ONCORHYNCHUS

Newsletter of the Alaska Chapter, American Fisheries Society

Vol. XXVIII Fall 2008 No. 4

In this issue:

Charter Captain Ryan Johnson with a string of black rockfish caught by the mechanical jig machine used for target ID.

Predicting Rockfish Locations Using High-resolution Bathymetry

Dan Urban

While doing a rockfish survey in the Shumagin Islands, I noticed a small aircraft flying back and forth in a regular transect pattern for hours at a time, not what you would expect from a commuter or charter airline. I later found out that the NOAA Pacific Hydrographic Branch (PHB) of the National Ocean Service was doing a detailed bathymetric survey to update nautical charts of the area and the plane was using a LIDAR (Light Detection and Ranging) laser system to gather data from the shallow nearshore area. The NOAA *R/V Fairweather* and its launches were using multibeam sonar to collect data from the deeper waters. By coincidence, the PHB survey was covering much of the same area in the western Gulf of Alaska that the Alaska Department of Fish and Game (ADF&G) was surveying for black and dark rockfish (*Sebastes melanops* and *S. ciliatus*). ADF&G had already established a cooperative agreement with the Pacific Hydrographic Branch for the sharing of bathymetric data so this fortuitous overlap in surveys allowed us to take advantage of a detailed bathymetry dataset that would normally be too expensive and technically difficult for ADF&G to collect. Previous work by Dr. Rikk Kvitek and others at California State University studying rockfish in Monterey Bay, California showed that many rockfish exhibit strong habitat associations with certain types of seafloor features. High resolution bathymetry is the key to describing and mapping those features.

The work in Monterey Bay specifically attempted to relate fish locations to the slope, roughness, and relative bathymetric position (e.g. peaks or valleys) of the benthic terrain. These techniques were of great interest to ADF&G since it is responsible for the management of both black and dark rockfish along roughly 1,200 km of the Alaska coast where sport and commercial fishing occur. With only limited

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The President's Corner

Bert Lewis

Bert Lewis, AFS Alaska Chapter President and a whopper of a king salmon.

Fisheries professionals are facing some major changes in the near future that will affect us all. As the baby boomer generation retires in ever greater numbers, more and more fisheries and aquatic resource positions will be vacated—we could be looking at a 35% turnover in personnel in federal, state, and private sectors. Furthermore, the transition is taking place as unprecedented job opportunities become available in fisheries and aquatic sciences. While this transition represents a great opportunity for the up-and-coming generation of professionals, the turnover rate is worrisome; many retirees will be leaving at the pinnacle of their career and vacating upper level positions. Consequently, agencies will lose many seasoned professionals, along with their vast experience, broad perspective, and institutional memory.

AFS members help to mitigate the negative effects of this turnover through the pursuit of our mission to develop future fisheries professionals. At the chapter level, student mentoring is provided through functions such as the upcoming student mentoring luncheon at the annual Chapter meeting and at the national level, through the Hutton Junior Fisheries Biology Program. To widen our demographic participation, we advocate for diversity with the Chapter Cultural Diversity Committee and the Equal Opportunity Section of AFS. The society further aids student development through chapter and national scholarship programs such as the Molly O. Ahlgren Award and John E. Skinner Memorial Fund Award. Finally, we offer discounted membership rates for students and young professionals to encourage membership

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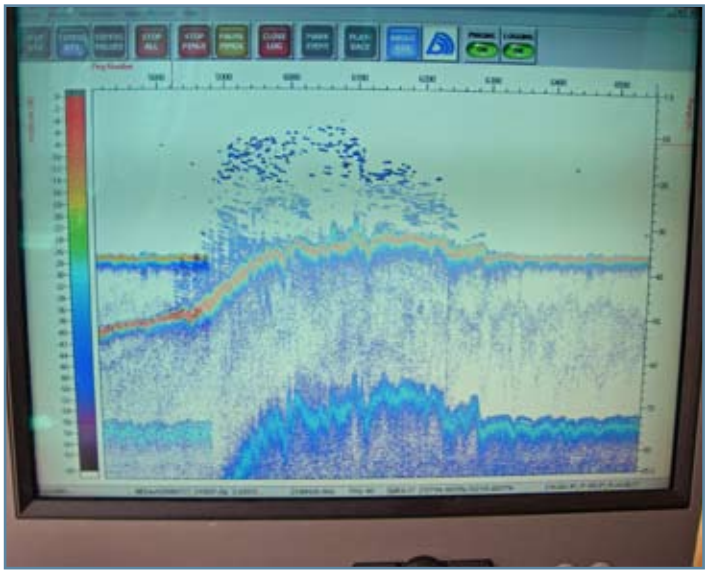
Predicting Rock Fish Locations, continued

resources, this is a daunting and important task given the vulnerability of rockfish in general to overfishing. Any technique which could help ADF&G to focus its survey efforts and make more efficient use of limited resources needs to be investigated.



Screen of the Biosonics DT-X echosounder showing a school of black rockfish associated with a high slope area.

Through the cooperative agreement, ADF&G acquired tens of millions of depth data points of the study area through downloads of bathymetry at the PHB office in Seattle and via the internet . The data from the multibeam equipment was provided as cleaned, XYZ data with a regular 2-m spacing. While the LIDAR data had more irregular distances between points, it generally had a spacing of 3–5 m. Some rockfish species are found associated with substrate features at a finer scale than could be identified with this dataset, but this level of detail is adequate for black and dark rockfish which have more semi-pelagic behavior. A raster grid of the bathymetry was created using the Spatial Analyst extension of ESRI ArcView v. 9.1. The raster depth grid was then analyzed to calculate slope using Spatial Analyst while roughness and bathymetric position index were calculated using benthic terrain modeling tools available online. These tools were created jointly by the Department of Geosciences at Oregon State University and NOAA Coastal Services Center. Individual rockfish locations were

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President's Corner, continued

and access to these benefits. Through these programs, we ensure a steady supply of well-educated biologists with a solid foundation in the scientific method, technical writing, and data collection, management and analysis.

Another way the society can ease this transition is to continue to support mid-career professional development through the Continuing Education and Professional Certification programs. One of our most important functions is the continuation and development of technical, professional, and administrative knowledge and expertise. The Society's promotion of mid-career professional development increases our skill level and helps fight job stagnation, thus improving performance and ultimately resource stewardship.

