

### American Institute of Fishery Research Biologists

Promoting excellence in fishery science

## ...BRIEFS...

VOL. 42-2 SPRING 2013

#### **Table of Contents**

President's Message

From the Editor

The AIFRB Impact

Take Action

Policy & News

Members in the Spotlight

Recognition

Awards

Founding Fellow

Miscellaneous News



## President's Message

Our new BRIEFS editor recently asked the Board if we can include controversial topics in the newsletter, and I was happy to hear a resoundingly positive reply. The Institute not only allows the submission of articles dealing with controversial topics to BRIEFS, it encourages discourse on controversial issues.

Our Institute was founded by leading scientists in our field who recognized the need for a professional organization that would allow them to voice their individual and independent opinions, free from the constraints of their employers or the groups in control of other organizations. We are compelled to view ourselves as research scientists in order to achieve our mission of "promoting conservation and proper utilization of fishery resources through the use of fishery and related sciences" and doing so encourages scientific debate and consideration of controversial issues. There is value in the development of best practices, standardized approaches, and scientific conventions, but we cannot fall into the trap of becoming practitioners in a stagnated science. If you have ideas that contradict convention, see systematic problems in our field, or if you question some current practices, we urge you to submit your professional opinions so that we can consider your perspectives. Such submissions will increase the interest in BRIEFS and demonstrate the advantage of being a member of AIFRB.

The AIFRB is a 501(c)(3) taxexempt nonprofit organization (EIN 61-6050711).

## **Important**

What if we could have saved a fishery, but didn't?

Please renew your membership so we can continue to unite and share our good work:

www.aifrb.org/2013/04/7-very-good-benefits

## From the Editor

Please keep sending in material for *Briefs* to sgfeditor@gmail.com. If it's about fisheries and you're interested in it, then your fellow members will be, too:

- · Start a discussion or ask a question
- · Share your photos
- · Share your research
- Share some How-To's But whatever you do.... Share!

## **Still Seeking**

The Executive Board is seeking nominations for an Associate member to represent young professionals at the 2013 Board meeting (Little Rock AR, September 7-8 2013; the weekend before the Annual AFS meeting). Up to \$600 in travel support is available to attend the meeting and participate in Board discussions. Associate members can nominate themselves or other members can nominate Associate Members who are willing to attend the meeting. Nominations and CVs should be sent to the Membership Committee Chair, Tom Keegan

(tkeegan@ecorpconsulting.com).

## The AIFRB Impact Making a Difference

AIFRB is a sponsor of the World Conference on Stock Assessment Methods for Sustainable Fisheries, which will take place in Boston, Massachusetts from July 15-19 2013. The conference will provide a forum for presentations on the application and future of stock assessment methods.



It will consider single stock approaches for data rich and poor stocks, and also multispecies and ecosystem based approaches. It is being organized by researchers from a range of scientific institutions and RFMO across the world. The conference will be preceded by a 2 day workshop (July 15-16 2013) where studies on the application of stock assessment methods to predefined data sets will be reviewed.

#### **READ MORE:**

www.ices.dk/news-and-events/symposia/WCSAM-2013 REQUEST INFO ABOUT THE AIFRB ABSTRACT: scadrin@umassd.edu

# Take Action Proposed Cut to Critical Fish and Wildlife Service Program—What AIFRB Members Can Do Now

by AIFRB member, Jesse Trushenski



Take Action continued on following page

The President's FY 2014 Budget has been released, and proposes a withering cut to the U.S. Fish and Wildlife Service (USFWS)'s Aquatic Animal Drug Approval Partnership (AADAP) program. The AADAP program provides critical and unduplicated services to the fisheries community, and efforts are underway to encourage decision-makers to reconsider the proposed cuts in light of the negative effects they would have on fisheries science and management.

Fisheries professionals use a suite of drugs to accomplish fisheries management objectives and deliver public and tribal trust responsibilities. Field biologists need to use sedatives to protect themselves and the fish they handle when collecting data and completing fisheries management objectives. Hatchery biologists need therapeutic drugs to combat disease outbreaks, spawning aids to encourage fish to reproduce in captivity, and marking agents to allow hatchery fish to be differentiated from wild fish after stocking. Whether to maintain health and fitness of fish or facilitate laboratory or field-based research and management activities, as described in a recent American Fisheries Society Policy Statement, the absence of suitable drugs, "jeopardizes fishes, fisheries, fish culture, research, and poses considerable risk to those involved in these activities" (AFS 2011).

