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## 137th Annual Meeting Call for Abstracts

Abstracts and symposium proposals are currently being accepted for the 137th Annual Meeting of AFS in San Francisco. Abstracts and proposals may be submitted online at <http://www.fisheries.org/sf/>. The deadlines are January 12 for symposium proposals and February 9 for contributed paper or poster abstracts. The meeting convenes in San Francisco's downtown Marriott Hotel, September 2-6, 2007. The

theme of the meeting is "Thinking Downstream and Down Current: Addressing Uncertainty and Unintended Consequences in Fish and Fisheries."



At the interface between the Sacramento-San Joaquin River drainage and the Pacific Ocean, San Francisco provides an outstanding venue to think about managing whole ecosystems, advance your professional networking, and to keep current on emerging ideas in fisheries science and management. San Francisco also provides a world-class location for a personal or family vacation. Dozens of must-see cultural, historic, and natural points of interest are located only minutes away from the Marriott and a wide array of outdoor activities may be experienced both locally and within a few hours drive from the city. ☹

*The Alaska Ocean Observing System monitors changes in atmospheric and oceanic conditions with on-shore and moored instrument arrays. Here an Acoustic Doppler Current Profiler is attached to an oceanographic mooring and may be anchored to the seafloor for up to a year. This instrument will measure temporal changes in water column velocities. Long term deployments will improve our understanding of seasonal and interannual variability in currents that will enable more accurate forecasts of future ocean conditions. Photo by Bill Parker, NOAA PMEL.*



## Fisheries Management Applications of the Alaska Ocean Observing System

*Phil Mundy, Carl Schoch and Molly McCammon*

In Alaska, and elsewhere, fisheries management is often limited by lack of information—especially by lack of information on how changing environmental conditions impact stock abundance. The dominant role of climate and ocean conditions in determining abundance for a wide variety of stocks and species is becoming increasingly apparent. Sharp unexplained changes in stock abundance have occurred over a broad range of species in Alaska such as herring (Prince William Sound and Kamishak), red king crab (Gulf of Alaska), chum salmon (western Alaska and Norton Sound), sockeye salmon (Kvichak and Egegik), and shrimp (Kodiak, Lower Cook Inlet and Prince William Sound).

Environmental forcing is suspected in those cases where age-structured abundance data are not adequate to explain stock status. A good illustration is the case of Prince William Sound herring. Based on age-structured modeling of stock abundance, the large biomass of herring in Prince William Sound in 1989 was expected to produce high catches throughout the 1990's. Nonetheless, the stock plummeted to very low levels in 1993; only one commercial opening has occurred

*Continued on page 3*

## The President's Column

Jamal Moss

Becoming reacquainted with friends and colleagues at our 33rd annual meeting in Fairbanks was a distinct pleasure, and I thank all of you who participated in the week's events. We had a total of 184 registrants, a significant proportion of whom were students, and a variety of stellar oral and poster presentations. Papers were given on topics ranging from ocean observing systems, ecosystem-based management, and marine derived nutrients in freshwater systems to climate change. The breadth of knowledge demonstrated was a testament to the diversity of research conducted in Alaska and the high aptitude of our membership. Three of our members were honored for their exceptional level of achievement and dedication to the Chapter. Bill Wilson received the prestigious Wally Noerenberg Award, Mason (Buck) Bryant, the Chapter's Meritorious Service Award, and Cindy Hartmann, the Distinguished Service Award.

Bert, Scott, and I had the pleasure of attending the past president's luncheon at the annual meeting and I was impressed by the extensive insight and experience of our past presidents. We inquired as to whether the past presidents would be willing to make recommendations to the Executive Committee regarding special projects and programs in need of funding and they kindly agreed to do so. Also, please join me in welcoming our newest member of the executive committee, Vice President Hamachan Hamazaki. Bert Lewis is now serving as President-Elect, and Scott Maclean as Past-President. Lee Ann Gardner was confirmed to remain on the Executive Committee as Chapter Treasurer at the November 15th business meeting.

