

*"I dwell in possibility,  
A fairer house than prose."*

— E. Dickinson

# the LODE STAR

Alaska Fisheries Development Foundation, Inc.

508 West Second Avenue, Suite 212, Anchorage, Alaska 99501 (907) 276-7315

January, 1994

## Update

*Installing a HACCP system in your processing plant?* Then you'll want a copy of AFDF's newest publication, "How to Improve Microbial Quality of Alaskan Seafood," by Dr. Jong S. Lee of the University of Alaska's Fishery Industrial Tech Center. Lee reports on a study of Alaskan seafood (he focused on pollock fillets), its microbial plate count before and during processing, and how microbial quality can be improved. First of all, it's pretty good already: Only one sample in the study showed an aerobic plate count higher than the ICMSF standards. Two sources to suspect: inadequately cleaned equipment surfaces, and inadequate washing of the product. These are important tips for plant operators. Order your copy of the report for \$10 from AFDF.

*What's that 1% salmon tax up to?* It's going to work at ASMI, where the new salmon marketing committee, mandated by the Legislature's salmon marketing tax law that passed last year, is taking shape. ASMI Chairman Bob Waldrop announced the salmon marketing committee participants in early December: Chuck Bundrant (Trident Seafoods) and Cheryl Sutton (UFA), already on ASMI's board, join Tim Horgan (Ocean Beauty Seafoods), Eric Eckholm (Health Seas, Inc./Klawock Cold Storage), Kodiak seiner Ron Jolin, Petersburg troller Chris Sharpsteen and Bristol Bay gillnetter Dan O'Hara. First item on the agenda: An early January meeting to establish objectives, draft a strategic salmon marketing program, and to select a contractor to collect and publish prices and market conditions for salmon and its products, as mandated by the salmon tax law. Word has it the state's Dept. of Revenue collected \$2 million this year, though ADF&G landings/estimated value data shows the tax should have been closer to \$3.9 million (on a total value of \$390 million.)

*Minced salmon takes another leap at USDA:* Last year's USDA trial of salmon nuggets for the school lunch program left much to be desired — it happened after the season and the resulting RFP specified whole-muscle breaded salmon nuggets. The one bidding company came in too high, so USDA didn't take the bite and salmon still isn't used widely in school lunches. Now AFDF and ASMI have convinced USDA to test nuggets again this Jan., but this time to compare nuggets made with whole muscle, mince, and blends (some flavored). AFDF arranged for production, and Trident Seafoods made the products. They produced nuggets from: 1) 100% deep-skinned, boneless fillet blocks; 2) AFDF's 85%/15% laminated blocks; 3) minced/whole fillet flesh; and 4) a spiced, minced material. These products are designed to convince USDA that minced Alaska salmon nuggets are high-quality, consistent, inexpensive. Brain food for the '90s. Next challenge is to get a school district to try them out. We expect kids'll love 'em.

*AFDF continues to connect producers & buyers* of salmon blocks. You'll remember we produced 166 custom-processed blocks of skinless, boneless pink salmon last August at North Pacific Processors using a variety of recipes including minced, whole fillets, and "laminates" that combined fillets with mince. Twelve companies across the country have evaluated the product so far, and have sent useful comments: "it was not deep-skinned enough," said one. "If I could get a truly deep-skinned block, I would be able to do something with it." Another said mince quality was good but the price too high. A third said the price was just right.

"I'd like to make nuggets and burgers from this — where can I get a quantity of mince?" asked another. And some advice from one company: "Reduce the amount of blood in your frame mince. Needs better deep-skinning. Couldn't taste the Duralox additive at all." The jury's still out on about half the samples that have been sent out, but two of the recipients are actively seeking commercial block suppliers.

Around Christmastime, one of these reproducers called inquiring about the possibility of purchasing 20,000 lbs. of the fillet block from fresh salmon with natural anti-oxidant. Unfortunately, there wasn't enough product to fulfill their whole order, but we're working on alternatives.

Meanwhile, FITC's Chuck Crapo continues to evaluate the taste, smell, drip loss and microbiological quality of the blocks every three months. He's also evaluating commercial blocks produced by five companies across the state, so we'll learn a little about consistency from one supplier to the next. (Their quality info will be provided to them confidentially.)



*oncorhynchus*

### A SYMPHONY OF SALMON

**CALL FOR NEW SALMON PRODUCTS:** AFDF, ASMI and the Alaska Department of Commerce and Economic Development (DCED) are co-sponsoring a "Symphony of Salmon" contest to promote the best new non-traditional salmon product now in commercial production. Entrants will submit their products for judging in early February at the Anchorage Museum of History and Art. Alaska's Gov. Wally Hickel, several professional chefs, and other luminaries will be among the judges. Best three products will be showcased at the International Boston Seafood Show in March — a juicy prize for the winners, and a good boost for all new Alaska salmon products.



*loc. chowder, gam, etc.*

Next step: About 6,000 lbs. of headed/gutted pink salmon, frozen last August, will be reprocessed into blocks in February. We're testing whether blocks made during the year hold up in quality to blocks made immediately after harvesting. If so, processors could freeze part of the catch, process it into saleable product as customers demand, and extend their production season. May be one way to smooth out the erratic pulse of the salmon industry.