Fish drugs include commonplace chemicals such as hydrogen peroxide, but it is illegal to use such products in the U.S. unless they have passed the rigorous Food and Drug Administration (FDA) animal drug approval process. The AADAP program is the only program in the U.S. fully dedicated to fish drug approval research and ensuring critically needed drugs are available to fisheries professionals. USFWS leadership in this area is critical because the Service itself is a major end-user of aquatic animal drugs, the need for safe and effective drugs is nationwide, and without public-sector assistance economic incentives are insufficient to encourage drug sponsors to pursue aquatic animal drug approvals in the U.S.

The President's FY 2014 Budget proposes \$400,000 in funding cuts and reducing the AADAP program's size by 3 FTEs (view the budget here: www.doi.gov/budget/appropriations/2014/upload/FY2014\_FWS\_Greenbook.pdf). The proposed cuts would effectively terminate the AADAP research program, and with it, the drug approval process in the U.S. Although the AADAP program works with many partners to generate data in support of drug approvals, without the leadership and wideranging expertise of the AADAP program, the availability of safe and effective aquatic animal drugs will continue to be a limiting factor in the fisheries disciplines.

Efforts are currently underway to communicate the importance of the AADAP program and its many services and deliverables to decision-makers. Interested AIFRB members may wish to join this effort, and tell decision-makers just how important AADAP is to the fisheries community. For more information on how to assist, please contact fellow AIFRB member, Jesse Trushenski at saluski@siu.edu for guidance. NOTE: IF YOU ARE A FEDERAL EMPLOYEE, YOU CANNOT COMMENT ON THE PRESIDENT'S BUDGET, EXCEPT IN A STRICTLY PERSONAL CAPACITY (I.E., AS A PRIVATE CITIZEN).

AFS (American Fisheries Society) 2011. Policy Statement on the Need for Immediate-release Sedatives in the Fisheries Disciplines. Can be found here: fisheries.org/docs/policy\_statements/policy\_34f.pdf.

## The Changing Face of Global Fisheries: A Geopolitical View

by Carmel Finley

Reg Watson and Daniel Pauly have a great paper in the most recent issue of *Marine Policy*<sup>1</sup>. They look at how fisheries have developed between 1950 and the 2000s, and how fishing has shifted from Northern European to Asian waters. It's a very interesting analysis, but one sentence really leapt off the page at me: "Trying to see the big picture has therefore been extremely difficult...."

This is because scientists aren't working with historians. Watson and Pauly have an interesting analysis but they are starting in the middle of this story. The development of fishing during the last 70 years didn't happen because a few boats were running around looking for tuna. Who built the boats? Why were they built? And, most importantly, who paid for them?

Fishing expanded dramatically after World War II because of deliberate government policies that created subsidies to build boats. The post-war expansion of fishing was directed at specific political and economic goals. Some goals were domestic, such as providing employment in coastal areas (Spain), or providing fish for export (Canada). Other goals were linked to foreign policy. For Japan, the recreation of its fishing fleet was a critical step in rebuilding its shattered economy. For the Soviet Union, fishing provided a vital source of protein, but it also represented a pre-emptive territorial claim throughout the world's oceans during the Cold War.

American foreign policy goals are especially important where fishing is concerned. The United States is not generally thought as having a leading role in the expansion of fishing,<sup>2</sup> but that view changes if you look at how fishing was embedded in post-war American foreign policy.

The Americans intended to dominate both the Pacific and the Atlantic Oceans, with an extensive network of military bases to project American power, maintain transit rights, access to resources and markets, and, most importantly, to deny all of these assets to any prospective enemy. The Americans wanted "control of every wave in the Pacific Ocean." The Joint Chiefs of Staff in 1945 proposed a string of military bases in the Aleutians, at Midway, Hawaii, Christmas Island, Canton, American Samoa, Bora Bora, Clipperton, and in the Galapagos. While the plans were scaled back due to budgetary constraints, the policy had specific impact on the expansion of fishing after World War II. Three of the policy goals were:

1) The rebuilding of the Japanese economy as a bulwark against communism in Asia. That led to the rebuilding of the world's largest fleet during the American Occupation of Japan, and to opening Americans markets to Japanese goods—especially canned and frozen tuna.

2) Strengthening the American presence in the Western Pacific by developing its Pacific possessions, including American Samoa and the newly acquired Caroline, Marshall, and Mariana Islands. Developing these resources included using the islands for nuclear testing, but also building a fish processing plant that officials hoped would create American-style employment. The fish plants were exempted from paying American wages after 1956, opening the door to the establishment of textile manufacturing—an industry with a subsequent history of abusing its workers.