Being proactive in the workplace can also help to mitigate potential negative effects of the impending workforce transition. Too often critical positions are vacated with plenty of advance notice, but little attempt to mentor and train replacements. These vacancies hurt agency and institutional performance, result in unrealistic workloads, are bad for morale, and at some level jeopardize our ability to manage resources. To avoid these negative effects we can start by talking about and planning for this transition in all of our workplaces. Discussion about the transition in everyday exchanges and at the annual meetings will help to keep the issue on the forefront of our minds. One proactive step we can encourage is hiring replacements that overlap with the people that are soon to be retiring. Members retiring in the near future should make a conscious effort to mentor their assistants and co-workers; this basic mentoring will help transfer institutional memory.

Finally, I suggest that we advocate within our agencies for the creation of more positions that start at entry level and progress to a full professional level through a series of promotions with increased levels of responsibilities and

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Predicting Rockfish Locations, continued

determined by ADF&G using a Biosonics DT-X echosounder operating at 200 kHz. The fish survey vessel ran a parallel transect pattern with a spacing of 50 m with target identification accomplished using hand and mechanical jigs as well as an underwater video system. Individual fish locations were detected from the echograms using SonarData Echoview software's fish tracking module.

The general strategy for the project was to do three hydroacoustic fish surveys in a small area running the same survey track each time. All the fish detected were then plotted in ArcView, along with polygons of the locations where the values of slope, roughness, and bathymetric position index

Black rockfish, Sebastes melanops, *were the main target species of this study.*

(BPI) were greater than one standard deviation from the mean value. This corresponds to areas of steep slope, high surface to area ratios, and the tops of pinnacles and ridges. Buffers were created at increasing 5-m intervals outward from the polygons until all the fish detected with hydroacoustics in the three surveys were included. All fish in those initial three hydroacoustic surveys were found within 115 m of the pinnacles, 50 m of the high slope areas, and 90 m of the high roughness areas.

Once we determined how closely the rockfish were associated with these types of seafloor structures, we surveyed other areas that we knew contained rockfish to determine if the association distances were generally applicable. Areas were also surveyed that matched the slope, roughness and BPI criteria but for which we had no information about fish abundance to determine if bathymetry could be used to predict fish locations.

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President's Corner, continued

incentives over the course of 3–5 years. Both federal and state agencies have this type of program but they seem underutilized. A good example of the effectiveness of this strategy is our Chapter's four-year progressive presidency, which starts as Vice President, moving next to President Elect, then President and finally to Past President. During this progression, skills required to effectively take on the various responsibilities are acquired through assisting in the process before taking it over, while mentoring within the group provides background and assistance. These types of positions, combined with mentoring and providing for a period of overlap with seasoned professionals, will help ease the impending transition.

In closing my last President's Corner, I would like to thank all the Chapter members for their dedication to fisheries and aquatic resource research, conservation, and management. I also thank the Alaska Chapter Executive Committee, Lee Ann Gardner, Dona Eidam, Jamal Moss, Hamachan Hamazaki, Karla Bush and Lisa Stuby for their hard work and commitment to making the Chapter an ongoing success. My association with the Society gives me confidence that our fisheries and aquatic resources are in capable hands and have a bright future.

Predicting Rockfish Locations, continued

In four areas known to contain schools of black and dark rockfish, over 90% of the fish were found within the predicted distances from areas of high slope, roughness, and pinnacles. In the three areas where we used bathymetry to predict fish location, hydroacoustics and target ID confirmed the presence of black and/or dark rockfish.

The technique described here is definitely a work in progress. While we had some success using high resolution bathymetry to predict where black and dark rockfish would occur, further work needs to be done on analysis of other important factors affecting rockfish distributions: tidal and current patterns, relation to the high energy open coast, seasonal and diurnal movements, freshwater runoff, upwelling, and factors that concentrate rockfish prey species. While the cost of acquiring multibeam sonar and LIDAR bathymetric data is falling, it remains prohibitive at this time. However, when the bathymetry is available, the method shows promise for designing efficient, cost effective rockfish surveys.

Hal Geiger and Co-authors Receive Stevan Phelps Award

The genetics section of AFS recently announced Hal Geiger, Ivan Wang, Pat Malecha, Kyle Hebert, Bill Smoker, and Tony Gharrett as winners of the Stevan Phelps Memorial Award for Best Genetics Paper published in an AFS Journal in 2007. The winning paper, entitled "What Causes Variability in Pink Salmon Family Size," was published in Transactions of the American Fisheries Society 136:1688-1698.

Hal Geiger and Kyle Hebert, author and one of 5 co-authors of the Stevan Phelps Award-winning "Best Genetics Paper for 2008."

Following the announcement, Hal laughingly relayed a rejection the paper had received from another journal and noted the influence of point of view in the scientific review process and the importance of perseverance in getting a paper published and of not taking reviews personally. He also noted that this is Tony Gharrett's third Stevan Phelps Award. Congratulations Hal and co-authors!

DON'T DELAY!
REGISTER NOW FOR THE ANNUAL ALASKA CHAPTER AFS MEETING
http://www.fisheries.org/units/afs-ak/meetings/2008/meet2008.htm

Alaska Chapter 35th Annual Conference: "Expanding Perspectives of Fisheries"

Hamachan Hamazaki

The Alaska Chapter of the American Fisheries Society is pleased to announce that its 35th annual meeting will be held at the Hilton Hotel in downtown Anchorage from October 27–30, 2008. Plenary speakers will include Terry Johnson, a well-known marine recreation and tourism specialist with the University of Alaska Sea Grant program in Homer.

Hotel reservations may be made by contacting the Hilton Hotel, which has set up a special hotel reservation website for the Chapter. Please use this link for room reservations: *http://www.hilton.com/en/hi/groups/personalized/ANCAHHF-AMF-20081026/index.jhtml*

We currently have 9 sessions:

Advances in Kuskokwim River Salmon Population Assessment

Session Chair: Doug Molyneaux, Alaska Department of Fish and Game, Anchorage; *doug.molyneaux@alaska.gov*

Developments in the stock assessment program for salmon populations in the Kuskokwim River drainage have allowed investigators to address broad scale information gaps such as quantifying spawning distribution, estimating historical run abundance, and characterizing the stock composition of harvests. These findings have direct implications for the protection of critical habitat, directing harvest strategies, and for providing a means to explore causative agents of natural variation in abundance. This session will highlight some of these advances as well as describe promising avenues for future pursuit.