I traveled to Portland, Oregon for the Western Division AFS mid-year meeting in late November. Western Division Chapter Presidents delivered presentations on recent activities, financial solvency, and the general status of their respective chapters. Division-specific business addressed at the meeting included hosting of the 137th Annual meeting and Western Division 2008 and 2009 meetings, status of the Western Native Fishes Database, bull trout recovery, and investment strategies for managing division funds. It became apparent to me that the Alaska Chapter is highly regarded by other Western Division chapters, and I was extremely proud to represent you.

Immediately after the Western Division meeting, I made my way south to San Francisco, where I had the privilege of meeting with Gus Rassam and Jennifer Nielsen; they



Jamal Moss,  
AFS Alaska  
Chapter President

had come for a coordination meeting of the California and Nevada Chapters to prepare for hosting the 137th Annual Meeting. I'd encourage each of you to make an effort to attend. While the 135th meeting in Anchorage currently holds the title of 'most sensational' AFS meeting, the 137th is shaping up to be a close second. Even though I felt at times that I'd be safer wandering Admiralty Island unarmed and smeared in peanut butter than navigating the sidewalk along Market Street, San Francisco is a truly first-class city, rich in the arts, culture, and cuisine. While there, I had the opportunity to indulge in the ballet, Ethiopian food, a reggae concert, and to browse numerous record shops. The "City by the Bay" is a cornucopia of activities and is sure to have whatever your pleasure may be. Hope to see you there next September! ☺

## Election Results

Scott Maclean

The recent election and installation of officers reflects the diversity of backgrounds and disciplines represented in the Alaska Chapter of the American Fisheries Society. This year the Chapter had two positions open, Vice-President and Treasurer. The gavel was passed on to Jamal Moss, the Chapter's new President, and Bert Lewis advanced to President-Elect. Steve Zemke continues his term as Secretary for a second year and Scott Ayers is the new Student Representative.

The new Vice President, Hamachan Hamazaki, pulled off a landslide win over "write-in" in this election. Hamachan had most recently been Chair of the Continuing Education Committee. He received an MS in applied statistics, a certificate in environmental ethics, and a Ph.D. in ecology from the University of Georgia. He currently works for the Alaska Department of Fish and Game, as a biometrician and is involved in all Arctic-Yukon-Kuskokwim Region's fisheries research, including salmon stock assessment, subsistence fishery catch estimation and the assessment of herring, and king crab stocks.

Lee Ann Gardner transitioned into the Treasurer position a year ago and will continue in this capacity for the next two years. Lee Ann served previously as Chapter Secretary and also on the local arrangements committees for each of the 1998 Western Division and 2005 National meetings. She received a MS in Fisheries with a minor in statistics from Oregon State University and has worked for the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and ENSR Consulting and Engineering in Anchorage. Lee Ann is currently self-employed as an environmental consultant in Chugiak with RWJ Consulting.

Scott Ayers, the new Student Representative, is working on a Masters Degree with Dr. Gordon Haas at the University of Alaska, Fairbanks. He is investigating the question of species status for the Angayukaksurak 'old-man' charr (*Salvelinus anaktuvukensis*), which was originally described by Dr. J. Morrow at UAF in the 1970s. It is a small charr, noted to reside in the headwaters of the central Brooks Range in Alaska.

The Chapter welcomes these new officers to their positions and especially thanks them for volunteering their time and skills to the American Fisheries Society. It takes volunteers with diverse backgrounds, such as these individuals, to keep our chapter relevant. ☺

### ONCORHYNCHUS

Oncorhynchus is the quarterly newsletter of the Alaska Chapter of the American Fisheries Society. Material in this newsletter may be reprinted from AFS Diary and Western Division.

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## Alaska Ocean Observing System, Continued

since then, and stock levels remain very low more than a decade after the crash. A wide variety of individual mortality factors (disease, predation, Exxon Valdez oil spill) have been hypothesized by way of explanation. Unfortunately, even when measured, the effects of individual factors on population size may not be identified due to the confounding effects of unmeasured “environmental factors.” Environmental data are absolutely essential to understanding why and when stock abundances of many species change.