*Isn't that just like a youngster?* For the past few years, undersized pollock were everywhere, crowding into trawl nets, tipping the tote scales — and then shooting right into the meal plant or back over the side because they were too small for fillets or surimi. So AFDF launched a trawl net study to compare how different cod end mesh configurations might decrease catches of small pollock (30 cm. or less) — and this fall, when the study got underway, the undersizers disappeared. Read our last *Lodestar* for details: AFDF, working with biologists from the Univ. of Washington and FITC, sent biologists aboard the mothership *American Triumph*, accompanied by four catcher boats (*Pacific Explorer*, *Muir Milach*, *Aleutian Challenger*, *Ocean Leader*) assigned to rotate six different codends among them. They set out to test a double-layer diamond mesh "control" bag designed to catch everything; two single-layer diamond bags, one 89-mm. (stretched measure), and one 127-mm. mesh size; two square mesh bags, one 90-mm. and one 127-mm. mesh size; and a double layer diamond mesh bag with an 89-mm. square mesh panel sewn in at the top. (This last one was dubbed the "Highliners" bag since it mirrored a proposal that the North Pacific Council adopt a similar codend.)

After chasing small pollock for four days off the Pribilofs and in Zhemchug Canyon, the fleet decided on another tack. Since the fish were so much larger than expected, all but the largest mesh sizes were catching almost everything. The 89-mm. and the 90-mm. square mesh bags were removed, and the 90-mm. square mesh panel in the "Highliners" bag was replaced with a 127-mm. square mesh panel. The boats fished the remaining four codends for another week.

*Results will tell us* just which fish will be caught, and which will escape from the cod ends. We will be able to compare square mesh with diamond meshes of similar size (we expect square meshes to let slightly larger fish escape, and thus to be more selective.) And we will be able to judge the effectiveness and selectivity of using just a top panel of square mesh, compared to a whole net of square mesh. Due to the lack of small fish this year, we still don't know which mesh sizes are most selective for sorting out discard-sized fish. There's no minimum legal size for pollock, but optimal usage remains a top priority in the fishery. AFDF now hopes to continue the project later this year when, biologists say, the Bering Sea can expect an abundance of small pollock. The work will continue with Dr. Pikitch from U. of W. and Chris Bublitz from FITC, as well as American Seafoods.

AFDF received some income from the sale of this research-permit pollock. That money has been dedicated to a follow-up study on the survival of pollock that do escape trawl nets. AFDF will initiate that study when work on mesh size comparisons is complete. For more information, call Paula Cullenberg at AFDF.

*Arrowtooth surimi shoots out the door.* After dancing around bycatch problems, plant shutdowns, plummeting markets and other obstacles for almost two years, a couple hundred tons of arrowtooth flounder marched themselves into the surimi plant at All Alaskan Seafoods this fall, and about 90,000 lbs. of finished product shot out the back door to ready users. Arrowtooth is the Gulf of Alaska's largest biomass but goes unused for lack of production technology and markets, and is an aggravation for fishermen who catch tons of it incidentally. After NMFS researchers in Kodiak developed an enzyme inhibitor that helps arrowtooth retain its texture when cooked, NMFS and AFDF began working on making surimi from arrowtooth flounder. But bycatch problems have stymied further development. This fall, under an out-of-season experimental fishing permit granted by NMFS, AFDF finally conducted its commercial-scale arrowtooth surimi production project.

The *Topaz* landed its first delivery of arrowtooth to All Alaskan, in Kodiak, where the surimi was made with the help of Jerry Babbitt of NMFS and Chris Pook of Alfa Laval. About half the surimi was made with beef blood plasma, half with potato starch, to inhibit enzymatic action. Samples were sent to a half dozen domestic surimi producers for testing. Initial product differed from pollock surimi only in gel strength, but improvements are expected as producers get more experience. In the meantime, once the Gulf flatfish season began again Nov. 1, buyers perked up. In the end, Sea Blends (a subsidiary of Peter Pan) took the 80,000-lb. lot. They'll blend the arrowtooth surimi with pollock surimi in some of their traditional products, and will let us know more about its uses and performance in the future.

*Acknowledgements of thanks for support and contributions to this project go to: B.K. Ladenburg (represented by Evergreen Food Ingredients), Specialty Foods, Roquette Corp., American Meat Protein Corp. and Non Pareil Corp.*

# AFDF

## Member alert

**Annual meeting** is scheduled for Feb. 6, 1993, in Juneau. On the agenda: Speaker Paul Fuhs, Commissioner of Department of Commerce & Economic Development. Also, we'll elect six to the Board: two harvesters, two processors, two support representatives. Like last year, we'll also try to lure legislators and their aides to our meeting and reception. Can you be there? Let us know.

**New members:** Bernt Bodal, American Seafoods (Supporting); Mike Haggren, Defiant Fisheries, Inc. (Voting); Barbara Culver, Barbara Culver & Associates (Voting); Dan Oliver, NET Systems (Associate — formerly Nor Eastern Trawl); Mike Stone, Gourock Trawls/Ship Supply (Associate) and Nancy Munro, Saltwater Inc. (Associate). Also, Winterholm Press enthusiastically upgraded to voting membership. (If she can do it, so can you. Send your 300 bucks to AFDF, 508 West 2nd Ave., Suite 212, Anchorage, AK 99501 today.)

# the LODESTAR

Alaska Fisheries Development Foundation, Inc.  
508 West Second Avenue, Suite 212  
Anchorage, Alaska 99501

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
ALASKA FISHERIES  
DEVELOPMENT FDN.