Mining and Fisheries in Alaska: Issues, Impacts, and What We Need to Know to Make Resource Management Decisions. Is Mining and Fisheries Compatible?

Session Chair: Cindy Hartmann Moore; National Marine Fisheries Service, Juneau; *cindy.hartmann@noaa.gov*

This session focuses on resource issues related to hard rock mining and fisheries in Alaska. Various aspects of how mining can impact fisheries will be discussed including: what we need to know about fish habitat, hydrology, water chemistry, toxicology, mine permitting, monitoring, and how to minimize or avoid impacts to fisheries. The question of whether fisheries and mining is compatible and what conditions need to be met to determine compatibility will be addressed. AFS mining policy will also be discussed.

Everything You Wanted to Know About Whitefish, but Were Afraid to Ask

Session Chair: Timothy Joyce; U.S. Forest Service, Cordova; *tljoyce@fs.fed.us*

This session will discuss topics in the Subfamily Coregoninae. The session is open to any information collected recently in Alaska on this interesting group of fish. Presentations can include taxonomic distinctions, life history information, interactions between species, population, and distribution information, and any other interesting area of study. This subfamily is widely distributed in Alaska and often overlooked. It is used as a subsistence food in rural areas, yet limited information is available in many areas of the state.

Escapement Goal Management

Session Chair: Ray Beamesderfer, *Beamesderfer@fishsciences.net*

Escapement goal management has been a lynch pin in the tremendous success of Alaska's salmon management system. It is designed to ensure spawning escapements that sustain populations and optimize production over the long term. However, implementation of escapement goal management is not without its problems and controversies. Significant questions concern effective methods for accurately identifying sustainable escapement levels, appropriate management objectives for stocks where data is

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Alaska Chapter Conference, continued

lacking or incomplete, management imprecision that makes it difficult to consistently achieve many goals, implementation in mixed stock fisheries where not all goals can be achieved, conservation risks of low escapements, and the effects of large escapements on potential future yields. Many of these biological issues have significant fishery implications and very controversial social and political dimensions. This session explores the implementation, strengths, and weaknesses of escapement goal management and highlights outstanding questions for future consideration.

Alaska's Subsistence Fisheries: Balancing Tradition, Conservation, and Economic Change

Session Chair: Jan Conitz; Alaska Department of Fish & Game, Juneau; *jan.conitz@alaska.gov*

This session explores wide dimensions surrounding subsistence fisheries. Current management systems for subsistence fisheries are poorly developed, and are based on commercial or recreational fishery management models, without taking into consideration differences in the structure and basic economic motivations of subsistence fisheries. How can modern scientific management concepts and fisheries research better address subsistence fisheries and the desire of rural Alaskans for more control over the fish resources they depend upon? How can local traditional knowledge be integrated into scientific concepts of fish stocks and their conservation? How should the responsibility for conservation of stocks be apportioned between subsistence and commercial fisheries, particularly when commercial fisheries target larger or mixed stocks farther offshore? How are economic changes in rural Alaska, such as the extraordinarily high cost of fuel, or the growth of the tourism and fishing charter industries, affecting subsistence activity? What is the value of healthy and viable subsistence fisheries to Alaska's small communities in relation to income from other resource development, such as mining? Most importantly, how can traditional fisheries be sustained for future generations in a fast changing global economy?

Size Trends of Alaskan Salmon Stocks

Session Chair: Danielle F. Evenson; Alaska Department of Fish and Game, Anchorage; *dani.evenson@alaska.gov*

Anecdotal information and local knowledge suggests that the size of salmon, Oncorhynchus spp., has decreased and some fishers have expressed concerns over a reduction in their encounters with large fish. Reports of small size and low numbers of females have become increasingly common in recent years, and apprehension over the long-term health of stocks has grown. The subject has been discussed in Alaska Board of Fisheries and Federal Subsistence Board meetings, and other forums that involve subsistence, commercial, and sport fishers. This session will explore the various causes, current status of salmon stocks, and potential management implications of size trends.

Applying GIS to Fisheries Research and Management

Session Chair: Jeff Adams; US Fish & Wildlife Service, Fairbanks; *Jeff_Adams@fws.gov*

As Alaskan fisheries agencies and users strive to adapt to environmental and social responses caused by climate change, increased infrastructure, and new fishing practices, there will be an increased need to address fisheries issues from a large scale, multi-disciplinary approach. To understand these responses, fishery scientists must understand and embrace the role that GIS can play in future research and management. The first portion of this session will introduce the audience to GIS technology as it applies to Alaskan fisheries, and will provide an awareness of techniques and products that fisheries researchers and managers can apply. The second portion will provide specific case studies of GIS applications.

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Deadline for materials for the fall issue of Oncorhynchus is Dec. 10.

Alaska Chapter Conference, continued

What's going on with Fish and Fisheries on the North Slope?

Session Chair: Dennis Lassuy; U.S. Fish and Wildlife Service, Anchorage; *denny_lassuy@fws.gov*

Alaska's Arctic is an epicenter for the dual challenges of climate change and energy development. This session is intended to start gathering "fish folks" who are active or interested in marine and freshwater fishes of the North Slope of Alaska. The session will highlight some of the ongoing work in this huge chunk of Alaskan geography and conclude with a panel discussion. The panel, working with session attendees, will be the kickoff of an effort to identify the pressing management and science needs that can position us all to help ensure the continued health of Alaska's arctic fish resources under these changing conditions. The culmination of this session may be cooperation between the North Slope Science Initiative and the Alaska Chapter of AFS to put on a workshop at the 2009 meeting of the Alaska Chapter as a way to share our knowledge, establish research priorities, and to develop a collaborative plan to meet these emerging challenges.

