

**EUROPEAN
MARKET
OPPORTUNITY**

S.I.A.L.-1982

Sign up now to promote your exports at S.I.A.L. -- the second largest food show in the world.

S.I.A.L. will be held in Paris, November 15 - 20, 1982. Timing is perfect to sell expected large inventories of salmon and bottom fish.

Act now to reserve your booth while there is still opportunity to participate.

Contact A.F.D.F., Alaska Seafood Marketing Institute or Fishery Development Services (703) 560-4166 TWX 71008319095 for further details.

**FMI REPORT:
MOST LIKE
IT FRESH**

Most people prefer fresh seafood over frozen--and many avoid the seafood counter altogether out of sheer confusion.

These and other marketing indications were compiled by the Food Marketing Institute in a report entitled "Consumer attitudes Toward Seafood." The 27-page booklet gives results from surveys taken in six major American cities on attitudes about various kinds of seafood.

Researchers learned that most shoppers don't know how to shop for or prepare seafood. Though consumers overwhelmingly prefer fresh over canned or frozen seafood, they indicated unsureness about shelf life and true freshness of seafood bought in a supermarket.

The marketing of fresh seafood from Alaska has in the past been considered prohibitively expensive; however, with such a positive market outlook, it seems likely new pathways for transporting and selling frozen fish will open up.

Once a market is established and a regular transportation network is devised, there is little doubt a significant change could be made toward greater marketing potential.

**MOST LIKE
IT FRESH
(continued)**

Seafood transportation processes are constantly improving; transportation networks are being systemized, new technologies are on the drawing board. One such technology is a new crab holding facility recently developed by D.W. Thompson Consultants, Ltd. in Vancouver, B.C.

The facility, located in Delta, B.C., is based on the practice of minimizing mortality rate by reducing the metabolism of live crabs. They are placed in a holding tank of 45°F water and then 35°F water, which sufficiently slows metabolic rate, and then are kept awash with recirculating seawater between 35°F and 45°F.

Circulating seawater is disinfected before running into holding tanks to prevent disease from attacking the live product, although the nitrifying bacteria that allow decomposition of organic waste products are allowed to flourish.

The facility can presently handle up to 15,000 pounds of crab at one time, but plans and adjustments may double that. The facility now exports live crab to restaurants all over the world, from Frankfurt to Hong Kong.

The challenge to provide fresh seafood -- whether crab, flounder, or rockfish -- is a significant one and steps are being made to fill this important demand. But the field is still wide open.

**SEAFOOD
ALCHEMY:
TURNING CROAKER
INTO CRAB LEGS**

The story of Nichibei Fisheries in Bayou La Batre is probably a familiar one to most people in the industry. They take a croaker brought in by Alabama's large offshore fleet and process it to surimi, a Japanese-style fish paste, which is processed into items for marketing in Japan. Their products have received awards for excellence given by that country's seafood industry.

Now they have produced a new product called "King Crab Legs" that has taken a considerable amount of time and effort to finalize. Again, the basic ingredient is surimi, and is sometimes made from cod caught off of Alaska, depending on business circumstances.

The surimi is shipped to California frozen in blocks. It is thawed and mixed with salt which removes the fish odor, and then batch-mixed with water, eggwhite, modified food starch, sugar, crab paste, monosodium glutamate, glycine, a special natural flavor from Japan, calcium carbonate, sodium tripolyphosphate, lecithin, and red food coloring. They are experimenting with several U.S. company-produced flavor ingredients so that they can have a local source of supply. It took about a year of trial and error to get the color shading to look like real crab legs.

**TURNING CROAKER
INTO CRAB LEGS**
(continued)

After it is mixed, the product is extruded onto a stainless steel belt in a continuous thin strip. Special extrusion equipment had to be formulated for this step. While it is on the belt, it is solidified by steaming, then it is broiled.

Next it is cut into thin strips, so it will have the mouthfeel of real crab muscle fibers. It is then pressure molded into a shape resembling King crab leg meat, and finally has the color added to the top of the molded piece.