The main challenges in developing and testing hypotheses on environmental control of stock abundance, and in understanding how such stocks may respond to fishing, are that relevant measures of environmental conditions are scarce, and even when environmental data do exist, getting them into a useful format can take a lot of time. So what can we do to enable fisheries management of environmentally controlled stocks? Actively engage in supporting and defining the Alaska Ocean Observing System (AOOS, <http://www.aos.org>). AOOS is part of a nationwide network of regional observing systems that comprise the Integrated Ocean Observing System (IOOS) (<http://www.ocean.us>).

AOOS can fill gaps in environmental information and, more importantly for overworked fishery managers and researchers; it can make that information readily accessible over the web. Based in Anchorage, AOOS was established in July 2003 with support from university, federal and private partners. Its primary stakeholders include commercial and recreational fishers, seafood processing, the shipping, mining, and oil and gas industries, coastal communities affected by coastal erosion and climate change, and participants in search and rescue operations. Other key stakeholders include managers, regulators and policy makers of fisheries and other natural resources.

In addition to serving a large and diverse group of stakeholders, AOOS has to deal with the fact that Alaska is a huge state in the far north. No other marine system in the United States has such extreme weather and climate, vast geographic distances (larger than the combined marine systems in the rest of the U.S.), extensive coastline (about 44,000 miles), and limited infrastructure. With so much geography, so many potential user groups, and limited funding, creating an integrated ocean observing system in Alaska is a unique challenge.

AOOS is meeting the challenge through three basic approaches:

1) Developing a statewide capacity in data and information management and modeling and analysis through a Data, Modeling and Analysis Group (DMAG) at

Prince William Sound Ocean Observing System

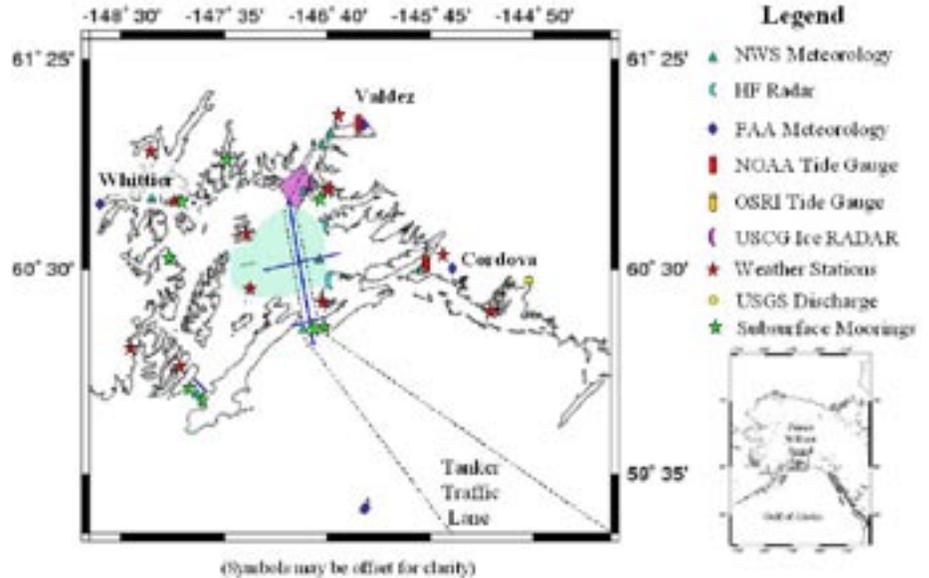


Chart showing the Prince William Sound Ocean Observing System stations, moorings and gauges.

the University of Alaska, Fairbanks in conjunction with the Arctic Regional Supercomputing Center. DMAG is the cornerstone of the AOOS observing system and now provides access to real-time and historical data from all over the state (<http://www.aos.org>).

2) Implementing the Prince William Sound Ocean Observing System as a pilot project. PWSOOS consists of climate and ocean observations, ocean circulation models and real-time products that may be viewed over the web. The pilot project has developed and demonstrated techniques and knowledge that can be transferred to other areas of Alaska. In the spatially nested conceptual model adopted by AOOS, information from any one area can be transferred to the implementation and operation of other areas throughout the entirety of the three major AOOS regions (Gulf of Alaska, Bering Sea, and Arctic).

