

the **LODE** **STAR**

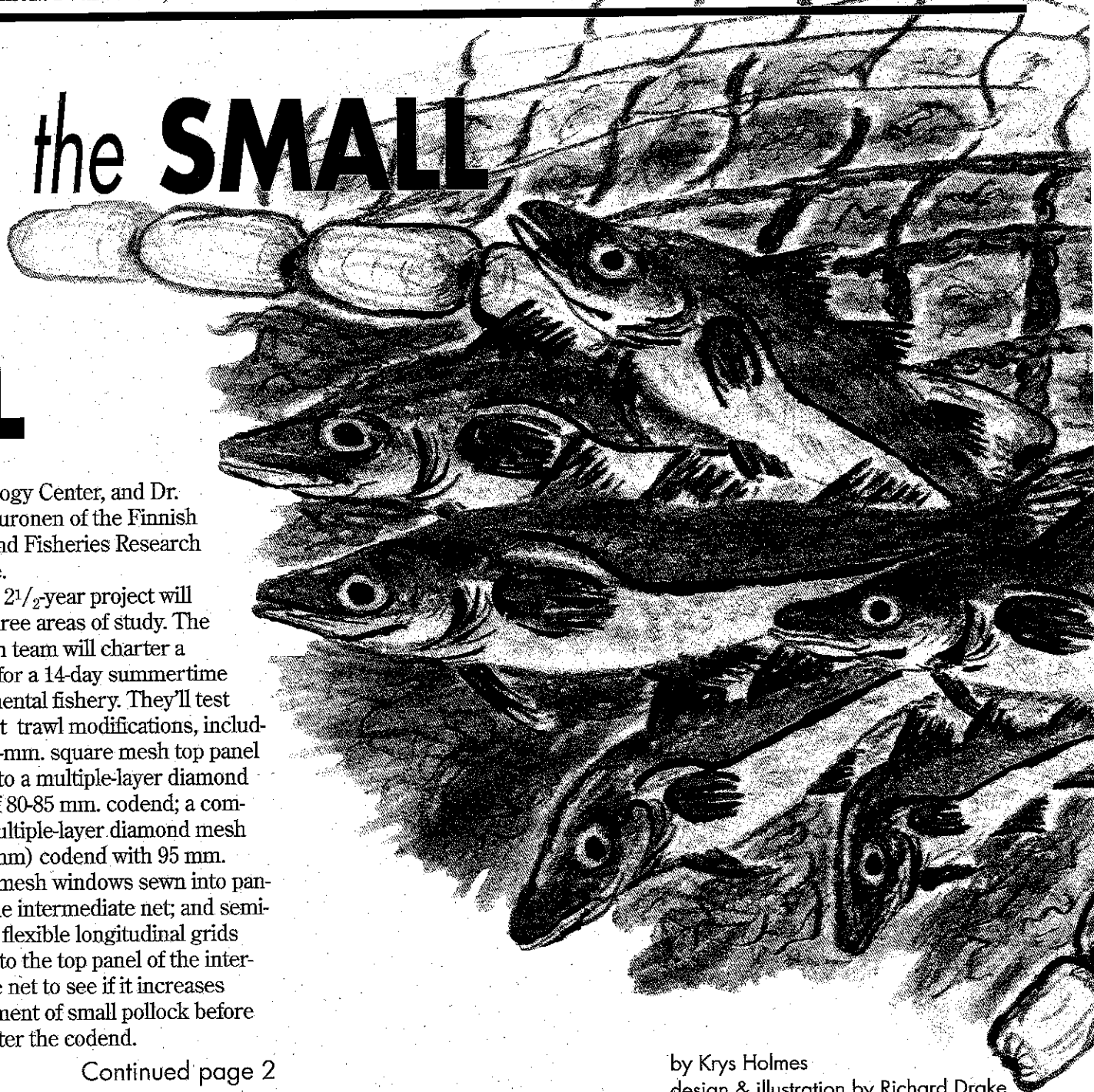
Charting the course of fisheries development today


Alaska Fisheries

Development Foundation, Inc.

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HELPING *the* **SMALL** **ESCAPE** *the* **TRAWL**



 Understanding of pollock mortalities and underwater behavior will take a small step forward next summer when AFDF resumes its interrupted Pollock Survival Study. The multi-year project was halted by NOAA last year when funds generated by the chartered pollock trawler, funds originally assigned to broaden this pollock bycatch reduction study, were impounded (see story below).

Now AFDF returns to the task at hand: to test different trawl modifications for size selectivity, and to estimate mortality of escaping small pollock from the trawl gear. AFDF will work with an experienced research team: Ellen Pikitch and Dan Erickson at the University of Washington's Fisheries Research Institute, Chris Bublitz at Fishery Industrial

Technology Center, and Dr. Petri Suuronen of the Finnish Game and Fisheries Research Institute.

The 2½-year project will cover three areas of study. The research team will charter a trawler for a 14-day summertime experimental fishery. They'll test different trawl modifications, including a 95-mm. square mesh top panel sewn into a multiple-layer diamond mesh of 80-85 mm. codend; a complete multiple-layer diamond mesh (80-85 mm) codend with 95 mm. square mesh windows sewn into panels of the intermediate net; and semi-rigid or flexible longitudinal grids sewn into the top panel of the intermediate net to see if it increases escapement of small pollock before they enter the codend.

Continued page 2

by Krys Holmes
design & illustration by Richard Drake

AFDF SURVIVES AUDIT BOUT

The U.S. Department of Commerce has let go its grip on \$858,200 of industry-generated funds earned during Phase I of AFDF's pollock trawl escapement study, and will allow the money to be used to finish the project.

The pollock study was launched on a small S-K grant, with the understanding that subsequent phases of the study would be funded by proceeds from the sale of pollock harvested during the project. But when Commerce learned that those proceeds totalled \$858,200, they halted the project, impounded the funds, and called for a federal audit of AFDF.

"I think it's pretty rare that a federal agency ever sees that much in real currency," said AFDF's Chris Mitchell. "They'd never seen a program earn more than it started with. They

put a hold on everything until they could sort out the rules for this kind of thing." After a year and a half in which AFDF laid off employees and hung on by the skin of its teeth—and by some staunch support from Foundation members and the industry at large. Finally, Commerce released the funds in October and authorized the pollock project to continue.

"It was our understanding all along that the industry's money should be invested back into this industry-generated project, not surrendered to the government," Mitchell said.

Mitchell said the Foundation's extreme financial despair wasn't the worst consequence of the shut-down. "The worst thing is that our pollock survival study is now delayed by at least two years," he said. "This is crucial information

to the future of the bottomfish industry, and we're still three years away from any solutions. I think that's the real tragedy.