King Crab Legs are packaged by cutting into pieces, and then each piece is film wrapped. It is now being introduced into Japanese-ethnic retail food-service markets in California, but if all goes well, there are plans to sell it nationally in supermarkets.

With the apparent collapse of the King crab fishery last year and forecasts of low catches and high prices for the future, such a simulated crab product may have come on the scene at the right time. It may also represent one possible answer to the problem of product development for Alaska's huge pollock resource.

(Reprinted from "The Biloxi Schooner")

**200 MILES
OF FISH**

BYLINE: George M. Pigott
Continued from March-April 1982

TRANSITIONAL TIMES

3. Present Fishery At Its Peak

Although there will continue to be yearly variations in catch, the current high priced-seasonal fishery will not substantially increase in the future. Hence, any major increase by the U.S. in either Alaskan or Northwest fisheries will have to come from "cheaper" bottomfish.

Ironically, many of the overfished segments of the marine waters under consideration continue to be pressed by relatively new vessels built for specific fisheries. Many of these vessels do not have the facilities and structure allowing them to multi-fish or be easily converted to other fisheries, particularly high seas trawling.

**200 MILES
OF FISH
(continued)**

4. Large Tonnage Of Fish Available In The 200-Mile Limit Zone

The tonnage and total market value of bottomfish stocks within the 200-mile limit area dwarf the high-priced seafood now being caught in Alaska and the Northwest. However, it must be remembered that this is not a new fishery. Foreign fleets have been harvesting large amounts of fish on the high seas. The U.S. has management jurisdiction over the area but we can only replace foreign fishery effort as the ability to harvest and handle high seas fish is developed and available.

We complacently complain about not being able to compete with foreign fleets who are supplying some 60% of the fish consumed in the United States, much of it from waters within our own Fisheries Conservation Zone. Why is this possible? It is because these foreign companies understand the economics of harvesting and selling natural resources. We are calculating the economics of harvesting, processing and marketing huge volumes of bottomfish or groundfish based on recovering the fillet, or 25% of the raw material, while the foreign fishing fleets are amortizing their costs over 100% of that raw material.

You can argue resource availability, conservation, ecology, allocations and all of the other management factors, but until technology is applied to "total utilization" of the resource, the U.S. fishing industry is not going to be a major factor in harvesting the relatively low priced, high volume off-shore fish that exist in our waters. Can we sell that 25 lb. fillet in competition with someone selling the entire 100 lbs.? More about this later....

**SEAFOOD
SPECIES CHART
HELPS CONSUMERS**

To the avid but not-so-experienced consumer whose only contact with seafood has been weekly feeding of goldfish and opening a box of Mrs. Paul's fishsticks; fear fish no more. National Fisheries Institute, Inc. has produced a colorful, slick, easy-to use Seafood Species Chart, designed to tell the nervous neophyte everything he or she ever wanted to know about the choosing and preparation of fish.

The lesson begins with seafood nutrition, basic cookery ("Don't overcook!") and tips on shopping savvy. Then the whole page opens up to show a species identification chart -- complete with "Piscatorial Primer" -- that tells seafood names and nicknames, where they're caught, and their various market forms.

It's a much-needed primer for the burgeoning new seafood set, and well enough presented to hang on the refrigerator next to Junior's spelling test.

**DEVELOPMENTS
AGAINST DISEASE:
CANNING TECHNOLOGY**

Several decades ago, basic food canning methods were developed that virtually eliminated risks of contamination. Since that time, instances of botulism poisoning have been rare but have occurred in a wide variety of canned foods. The recent case of botulism traced to Alaska canned salmon has created severe short-term economic strain for the industry. However, an indirect result of this incident will likely be a wave of modernization in canning technology.

With advice from industry leaders, the State of Alaska has initiated a new quality assurance inspection and research program, and consumer education efforts are being conducted by Alaska Seafood Marketing Institute.