3) Expanding and enhancing observing platforms and stations in each of the three major large marine ecosystems in Alaska—Arctic Ocean, Bering Sea/Aleutian Islands, and Gulf of Alaska—and initiating product development for stakeholders. These efforts include moorings in the Bering Strait and Aleutian passes, “ice radar” in Barrow, and exploratory moorings in Southeast Alaska.

Prince William Sound was the logical place for the first AOOS pilot program because of the existing infrastructure of weather and ocean observations funded by the Oil Spill Recovery Institute, National Oceanic and Atmospheric Administration, U.S. Coast Guard and other entities. As a consequence of the implementation of the pilot program, Prince William Sound now has one of the highest time-space densities of environmental observations in the state. Information from these observations is available at <http://www.aos.org>.

Continued on page 4

## 2006 Chapter Awards

*Cheryl Dion*

The Awards Committee is responsible for soliciting nominations and selecting among them to recognize individuals with the Meritorious Service Award, Alaska Chapter Service Award, and Almost Darwin Award. The Committee



*Outgoing President, Scott Maclean addresses the 2006 Chapter Business meeting.*

also coordinates the judging of papers and posters at the annual Chapter Meeting. In 2006, Mason Bryant was selected for the Meritorious Service Award and Cindy Hartmann for the Alaska Chapter Service Award. The perpetrators selected for the Almost Darwin Award were Togiak National Wildlife Refuge, ADF&G Commercial Fisheries Division in Bethel, and the Native Village of Quinagak. Mark Lisac accepted the award.

The Best Paper and Best Poster award recipients, selected from presentations at the 2006 AFS Annual Meeting in Fairbanks, were:

### Best Student Paper

Andrew C. Seitz, Timothy Loher, Brenda L. Norcross, and Jennifer L. Nielsen “Conceptual model for the population structure of Pacific halibut *Hippoglossus stenolepis* using insights from satellite tagging.”

### Best Professional Paper

Randy J. Brown “Humpback whitefish *Coregonus pidschian* in the upper Tanana River drainage reduce risk of confinement by exhibiting feeding habitat fidelity.”

### Best Student Poster

Wongyu Park “Patterns of development, mortality, mixing and distribution of Dungeness crab larvae in Glacier Bay and neighboring straits.”

### Best Professional Poster

David Orabutt “The Kuskokwim Native Association Fisheries Program: local involvement in Kuskokwim River fisheries research and monitoring.”

Congratulations award recipients for a job well done! 🗨️



*Jamal Moss, Lisa Stuby, Julie Bednarski, and Switgard Duesterloh await a bartender at the Chena Hot Springs Ice Museum.*



*Panel discussion following the Marine Derived Nutrient Session, from left to right, participants are: Tom Paragi (standing), Mark Wipfli, Joshua Peirce, Marty Freeman, Robert Naiman, Scott Gende, and Craig Stricker.*

### Alaska Ocean Observing System, Continued

The long-term survival of AOOS depends on funding from the federal government, which requires the active support of stakeholders. What AOOS ultimately becomes depends on stakeholders making their needs known. Having climate and ocean observations from fishery-relevant localities on time scales appropriate to fisheries management information needs will require the active involvement of fisheries managers and researchers. Check out the AOOS web site, and if you don't see what you need, contact Executive Director, Molly McCammon, or Chief Scientist, Carl Schoch. 🗨️



*Misadventures in fisheries science, the well-deserved winners of the 2006 Almost Darwin Award.*

## Wally Noerenberg Award

*Doug Palmer*

The Wally Noerenberg Award for Fishery Excellence is the highest award of the Chapter. It is bestowed to honor an individual's life-long career achievements in fishery excellence. The award was created in 1981, and in 1982 was awarded posthumously to its namesake, Wally Noerenberg. Since then, there have been twelve recipients: Armin Koerning, Robert Armstrong, Clem Tillion, Steven Pennoyer, Jim Branson, Jim Reynolds, Ole Mathisen, Ken Roberson, John Clark, A.J. Paul, Alex Wertheimer, and Lance Trasky. Contributions may include, but are not limited to: fisheries research; technology development; species and habitat management; innovations in harvesting, processing or marketing; academics or fisheries education; and involvement in national and international affairs affecting Alaska fisheries.

