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Yukon River commercial fishers use dip nets to harvest Arctic lamprey. Photo courtesy of Bruce C. McIntosh, ADF&G. 2004.

Yukon River Lamprey Fishery

Maureen Horne-Brine

As fall descends upon the Yukon River, local commercial and subsistence fishers retire their gillnets for the season and turn their focus to the steadily approaching winter. In previous years, this would have signaled the end of commercial fishing along the lower Yukon River. However, a newly developed winter commercial fishery for Arctic lamprey, *Lampetra camtschatica*, has changed that.

Like subsistence users in Alaska, international consumers value lamprey for their rich protein and high oil content. It is estimated that approximately 38% of an adult lamprey's bodyweight is oil, and in some markets, lampreys have commanded a higher price per pound than salmon.

Arctic lamprey is the most commonly occurring species of lamprey in Alaska, with a range that runs from the Arctic coast to the Kenai Peninsula. Lampreys travel over 1,000 river miles up the Yukon River into Canada, as well as into the Kuskokwim and Tanana river drainages. Although it is believed that resident freshwater subspecies exist, Arctic lampreys are most often anadromous, experiencing a complex lifecycle similar to Pacific salmon.

Lamprey lifecycles begin and end in freshwater streams. Eggs are deposited in the spring and incubate for one to two weeks before ammocoetes emerge. Ammocoetes are blind and spend substantial time burrowed into soft, muddy stream substrates where they filter feed microorganisms and sediment. Ammocoetes live one to four years in freshwater before metamorphosing into adults and migrating to the ocean.

Adult lampreys feed parasitically by attaching themselves to a host fish or, occasionally, a marine mammal. They use their teeth and tongue to cut through scales or skin and feed on blood and bodily fluids; after which, they release from the host fish for a short resting period. Although lampreys attach themselves to a variety of species, it has been documented that common host fish include salmon (*Oncorhynchus* spp.), cisco (*Coregonus* spp.), pygmy whitefish (*Prosopium coulteri*), and three-spined stickleback (*Gasterosteus aculeatus*).



ADF&G Biologist Jim Bales collects weight-length-sex data from commercially harvested Arctic lamprey. Photo courtesy of Larry DuBois, ADF&G. 2006.

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The President's Column

Jamal Moss

“Brave men tell the truth ... the wise man's tools are analogies and puzzles” is a lyric by the Norwegian pop band Røyksoopp that seems particularly pertinent to Alaskan fisheries.

In regards to telling the truth, a longliner friend of mine and I had an interesting conversation about dogfish, more specifically, a conversation about why Alaska does not have a dogfish fishery, over waffles in a remote Southeast fishing village that I frequent. We discussed how relatively little is known about dogfish relative to other commercially



Jamal Moss, AFS Alaska Chapter President, indulging in a little R&R.

fished species, the inherent risk of recruitment overfishing, and insight based on personal observations made at sea. I was pleasantly surprised by how informed he was about these spotted critters, but disappointed to learn that it is standard protocol for the fleet to ‘neutralize’ any and all individuals that happen across their circle hooks. It seems abominable that these long-lived, slow-maturing fish meet their demise at the bottom of the ocean rather than at market, not to mention the loss of valuable data easily attained if these fish were landed. Later that afternoon, my thoughts dwelled upon how much progress could be gained from an open and honest exchange between fisheries professionals and commercial fishermen, some compromise, and a little common sense. I suspect it would have more value than even the savviest models and increasingly stringent harvest regulations.

In other news, the University of Alaska Fairbanks, School of Fisheries and Ocean Sciences held the 11th Annual AFS Student Symposium on April 4th in Juneau. Former Alaska Chapter Student President Katie Palof

chaired the meeting, and graduate student presentations were informative and well-crafted. This gathering provided an opportunity for students to showcase their research projects and get feedback from professionals such as managers, academics, and federal and state agency biologists. Graduate student research topics covered a variety of disciplines such as genetics, population dynamics, aquaculture, habitat, and biogeography.

This spring, the Fairbanks Student Subunit helped with judging the Alaska Statewide High School Science Symposium and awarded two prizes and AFS memberships to the best aquatic science projects. The Western Division has completed its cutthroat trout DVD and information on how to order a complementary copy will be available on their website soon. Our National Chapter Meeting in San Francisco is poised to be a huge success with a near record-breaking number of presentations and participants, and I hope many of you will be able to attend. The Western Division Annual Meeting will be held in conjunction with the National Meeting this year, but will be held in Portland, Oregon May 4–8 in 2008. This is a busy time of year for many of us, as we're squeezing fish and managing our state's fisheries.