Contributed Papers

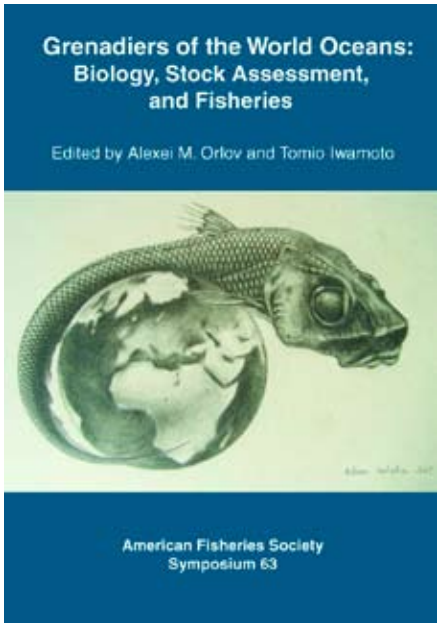
Presenters with topics that do not fit the subject matter of other sessions are encouraged to submit their abstracts to this session.

All sessions are now closed for presentation submission. For more information about a session, submission guidelines or continuing education courses, please visit the website at: *http://www.fisheries.org/units/afs-ak/meetings/2008/meet2008.htm.*

New Books from AFS

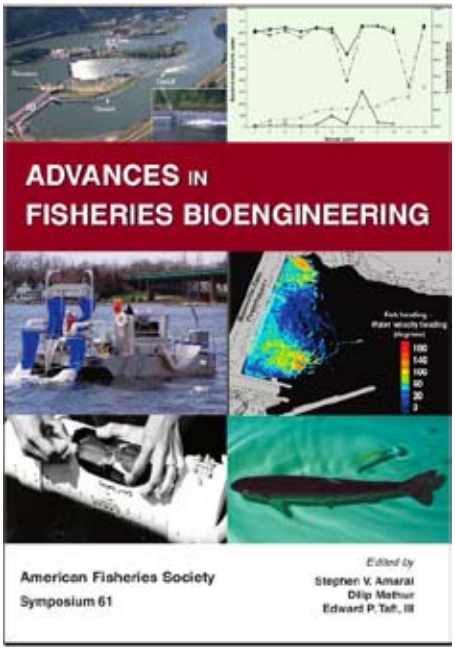
Grenadiers of the World Oceans: Biology, Stock Assessment, and Fisheries

This book, edited by Alexei M. Orlov and Tomio Iwamoto. is a proceedings of AFS Symposium 63, it is 484 pages long. Grenadiers or rattails are widely distributed in the oceans from the Arctic to the Antarctic. This is the first book to examine different aspects of the distribution, ecology, life history, stock assessment, and fisheries of different grenadier species in the oceans. The 25 chapters, written by 65 international experts, provide the most current data on the biology and fisheries of grenadiers. It will appeal to a wide spectrum of professionals, including fisheries scientists and managers, marine biologists and ecologists, and oceanographers.



Advances in Fisheries Bioengineering

Edited by Stephen V. Amaral, Dilip Mathur, and Edward P. Taft, III this book, is 239 pages long and is the proceedings of AFS Symposium 61. Authors who are leaders in their field examine a wide range of new research associated with fish passage (upstream and downstream), water intake fish protection technologies, sampling technologies, and techniques for assessing fishway performance and migration behaviors, aquaculture, and habitat restoration and enhancement.



To order either of these titles or other books from AFS visit *http://www.afsbooks.org/.*

Continuing Education Workshops at the Annual Conference

Continuing education courses scheduled so far include: "Technical Writing" (October 27), "DIDSON-based Fish Assessment," (October 26, 27, 28), "Scientific Speaking and Presenting Skills," (October 26, 27), and "Wilderness First Aid" (October 26, 27).

Technical Writing

"Technical Writing" will be instructed by Jim Hale, a former English professor and now a technical editor for NOAA. This workshop offers no-nonsense, common-sense lessons for writing in the workplace, with real solutions to the everyday problems in professional writing. This seminar will help you write clear sentences, well-developed paragraphs, and coherent documents.

DIDSON-based Fish Assessment

The "DIDSON-based Fish Assessment" workshop offers introductions and advanced acoustic assessment techniques and is broken into three separate workshops as follows:

- October 26: Use of Echoview instructed by instructors from Echoview.
- October 27: Introduction to DIDSON-based assessment techniques. This workshop is the most suitable for people who have started or are planning to start using the DIDSON system.
- October 28: Advanced topics in DIDSON tools and techniques. This workshop is limited to the most experienced users, for details about the workshop, please contact Debby Burwen, *debby.burwen@alaska.gov.*

Scientific Speaking and Presenting Skills

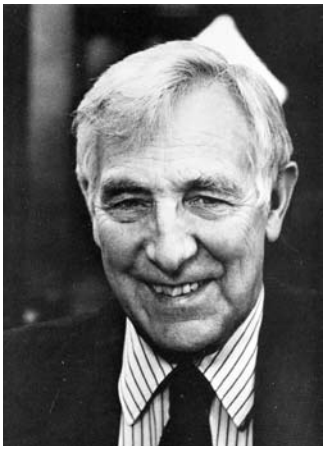
A workshop, "Improve Your Scientific Speaking and Presenting Skills," will be instructed by Andi O'Conor. This workshop is tailored specifically to the scientific speaker. You will receive specific tips and tools to help you speak and present more effectively. Each workshop includes several practice sessions.

Wilderness First Aid

"Wilderness First Aid" (WFA) will be instructed by Deb Ajango, and provides an excellent introduction to the fundamentals of wilderness medicine. WFA is typically considered the minimum training required for people leading trips in semi-remote environments. It is also becoming the standard for field workers in a number of professions. For more information on this course, please see: *http://www.safetyed.net/whatissafetyed.html.*

Ole Mathisen
Posthumously Receives Carl R. Sullivan Fishery Conservation Award

Bill Wilson, Terry Quinn, and Phil Mundy



Ole Mathisen (1919–2007), posthumous winner of the 2008 Carl R. Sullivan Fishery Conservation Award

Dr. Ole Mathisen passed away on March 12, 2007 at the age of 88. His career spanned 60 dedicated years to fisheries science, through his tenure as a professor at both the Universities of Washington (1955–1982) and Alaska (1983–1997), and also in "retirement" where as a professor emeritus he maintained an active schedule to the very end. In fact during his last six months he had completed, under contract, a white paper reviewing natural resources that could be impacted by offshore mineral leases in Bristol Bay, as well as a field study guide on sockeye salmon for middle school students.