But the situation begs for permanent solutions, as well as public information on how freakish a botulism case is. The industry has been investigating technical solutions: new product forms; improved canning techniques; and state-of-the-art can testing equipment.

One S-K proposal from the New England Fisheries Development Foundation outlined the development of "processing protocols" for ready-to-eat fish meals in plastic pouches. Other solutions may lie in retortable pouch technology, or in other varieties of the "soft can".

Response to the canning industry's dilemma has been immediate and thoughtful. Industrial engineers have proposed to develop new methods for examination of salmon cans. The proposed work would involve the adaptation of sophisticated optical and radiographic techniques to aim for 100% effective automated inspection.

The proposed solutions--these and many others which have been offered up--are innovative and significant. They are a sign that the industry is walking through its misfortune, and will come out of it with greater knowledge, improved technologies, and high public regard for its responsiveness.

THE COMPUTER GAME

MAILING LISTS:

The Foundation recently computerized its mailing list which, among other things, is responsible for getting this bulletin to your mailbox.

To err is human, they say, but to really mess up one needs a computer. Let's hope this one is more help than hindrance--and we think it will be--but if you do have any problems with mis-addressed mail from us, please notify us. We will gladly rectify the problem.

**INTERNATIONAL
TRADE
CONFERENCE**

An International Seafood Trade Conference will be held in Anchorage, Alaska, from September 8 through 12, 1982. The conference will be structured to allow presentations by some 30 individuals representing more than 16 countries on research being carried out on major economic issues involved in international cooperative research projects and data sharing processes. Barriers to trade, joint ventures and effects of extended jurisdiction on trade are some of the topics which will be covered. Speakers from industry, government and universities from Europe, Asia, Australia and the Americas will participate.

The conference will be headquartered at the Anchorage Westward Hilton. Admission is open to anyone interested in international seafood trade. A registration fee of \$85.00 (U.S.) will be charged. For further information or to pre-register, please contact Brenda Metleff, University of Alaska Sea Grant Program, 3 Bunnell, 303 Tanana, Fairbanks, Alaska 99709, (907) 474-7086. Registration will be limited; please pre-register before August 15, 1982.

Sponsors of the conference are the Pacific Sea Grant College Program (University of Alaska, Oregon State University, University of California, University of Hawaii and University of Washington); Alaska Department of Commerce and Economic Development, Office of Commercial Fisheries Development; National Marine Fisheries Service, North Pacific Fishery Management Council; Alaska Fisheries Council; and, National Bank of Alaska.

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**REPORTS
IN PRINT**

A regular section to keep you alerted as to all reports, proceedings, and publications available through AFDF. All publications are free with the exception of those noted. Use this page as an order form, checking those publications requested, and send to the AFDF office.

Alaska Pollock: Is it Red Herring? - Proceedings from November, 1981 conference. (\$15 charge) _____

Pacific Pollock: Resources, Fisheries, Products and Markets _____

Proceedings from the Salt Fish Workshop (\$5 charge) _____

Salt Fish Workshop - Technical Workbook (\$10 charge) _____

Longline Demonstration Project Interim Project - Including First and Second Trip Reports and Preliminary Financial Analysis _____

Conversion of a Crabber to an Auto-Longlining Catcher/Processor _____

Executive Summary, Conversion of a Crabber.... _____

The Joint Venture Fishery for Yellowfin Sole _____

Exploratory Fishing in Southcentral Alaska Using Jigging Machines _____

Operations of a European Factory Trawler in the Alaska Bering Sea Groundfish Fishery _____

Fisheries of Alaska 1981, Annual Report _____

**FLAT FISH
MARKETS
NEEDED**

Later this year, the Foundation will be conducting a project to demonstrate the potential for a new fishery in Kodiak waters using small vessels and local processors to produce high quality products from selected flatfish species. Any firm interested in participating in the project by providing suitable market channels for test shipments is invited to contact the Foundation.

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Development Foundation, Inc.**
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