The committee is comprised of three Chapter past-presidents and a committee chair that cannot be a past president. Committee members during 2006 were David Wiswar, Carol Kerkvliet, Tim Joyce and myself as chair. The committee received two nominations for the Wally Noerenberg Award prior to the July 31 deadline, both nominations were for Bill Wilson. The committee met via teleconference on August 24 and unanimously supported Bill as a recipient for the award. Supporting documentation for the award was forwarded to the Executive Committee in late September for final approval.

The Wally Noerenberg Award for Fishery Excellence was presented to Bill Wilson during the banquet at the annual meeting in Fairbanks. Bill's life-long achievements include numerous scientific contributions that have improved our understanding of Arctic and sub-Arctic fish assemblages—particularly the responses of North Slope fish communities to human perturbations and development. Bill also played an integral role in developing the Bering Sea and Aleutian



*Bill Wilson receives the 2006 Wally Noerenberg Award from Committee Chair Doug Palmer.*

groundfish management plan for the North Pacific Fishery Management Council. Bill has held numerous positions on Alaska Chapter committees and played a significant role in bringing two very successful annual meetings of the AFS Parent Society to Alaska. He was a driving force in the realization of the milestone book "Fishes of Alaska," which probably would never have come to pass without his efforts. Bill has demonstrated a career of fisheries excellence, be it on-the-ground research studies, policy negotiations, or bringing top-flight science to the fisheries community in Alaska and beyond. His career in Alaska fisheries truly embodies what the Wally Noerenberg Award is all about. 🗨️

## Biggest Bony Fish Contest

*Steve Lochmann*

What is the largest bony fish? If you are like me, you probably waited until the last minute to renew your AFS Membership for 2007. When you renew, please consider this invitation. The Education Section of the American Fisheries Society invites you to join our Section. Education Section activities include preparation and revision of textbooks, support of student travel to meetings, and compilation of brochures on academic programs and fisheries career opportunities. Undergraduate and graduate education is only one focus of the Section; we also support lifelong learning of all fisheries professionals. The Education

Section encourages all fisheries professionals to expand their minds through the pursuit of new knowledge. To that end, we are sponsoring a "Largest Fish" contest. What is the largest bony fish known to science? If you think you know the answer, email your response to [slochmann@uaex.edu](mailto:slochmann@uaex.edu). We will provide a small incentive to some lucky individual, randomly chosen from among the respondents with the correct answer. Take some time, explore the possibilities, and see what there is to learn about really big fish. You must be a member of the Education Section to be eligible for the "small incentive." 🗨️

## Hutton Program

The Hutton Junior Fisheries Biology Program was established in 2000 to stimulate the interest of high school students from groups underrepresented in the fisheries professions, in pursuing careers in fisheries science and management. Individuals interesting in mentoring a high school student are encouraged to apply as soon as possible

and to recruit students during the fall of 2006 by visiting classes and communicating with biology teachers and guidance counselors in local high schools. Recruitment materials are available, and guidance on creating an appropriate project for a high school student and sample

*Continued on page 6*

## Maximalist versus Minimalist Technologies for Bear Safety

*Ed Berg, excerpted from [kenai.fws.gov/overview/notebook/2006/nov/03nov2006.htm](http://kenai.fws.gov/overview/notebook/2006/nov/03nov2006.htm)*