3) Strengthening of the Icelandic (and also Norwegian) economy and attempting to re-direct the sale of fish away from the Soviet Union. Through the Marshall Plan and

other development grants, Americans grew the Icelandic fishing industry, encouraging exports to the United States and hurting the New England fishing industry. Why was U.S. the so interested in Icelandic fish? They wanted to maintain the air base they had built at Keflavik during the war.

There were two specific sets of legislation to achieve these goals:

1) A 1943 trade agreement with

Iceland that created a loophole that allowed the Japanese, after 1948, to export canned and frozen tuna into the world's largest tuna market, the United States.

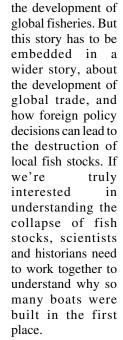
2) A series of U.S Tariff Schedule decisions in 1952 to allow products from American Samoa into the United States without paying a tariff, and exempting the territory from the Nicolson Act, which prohibited the landing of fish by foreign flagged vessels in U.S. ports.<sup>6</sup> Fish caught by non-American vessels could land their catch at Pago Pago, where it would be processed, then exported to the United States with no tariff.<sup>7</sup>

These trade decisions resulted in the destabilization of the southern California tuna processing industry. They also created the conditions that allowed boats to move into the Atlantic and Indian Oceans in the late 1950s, with devastating impacts on bluefish tuna stocks.

We generally think of the expansion of fishing as coming from Northern Europe and sweeping westward to the United States and south into the Southern Hemisphere. But there was a second great movement in the development of global fishing, a sweep during the late 1950s that moves from the Pacific into the Atlantic and the Indian Oceans. It is a post-war sweep, led first by the Japanese, then the Americans.

Japanese boats began delivering tuna to American Samoa in 1954. Decisions in 1956 allowed fish plants in American Samoa (and later Puerto Rico) to pay wages substantially below American fish processing plants. By 1958, boats were catching tuna in the Pacific, passing through the Panama Canal to deliver in Puerto Rico, then moving into the Atlantic to fish off Brazil and Western Africa. With the development of nylon nets for purse seining, fishing of tunas greatly expanded, as did the catch of the now critically endangered bluefin tuna.

It's great that scientists are reconstructing the story of





Watson, R.A., and D. Pauly. 2013. The changing face of global fisheries —The 1950s vs. the 2000s. Marine Policy 42:1-4.
 Ann Hollick, U.S. Foreign Policy and the Law of the Sea, (Princeton: Princeton University Press) 1981.

M.P. Leffler, "National Security and U.S. Foreign Policy," in Origins of the Cold War: An International History, (New York and London: Rutledge, 1994), M.P. Leffler and D.S. Painter, Eds, 15-53, 37.
 R.L. McGlothlen, Controlling the Waves: Dean Acheson and U.S.

 <sup>&</sup>lt;sup>4</sup> R.L. McGlothlen, Controlling the Waves: Dean Acheson and U.S.
 Foreign Policy in Asia, (New York and London: W.W. Norton & Company)
 <sup>5</sup> Leffler, 20.

<sup>&</sup>lt;sup>6</sup> Michael P. Hamnett and William Sam Pintz, "The Contribution of Tuna Fishing and Transshipment to the Economics of American Samoa, the Commonwealth of the Northern Mariana Islands, and Guam," Pelagic Fisheries Research Program, SOEST 96-05, JIMAR Contribution 96-303.

 $<sup>^{7}\,\</sup>mathrm{Food}$  and Agricultural Organization of the United Nations Corporate document repository.

## **Policy and News**

#### **New Protections for White Shark**

AIFRB member, Traci Latino, an environmental scientist for the state of California, explained the new policy for protecting white sharks off California's coast. Pursuant to the California Endangered Species Act (CESA), the California Fish and Game Commission (FGC) designated the species as a candidate for threatened or endangered status, entitling them to the full legal protection afforded to a listed species. Targeted sport and commercial fishing for white shark has been banned in waters off California since the mid- 1990s, with some exceptions that allowed for incidental take associated with research activities. Now the Commission will consider exceptions only on a case-by-case basis, and will authorize take only under permits issued pursuant to CESA. Now that the species is either a threatened or endangered candidate, an in-depth status review will be provided to the Commission with information to aid in its decision (slated for early next year) on whether or not to list the species.