Best wishes for a safe and productive field season, and looking forward to swapping tall tales of summer adventures in Ketchikan this autumn. Enjoy! ☺

Email Distribution of Oncorhynchus

If you are an AFS, Alaska Chapter member and did not receive an email with the current issue of *Oncorhynchus* attached as a .pdf file and would like to, please email Allen Bingham at allen.bingham@alaska.gov and ask to be put on the distribution list.

Cultural Diversity Award Application Deadline

The Alaska Chapter of the American Fisheries Society is pleased to announce the availability of a monetary award for an Alaska Native or other minority person, to cover travel expenses to attend the 2007 Annual Chapter Meeting from November 13–16 in Ketchikan.

Applicants must be Alaskan Native or a minority (woman, black, Hispanic, or other ethnic minority) in a field of fisheries science or a related discipline and must be in an entry level position or a student involved with natural resources. The deadline for the application this year is October 12, 2007, the application form is available from the committee co-chairs; Jerry Berg at jerry_berg@fws.gov, or 786-3519 and Lisa Stuby at lisa.stuby@alaska.gov, or 459-7202. You can also find an application on the AFS Alaska Chapter website at http://www.fisheries.org/units/afs-ak/awards_scholarships.htm. ☺

ONCORHYNCHUS

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Deadline for materials for the summer issue of *Oncorhynchus* is Sept. 10.

Alaska Chapter's Internet Home Page Address

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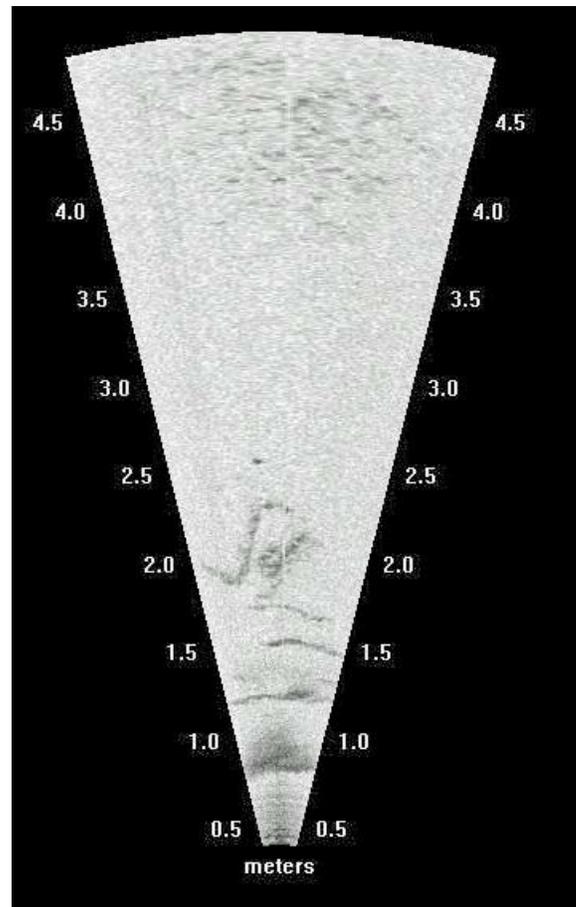
Yukon River Lamprey Fishery, continued

After spending one to four years at sea, adult lampreys return to freshwater, often traveling upriver in large schools. Like salmon, lampreys stop feeding once they return to freshwater, and it is believed that they then reside in their natal streams until spring, when the reproduction process begins. After spawning, adult lampreys die, returning valuable nutrients back to the freshwater ecosystem.

Yukon River subsistence fishers have used traditional ecological knowledge to track and harvest lamprey for generations. When ice conditions are favorable, fishers travel to harvesting sites along the river during times of high lamprey abundance, usually November or December on the Yukon. Traditionally, “eel sticks” (large wood poles with long, protruding spikes) are crafted as a harvesting device. After cutting a hole through the river ice, the fisher will plunge the eel stick into the water, pulling lamprey intercepted by the device onto the surface ice. Fishing for lampreys can be a fast and furious process, with just a few feet of ice separating the fisher and thousands of quickly passing lampreys. In recent times, many fishers have moved to using hand-held dip nets in an attempt to maximize their fishing efficiency.