Ole Mathisen came to the United States from Norway after World War II in 1946 to serve at the newly formed Fisheries Research Institute (FRI) at the University of Washington under the tutelage of its founder W.F. Thompson. By all accounts W.F. Thompson was himself an intense worker and a demanding and exacting mentor, and his pioneering work in applying population science to the management of West Coast fisheries was just being recognized at that time. In many regards, Ole Mathisen built upon that legacy in his own career.

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Ole Mathisen, continued

In 1948 Ole was part of a new wave of scientists brought to Alaska's Bristol Bay by W.F. Thompson. Ole soon established himself as a force in discovering the basic biological principles of conservation for the world's largest salmon runs, and in seeing those principles embodied in harvest management regulations. Fundamentals of managing salmon for sustainable harvests, such as setting numerical goals for spawning stock size (escapements) by watershed, measuring spawning escapements, regulating size selective gear to deliver effective sex ratios on the spawning grounds, and understanding the ecological characteristics of spawning and rearing grounds were largely based on the work of Ole and his colleagues. By working closely with the salmon packing industry and later with the newly constituted Alaska Department of Fish and Game, Ole's work helped to establish the regulations and international negotiating strategy that brought Bristol Bay sockeye salmon back from the brink of destruction in 1973.

Terry Quinn receiving the Carl R. Sullivan Fishery Conservation Award for Ole Mathisen, to whom it was awarded posthumously at the 2008 AFS Annual Meeting in Ottawa.

Bristol Bay is home to the world's largest salmon runs based on records dating back to the 1880s. Even so, a "perfect storm" of events sent these salmon runs to such low levels in 1973 that they could have been lost as a resource for many human generations. A series of very cold winters, 1968–1972, and thousands of miles of gill nets fishing in international waters of the eastern Bering Sea reduced the numbers of salmon returning to Bristol Bay to a very small fraction of that needed for spawning in 1973. Nonetheless, the Alaska Department of Fish and Game and federal fishery treaty negotiators were in a position to take appropriate action to secure the runs for future generations, all thanks to the work of Ole and his state and federal colleagues. The scientific principles of sustainable salmon harvest management that Ole developed and transferred to his students, and to colleagues, were readily apparent in 1973 and years to follow as ADF&G regulators sharply reduced or completely eliminated Bristol Bay salmon harvests, and as federal and state negotiators virtually eliminated high seas drift net fishing directed at salmon through international treaty agreements. The harvest constraints during the 1970s, combined with improving conditions in freshwater and marine habitats, produced record salmon runs from the 1980s to today.

Alaska is now recognized world-wide as the leading example of the success of sustainable fishery management in large part due to the contributions of Dr. Ole A. Mathisen. State and federal fishery management in Alaska is highly regarded throughout the world today for its long term success in achieving sustainable harvests. Alaska's fishery management has been able to reach so high because it stands on the shoulders of giants, and Ole Mathisen was one of those giants.

Although Ole always considered Bristol Bay his home base, he was a world class scientist who fostered collaborative work among U.S. scientists and those of Norway, Iceland, Russia, Peru, China

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Ole Mathisen, continued

and Canada, and others. He was multilingual and multicultural, receiving undergraduate and post-graduate degrees in Norway and the United States, and post graduate education in the former Soviet Union. In the international arena he was well known for his work in transferring the technology of hydroacoustic biomass estimation from Norway, where it was developed, to the United States in the 1970s. Ole used this technology and his expertise to help management programs in fisheries in the boundary currents of the world, including Peru and Morocco, as well as studies of juvenile salmon in freshwater lakes in Alaska, Washington, and British Columbia; marine fisheries off Northwest Africa; anchovetta off South America; krill in Antarctica; and FAO studies of freshwater fish species in Lake Tanganyika and Iceland. It is not surprising that many of today's hydroacoustic biomass practitioners started their careers with a course from Ole or one of his students.

In addition to hydroacoustics, Ole was also ahead of his time in making contributions to conservation of fishery resources through ecological studies. Ole designed and led studies on the role of salmon in the biogeochemical cycling of nutrients between marine and freshwater ecosystems. Ole published his first work on biogenic enrichment of salmon lakes and its relation to stock productivity in 1972. Working with students and his life long colleague and friend, Dr. John Goering, a chemical oceanographer at the University of Alaska Fairbanks, Ole made significant contributions to understanding nutrient cycling, other essential roles of salmon in ecosystems, and the functions of salmon as predators and prey. When Ole published his first ecological study, such information was considered tangential to fishery management; however, today national legislation (ESA, MMPA, MSA) and policies supporting the Ecosystem Approach to Management are making these types of information part of the management mainstream.

At the age of 64, when most would consider retirement, he accepted the position of Dean at the School of Fisheries and Ocean Sciences at the University of Alaska Juneau and took on the challenge of creating a fisheries graduate program based in Alaska. He was a tireless symbol of the conservation of fishery resources as he studied in the rivers and streams of Alaska, taught in the classrooms of the Pacific Northwest, published in the scientific literature, and traveled the world to exchange scientific knowledge. Ole entered the field of fishery science when many of its fundamental principles were yet to be discovered, let alone transferred to management practitioners. Throughout his long career Ole worked relentlessly to discover the biological principles of conservation, and to see those conservation principles implemented in harvest regulations all over Alaska.

In summary, Ole Mathisen was the epitome of the person for whom the Carl R. Sullivan award was created. Ole invested a lifetime in establishing the credibility of principles of fishery conservation not only with students and fellow academicians, but especially with seafood processors, fishery regulators and fishers. Ole's dedication to conservation laid much of the foundation for today's culture of sustainable fishery management in state and federal institutions of Alaska. Ole's ecumenical spirit united fisheries scientists from all over the world in the pursuit of the scientific foundations of conservation. Like Carl Sullivan, although Ole no longer lives among us, the benefits of his career will always be with us.

UAF professor Terry Quinn accepted the award on behalf of Ole's widow, Randi, son Sven, and daughter Heidi at the plenary session of the AFS annual meeting in Ottawa. The award itself is a colorful carving of a rainbow trout and will be sent to Randi. Quinn remarked that Ole's most defining feature was his intellectual curiosity about almost everything and concluded that it was so appropriate that the award was made to him in recognition of a truly legendary man.