WHITE SHARK AND CESA CANDIDACY: www.dfg.ca.gov/marine/whiteshark.asp. TO MAKE A COMMENT, VISIT: www.aifrb.org/2013/04/new-protections-for-white-shark To call Traci Latino for more information: (562) 342-7111

### **Big Fish Catches Mean Smaller Fish**



Research conducted at Bangor University (and published in March by Frontiers in Ecology and the Environment) examined molecular in the genes of Trinidadian guppies and documented that the fish became fewer and smaller. Serinde van Wijk, a Bangor University-funded doctoral student, who lead the study said, "Our attempts to conserve fish communities by regulating the size of fish that can be fished for, and by removing specifically the larger fish, may have had opposite effects to those intended. The loss of these genetic 'types' may mean that populations may not be able to recover completely or at all." The research pointed out that this genetically based shift also has repercussions for the wider marine community and environment.

NEWS SOURCE: www.bbc.co.uk/news/uk-wales-21813736

## **ELA Research Station Is Being Dismantled**

The 45-year-old Experimental Lakes Area (ELA) in Ontario- a research station that has made Canada a world leader in the science of fresh water for decades – is being partly dismantled by the government as it waits to be sold. The one-of-a-kind outdoor laboratory has informed the world about the effects of contaminants such as mercury, acid rain and phosphorus. As of April 1st, scientists have been prevented from



entering the ELA, ending several long-term experiments – not yet completed - aimed at keeping fresh water clean:

#### 1. ELA Climate Study

Scientists will lose the ability to quantify and predict the consequences of climate warming, since they will no longer be able to examine the drying of downstream wetlands, conduct a hydro-acoustic assessment of fish communities, and assess the habitat changes and health of lake trout.

**2. METAALICUS** (Mercury Experiment to Assess Atmospheric Loading in the United States and Canada)

Scientists will no longer be able to determine how much mercury

Policy & News continued on following page

concentrations (from coal combustion) in rainfall needs to be lowered so that the concentrations in fish are low enough for safe consumption by humans and wildlife.

#### 3. Eutrophication

To test detergent companies' claims that carbon, not the phosphorus in their products, was responsible for algae blooms and the related problems of reduced oxygen, toxins, and fish kills, a lake shaped like an hourglass was partitioned at the narrows with a curtain. Nitrogen and carbon were added to one side and phosphorus to the other. The picture of the algae bloom that emerged on the phosphorus side convinced policy makers around the world that phosphorus was the culprit. This was the only area in the world where inputs of nutrients, other chemicals, and food chains could be closely controlled in a watershed, and now present and future studies have been halted.

#### 4. Silver Nanoparticles

Silver nanoparticles are an emerging contaminant found in hundreds of products, especially textiles, because of their anti-bacterial properties (some washing machines are built to put silver nanoparticles into the load). A whole lake was being prepared to have silver nanoparticles dripped from the side of the lake in order to monitor the effect.

As of late April, Toronto's Premier Kathleen Wynne said the ELA does "extremely important work" and that she is "working with our partners to make sure that work can continue." However, it remains unclear what precisely her government's commitment is. Provincial officials declined to elaborate, citing ongoing negotiations with Ottawa, the province of Manitoba, and the International Institute for Sustainable Development, which is the only group known to be interested in taking over the site. The closure has been portrayed by critics of the federal government as part of a broader attack on environmental science research.

#### **READ MORE:**

www.aifrb.org > News & Policy News Source: theglobeandmail.com

## Members in the Spotlight



On Video

#### Members - Alena Pribyl, John Hyde, and Milton Love

Alena Pribyl has co-starred in a unique video that she also helped to write (along with Milton Love, Merit McCrea, and John Hyde) that educates viewers as to how the long-lived rockfish (many live to be 100 years or more) get barotrauma. The video begins with Alena talking to a large red rockfish puppet, but adult viewers would sorely miss out if they clicked the stop button thinking this was a video for little kids. There's good knowledge here, and fisheries professionals and homegrown fishermen, alike, can benefit from the explanation of the different devices used to recompress a rockfish by returning it to its depth of capture. Seven species of rockfish are considered overfished and several states require these species to be discarded if captured. However, just throwing these fish overboard often leads to their demise because of pressure-related injuries from barotrauma.