Bear protection is of universal interest to outdoor-loving Alaskans. Outside of our various protective shells, we are intruders on bear turf and bears can have a proprietary objection to our presence. Like many Alaskans I have gone the full route in bear protection—aerial flares, .44 magnum pistol, 12-gauge shotgun, pepper spray and most recently hand-held marine flares. To date, noise making and vigorous hand waving have been my best deterrents. Every spring at the Kenai National Wildlife Refuge we run new field employees through a 2-day bear safety training program, including a day at the rifle range shooting at stationary and moving targets with slug-loaded 12-gauge shotguns. For many of our younger seasonal workers this is the first time in their life that they have ever handled a gun. Our field crews all have at least one person carrying a shotgun, who has qualified as a shooter by hitting a moving bear target in the kill zone 2 out of 3 shots. Permanent employees must re-qualify every spring at the range with the moving bear target. We also encourage everyone to carry pepper spray and noisemakers. To date we have been lucky; our field crews have never had to spray a bear or shoot in self-defense, probably because we typically make a lot of noise in the field and generally work in groups. We like to remind ourselves of the statistic that there has never been a serious bear attack on 4 or more people, at least when they are grouped together. Like many safety issues, the real issue with bears is what you yourself can deliver when push comes to shove. Can you effectively deploy a shotgun, pistol or pepper spray? Will you have the presence of mind not to run, or to curl up in a ball and let a brown bear take a bite out of you? We do our drills—both physical and mental—and hope that the reflexes will be there when we need them.

There seem to be two schools of thought about bear protection: maximalist and minimalist. The maximalist approach basically uses firearms, which have a comforting appeal to the experienced user, myself included, and should theoretically stand up well in liability court cases. However, the well-armed traveler who is “loaded for bear” can have a boundless sense of self-confidence that statistics suggest is vastly over-inflated. The minimalist approach—in the extreme—uses only careful awareness of one’s surroundings and making plenty of noise. For whatever reasons, most of us probably use this approach on informal outings such as jogging and walking the dog. The long history of bear-mauled unarmed joggers on the Kenai suggests that this is not an adequate approach. The next step up uses non-lethal tools like pepper spray, flare guns, and hand-held flares. When I say “non-lethal,” I

mean non-lethal to both bears and to fellow human beings, including the user.

A recent study of 258 bear-human incidents in Alaska involving firearms found that firearms were effective in only 68% of the cases, i.e., the failure rate was 32%. Conversely, pepper spray was effective in 94% of 75 incidents in Alaska where pepper spray was deployed. This study by Tom Smith, formerly of the USGS in Anchorage and now at Brigham Young University in Utah, and his colleagues, is currently under review with anticipated publication in 2007. In spite of its impressive statistics, pepper spray has its detractors. Clint Hlebechuk and Simyra Taback operate the Hallo Bay Wilderness camp, where tourists arrive daily for world-class brown bear viewing along the Katmai coast. Clint and Simyra are outspoken critics of pepper spray and don’t allow clients to bring pepper spray to camp. They and their guides carry Ikaros-brand hand-held flares and no firearms. Ikaros marine flares weigh only 8 ounces, are 10-inches long, and are activated instantly by pulling a string. They can be fired bare-handed and burn for 60 seconds with an extremely intense red light and abundant smoke. These are not aerial flares, and do not shoot out any kind of fireball into the air or at the bear. Nor are they fuses, such as are used for highway safety warnings that are activated by scratching on a striker surface. The flares are made by the Swedish company Hansson Pyrotech and cost about \$18 at Eagle Enterprises in Homer and Anchorage. (A Google internet search on “Ikaros flares” leads to a color video on these flares.) These flares appear to be well-suited for the careful, non-confrontational kind of bear viewing done at places like Hallo Bay and McNeill River. The bears in these places are not tame but they are more or less acclimated to the presence of human beings. Flares have been used on four occasions in 16 years at Hallo Bay to discourage overly inquisitive sub-adults from approaching too closely. How well they would work with a surprised bear, say a mother with cubs has not been tested at Hallo Bay. Pepper spray, however, has a proven track record in hostile close encounters, and has been 94% effective, according to Tom Smith’s data.

Next week, I’ll explore the pros and cons of these technologies in more detail. I have no “one size fits all” solution to recommend for all cases. Bears vary in their personalities, and bear encounters vary in the degree of closeness and surprise. I, for one, haven’t given up my 12-gauge, but I am including more non-lethal alternatives in my arsenal of possibilities.