The office is a little quieter now, but imbued with lots of renewed energy. Give us a call.

What AFDF is up to now:

- Pollock survival study
- Co-sponsor of "Symphony of Salmon" contest
- Salmon nuggets in the School Lunch program
- "Taming the Wild Thing," a new salmon product development project
- Halibut bycatch mortality study
- Extending shelf life of chum salmon blocks



Cont. from page 1

How many survive?

These gear modifications aren't worth the effort if the young pollock that do escape don't survive. To gauge the mortality of pollock escaping from trawl gear, the researchers will fish with a cover-net attached to the trawl net to catch the escapees. They will be transferred to a collection cage and moved (ever so carefully) to an underwater observation cage in protected waters where, for the next 14 days, divers will check on their health and well-being daily.

Most undersized pollock that escape commercial trawl nets and later die don't suffer from net damage wriggling through the gear as much as from stress, exhaustion or injuries sustained while still inside the net—especially in a large tow, Pikitch said. However, most previous studies have been done aboard

research vessels that make small tows.

AFDF's survival study is the first to examine commercial-sized tows. The first phase of the project, conducted in 1994, examined tows of 0.3 to 79 mt. That research

revealed that the gear does help release small pollock, but the size selection diminishes as the size of

the catch increases. As the codend fills up, the fish get squished against the net and soon, with 40 mt. of crushing pressure, escape is impos-

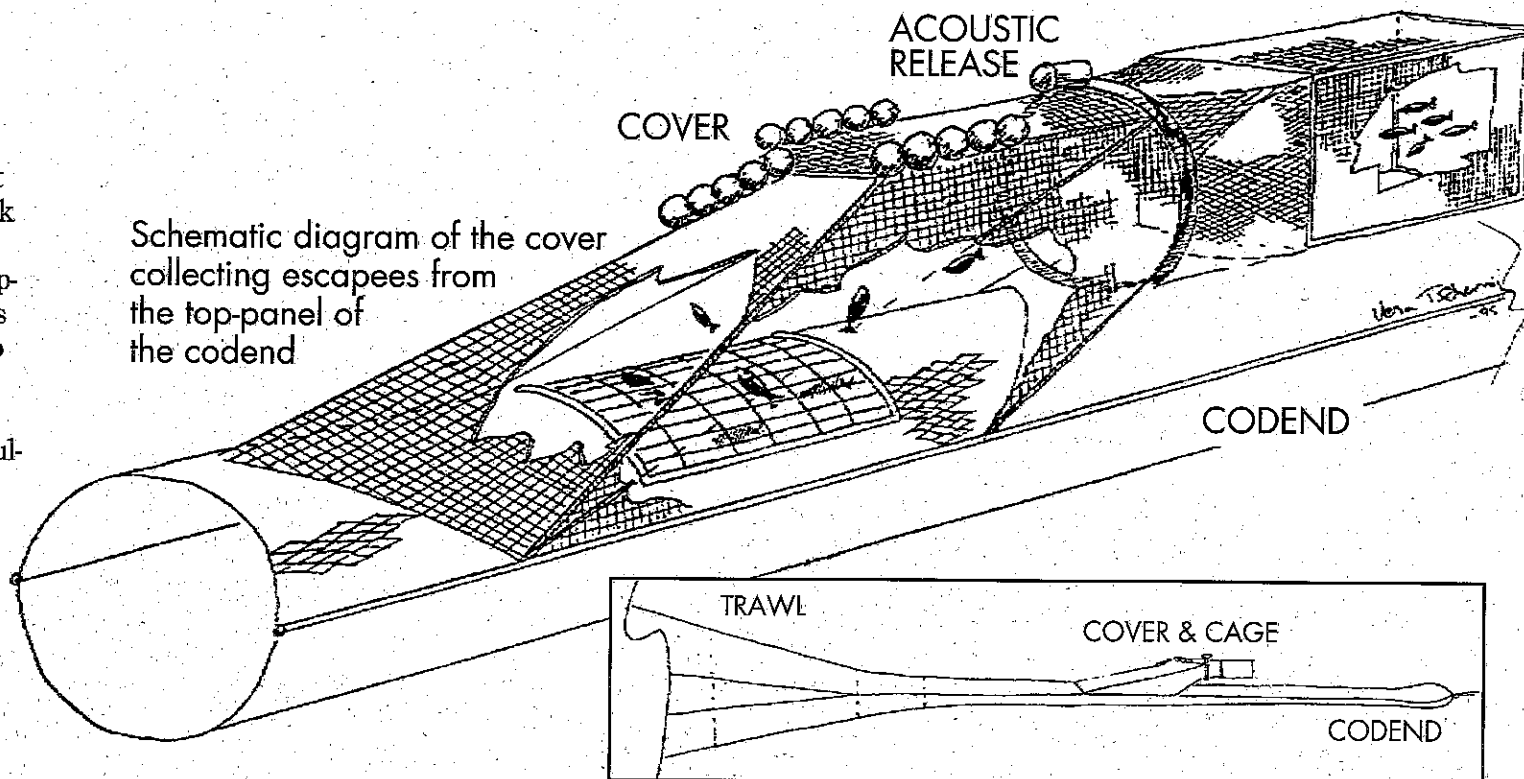
sible for any pollock, big or small. During next summer's harvesting phase, tow sizes will range from 10 mt. to 40 mt.

Researchers will drop Silicon Intensified Tube underwater cameras alongside the gear to

evaluate the effectiveness of the modifications in selecting out the undersized pollock. They also may analyze

After nearly two years of delay at the hands of the feds, AFDF returns to its pollock survival study. Purpose: To test trawl modifications for pollock size selectivity, and to estimate mortality of escaping small pollock from trawl gear

Schematic diagram of the cover collecting escapees from the top-panel of the codend



the water flow inside and outside of the trawl net to assess how the modifications—especially the cover net used to collect escaping pollock—affect the hydrodynamics of the trawl nets.

Building on what's known

"We are going to capitalize on what was learned at the bycatch conference in Seattle this fall," said Chris Mitchell, AFDF's executive director. "The key question is, do the pollock

that escape the net live or die? Because none of this is worth it if they don't survive. And the second question is, how can we help the smaller fish escape while they're still strong, before they've been sucked back into the void? And we'll have cameras everywhere to document as much as we can."

To involve the fleet as much as possible, AFDF will assemble an industry advisory group within a few months. The group will oversee the project, advise on its direction and focus, and help disseminate information after the project is through.