Alaska Chapter's
Internet Home Page Address

http://www.fisheries.org/units/afs-ak/

Membership information and application

http://www.fisheries.org/afs/membership.html

Meetings and Events

Fifth World Fisheries Congress

October 20–24, 2008: To be held in Yokohama, Japan. See *www.5thwfc2008.com.*

PICES 17th Annual Meeting

October 23–November 2, 2008: This meeting with its theme of "Beyond observations to achieving understanding and forecasting in a changing North Pacific: Forward to the FUTURE," will be held in Dalian, China. For more information, see: *http://www.pices.int/meetings/annual/PICES17/background.aspx.*

NALMS 2008

November 11–14, 2008: The annual meeting of the North American Lake Management Society will be held at Lake Louise, Alberta, Canada. See *www.nalms.org/Conferences/2008LakeLouise/Default.aspx.*

AWRA 2008

November 17–20, 2008: The Annual Water Resources Conference will be held at the Sheraton Hotel in New Orleans, Louisiana. For more information visit: *http://www.awra.org/meetings/NewOrleans2008/index.html.*

NPAFC International Symposium on Bering-Aleutian Salmon International Surveys (BASIS)

November 23–25, 2008: This meeting with its theme of "Climate Change, Production Trends, and Carrying Capacity of Pacific Salmon in the Bering Sea and Adjacent Waters" will be held in Sheraton Seattle Hotel in Seattle. For more information, see: *http://www.npafc.org/new/basis_home.html.*

11th International Flatfish Symposium

December 3–4, 2008: This meeting will be held at the Water's Edge Resort and Spa in Westbrook, CT. Further information regarding submission of abstracts for oral and poster presentations, theme sessions, workshops, registration and other important dates can be found on the symposium website: *http://www.mi.nmfs.gov/flatfishbiologyworkshop.html.*

SICB 2009

January 3–7, 2008: Society of Integrative and Comparative Biologists Annual Meeting. Westin Boston Waterfront Hotel, Boston, MA. See *www.sicb.org/meetings/2009/index.php3.*

Alaska Marine Science Symposium

January19–23: The 2009 Alaska Marine Sciences Symposium meeting will be held in Anchorage. See *http://www.alaskamarinescience.org/* for more information.

ASLO Aquatic Sciences Meeting

January 25–30, 2009: The 2009 Aquatic Sciences meeting of the American Society of Limnology and Oceanography, will be held internationally in 2009, in Nice, France. The abstract deadline is October 3. For more information see: *http://www.aslo.org/nice2009/.*

State of the Salmon 2009

February 2–5, 2009: The early bird registration deadline for this meeting is November 10, it will be held at the Fairmont Waterfront Hotel, in Vancouver B.C., Canada. See *http://www.stateofthesalmon.org/conference2009/index.html.*

Meetings and Events

Aquaculture America 2009

February 15–18, 2009. This meeting will be held in Seattle, Washington. See *www.was.org/WasMeetings/meetings/Default.aspx?code=AA2009.*

Biology and Management of Exploited Crab Populations under Climate Change

March 10–13, 2009: This meeting, which is the 25th in the University of Alaska, Sea Grant Wakefield Fisheries Symposium series, will be held in Anchorage. The call for papers is online now, with a deadline of November 14, 2008. For more information, please visit the website at: *http://seagrant.uaf.edu/conferences/2009/wakefield-crab/index.html.*

AWRA Spring Specialty Conference

May 4–6, 2009: This conference, to be held in Anchorage, is themed: "Managing Water Resources and Development in a Changing Climate," for more information visit the website at: *http://www.awra.org/meetings/Anchorage2009/index.html.*

GEOHAB
Marine Geological and Biological Habitat Mapping

GEOHAB 2009

May 5–7, 2009 The 8th GeoHab meeting will be held in Trondheim, Norway. See *http://geohab.org/trondheim.html.*

International Marine Conservation Congress

May 20–24, 2009: The Marine Section of the Society for Conservation Biology will be hosting its first stand-alone meeting, the International Marine Conservation Congress (IMCC), at George Mason University near Washington D.C. For more information on this meeting, visit: *www.conbio.org/IMCC.*

Society for Conservation Biology

NABS 2009

May 17–22, 2009: The 2009 meeting of the North American Benthological Society will be held in Grand Rapids, Michigan. For more information visit: *http://www.benthos.org/index.cfm.*

World Aquaculture 2009

May 25–29, 2009: The abstract deadline for this meeting is November 1. It will be held at the World Trade Center in Veracruz Mexico. See *https://www.was.org/WASMeetings/meetings/Default.aspx?code=WA2009.*

World Aquaculture 2009

REGISTER NOW ! !

ANNUAL ALASKA CHAPTER AFS MEETING
http://www.fisheries.org/units/afs-ak/meetings/2008/meet2008.htm

Cultural Diversity Committee Chair Position Opens

The Alaska Chapter of the American Fisheries Society Cultural Diversity Travel Award Committee is looking for a new chair or co-chairs for 2009 and beyond. After over 5 years of serving on this committee, Jerry Berg and Lisa Stuby will be stepping down after the 2008 meeting. The Cultural Diversity Travel Award helps fund entry-level applicants who are involved in the natural resource field to attend the annual Alaska Chapter conference. The goal is to help diversify our Chapter membership and get young upcoming people active with AFS. Duties of the committee include, occasional updates to the travel award application form and application review process, maintaining a list of various cultural, academic, and natural resource organizations, mailing these organizations travel award applications annually during the late summer or early fall, and finally reviewing the completed and returned applications to select the top candidate(s). Our main goal has been to get as many recipients to the meeting as possible, depending on the meeting location and where the candidate(s) reside. This has not been a competitive process in the traditional sense.

Through serving on this committee, we have met some wonderful people, many of whom are still active with the Alaska Chapter and in the field of fisheries. The time commitment has been fairly minimal, but has been immensely rewarding. If you are interested in serving, please contact Jerry Berg (*Jerry_Berg@fws.gov*) or Lisa Stuby (*lisa.stuby@alaska.gov*). Both Jerry and Lisa will work with whoever takes our places to ensure they are comfortable taking over the reins for this committee.