*Editor’s note: the second installment of this article is online at the above web address.* 

### Hutton Program, Continued

project descriptions from previous mentors can be requested by contacting the Hutton Program Coordinator. Applications for students and mentors are currently available online at the AFS parent society at [http://web.fisheries.org/main/index.php?option=com\\_content&task=view&id=105&Itemid=124](http://web.fisheries.org/main/index.php?option=com_content&task=view&id=105&Itemid=124) and are due February 15, 2007. Students selected for the Hutton Program are awarded a

\$3,000 scholarship. The Hutton Program is now in its sixth year and last summer alone 56 students in the US and Canada participated in the program. Many Hutton alumni are now studying fisheries or a natural resources discipline in college. For questions about the program, contact Hutton Program Coordinator Danielle Hawkins at 301-897-8616, ext. 213 or by email at [hutton@fisheries.org](mailto:hutton@fisheries.org) 

## Meetings and Events

### Hydroacoustics for Fisheries Assessment

January 18–19, 2007: This workshop will be held in Seattle, WA. For more information see <http://www.HTIsonar.com> or contact Caroline Mercado, [cmercado@HTIsonar.com](mailto:cmercado@HTIsonar.com).

### Alaska Marine Science Symposium

January 21–24, 2007: This meeting, sponsored by the North Pacific Research Board and partners will be held in Anchorage. Visit the website at <http://www.alaskamarinescience.org> for more information.



### ASLO 2007 Aquatic Sciences Meeting

February 4–9, 2007: “Water Rocks” will be held in Santa Fe, NM. For more information visit <http://aslo.org/meetings/santafe2007/> or contact Helen Schneider Lemay at [business@aslo.org](mailto:business@aslo.org) or 800-929-ASLO

### Sustainability of the Arctic-Yukon-Kuskokwim Salmon Fisheries

February 6–9, 2007: This workshop, sponsored by the Yukon-Kuskokwim Sustainable Salmon Initiative will be held in Anchorage. Check out the website at <http://www.aykssi.org/>.



### AIFRB 50th Anniversary Symposium

February 13–15, 2007: The American Institute of Fishery Research Biologists is celebrating its 50th anniversary by convening a symposium on “The Future of Fishery Science in North America” in Seattle, WA. For further information check <http://www.aifrb.org/>.

### 98th Annual NSA Meeting

February 26–March 2, 2007: The 98th Annual NSA Meeting will be held in conjunction with AQUA 07 in San Antonio, TX. For details, see the meeting website at <http://www.was.org/meetings/ConferenceInfo.asp?MeetingCode=AQ2007>.



### 2007 Oregon Chapter 43rd Annual Meeting

February 28–March 2, 2007: “Big Fish over Big Dams: Complexities, Controversies, and Opportunities” will be held in Eugene, OR. For details check out the website at <http://www.orafs.org/meetings.htm>.



### Estuarine Research

#### Federation Meeting

November 4–8, 2007: The ERF 2007 meeting will be held in Providence, RI. Abstracts are due May 23, 2007, visit <http://erf.org/newsletter/Sp06-ERF07-CFS.html>.



### Oregon Sea Grant Conference

April 3–5, 2007: “Sustaining Pacific Salmon in a Changing World” will be held in Portland, OR. See <http://oregonstate.edu/conferences/resilience/>.



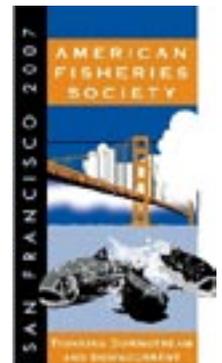
### 4th North American Reservoir Symposium

June 6–8, 2007: “Balancing Fisheries Management and Water Uses for Impounded River Systems,” sponsored by the Southern Division of AFS, Reservoir Committee will be held in Atlanta, GA. See the website at <http://www.sdafs.org/reservoir/symposium/> or contact Mike Colvin, [Mike.Colvin@mdc.co.gov](mailto:Mike.Colvin@mdc.co.gov).



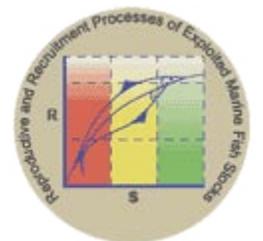
### 137th Annual Meeting of the American Fisheries Society

September 2–6: The 137th Annual Meeting of AFS with its theme of: “Thinking Downstream and Down Current: Addressing Uncertainty and Unintended Consequences in Fish and Fisheries,” will be held in San Francisco, CA. The abstract deadline is March 2, 2007. See <http://www.fisheries.org/sf/> to propose a symposia, register and for more information.