Here's a peek at just a few of the lyrics for the song written and performed by Ray Troll and Russell Wodehouse:

"The genus is Sebastes and we like it a lot,
It means magnificent in language of the Greeks
Some cool fish effluvia for icthyo geeks
Yellow eye, Vermillion and Canary are a few
Get to know your rockfish and what you should do
Have a rig and a plan how to get them to the bottom
Have a heart, do your part, send them down
to where you caught 'em"

WATCH THE FULL VIDEO HERE: http://sea-media.org/mediaitems/201302/barotrauma-keeping-you-tr





## In Blogs

#### Dr. Allen Hia Andrews

"The findings of opakapaka lead-radium dating led to the conclusion that numerous fish in the existing population would

exceed 30 or 40 years of age. It was therefore concluded that an application of a more precise age validation technique was possible, called bomb radiocarbon dating. The method could be applied to otoliths of opakapaka because birth years would be great enough for the



requirements of its use. Bomb radiocarbon dating is a technique that uses a marker created by the rapid increase in radiocarbon from atmospheric testing of nuclear devices. The initial uptake of bomb–produced radiocarbon by the marine environment was virtually synchronous in the mixed layer of mid–latitude oceans. This time–specific signal provides a reference period that can be used to determine fish age and can either corroborate age estimates from growth zone counting in otoliths or provide age estimates where little or no other information was available."

From **Dr. Allen Hia Andrew's** blog: www.astrofish.me. READ MORE: www.aifrb.org/2013/04/dr-allen-hia-andrews

## Recognition

## NOAA Names Link New Senior Scientist for Ecosystem Management

NOAA has named **Jason Link**, **PhD**, as its first-ever Senior Scientist for Ecosystem Management.

In this new role, Dr. Link will be the agency's seniormost authority on ecosystem science, conducting research and coordinating activities of NOAA Fisheries' science



support for effective ecosystembas ed management. His priorities will be to lead approaches and models to support development of ecosystembased management

plans throughout the agency. A key element of Jason's work will be the development of the tools and approaches that will allow us to deal with the impacts of climate change on our marine trust species.

READ MORE: www.aifrb.org/category/news-now PHOTO TITLE: AIFRB mar-apr-MEM Link.jpg

## **Award Winners**

#### Brian Rothschild Honored by National Fisherman

**Brian J. Rothschild**, a member of the faculty of the University of Massachusetts and an AIFRB fellow since 1995, was recently given a Lifetime Achievement Award by the highly-respected trade journal National Fisherman.

Some of Brian's recent achievements are described in the November 2012 issue of National Fisherman, such as:

- 1. At 78... Brian J. Rothschild continues to serve as the Montgomery Charter Professor of Marine Science at the University of Massachusetts, Dartmouth, School for Marine Science and Technology (which he established, then served as its first dean).
- 2. Rothschild has a career that has spanned many aspects of marine science and management, beginning in 1953.
- 3. Talks with fishermen led Rothschild and UMass Dartmouth professor Kevin Stokesbury to develop the system of counting scallops via underwater cameras that photographed their abundance in areas that had been closed to scalloping, leading to the industry revival.
- 4. He's working with Rep. Bill Keating (D-Mass.) to develop a task force to review stock assessments.
  - 5. He has plans to update [his book] "Dynamics of Marine Fish Populations."

Simply put, he enjoys his work. 'The satisfaction is multifaceted,' Rothschild says. 'You're discovering something nobody's discovered before, and at the same time you're helping people. You're walking where nobody's walked before.'"

Brian won the AIFRB Outstanding Achievement Award: Individual for 2004, and his achievements for that can be found in Briefs, Vol. 33, No. 1: www.aifrb.org/publications/briefs-issues

PHOTO CREDIT: smast.umassd.edu



Award s continued on the following page

#### Abigail Lynch Wins AFS 2013 Best Student Paper Award



The American Fisheries Society (AFS) recognizes students for excellence in the communication of fisheries research to the general public, and this year the award goes to AIFRB member, Abigail Lynch, for her paper: "One Fish, Two Fish, Where Fish for Whitefish? Designing a climate change decision-support tool for Great Lakes lake whitefish." The paper will be published in the August issue of Fisheries magazine, but for a little preview:

Imagine you are playing a game of Monopoly and are investing wisely for the future. You have numerous hotels on "Boardwalk" and are raking in the dough any time another player lands on your valuable property. Then, the rules of the game unexpectedly change. "Baltic Place" is the hot commodity and all of your painstaking investments in "Boardwalk" are for naught. Now, imagine this is not a game and your actual livelihood and family depend on your success. Currently, the Great Lakes lake whitefish fishery is the most economically valuable commercial fishery in the upper Great Lakes. But, like the modified Monopoly, this fishery could face new "rules of the game" from climate change. (Read the rest of Lynch's paper in the August issue of Fisheries magazine.)