For more information about the pollock survival study, call Chris Mitchell at AFDF, Chris Bublitz at FITC (907) 486-1515 or Ellen Pikitch at (206) 543-4650.

FISHERIES DEVELOPMENT: What is it for?

Does fisheries development mean anything any more?

In 1954 Congress passed the Saltonstall-Kennedy Act to use a portion of seafood duty revenues to help America's seafood industry develop and mature. It was not until the late 70's and the passage of the Magnuson Act, which expanded opportunity out to America's 200 mile zone, that America's fisheries began to really develop. Americanizing our 200-mile zone became the definition of development. Going after resources underexploited by Americans was the charge. Back then, industry projects to develop the harvesting and primary processing technologies drove our efforts in the Alaskan theater.

Within a decade, all foreign fisheries had been pushed beyond our EEZ and Americanization had been accomplished. A half a decade later a good number of fisheries off the Northeast had been closed due to stock failures, the Gulf and South Atlantic fisheries were under assault by environmentalists and sports groups; and Alaska's ground fisheries, though still healthy, were greatly overcapitalized.

By the 1990s, the U.S. had become the world's largest exporter (in tonnage) of food fish but the world's largest importer (in dollar value) of seafood. Yet some 70% of the seafood consumed in America is imported resulting in a nearly \$4 Billion seafood trade deficit!

Though some U.S. fishery stocks remain underexploited, the number of motherlodes yet to be found dwindles with each passing year. Likewise, the focus of government-funded fisheries development has shifted. Today, the

stated priority nationwide is reducing bycatch—also seen as a development effort, since fish taken as bycatch represent future fishing opportunities. While bycatch concerns are important from an ecological, economic and/or political perspective, they are just a part of what needs to be funded.

Whether we're talking Alaska groundfish or our huge salmon harvests, current processing methods yield 15 to 75 percent, with a good percentage just dumped over the side, adding little return to the industry. Less bountiful states and nations (like other parts of the protein industry) extract value from each and every waste stream. As our fisheries continue to be fully harvestable with less and less effort, we must too look to fully utilize the millions of tons the Alaska industry harvests annually. Byproducts and waste usage have become the necessity the rest of the world has already discovered.

Alaska is a land rich in minerals, oil, timber, land and fish. Our industries are principally extractive entities in which natural resources are minimally processed and exported. Firms closer to the markets supply the labor, technology and market knowledge to turn those primary products into consumer and market friendly items. While this type of industry has provided sustenance for decades, we no longer monopolize the world's growing demand for certain raw materials. Our once-exclusive markets for crab, halibut and salmon are dwindling at the same pace as others are becoming more efficient in producing market-ready products. We must counterbalance their efforts by our own new product and market development to add value to our production.

If we focus on these three priorities (bycatch reduction, byproduct utilization and product and market development) we can turn Alaska's fishing industry into a dynamo, poised to contribute to the nation's economy in the 21st Century.

If not, look out!

Chris Mitchell, Executive Director

Tracking halibut deaths



One of the thorniest questions surrounding the halibut bycatch problem in North Pacific fisheries is: How many halibut actually die as bycatch? On-board observers now are responsible for estimating halibut deaths according to subjective factors based on how healthy or damaged the halibut looks. Could bycatch mortality estimates be more accurate if based on more objective facts, like length of tow, air temperature, and time out of the water?

AFDF's next bycatch project, which begins with the February Pacific cod season in the Gulf of Alaska, will give researchers at the University of Washington's Fisheries Research Institute (FRI) a chance to compare a new halibut mortality model they are designing to the traditional assessment method used by the International Pacific Halibut Commission. Both methods of assessing halibut survival will be compared on board trawlers fishing for cod in the Gulf of Alaska. Seven vessels, all members of the Alaska Druggers Association of Kodiak, will carry an extra biologist in addition to the on-board observer required by law.

Estimating mortalities

Since the 1970s, the Halibut Commission has estimated halibut mortalities by what's called "condition factor"—basically an overall assessment of a halibut's well-being. Originally, halibut caught as bycatch were assigned a condition factor and then tagged and returned to the sea. Based on tag returns, the Halibut Commission established a mortality percentage that is now used by on-board observers to estimate mortalities. A halibut judged in "good" condition has an 80% chance of survival; one in "poor" condition has a 45% chance of survival; and a "dead or near-dead" halibut has only a 10% chance. Condition factor is now the established method for estimating what percentage of halibut caught as bycatch in groundfish fisheries survive.

Now FRI researchers have introduced their model that uses more objective methods to judge a halibut's chances of survival. The FRI model assumes that qualitative fac-

tors including: duration of tow, size of catch, amount of time a halibut is on deck, air temperature and other conditions are indicators of the likelihood of halibut survival.

Dan Erickson of FRI said he hopes the new method would make an observer's job easier and their estimates more accurate.

"For the past four years we have been taking halibut caught by trawlers off Kodiak Island, recording these objective conditions, and then keeping the halibut in underwater cages," Erickson said. "Then three to five days later we've gone back, recovered the cages and counted the survivors."

Conditions included tows between a half hour and three hours long; time on deck between 10 and 60 minutes, different catch sizes and different halibut sizes.

"From that we were able to develop a model to correlate all those factors to a mortality estimate," he said.

Last year, FRI and the Halibut Commission tested their estimates in a cooperative project. While the Halibut Commission tagged and released their halibut, the FRI team used underwater cages and monitored the halibut's survival over a few days. As the IPHC's tag returns come back over the next few years, they'll be able to compare results.

Observers to team up

This project will be the first opportunity to test the FRI method alongside working observers in a commercial setting. AFDF has hired seven independent biologists to record data for the FRI model. Each AFDF biologist will team up with one professional observer. Each observer/biologist team will work seven days on one vessel and seven days on another through the two-week study.

"We are interested in finding out how much variability exists between observers, and within each observer's records," Erickson said. "By forming teams, and switching from vessel to vessel, we can get some idea of how much variation does exist. We also want to find out if it's even practical to ask an observer to record the kind of information we're

looking for while they're carrying out their other duties."

How will they know which method gives a more accurate estimate of halibut mortalities? Good question, Erickson said.

"Either both methods come up with similar results, or they'll produce completely different results," he said. "We'll have to see. We may not know for sure right away which method may be underestimating or overestimating, but we will have a lot more information about the conditions that surrounded the observers' assessment. In essence we'll be testing both methods at once."

How to use this information

Whether halibut mortalities in trawl gear are underestimated or overestimated is one of the hottest arguments lobbed between gear groups. If the two methods produce widely disparate results, how will anyone know which is more accurate? Won't the conflicting data simply fuel more arguments?