Student Sub-unit Update

Dona Eidam

The University of Alaska Anchorage (UAA) Student Group concluded its spring 2008 semester by hosting a series of talks about the proposed Pebble Mine in Bristol Bay entitled, The Pebble Project: Fish and Science. Speakers included Sean Magee who talked on "Overview of the Pebble Project," James Buell, on "Fisheries Baseline Studies," Carol Ann Woody on "Fisheries Science and Regulatory Deficiencies at Pebble," Greg Beischer on "Mining Practices," Davin Holen on "Subsistence Harvests and Uses of Wild Resources in Bristol Bay," and Tom Crafford on "The Permitting Process."

More than 150 students and guests from the Anchorage community attended the series, and lively question and answer sessions followed each presentation. The UAA Student Group extends heartfelt thanks to advisors Andy Kliskey and Steve Grabacki for all their support.

HTI Short Courses

Using Acoustic Tags to Track Fish - (*http://www.htisonar.com/at_short_course.htm*) Seattle, WA: 5-6 February, 2009, 9 AM - 5 PM. This short course addresses all aspects of tracking fish movement with acoustic tags, including three-dimensional tracking with sub-meter resolution. The course includes hands-on-operation and a variety of applications are covered. Lunch is provided. $300.00 USD, per person. Seating is limited.

Using Hydroacoustics for Fisheries Assessment - *(http://www.htisonar.com/ha_short_course.htm*) 12-13 February, 2009, 9 AM - 5 PM Seattle, WA: The hydroacoustic short course covers mobile and fixed-location survey techniques, and subjects include basic hydroacoustic theory, deployment logistics, data collection and processing. Split-beam, single-beam, and multi-beam frequency techniques are discussed in detail. Lunch is provided. Seating is limited. For information, call 206-633-3383 or email *cmercado@HTIsonar.com*.

Ever need a back issue of *Oncorhynchus* Newsletters?

Back Issues are available at

http://www.fisheries.org/units/afs-ak/oncorhynchus/oncindex.html

Issues from 1995 through the present are available.

AFS National Meeting Update

Bill Wilson

AFS convened its 138th annual meeting in Ottawa, Ontario—the cosmopolitan and beautiful capitol city of Canada. AFS President Mary Fabrizio organized the meeting around the theme "Fisheries in Flux," and the conference reflected that theme over nearly four days of scientific papers, symposia, a trade show, special student programs, socials, and other events. Alaska's Ole Mathisen posthumously received "The Sully," AFS' prestigious Carl R. Sullivan Fishery Conservation Award, during the Plenary Session. As a member of the "Sully" Award Committee, it was my pleasure to nominate Ole, and to champion his nomination this year. Thanks to many of Ole's colleagues, including particularly Peter Hagen, Terry Quinn, and Phil Mundy, Ole will join the roster of very distinguished international fishery scientists who have received this award. See another article in this issue for more on the award.

The Ottawa meeting included many sessions that investigated stressors on fish and fisheries that affect fishery sustainability, including exploitation, invasive species, climate change, and water resource availability. Some of the sessions I was drawn to included fishery-induced evolution, fish and fishery sensitivity to climate change, hydropower development, fisheries governance, and fishery bycatch reduction. The Ottawa meeting was also a forum for AFS Section meetings and opportunities to visit old friends and to network with new ones.

And of course there were the social events; these included an opening session on the rooftop of the Ottawa Congress Centre, the usual trade show social, and a memorable evening at the Canadian Museum of Civilization. The Canadian Museum of Civilization is a massive building with spectacular artifacts from hundreds of years of North American history, there meeting attendees had the run of the place and an opportunity to view exhibits on Canadian culture and history at leisure. Some of us also squeezed in a tour of Parliament, pub crawling in Byward Market, and sightseeing in the scenic Thousand Islands area of the St. Lawrence Seaway before the meeting.

AFS will convene its 139th annual meeting next year in Nashville, Tennessee. Scheduled for August 30–September 3, 2009, the Nashville meeting will showcase southern fisheries issues, and I'm sure it will include a healthy portion of good old southern hospitality. Check *www.fisheries.org* for more information.

Biographies of Nominees for Vice President and Assistant Treasurer

Audra Brase, Vice President

Although I didn't realize it at the time, my interest in fisheries biology began as a young girl in Minnesota when I spent many an afternoon at my parents' sides watching them fillet our daily catches. As I poked through the "guts" of walleye, pike, and perch I discovered much about their feeding habits and my own tolerance for blood and that "ewww" factor.

My interest in Biology led me to Alaska in 1989 to attend the University of Alaska Fairbanks. I was often asked, "Why go to college in Alaska?" My answer was simple: scholarships and a family trip that had piqued my interest in this gorgeous state. I've stayed here because of the great people I've met and the innumerable opportunities that exist here.

Alaska Chapter Vice President candidate Audra Brase with a nice pike caught at Minto on the Yukon River.

Continued on next page

Biographies of Nominees, continued

My first summer job in Alaska was at a Bristol Bay cannery. As I stood on the "slime line," or at the fish chute, sorting the various salmon species, I watched the Alaska Department of Fish and Game (ADF&G) fish techs in their blue hats, and said to myself, "Now that is what I want to be doing next summer!" The following year, I was lucky enough to get hired on as a fish tech with the ADF&G Sport Fish Division in Fairbanks. I spent three summers in that position and I loved (almost) every minute of it. I couldn't believe I was getting paid to travel and catch fish. I was hooked, and decided that I would pursue a Master of Science degree in Fisheries, with the long-term goal of a career with ADF&G.

In 1993, I traveled to Southeast to attend the University of Alaska Fairbanks (UAF), Juneau Center of the School of Fisheries and Ocean Sciences for my Masters work. My thesis project was looking at the feeding habits of Bering Sea larval Walleye Pollock during the spring bloom period. After graduation in 1996, I worked in various positions in Juneau, starting with the National Marine Fisheries Service (NMFS) and then moving on to the ADF&G Commercial Fisheries Division. My final job in Juneau was working as the Assistant Management Biologist for the regional troll fishery. I loved the work, but by this point I had discovered that I was not a rain person. The dry and sunny Interior was calling, so in March 2001 my husband and I packed up our kids, dog and cat and moved back to Fairbanks. I currently work as the Lower Tanana (Fairbanks) Area Management Biologist for the ADF&G Sport Fish Division.