Photo Description: AIFRB member - Abigail Lynch

Photo Title: AIFRB\_Mar\_Apr\_Abigail-

Lynch-writing-award.jpg

## **Meet Two of Our Newest Members**

#### William Hoffman

Description: William Hoffman (right), an Aquatic Biologist III for Massachusetts Department of Fish and Game, is interviewed about the herring fishery in Gloucester:

"The herring fishery is a relatively new fishery to this area. Before, all the herring boats were fishing – and all these captains were fishing – over in Europe and they'd depleted their resources and actually moved over here. So as you can imagine, people were very nervous about these



boats, of the capacity, and the size that were coming over. And when they did come over, they were targeting a species as identified by the Federal Government as an under-utilized they actually promoted this. But as time went on, and as all fish stocks fluctuate, there's been some localized depletion in certain areas. It's a combination of misinformation and some mismanagement."

To see the entire video, please visit AIFRB.org

#### Lisa Kerr

Lisa Kerr recently joined the GMRI's (Gulf of Maine Research Institute) science team. Her expertise includes a number of methods for gaining insight into fishes' life history by analyzing their ear bones and vertebrae, as well as the use of mathematical models



to better understand fish populations. "Once we understand the complex nature of fish populations, we can better envision the methods of assessment and management that support their long-term success," Kerr said. She is currently leading a project on the stock structure of Maine alewife populations. These fish spawn in different rivers and then move into the ocean, where little is known about their distribution and the impact that fishing has on individual populations. "Protecting population diversity promotes the stability of our fish resources," Kerr said. "Much like diversifying a financial stock portfolio, it allows us to hedge our bets against potential losses."

For more on Kerr's work, watch her presentation of the Impact of Alternative Stock Structure Assumptions on the Perception of Stock Status and Yield of Atlantic Cod, which can be viewed in its entirety on the AIFRB website.

www.screencast.com/t/gCwWWUyIu

## **Past Meetings**

## New England District's Spatial Mapping and Statistical Models in R Workshop

The *AIFRB NE District* held a workshop on spatial mapping and statistical models in R at the Massachusetts Division of Marine Fisheries (MADMF) in Gloucester, MA this March. Twenty-three researchers from the Massachusetts Division of Marine Fisheries,



National Marine Fisheries Service in Woods Hole and Narragansett, RI, University of Massachusetts in Dartmouth and Amherst, and Applied Science Services of Kingstown, RI participated in the one-day workshop that focused on using program R to map and model geo-referenced fisheries data. Brant McAfee, Micah Dean, and Gary Nelson of MADMF cotaught the workshop. Brant McAfee reviewed basic concepts of cartography and showed participants how to use R to import GIS shapefiles and create basic maps. Micah Dean focused on annotating maps, importing and manipulating raster images, and animating time series of spatial data. Gary Nelson reviewed the use of generalized additive models to model spatial fisheries data and how to plot model predictions as contours and color scales on maps and as 3-D images. All participants were provided R scripts of all examples shown during the workshop.

#### READ ABOUT MORE PAST EVENTS:

A look back at the 2012 AIFRB Board Meeting: www.aifrb.org/events/past-events/2012-bod-mtg

## **Founding Fellow**

Henry A. Dunlop

Henry A. Dunlop, also known as Harry, was born in Dunrea, Manitoba, Canada, on July 8, 1898. He earned a Bachelor of Arts degree in Zoology at the University of British Columbia in 1919 and a Master of Arts degree in Zoology in 1922, under the advisement of Dr. McLean Fraser, a prominent fisheryoriented marine biologist, at the same university. He continued his graduate studies at the University of Toronto during 1924-1925 and at the University



of Washington School of Fisheries between 1931 and 1936.

Harry joined the staff of the International Fisheries Commission, known today as the International Pacific Halibut Commission, in July 1925 as Assistant Director. He held that position until May 1939. He was appointed Acting Director of the Halibut Commission for the period of June 1939 to September 1940, at which time he was appointed Director of Investigations, a position that he held until his retirement in 1963. During his tenure, the rehabilitation of Pacific halibut resources continued, and by the early 1960s they were close to their optimum levels.

These accomplishments were achieved despite adverse and trying circumstances, most notably the challenge of maintaining a research program during World War II. At one time, the Commission's scientific staff was one time reduced to three persons, including the Director. Also, funds allotted for research and management were steadily eroded by inflation. During the postwar period, prolonged and frustrating effort over a period of seven years were required to secure treaty authority that would permit measures to alleviate the drastic reduction that had occurred during the fishing seasons. During the 1950s, further demands were placed on the staff to "prove in" certain commitments made by Canada and the United States with Japan, culminating in the eastern Bering Sea debacle in 1962, when the two countries abdicated their valid exclusive claims to the halibut stocks in that region. Mr. Dunlop was deeply concerned over the threat that the fishing fleets of Japan and the USSR posed for the Pacific halibut stocks, and he feared for the survival of the halibut fisheries of Canada and the United States.