"It will be interesting to see how this plays out," said Gregg Williams of the Halibut Commission. "We have a very high confidence in our methods, which focus on two factors—the observer's assessment of the fish's viability, and our estimates of survival for each one of those categories in each fishery. Scientific methods can always be improved. In this case it's difficult to remove the politics from the issue."

Actual comparison between the two methods won't be possible until the halibut tags are returned, a process that takes a few years. In the meantime, biologists will learn more about how external factors correlate with the condition factor of halibut caught in trawl gear.

For more information call Chris Mitchell at AFDF, Dan Erickson at the Fisheries Research Institute, (206) 543-7384, or Al Burch at the Alaska Druggers Assoc., (907) 486-3910.

Baby those halibut

Tips for trawlers to help increase survival of halibut bycatch

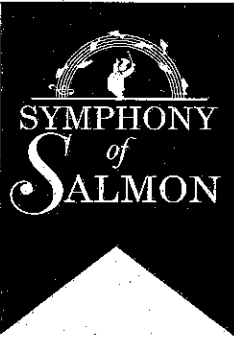
Fishing strategies:

- Avoid high bycatch areas.
- Warn other fishermen in area.
- Do a short test tow in new areas. It's easier to move than to sort.
- Slow down.
- When cod and pollock fishing, use longer drop chains on footrope.
- Be wary of night-time tows when flatfish fishing. 10 halibut per tow in daylight = 100 halibut per tow at night.
- Shorten tows when bycatch rates go up.

On deck strategies:

- Sort catch as quickly as possible.
- Use large-volume deck hose to "boil" fish so halibut can swim to top.
- Open checkers quickly to spread fish.
- Protect fish from drying in sunlight.
- Larger, live halibut are likely to be first out of zippered codend. Wash them down ramp as quickly as possible.
- Avoid gills when handling.
- Stern ramp is best for discards. Avoid prop wash on over-the-side discards on twin-screw boats.

Symphony of Salmon plays the pops



A chorus of new products entered the third annual Symphony of Salmon competition held in Anchorage on January 18, turning up the volume on product development for Alaskan

wild salmon. It was bitter cold outside, but inside the atrium of the Anchorage Museum of History and Art the leaping salmon ice sculpture was dripping as seven aproned judges munched, nibbled and sniffed their way through 29 products made from Alaska wild salmon.

This year 20 companies entered the contest to bid for free booth space at the Boston International Seafood Show in March. Entries were divided into three categories (retail, foodservice and gift/specialty) and were judged on packaging and presentation, appearance, aroma, flavor, texture, overall desirability and marketability.

The winner in each category (see box at right) will get the opportunity to showcase their Alaska salmon product at the Boston show, usually attended by about 20,000 food industry buyers. The grand prize winner, Morey Fish Co. of Golden Valley, Minn., also received \$1,001 in extra marketing money.

"Winning this contest gives us an enormous amount of immediate credibility," said Jim Walstrom, national sales and marketing manager for Morey Fish Co. "Any time the state of Alaska, which is so big in seafood, identifies our product as a good one, it's a mighty proud moment for any processor. We're very proud of it."

Smoked salmon for the '90s

Morey has been in the seafood business since 1937, and produces a host of seafood items, smoked and

otherwise. They rolled out their winning product, a wood-roasted salmon fillet portion with sun-dried tomato and basil, on November 15 and since then, Walstrom said, it has become Morey's #2 retail item in their vacuum-packed smoked fish line.

Morey Fish Co. looked for ways to update traditional smoked salmon products, Walstrom said. "We came up with a formulation that we thought re-establishes the product for the new consumer," he said. "We're preparing salmon in a lighter, more versatile product prepared not only to be an appetizer, which is how smoked salmon has become pigeonholed, but also as an ingredient for entrees."

The wood-roasted chum fillets make great finger food, but they also work chopped up in omelets, soups, pasta, sauces and salads.

"Or just dip it in balsamic vinegar and pop it in your mouth," Walstrom said. Walstrom said the company chose wild Alaska chum salmon because the oil content of the fish is just right, the flavor is "phenomenal," the supply is bountiful and the price is right.

Two other winners

Stockpot Soups isn't the first company to think of salmon chowder, but they've definitely refined the recipe. Creamy, flavorful and well textured, their Alaskan Alderwood Smoked Salmon Chowder was a favorite among judges and the public, and earned the second-highest number of points in the contest. The chowder is packaged in two 3-lb. bags, and has been on the commercial market for two years. Stockpot also won second place in the foodservice division with their Alaskan Smoked Salmon Sauce with Dill, a ready-to-heat cream-based sauce useful over crepes, pasta, rice or other entrees.

The winner of the gift/specialty category also took second place. Northern Discovery Seafoods, based in Grapeview, Wash., produced a pickled sockeye salmon relish called "SeaGarden."



GRAND PRIZE WINNER

RETAIL

Morey Fish Co.
Wood Roasted Salmon Fillet Portions with Sun-Dried Tomato & Basil

A 4.5-oz. portion of Alaskan chum salmon fillet, wood-roasted with natural hardwoods and flavored with sun-dried tomato, basil and a blend of spices. Contact: Jim Walstrom (612) 541-0129.

1st Place:

FOODSERVICE

Stockpot Soups

Alaskan Smoked Salmon Chowder

This tasty version of the popular salmon chowder concept is made from all natural ingredients and alderwood-smoked salmon. Packaged in 3-pound frozen form, in heavy-duty nylon poly zip-lock bags. Contact: Kevin Fortun (206) 885-0779.

1st Place:

GIFT/SPECIALTY

Northern Discovery Seafoods

SeaGarden

A pickled salmon relish mixes chunks of sockeye salmon with onions, garlic, carrots, bell peppers and spices. Packaged with a small serving spoon in a cello bag tied with a ribbon and willow stick. Contact: Natalie Schonberg (360) 275-7246.

2nd Place:

RETAIL

Salmolux

Ocean Pearl Smoked Salmon Mousse — Smoked salmon blended with cream, cheese and seasonings, packaged in a pastry squeeze bag with decorator tip. Contact: John Randisi (206) 874-2026.

FOOD SERVICE

Stockpot Soups

Alaskan Alderwood Smoked Salmon with Dill Sauce — A heat and serve sauce for pasta and other dishes, packaged in 3-lb. poly bags. Contact: Kevin Fortun (206) 885-0779.

GIFT/SPECIALTY

Northern Discovery Seafoods

Salmongram — A greeting card with a strip of smoked salmon jerky. Contact: Natalie Schonberg (360) 275-7246.