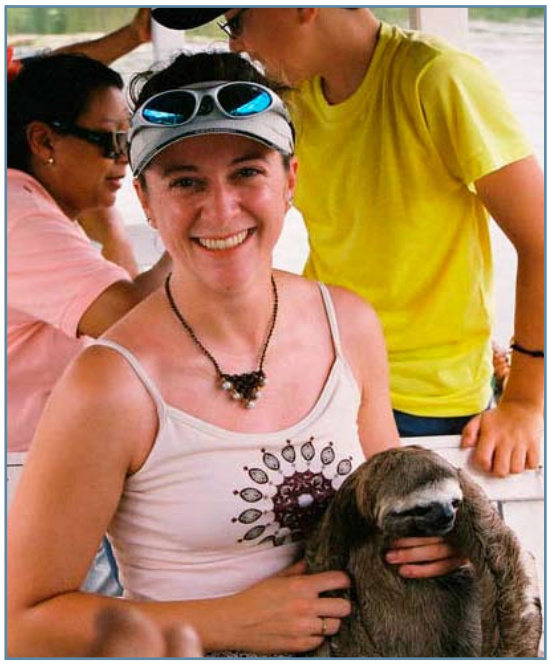
I enjoy my job, but what I love most is spending time with my family at the remote cabin we've built over the last two summers on the Teklanika River. My husband Mike and I have two kiddos: Piper (9) and Travis (7), they keep us busy with swimming, hockey and cross country skiing. Other family activities include hunting, fishing, berry picking, snow machining and cheering on our Alaska Nanooks Hockey Team.

As Vice President of the Alaska Chapter, I hope to add to the Chapter's energy and enthusiasm and expand our membership. I look forward to meeting more of you and I appreciate your support.

Cindy Tribuzio, Assistant Treasurer

My first interest in the ocean realm started when I was very young and was determined to "Save the Whales." It's been a great journey to get from there to where I am now. I am currently a research fishery biologist with the National Marine Fisheries Service (NMFS) in Juneau and finishing my PhD at the University of Alaska Fairbanks.

Even though I always knew I wanted to focus on the oceans, I started my education in terrestrial ecology, and received my Bachelor of Science in Ecology from Central Washington University (CWU) in 1999. The choice to go to CWU and not focus on marine sciences was easy: I wanted to get out and do stuff, lots of stuff, and CWU had a very strong field research program. I was able to travel to the Sonoran Desert to study Gila woodpecker nesting behavior and to Chamela, Mexico to study terrestrial ecotypes in a tropical dry forest.



Cindy Tribuzio, candidate for Assistant Treasurer, canoeing in the Amazon with a friendly neighborhood sloth.

After graduating, I spent some time working as a zookeeper, and then began volunteering at the Seattle Aquarium. My time at the aquarium cemented my desire to work with fish. I spent a

Continued on next page

Biographies of Nominees, continued

great deal of time learning about fish husbandry and observing the captive behavior of species common to the Puget Sound area. While at the Seattle Aquarium, I participated in a six-gill shark study, and have been studying sharks ever since.

I attended the University of Washington for my Master's degree. There I studied the life history and reproduction of both salmon sharks and spiny dogfish. After graduation, I moved to Juneau with my (now) husband, and started a PhD at the University of Alaska Fairbanks. I have been studying the ecology and population dynamics of spiny dogfish in the Gulf of Alaska for the last four years. This last spring, I was hired by NMFS to work at the Auke Bay Laboratories in the Marine Ecology and Stock Assessment group. I am thrilled to have this job because I get to continue to explore my interests in shark ecology and stock assessment.

I have participated in local AFS chapters at both the University of Washington and the University of Alaska Fairbanks, but this is my first foray into a service position. I enjoy volunteering and being involved in various organizations. Over the course of my research in Alaska I have been able to visit communities across the state and get to know many people. While I am not a born and raised Alaskan, I have made Juneau my home and can't imagine leaving.

Officer Ballot

For Chapter Vice President and Assistant Treasurer

Please cut and paste ballot into an email with subject "Vote" before December 5, 2008 and send it to: *Jamal.Moss@noaa.gov*

Vice President:
____ Audra Brase ____Write-in_____

Assistant Treasurer:
____ Cindy Tribuzio ____Write-in_____

2008 Alaska Chapter Officers

Alaska Chapter officers serve for 2 or 3-year terms. Elections are held annually in the fall for open offices. It is the responsibility of the past president to recruit candidates. If you are interested in serving, please contact Jamal Moss.

President
Bert Lewis, ADF&G/CF, P.O. Box 669, Cordova 99574-0669, 424-3212 wk, Fax: 424-3235, *Bert.Lewis@alaska.gov*

President-Elect
Toshihide "Hamachan" Hamazaki, ADF&G/CF, 333 Raspberry Road, Anchorage 99518-1599; 267-2158 wk, Fax: 267-2442, *Hamachan.Hamazaki@alaska.gov*

Vice President
Lisa Stuby, ADF&G/SF, 1300 College Road, Fairbanks 99701-1599, 459-7202 wk, Fax: 456-2259, *Lisa.Stuby@alaska.gov*

Treasurer
Lee Ann Gardner, RWJ Consulting, P.O. Box 672302, Chugiak 99567-2302, 688-1400 wk, Fax: 688-1400, *rwjconsulting@ak.net*

Secretary
Karla Bush, ADF&G/CF, P.O. Box 110024, Juneau 99811-0024, 465-4259 wk, Fax: 465-4944, *Karla.Bush@alaska.gov*

Past President
Jamal Moss, Ted Stevens Marine Research Institute, Alaska Fisheries Science Center, 17109 Point Lena Loop Road, Juneau, 99801, 789-6609 wk, Fax: 789-6620, *Jamal.Moss@noaa.gov*

Student Subunit President
Dona Eidam, UAA, 3151 Alumni Loop, Ecosystems Biomedical Lab, Anchorage 99508, 764-7144 wk, *eidam.d@alaska.com*

Feel free to contact the Executive Committee members