Harry Dunlop was a member of the American Fisheries Society, the American Society of Ichthyologists and Herpetologists, and the American Association for the Advancement of Science. He was a charter member of the Pacific Fishery Biologists. In 1953, he received the Elizabeth II Coronation Medal for meritorious public service to Canada. He was also a Founding Fellow of the American Institute of Fishery Research Biologists. Early ideas and discussions that led to the formation of the AIFRB took place in the Halibut Commission's offices. Strength between the members of the fishing industry and the regulating agency was crucial to the recovery of the halibut resource and in many ways influenced the formation of the AIFRB.

Harry Dunlop returned to Vancouver when he retired in 1963. He passed away on May 3, 1966, at the age of 68.

READ MORE ABOUT OUR FOUNDING FELLOWS: www.aifrb.org/publications/the-founding-fellow

## Acknowledged

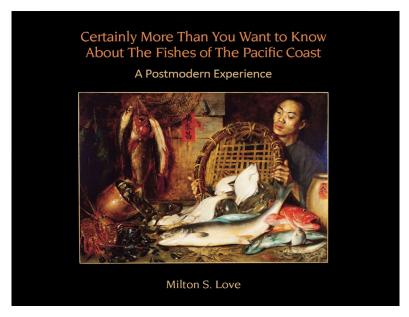
### New reports highlight rebuilding and conservation of marine stocks, AIFRB members' contributions

Two new reports were released this month addressing the status of marine fisheries in the U.S. and ongoing efforts to protect these critical resources. The first is the NOAA Fisheries' annual report to Congress, Status of Stocks 2012. The report highlights considerable progress made towards rebuilding U.S. fisheries resources, including delisting of ten stocked previously on the overfishing list and four stocked previously on the overfished list. In the past year, the number of rebuilt stocks has also increased from 27 to 32. The report acknowledges that these accomplishments are the result of "science-based management", including the work of many AIFRB members and fisheries professionals. The full report may be accessed here: http://www.nmfs.noaa.gov/stories/2013/ 05/05 02 13status of stocks 2012.html.

Several AIFRB members are directly acknowledged in the second report, Pew Charitable Trusts' The Law That's Saving American Fisheries - The Magnuson-Stevens Fishery Conservation and Management Act. The report describes the roles of sensible regulation and cooperation between fishermen and other stakeholders and regulatory authorities in achieving the progress detailed in the Status of Stocks 2012 report. AIFRB members Carmel Finley, Tom Ihde, and Wally Pereyra are each acknowledged in the report for their contributions to the report and management of marine stocks. The full report may be accessed here: http:// www.pewenvironment.org/news-room/ reports/the-law-thats-saving-americanfisheries-the-magnuson-stevens-fisheryconservation-and-management-act-85899472108.

## **Book Review**

Love, Milton S. 2011. Certainly more than you want to know about the fishes of the Pacific Coast: a postmodern experience. Really Big Press, Santa Barbara CA. \$29.95.



If you have any interest in fish and ocean life, you should own this book. When you are in the dumps, you can open it up for a laugh, for a tidbit of odd information, for a wonderful picture of an interesting fish or two, for a story about a great (or not-so-great) ichthyologist, or even for useful and accurate information. Much of the information is contained in accounts of 490 species, each with at least one color photo or other artwork.

Most accounts have sections on "Etymology and Colloquial Names," "The Basics" (size and distribution), "Life History," "Fishery," "Origins," and "Miscellany." The Origins section provides background on the fossil record, if any, and evolution, while the Miscellany section covers interesting topics that do not fit in elsewhere, such as the possible effects of a pathogen on Pacific herring populations. Each account is written in a concise but easy-to-read fashion, and provides the facts you are likely looking for and jokes you are not. The facts include von Bertalanffy parameters, in case you are thinking of building fisheries models for, say, shortfin mako. But it is also a book for browsing, with dozens of boxes devoted to old newspaper accounts or subjects like "James Swan" (an anthropologist who recorded Indian fisheries), "On the aesthetics of shark liver oil," "Captain Fish Blood," and "A dab by any other name." One of the longest sections in the book (30 pages) is about salmon, mostly because Love has found lots of diverting stories to include, such as the behavior of spawning salmon during an eclipse of the moon, and why crow flesh was regarded as prime salmon bait.