When compared to other commercially harvested fish, little is known about Arctic lamprey. As such, stipulations in the lamprey commercial harvest permit issued by the Alaska Department of Fish & Game (ADF&G) allocate a portion of the catch for biological sampling. Baseline biological sampling, combined with harvest data, provides valuable information on Arctic lamprey life history, abundance, and run timing.

Exploratory commercial harvest of Arctic lampreys on the Yukon River has been permitted and biologically monitored by ADF&G during the winters of 2003–2006. In 2003, a commissioner’s permit was issued for the harvest of up to 40,000 pounds of Yukon River Arctic lamprey. Commissioner’s permits are issued for the exploratory commercial harvest of species not managed under existing State of Alaska commercial fishing regulations. The 2003 harvest began near the village of Saint Mary’s on November 17, when 23,960 pounds of lampreys were harvested in approximately three hours. On December 6, it took five hours to harvest an additional 25,697 pounds of lampreys 229 miles upriver in Grayling. Fishers observed two to three distinct pulses of lamprey passage and reported utilizing traditional harvest sites. In addition, length-weight-sex composition information was collected from 446 Arctic lampreys by ADF&G, and commercial fishers provided catch logs of fishing times and locations. The total commercial harvest for the 2003 season was 49,657 pounds. No commercial permit was issued in 2004. However, state biologists traveled to the Yukon River communities of Marshall and Grayling to collect specimens for biological sampling. Local subsistence fishers donated lampreys as well, which were combined with ADF&G samples and flown to Anchorage for assessment. In addition to collecting baseline length-weight-sex information from 462 lampreys, a subset of 61 lampreys were tested for



Migrating lamprey can be seen between approximately 1 meter and 1.75 meters. The concentric arcs between 0.5 meter and 1.0 meter are ice. The large, backwards “Z” formation located at approximately 2 meters is also a piece of ice. DIDSON frame courtesy of Bruce C McIntosh, ADF&G. 2004.

Ichthyophonus, a protozoan parasite known to infect other stocks of Yukon River fish. All lamprey samples tested negative for the disease. Sonar equipment was also operated during the 2004 sampling season to determine the feasibility of tracking passing lamprey. The project site was located near the village of Grayling, where Dual Frequency Identification Sonar (DIDSON) was installed below thick surface ice. Continuous bands of lamprey could be seen migrating upstream, most evident in the shallow areas close to shore. With further study, sonar could be used to estimate lamprey escapement and/or abundance during future projects. A commissioner’s commercial harvest permit was issued in 2005, but open water and thin, unstable ice precluded fishers from accessing most traditional fishing sites. Very limited subsistence harvests were reported and no commercial harvest was taken. In 2006, a commissioner’s permit was issued for the harvest of up to 40,000 pounds of Yukon lampreys. The commercial fishery began on November 13, when fishers from Saint Mary’s and Mountain Village delivered 715 pounds of lampreys to the processor. On December 1, an additional

Continued on page 4

Yukon River Lamprey Fishery, continued

7,481 pounds were harvested upriver in Grayling, bringing the total harvest for the 2006 season to 8,196 pounds. The processor stopped buying lampreys on December 6, keeping the harvest conservative due to unknown market conditions. ADF&G collected length-weight-sex information from 500 samples.

Since the inception of the commercial fishery, the majority of the harvested lamprey has made its way to Portugal and Japan. Portuguese consumers prize lamprey as a high quality food source, whereas lamprey sent to Japan are more commonly rendered and the oil utilized in traditional medicines and sometimes in cosmetics.

Currently, domestic demand for lamprey remains low and buyer-processors report exporting costs from remote Alaska as one of their largest operational obstacles. State biologists and buyer-processor representatives will



Yukon River commercial lamprey fishers. Photo courtesy of Bruce C Mcintosh, ADF&G. 2004.

continue to work with remote Yukon River communities to develop a sustainable commercial lamprey fishery that meets market expectations while supporting the needs of local fishing communities. 🗨️

Largest Bony Fish Answer

Steve Lochmann, AFS Education Section Membership Chair

Some time ago, I issued an invitation to play a game with the Education Section of AFS. I posed the question, “What is the largest bony fish known to science?” Hey, we’re fish squeezers; we’re supposed to know this sort of stuff, right?