### Reproductive and Recruitment Processes of Exploited Marine Fish Stocks

October 1–3, 2007: The Northwest Atlantic Fisheries Organization (NAFO), the North Pacific Marine Science Organization (PICES), and the International Council for the Exploration of the Sea (ICES), announce a joint symposium to be held in Lisbon, Portugal. Abstracts are due June 30, 2007. Visit the website at <http://www.nafo.int/symposium.html>.



### Sustaining Wild Trout in a Changing World

October 9–12, 2007: The Ninth International Wild Trout Symposium will be held in West Yellowstone, MT. Visit the website at <http://www.wildtroutsymposium.com/> for more information. The deadline for abstract submission is April 1, 2007. Contact Dirk Miller, [Dirk.Miller@wgf.state.wy.us](mailto:Dirk.Miller@wgf.state.wy.us).



# Oncorhynchus

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Feel free to contact the Executive Committee members.

## 2007 AFS Membership Application

You can JOIN the AFS and the Alaska Chapter on-line (or by fax/phone), see <http://web.fisheries.org/main/> and click on Membership for details, or fill out the application form and process as noted below.

Print or type applicant's name in full \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Nation \_\_\_\_\_ Membership year\* \_\_\_\_\_

Kindly make checks payable to American Fisheries Society in U.S. Currency or drawn on a U.S. bank.

Please mail to  
Allen Bingham  
P.O. Box 221804  
Anchorage, AK  
99522-1804

Professional recruiting others (PROCLUB) \_\_\_\_\_

If applicant is a student as defined below, the teacher endorsing him signs here.\*\* \_\_\_\_\_

Name of institution where student is enrolled \_\_\_\_\_

Date \_\_\_\_\_

Please provide phone numbers for directory and Society use only:

Home \_\_\_\_\_ Work \_\_\_\_\_

Fax \_\_\_\_\_ Email \_\_\_\_\_

Employed by:  
 federal gov't.  state/prov. gov't.  industry  academia  self

- Alaska Dues: \$10.00**  **Alaska Student Dues: \$5.00**  
Membership Dues (includes *Fisheries* and Membership Directory)  
 Regular (North America): \$76.00 (Other than North America, \$88.00)  
 Student (North America)\*\*: \$19.00 (Other than North America, \$22.00)  
 Young Professional\*\*\*: \$38.00  
 Retired (North America): (65 or over): \$38.00 (Other than North America \$44.00)  
 Life (All): \$1,737.00 (includes *Fisheries* and one other journal of choice)

<sup>1</sup> Prices are for AFS members only <sup>2</sup> Membership not required for subscription  
\* New members accepted Jan. 1-Aug.31 are credited to full membership for that year. (Back issues of Journals are sent.) Members accepted Sept. 1-Dec. 31 credited to full membership as of next Jan. 1, unless requested otherwise. Membership on calendar year only.

### Journal Subscriptions (Optional)

- Transactions of the AFS<sup>1</sup>  N.A. Journal of Fisheries Management<sup>1</sup>  
 \$43.00 Paper in North America  \$48.00 Paper other than N.A.  
 \$25.00 E-Pub via WWW/Internet  
 North American Journal  Journal of Aquatic Animal Health<sup>1</sup>  
 \$38.00 Paper in North America  \$41.00 Paper other than N.A.  
 \$25.00 E-Pub via WWW/Internet

\*\* Bona fide students of fisheries subjects are eligible for Student membership (limited to 6 years). Persons employed full-time not eligible. Teacher endorsement required (see above).

\*\*\* Within 3 years of graduation.

NOTE: Retired membership for Active members upon retiring at age 65. Sustaining membership for commercial firms, conservation clubs, or others desiring to support the Society. Library Subscriptions include bimonthly *Transactions*, quarterly *North American Journal of Fisheries Management*, *Journal of Aquatic Animal Health*, quarterly *North American Journal of Aquaculture*, bimonthly *Fisheries*, and Membership Directory.