American Fishermen's Research Foundation News

There is a discussion ongoing at this time within American Fishermen's Research Foundation (AFRF) on how to make the foundation more relevant to fisheries science and management in 2020 and beyond. Stronger advocacy for U.S. albacore fishermen and their access to the albacore resource in both hemispheres backed by relevant science is the direction we are most likely to take with your continued help.

AFRF was founded in 1981 by dedicated WFOA fishermen like Frank Martins and others in WFOA who envisioned that in 20, 30, or 50 years the troll and pole albacore fishery may be managed and regulated. Getting a jump on data collection, research, and science would support the U.S. albacore industry at that time. That time has arrived but much of our projects in the past may not be a fit going forward given how management on highly migratory species is evolving.

In 1981 there was no way to predict what future management would look like. The Magnuson Stevens Act (MSA) was only five years old and there was no international management of most fisheries. In 1981 there was only a small state license fee and a one page application to be able to fish albacore. The U.S./Canada albacore treaty just was ratified. Many back then would be quite surprised at how fisheries management evolved through state, federal, and international forums with many tentacles and tangles of many outside interests, information, multi million dollar budgets of ENGO's, and politics. Thus, more information on the albacore fishery would be positive and since 1981 AFRF has spent about seven million dollars of many research projects mainly through cooperative research with NOAA/NMFS and other institutions as well as scouting for albacore in regions never fished prior.

To this day AFRF remains involved in management issues affecting your fishery through advocacy, representation, and science. However cooperative research with NOAA/NMFS seems to be fading because of their focus on other species and budget constraints.

Buyers such as those listed below that recognize long-term potential of good sound science and data to defend our fishermen's access to the resource are at a market disadvantage against those that choose not to participate in AFRF. However, the \$30/st that the buyers pay is only around 1% of the dock price of albacore compared to 7% in 1981. Nonetheless when a large segment does not buy in the participating processors remain at a disadvantage.

This is all the while issues such as the Management Strategy Evaluation (MSE) process is ongoing and will direct direction of future management probably in the form of catch quotas, limited entry, and other methods. Also, AFRF past research has been used to support Marine Stewardship Certification (MSC) of North Pacific and South Pacific albacore.

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AFRF funds from the South Pacific could be used for supporting management and regulatory representations and possible data collecting projects in the South Pacific. AFRF involvement also supports MSC and our annual compliance audits.

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History of U.S. albacore fishery in South Pacific:

Western Fishboat Owners Association (WFOA) along with American Fishermen's Research Foundation (AFRF) were instrumental in research the feasibility of a small vessel troll albacore fishery in the South Pacific.

Through two contracts with the Pacific Fisheries Development Foundation (PFDF) in 1985 and 1986 WFOA vessels explored the fishing grounds in the South Pacific with three vessels in 1985 and four vessels in 1986. In 1985 the PFDF contributed \$90,000 and AFRF contributed \$148,000, and in 1986 PFDF \$115,000 and AFRF \$ 172,800 for vessel charter costs and fuel expenses. These were 60-80 ft WFOA member boats which transited from the US west coast over 4,000nm to the fishing grounds in the SP on which they spent an average of three months each fishing, tagging, and documenting their catch. The general areas covered were from 35 S latitude to 42 S latitude and from 145 W longitude to 165 W longitude. Very good sign of albacore was had in most regions on jigs with average size from 13-18 pounds. Fish were also dart tagged along the way.

After 1986 US vessels began fishing in the SP self-funded and did very well. The fishery lasted from Mid-December through early April and was generally centered about 800 nm south of American Samoa and Tahiti. Weather was always a factor in that area known to sailors as the roaring forties. From 1987 - 1998 anywhere from 12 - 55 US boats ranging in size from 50ft to 90 ft fished in the region. Total catches were as high as 5,500 tons with CPUE's also very good compared to NP.