3rd Place:

RETAIL

Health Sea, Inc.

Kata "Carving-style" Alaska Smoked Salmon — Two flavors (lemon pepper, herbs & spice) of smoked salmon ham made from chum fillets seasoned with herbs, spices, fruits, and vegetables. Contact: Kellin Sewell (907) 586-3333.

FOODSERVICE

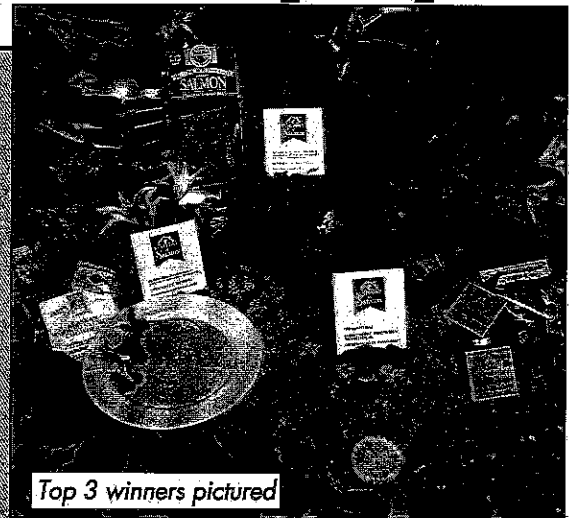
Trident Seafoods

Fillet of Salmon Croquette — Oven-ready breaded salmon fillet portions mixed with vegetables and seasonings. Contact: Doug Van Devanter (206) 781-4505.

GIFT/SPECIALTY

Sea Change Seafoods

Smoked Salmon Pate
Contact: John Miller (604) 537-5641.



Top 3 winners pictured



Symphony
cont. from
page 4

sponsor, Signature Seafoods of Seattle, whose president, Stan Simonsen, said he'd like to see 100 companies enter new salmon products next year.

"It may be surprising that new product development for salmon is taking as long as it is," Simonsen said. "After a number of years, we're finally seeing some variety here. Producers can offer stable prices, which is what the value-added market is looking for, and even the farmed salmon industry has helped in that area."

Simonsen said sponsoring the contest was a good move for his company because "the industry is going through chaotic times, and out of chaos comes opportunity. This year, every prize winner used our salmon for their product—a fact the judges could not have known, but that means a lot to us."



ing in the three years since. The company submitted the salmon ham's bigger cousin this year. Called Keta "Carving Style" Alaska Smoked Salmon, the new product is shaped and sized more like a traditional ham. The new product won third prize in the retail category this year. Health Seas now buys approximately 1.5 million pounds of chum salmon each year for its salmon ham products, and the hand-grenade-sized Silverbow is popping up in grocery stores everywhere.

Last year's winner, a smoked salmon flake product resembling bacon bits and called "Alaskabits," is

doing well enough to be advertised in United and Alaska Airlines' in-flight magazines, and has picked up some interest from a major

Japanese food company.

"Alaskabits is doing very well for a one-product company," said Chris Mitchell after a recent talk with producer's at the Alaska Food Group. "It's expensive and unusual, but it seems to have staying power. Several companies have approached him with offers to buy him out, and so far he's always said no."

Thanks to the judges

The seven volunteers who donated their taste buds and food experience were: Tom Andersen, merchandising manager for Sysco Corp., the nation's largest foodservice corporation; Thomas Dow, a vice president of Princess Tours; Wayne Ludvigsen, general manager at Seattle's Ray's Boathouse Restaurant; Michael Flynn, executive chef at Alyeska Prince Resort; Mark Linden, chef for the Anchorage Hilton; Linda Sievers, food editor of the Anchorage Daily News; and Mary Mystrom, wife of Anchorage's Mayor Rick Mystrom.

The product, packaged in a fancy jar with a serving spoon tied together in a beribboned cello bag, earned top marks for packaging and presentation, but rated high in the flavor, texture and aroma categories also.

Northern Discovery is also the producer of the novelty "Salmongram," which was entered but did not place in last year's contest. It's a strip of smoked salmon jerky packaged in a windowed mailing envelope.

100 entries next year?

"This contest started on a shoestring and has really taken off," said Loretta Lure of AFDF, who organized the contest. "This year we had our first international competitor, Sea Change Seafoods of British Columbia, and our first real food industry entrant, Stockpot Soups, which means Alaska salmon is breaking out beyond the bounds of the traditional seafood producers."

This year, also for the first time, the contest attracted a corporate

Former winners break new ground

Health Seas, Inc. of Juneau won the first Symphony of Salmon contest in 1994 with their Silverbow Salmon Ham, a product that has found broad welcome and endured a little matur-

A big thank-you

to Signature Seafoods for their corporate sponsorship of the 1996 Symphony of Salmon, and also to Alaska Seafood Marketing Institute and the Alaska Department of Commerce & Economic Development for their support. AFDF also wishes to thank the seven contest judges for their participation.

POUCHED PINK SALMON will take on tuna

Three guys, two ideas, one new product. Together they brought 1 million pounds of pink salmon to the U.S. market in a new form last year.

Gourmet Pouched Pink Salmon, made from pink salmon frozen last season and reprocessed this winter at Alaska Pacific Seafoods in Kodiak, is a quiet revolution in the seafood business.

"The pouched pink salmon is a final version of two revolutions," said Greg McIntosh of Arctic Alaska Seafoods, the company that owns the technology and licenses its use to APS's parent company. "It's a new kind of packaging seafood, and a new product that is a head-to-head challenge to that four-letter word—tuna."

The world's softest can

The pouch is a thin aluminum bag that offers all the advantages of a can—a vacuum seal, long shelf life, convenience—but is lighter (less than 1 ounce), easier to open (tearable notches in package), safer (no sharp edges, as a can has), more easily disposed of (but not recyclable), and far more compact for shipping and storing.

"With other retort packages the product is cured, put in the bag, the bag is vacuum sealed and away it goes," McIntosh said. "With our product it's the opposite. The raw material goes into the pouch, the pouch is evacuated and sealed, then it's treated just as a can would be

treated. What you have is a shelf-stable, hermetically sealed, pre-cooked, ready-to-eat product that doesn't require refrigeration until after it's been opened."

You can take it anywhere

Rip the package open and out pours flaked pink salmon fillet meat, drier than canned product but just as versatile in salads, sandwiches, pasta, sauces and omelets. Hot or cold, the salmon meat can be used in any dish that traditionally attracts canned tuna. It's the product's versatility and convenience that has attracted its first eager customers, McIntosh said.