This is one of the most interesting and entertaining fish books you will ever own, even if you don't live on the Pacific Coast. For those who do live there —especially in California — you will also find it a useful reference work. It's the only book that provides summaries of the biology of marine fishes south of British Columbia, as well as some to the north. It has a glossary and a fairly extensive list of references. At 672 pages, most with well-chosen color plates, it is a bargain. ~Peter Moyle, University of California, Davis.

Photo Description: Milton Love's book on fishes of the Pacific Coast.

## **Tiddly Bits**

## Member Don Jackson Asks The Ultimate Researcher Question: Why?

Alone on an icy tailwater river, twilight reminded me that I still had miles yet to travel and several challenging rapids to shoot to get to my takeout point... and still I worked, hands red, raw, bleeding, and numb from the cold, trying to get plankton samples, yet pouring out the samples, one after another, because the plankton net kept freezing and the samples just were not coming "right." I could hear the rapids roaring downstream as darkness fell. Finally, the samples came well and I was on my way, shooting those rapids under starlight, warmed by the fire in my heart, knowing that these samples were not just good, they were treasures. Why? (To read the rest of Don Jackson's article, please visit www.aifrb.org.)





#### District Directors

#### Alaska, Northern

Christian Zimmerman USGS Alaska Science Center 4230 University Drive Suite 201 Anchorage, AK 99508 czimmerman@usgs.gov

#### Alaska, Southeast

Bruce Wing P.O. Box 210265 Auke Bay, AK 99821-0265 bruce.wing@noaa.gov

#### Arizona - New Mexico

Vacant

#### California, Northern

Thomas Keegan Managing Partner ECORP Consulting, Inc. 2525 Warren Drive Rocklin, CA 95677 tkeegan@ecorpconsulting.com

#### California, Southern

Traci Larinto California Department of Fish and Game 4665 Lampson Avenue, Suite C Los Alamitos, CA 90720

#### Capital

Katherine A. McGraw, Ph.D. NOAA Restoration Center 1315 East West Hwy. Silver Spring, MD 20910 kay.mcgraw@noaa.gov

#### Carolinas

Vacant

#### Florida

S Gregory Tolley, Ph.D. Professor of Marine Science Coastal Watershed Institute Florida Gulf Coast University 10501 FGCU Blvd S Fort Myers, Florida gtolley@fgcu.edu

Great Lakes, South Central Edward F. Roseman USGS Great Lakes Science Ctr. 1451 Green Road Ann Arbor, MI 48105-2897 eroseman@usgs.gov

#### Gulf of Mexico, Northeast

Vacant

#### **Keystone**

Joseph W. Rachlin Dept. Biological Sciences Lehman College of CUNY 250 Bedford Pk. Blvd. W. Bronx, NY 10468-5189 joseph.rachlin@lehman.cuny.edu

#### **New England**

Gary A. Nelson Massachusetts Division of Marine Fisheries 30 Emerson Avenue Gloucester, MA 01930 (978) 282-0308 x 114

#### **Oregon-SW Washington**

Vacant

#### Texas

Vacant

#### Washington, NW

Katherine Myers School of Aquatic & Sciences University of Washington Box 355020 Seattle, WA 98195-5020

**BRIEFS,** the newsletter of the American Institute of Fishery Research Biologists, is published six times a year. It is intended to communicate the professional activities and accomplishments of the Institute, its District, and Members; the results of research; the communicate the professional activities and accomplishments of the institute, its District, and Members; the results of research; the effects of management; unusual biological events; matters affecting the profession; political problems; and other matters of importance to the fishery community. Comments and contributions should be sent to the Editor, Sarah Fox, Washington, D.C., sgfoxeditor@gmail.com Subscription \$40 a year to Institutions and Non-Members. Officers- Steve Cadrin, Department of Fisheries Oceanography. School for Marine Science & Technology, UMass Dartmouth. (508) 910-6358, scadrin@umassd.edu-President; Kathryn A. Dickson, Dept. of Biological Science, California State University Fullerton, Fullerton, CA 92834-6850, kdickson@exchange.fullerton.edu - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov -Treasurer, ISSN-8755-0075

**ТЕМР—ВЕТИВИ SERVICE REQUESTED** 

Silver Spring, MD 20910 1315 East West Highway MMFS, Office of Science and Technology c/o Allen Shimada

Research Biologists American Institute of Fishery