Vessels in those years were predominantly brine-freezing their albacore and selling to Star Kist or COSI in American Samoa. Some of the catch was also transshipped to Samoa by high seas carries contracted through Marine Chartering Co of San Francisco, and on one occasion to Bangkok. Very detailed records were kept by WFOA on the carrier transshipping.

As freezing systems changed and quality was stressed, the markets changed more toward the sashimi grade fish and these vessels generally shipped fish from Tahiti and New Zealand to Asian markets, and many of the larger vessels took the fish directly back to Canada. A few boats over history also unloaded to Ecuador and in 2001 most albacore went through Bumble Bee Seafoods in Fiji for loining and eventual canning in Santa Fe Springs, CA.

After 1998, fuel and just the wear and tear of fishing in the south was a self-regulating factor. The number of vessels have diminished from the high of 55 to less than eight vessels at times. 2020 saw an effort of 19 vessels combined with good fishing. And we expect a further increase in 2021.

To this date there are no other fleets of any nation fishing albacore in that area except for 1-2 from Canada and rarely a few from New Zealand. There is absolutely no longline effort south of 30 S in the area east of the dateline. The albacore are traditional jig fish 12-25 pounds, 2-4 year old age class. AFRF continued to do dart tagging in the South Pacific until around 1998. In 2000 AFRF sent two vessels on a charter off the Chilean EEZ and found mainly bad weather, although in the past vessels venturing over to the Easter I area have found considerable sign of fish.

Weather and costs are very regulating issues for the SP fleet and it's a very serious commitment to take part in it. However it has been very good and it is showing signs of being good again. This fishery probably has minimal effects on the stocks in the SP, and is totally separate of the longline fishery in the area of catch and age class of the albacore.

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AFRF Contracted Buyers: Bornstein Seafoods Inc., Bumble Bee Seafoods, C2C Premium Seafood, Chicken of the Sea International, Da Yang Seafood, Driscoll's Wharf, Garibaldi Landing Fishermen, High Seas Tuna Inc., Interocean Fisheries, Island Trollers Inc., Albers / Jessie's Ilwaco Fish Company, JK Fisheries, J. DeLuca Fish Co., Ilwaco Landing Fishermen, Manabe & Co LLC, Oregon Seafoods, Pacific Seafood Group, Papa George Gourmet Albacore, Pelican Packers Inc., Seafood Producers Co-op, Trident Seafoods, Tri-Marine Fish Company, Westport Seafood Inc, Wild Planet Foods

Payments of USD \$30/ton can be made to: American Fishermen's Research Foundation, P.O. Box 992723, Redding, CA 96099

One project of great promise that AFRF has been assisting on is:

Improving Stock Definitions and Understanding of Stock Boundaries for North Pacific Albacore (Thunnus alalunga)

Kathleen G. O'Malley, Felix Vaux, John R. Hyde and Sandra Bohn

State Fisheries Genomics Lab, Coastal Oregon Marine Experiment Station, Department of Fisheries and Wildlife, Hatfield Marine Science Center, Oregon State University, Newport, OR, Southwest Fisheries Science Center, National Marine Fisheries Service, La Jolla, CA

Motivation for this Study- Though much work has been done to understand stock structure of albacore globally [1], research in the Pacific Ocean has been coarse in nature and has raised a number of questions. For example, tagging data have shown no movement of albacore across the equator and yet previous genetic data have shown a surprisingly poor ability to discriminate between the currently managed North and South Pacific stocks [1,2]. These genetic results suggest that some fish migrate between the two oceans and interbreed on the spawning grounds. On a more local scale, tagging studies have shown that the migratory behavior of juvenile albacore varies regionally and seasonally with limited mixing between the northern and southern fishery areas in the Northeast Pacific [3]. However, it is uncertain whether the two migratory groups represent two genetically distinct stocks or fish from the same stock that exhibit different foraging behaviors.