"It is beginning to get some traction now, and we're very pleased," he said, enumerating a flurry of foodservice companies that are looking at pouched pink salmon for their menus, most of them in Alaska and California.

McIntosh's company, has hired seafood marketing champ Tom Elliott with Slade Gorton in San Francisco to help broker the product nationwide.

"They're pushing this thing like crazy," McIntosh said from office in Halibut Cove, across Alaska's Kachemak Bay from the Homer Spit, where he watched a couple of loons and a sea otter frolicking in the 18° weather. "It's important to us, as an Alaskan company, that our product could help keep one of the major salmon lines operating almost until the end of January. Because our pouched salmon can be produced from frozen raw material, we could keep a line of about 32 people employed for several months after they otherwise would have been laid off."



For more information about Gourmet Pouched Pink Salmon, call Greg McIntosh at (907) 296-2244 or Tom Elliott at (415) 543-7890.



The WILD Thing Gets Busy

Alaska salmon's latest leap out of the can might land a couple of new products in some nationwide restaurant chains. AFDF has launched a project that links producers with large-scale buyers in an effort to custom design pink, chum and coho salmon products for two major markets: family-style restaurants and retirement home foodservice.

The project begins with two seafood producers, Ocean Beauty and Royal Seafoods. The two producers will target their most likely customers in the restaurant and institutional foodservice areas, working with them to develop meals for their menus made from Alaska salmon. Over the next few months the producers and their customers will work together to develop product specs, produce samples and perfect the recipes.

Next summer, two Community Development Quota groups, Norton Sound Economic Development Corporation and Bristol Bay Economic Development Corporation, will supply salmon from the 1996 harvest to the two processing companies, who will embark on commercial production of the new products for their customers.

"We won't know what the final product forms will be until we complete the research phase with the end-users," said Mitchell. "We're going to let the customers tell us exactly what they want. But hopefully by the end of the 1996 salmon production year several large institutional and restaurant chains will be using Alaskan wild salmon in a new way on their menus."

Mitchell said the most likely candidate for the pink salmon product probably would be a portion-control cut or form made from blocks, probably pre-sauced or pre-flavored. The chum and coho product might be unflavored IQF fillets—but who can say before the ideas have hit the drawing board?

Applebee's picks chum fillets

Ocean Beauty already has begun working with Applebee's, a Kansas-based chain of casual-dining restaurants, to promote Alaskan chum salmon. According to Ocean Beauty's Kerri Hayes, Applebee's is planning a ten-week promotion, beginning March 18, featuring grilled boneless chum fillets.

Waiters and managers in the 680-unit franchise chain will earn incentives—mini CD players, cruises to Alaska—for promoting the new salmon

dish. The restaurant hopes to use at least 110,000 lbs. of chums. If the program is a success, the chum fillet may earn a permanent spot on the menu at all or most of the chain's restaurants.

Applebee's approached Ocean Beauty for help in designing the promotion and learning more about Alaska salmon, Hayes indicated. Then they served the salmon to focus groups in Atlanta, Cleveland and Kansas City. Participants liked the product and recommended no changes to the recipe, and Applebee's decided to test it in 30 restaurants. According to Hayes, customers responded very favorably to the product, and Applebee's subsequently decided to launch a full-scale promotion. The grilled chum dinner will sell at the mid-\$7 range for a 6-oz. portion served with pasta and a vegetable.

Royal Seafoods signs on

Royal Seafoods is talking to a number of its clients as well, and has conducted some initial product development work that has not yet gone to the promotional stage.

"We're pursuing some ideas using glazes and sauces on portions cut from pink salmon blocks," said marketing manager Hilda Anderson. "We want to take our customers something new that they can see, taste and comment on—then they can change it to suit their needs."

Royal Seafoods doesn't currently produce any salmon products under

its Arctic Fresh label, but Anderson said this venture into Alaska wild salmon came at the right time. "I can't say we wouldn't have done something like this if we hadn't participated in this project with AFDF," she said. "But this opportunity came at the right moment and we were very willing to take it."

Alaska salmon lures Denny's

Meanwhile, grilled Alaska chums already have landed on mainstream America's dinnerplate. Since November, the Denny's chain of fami-

ly restaurants has been serving 6-oz. grilled chum fillets sold as "wild Pacific salmon." The 1,500-restaurant chain chose chums because they're consistent

in size and carry a reliable price tag. The company isn't saying how much product they're buying, but they do plan to keep it on the menu through spring to assess its performance.

Chums perform well in large-scale foodservice kitchens, where cooking instructions must be very specific, portion uniformity is important and supply is very reliable.

"The Denny's buy is very beneficial to the Alaska salmon industry," said Chris Mitchell. "There are a lot of people watching to see how this works out."

For more information about AFDF's salmon product development project, call Chris Mitchell or Loretta Lure at AFDF.

"If this promotion is a success, Applebee's may offer Alaska chum salmon fillets on the permanent menu in many of its 680 restaurants."

The secret of shelf-life

This fall, the Fishery Industrial Technology Center continued its study of antioxidants and how they extend the shelf-life of salmon fillet and mince blocks.

Last year, the Center's Chuck Crapo studied pink salmon blocks, made from fillets, mince and laminated fillet/mince combinations, at various times during the year to compare the quality difference between blocks treated with antioxidants and untreated blocks. He found that frozen blocks retained their quality characteristics—texture, flavor, freedom from rancidity—four and a half months longer when treated with antioxidants than if left untreated.

Now Crapo continues the study on chum salmon blocks. Fillet, mince and fillet/mince combination (85% fillet, 15% mince) blocks were each treated with antioxidants; once again, Crapo used either Duralox 213 or Specialty Foods L-900 as the treatment.

"We presume that the chum blocks will produce the same results the pink salmon blocks did," said AFDF's Chris Mitchell. "The information we've already learned about maintaining the shelf life of salmon blocks eventually may help turn frozen pink and chum salmon production into a year-round enterprise. With these results we have proven that treated salmon blocks, reprocessed even months after primary processing, can successfully be made into high-quality end products."

Twice-frozen salmon blocks are tougher to maintain, however. In a separate test, Crapo compared the quality characteristics of twice-frozen chum



chum salmon blocks

salmon blocks. For this study, headed and gutted chums were frozen at 0°F for six months. Then the fish were thawed, filleted, deep skinned, packed and refrozen into 16.5 pound blocks. These blocks were evaluated for quality retention after three, seven and ten months in frozen storage.

By seven months, the quality of the mince blocks had deteriorated markedly. Laminated blocks were a couple of months behind in rancidity, and the fillet blocks fared the best. These results were similar to those found with twice-frozen pink salmon blocks. At ten months, all the blocks were too rancid for use.

"This may seem like a small study, compared to some of the more dramatic things going on in the industry," Mitchell said. "However, it's detailed quality information like this—how long can salmon blocks be held in frozen storage and still maintain quality?—that is going to make the difference between the success and failure of some new salmon products. Now we have firm data to go on that can tell us just what pink and chum salmon can do, and just what it can't."

Some buyers are beginning to specify anti-oxidants in their salmon blocks, Mitchell said. "We've also had a lot of requests for this information from the Canadians, and from companies in the catfish industry."

For more information or copies of the report, call Mitchell at AFDF or talk to Chuck Crapo at FITC, (907) 586-1515

PINK SALMON NUGGETS:

USDA promises \$1 million buy

Alaska salmon nuggets are working their way through school. This past fall the USDA announced they were prepared to buy \$1 million worth of Alaska's newest high-volume pink salmon product for their nationwide school lunch program. So far, actual buys have fallen a little short of that potential sale, but the USDA says it will keep the offer open throughout the school year to give schools the chance to familiarize themselves with the new product.

The USDA's announcement came on the heels of AFDF's test trials in a number of school districts across the country, in which 76 percent of kids who ate the nuggets for lunch said they'd like to have them more often. AFDF has been working for three years, with the help of Alaska Seafood Marketing Institute and other industry organizations, to introduce Alaska salmon nuggets to the nation's school lunch programs.

"The USDA has opened the door for producers to go out and sell salmon nuggets to the schools and similar institutions," said AFDF's Chris Mitchell. "Now it's up to the individual school districts to

order the product if they want to—and for producers to market it. So far, only a few states, primarily in the East Coast and the South, have picked our nuggets to spend their money on. They can buy pizza or chicken, anything they want to, and some have chosen Alaska salmon nuggets because the kids do like them. It's not a million-dollar order so far, but it's a good start."

By mid-December, districts across the country had ordered only about 17 containers—not exactly 900,000 pounds, but the folks at USDA have called it a strong showing for a brand new product.

"Salmon nuggets are a new idea for the school lunch market," Mitchell said. "A lot of people don't know what it is. They know what chicken nuggets are, and they order that because they know the kids will eat it. And a second handicap—I think this is the major reason the full buy wasn't achieved—is that for many schools in this country, the only experience they have with fish is negative."

How big an opportunity?

Not all seafood producers get excited about government contracts like the school lunch program, which are always based in the lowest bid. Lowballers may benefit, or may just make enough to keep their plants operating, but in the long run such contracts can add a little to an

industry seeking stability in uncertain times. Still, Mitchell said, the school lunch program offers the salmon industry a number of opportunities.

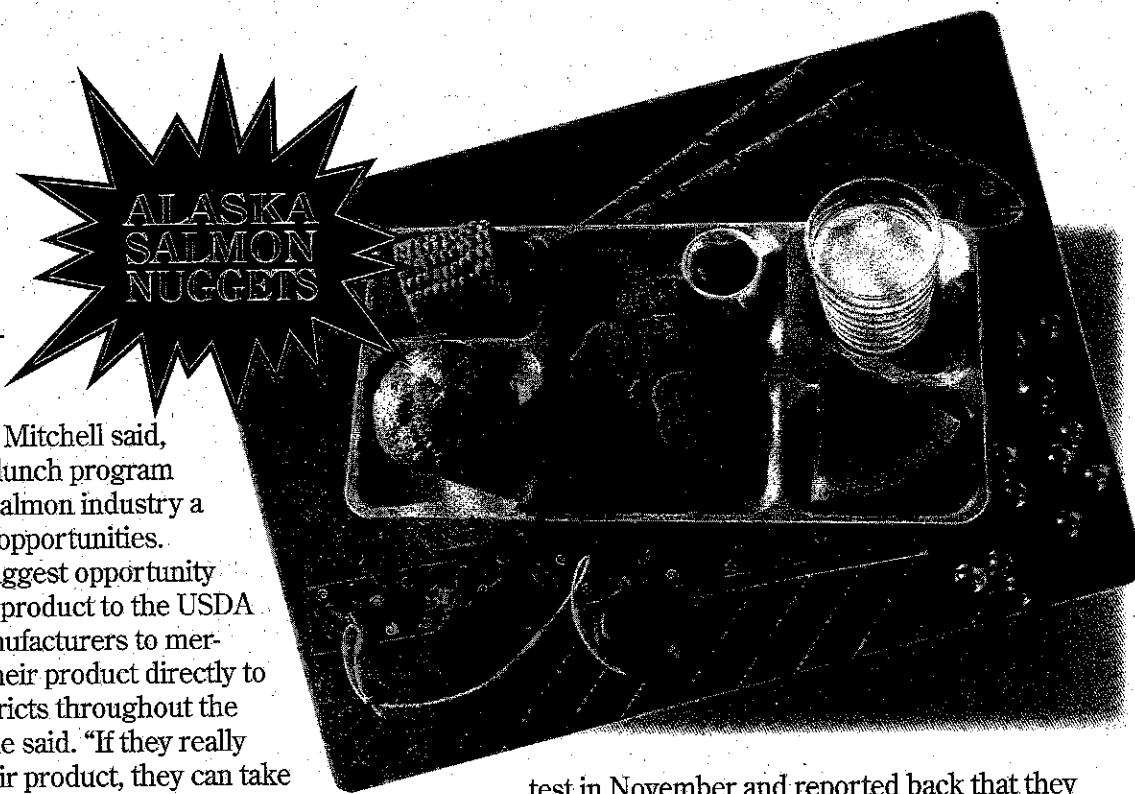
"The biggest opportunity isn't to sell product to the USDA but for manufacturers to merchandise their product directly to school districts throughout the country," he said. "If they really market their product, they can take a piece of the minced fish stick business. If we don't take this opportunity, then the market will only be there when the government declares pink salmon a surplus and makes emergency buys, and that isn't exactly expanding our markets."

Now that nuggets have a good track record with kids, producers could expand their target markets to include fish & chip shops and other kinds of outlets. "You can custom design nuggets for regional preferences, like Tex-Mex or Cajun," Mitchell said. "I'd really like to see some of

these producers take the nugget idea beyond this very narrow and very price-sensitive market."