The overall goal of our research was to generate genomic data to help resolve some of these uncertainties and provide more definitive results regarding stock boundaries of albacore tuna in the North Pacific. This collaborative effort involved researchers from Oregon State University, NOAA's Southwest Fisheries Science Center, the Pacific Community (SPC) Pacific Marine Specimen Tissue Bank and partners from the American Fishermen's Research Foundation and the Western Fishboat Owner's Association . . . If you would like a copy we can send it upon request

Tuna Conference: The 71st Tuna Conference is being planned for May 18-21, 2020, at the Lake Arrowhead Conference Center in California. This year's theme will be "Using new technologies to update and validate life history studies: The times they are a changin'." Technologies, fisheries, and marine environments are constantly undergoing change. Subtle changes in life history characteristics and data collection methods can have large impacts on stock assessments that are reliant on accurate and current data. In addition, the dynamics of our marine environments are under constant change from both anthropogenic and natural influences. Despite living in an ever-changing world, many important fisheries management institutions rely on biological or genetic information that may be outdated because they do not account for recent changes or rely on older methods that can now be validated, and/or require time-intensive data collection methods that could benefit from application of improved technologies. Validation of basic life history

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parameters is important if we strive to provide and produce sound, undeniable, and unbiased science that is incorporated into stock assessment and management decisions. This conference will explore the application of new methods and technologies to collect, update, and validate biological and genetic information on large pelagics who now live in an ever-changing marine environment.

Three new student scholarships are available from the sponsors: Wildlife Computers Inc, American Fishermen's Research Foundation, International Seafood Sustainability

Owyn Snodgrass - Tuna Conference Chair Southwest Fisheries Science Center 8901 La Jolla Shores Drive, La Jolla, CA 92037-1509

Phone: (858) 334-2877

Email: info@tunaconference.org

U.S. Seafood Consumption Rises to Highest Level Since 2007, but Falls Short of USDA Recommendations: On average, Americans consumed 16.1 pounds of seafood in 2018, a slight uptick from the year before, according to the latest "Fisheries of the United States" report released by NOAA Fisheries on 21 February.

U.S. consumers ate more fresh and frozen seafood in 2018, contributing to the highest seafood consumption level seen since 2007, NOAA Fisheries found.

"We all know seafood is part of a healthy diet, and this report also estimates the amount of seafood Americans consume. Estimated U.S. per capita consumption of fish and shellfish was 16.1 pounds, and this is the highest since 2007. This is an increase of 0.1 pounds from the 16 pounds consumed in 2017," NOAA Fisheries Chief Scientist Cisco Werner said of the findings during a 21 February press conference. Continue reading here (Source: Seafood Source). https://tinyurl.com/qvdzo2s

Tuna is the Second Top Selling Canned Item in the USA: People have been finding ways to preserve food for centuries. The method of storing it in a can dates back to France in the early 19th century. The military was going hungry, and the government offered an award for anyone who came up with a sustainable way to preserve food. A young chef started using champagne bottles sealed with cheese and lime. He later experimented with tin cans, and the rest is history.

Fast-forward to the 21st century: canned food is so popular that most Americans use it even when they cook meals at home. As much as 98% of Americans keep canned foods in their kitchens — an average of 24 cans — and 86% of parents say they don't go a week without using food from a can. Continue reading here (Source: 24/7 Wall Street) https://tinyurl.com/svk3dtz

NOAA Certificate of Origin Update: NOAA Fisheries announces an impending update to its catch and origin certification to meet increased needs of the EU and other trading partners. The new certificate, Legal Harvest U.S., will be released March 2, 2020.

The revised U.S. Catch Documentation Scheme is designed to issue a single form of legal harvest certification for export consignments US harvested of fish and fish products and processed products derived from such raw materials from the United States.

The U.S. producer or processor will be responsible for retaining all information corresponding to the vessels or list of vessels which contributed to the consignment and providing that information to the US Government competent authority upon request. While previously the vessel name and registration information had been required to be maintained in records, going forward this information will be listed directly on the harvest certificate. The NOAA Handbook will be updated on March 2, 2020, to include all relevant policy and procedure updates.

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