Chums may be next

Next up: AFDF continues the effort to add chum salmon to the recipe. The breaded nuggets currently are made from Alaska pink salmon, but USDA welcomes the idea of adding chum salmon to the product description if chum nuggets pass the agency's acceptability tests. The USDA tried some nuggets made of chum salmon at a taste-



test in November and reported back that they had no complaints with the chum product. In fact, they said, they found little difference between chum and pink salmon nuggets. If all goes well, USDA's product specifications will be modified to allow the use of either pink or chum salmon in Alaska salmon nuggets by the beginning of the 1996-97 school year.

Frionor and Viking Seafoods outbid four other seafood producers for the school lunch program buy. Mitchell said the fact that no company from the Alaska region won the bid is a boon to the effort in its own way.

"Only two West Coast producers bid for this contract," Mitchell said. "I'm pleased that East Coast producers now know that Alaska salmon is going to be a part of their future."

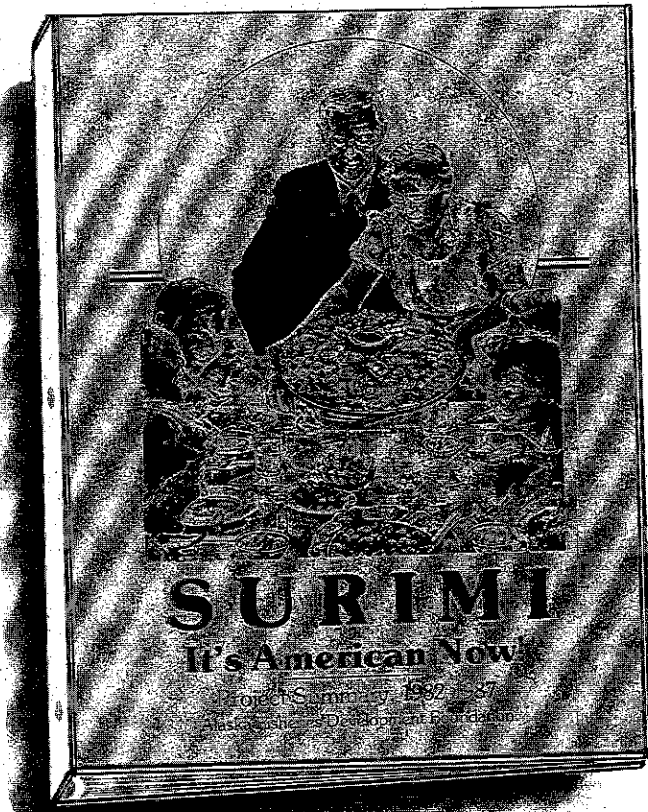
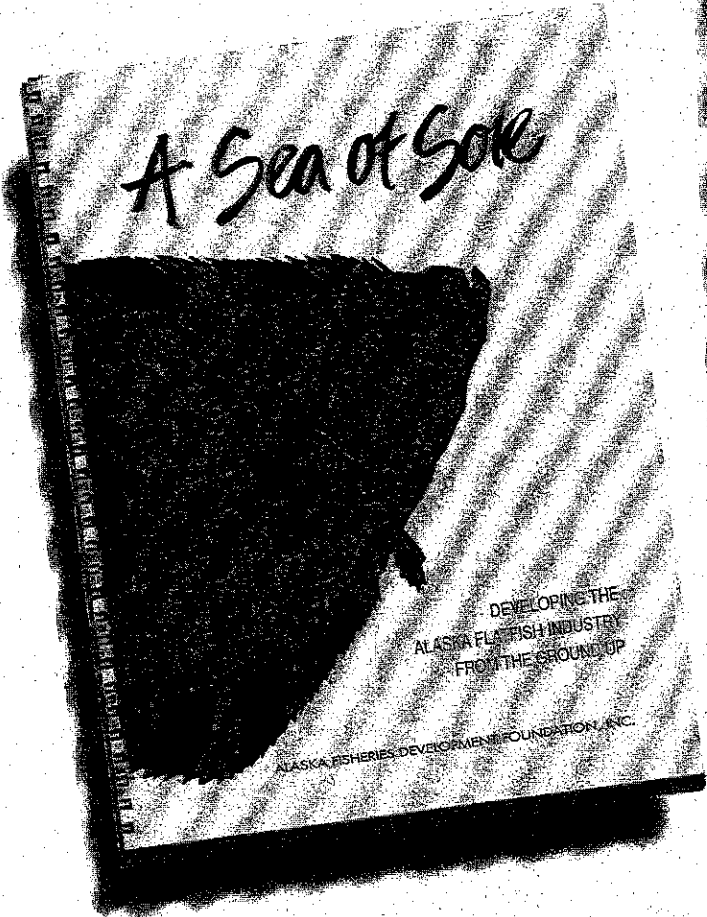
The effort to market Alaska salmon nuggets to the federal school lunch program is funded by a grant from the Alaska Seafood Marketing Institute.

This ain't no Little Mermaid

Everybody knows what really counts in kids' food isn't nutrition, it's cartoon appeal. Click your mental channel changer on the Neomorphic Seaforce, a rad rendezvous of marine action heroes (Angel, Alantor, Misty and Nemo) whose mission impossible is to interest kids in eating right. Kind of a piscine Popeye concept. Power Rangers go pelagic. The Seafood Education Council (you can bet kids didn't make up that name), an arm of NFI, developed this idea and will debut the benthic action figures in a couple of school districts this year. The heroes' task: to permeate the brain waves of young consumers with the desire to keep our oceans clean and eat more seafood. For information, call Kerri Green or Rose Welch, 1-800-421-8871



*Old News
can be*



AFDF Lures Loretta back

When fishing around for someone to lend muscle and brainpower to this year's projects, AFDF shopped for the best. We've signed Loretta Lure for her second stint at the foundation—she was previously a project manager here. After managing a congressional campaign, working for a trade association of attorneys and flying off to Italy to learn the language and meet her Italian relatives, she still finds the North Pacific seafood industry one of the more dynamic places to put her endless energy. Welcome back, Loretta.

Good News

There's still a chance for you to read some of our good news. Order your copy of "**A Sea of Sole**," still the most complete handbook on flatfish fisheries off Alaska. Also available, "**SURIMI: It's American Now!**" Called "the bible of the Surimi industry," a summary of AFDF's 5-year surimi project. Both are only \$15. This is your last chance to get these excellent publications from AFDF. Copies are limited. Call 907-276-7315.

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"Diligence is the highest form of passion."

Thomas Mann

AFDF welcomes new members

The following companies joined AFDF as members in 1995. Members participate in projects, help direct the Foundation's future, and support seafood industry development in the North Pacific. Want to join? Call Shirley at AFDF.

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Kalsec, Inc. — Thomas Jones
Network Seafoods, Inc. — A. Rae McFarland

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