A gut reaction for some was to suggest the whale shark *Rhincodon typus*. This could have been reinforced by the April 2006 cover story from Natural History entitled, “The Biggest Fish, Unraveling the Mysteries of the Whale Shark” (Wilson 2006). Chen et al. (1999) reported that *R. typus* can reach a maximum length of 20 m and a maximum weight of approximately 34,000 kg, but this is not the correct answer to our question. Sharks after all, are cartilaginous, not bony fishes.

Two species, *Arapaima gigas* from the Amazon and *Pangasius gigas* from the Mekong would be good guesses. They are gigantic by most standards. However, these two are both shorter than the oarfish *Regalecus glesne* at approximately 11 m (Eschmeyer et al. 1983) and lighter than the ocean sunfish *Mola mola* at approximately 2300 kg (Novak 1982). So what is the answer?

I hope you consider this a thought question, rather than a trick question. A clue to the answer is the phrase “known to science.” Fossilized remains of *Leedsichthys problematicus* were excavated from a clay pit in Peterborough, England beginning in June 2002. This Middle Jurassic species from the family Pachycormidae was first estimated to have grown to more than 20 m (Martill 1986). Jeff Liston, dig leader for the excavation, conservatively estimates the size of the newest specimen to be approximately 15 meters. This estimate is based on morphometric ratios, and the newly hooded Dr. Liston points out that such an estimate does not really indicate the maximum size to which *L. problematicus* could have grown. Regardless of the exact length, it seems clear that *Leedsichthys problematicus* is the largest bony fish known to science. Congratulations to those who knew the answer or took the trouble to find it!

The Education Section of the American Fisheries Society strives to improve the quality of education for

fisheries students and scientists and to promote exchange of education information, techniques, and materials among educators and among educational institutions. The Section also recognizes the importance of continuing education and professional development. If you embrace these goals, perhaps you should consider becoming a part of the Education Section.

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Artist’s impression of *Leedsichthys problematicus* (from <http://www.bbc.co.uk/science/seamonsters/factfiles/closeup.shtml?leedsichthys>).

Second Call for Papers and Session Chairs, Alaska Chapter 34th Annual Meeting: “Fisheries Under Pressure: Development, Environment, and Climate in the 21st Century”

Bert Lewis

Sessions and presentations are being planned for the Annual Conference of the Alaska Chapter of AFS to be held November 14–16, 2007 in Ketchikan. We are still assembling the program, so if you have ideas for session topics or continuing education courses, or are interested in leading a session, please contact Bert Lewis.

If you have a presentation for a specific session, contact the chair soon to ensure that you have an opportunity to present. Titles and abstracts should be submitted by October 1, 2007. Abstracts should be a single paragraph not more than 300 words in length and follow the format described in the AFS guide to authors. Abstract formatting guidelines are available on the Chapter website at <http://www.fisheries.org/units/afs-ak/meetings/2007/meet2007.htm>. Registration forms will be available online in August and the final lineup of symposia and continuing education courses will be announced in the October *Oncorhynchus*. Please contact Bert Lewis with questions about this year's meeting.

The Plenary Session will include guest speaker Denis A. Wiesenburg, Dean of the School of Fisheries and Ocean Sciences at the University of Alaska Fairbanks. Dr. Wiesenburg has broad experience in oceanographic research, academic program development, and marine policy. During his career, he has worked for the U.S. government and in academia both as a research scientist and as a tenured faculty member. We look forward to his presentation and welcoming him to our organization. Ray Troll and his band, “The Rat Fish,” based in Ketchikan, will add some spice to the socials. A list of oral sessions planned to date follows, there will also be a poster session.

Data Analysis in Fisheries: Turning Data into Wisdom

Hal Geiger, 7655 North Douglas Hwy, Juneau 99801, Phone: 586-1845, email: geiger@alaska.com.

Aquaculture and Fisheries Enhancement

Gary Frietag, Southern Southeast Regional Aquaculture Association, Inc. 14, Borch Street, Ketchikan 99901, Phone: 225-9605, email: garyf@ssraa.org.

Salmon and Trout Ecology

Jeff Adams, Fisheries and Habitat Restoration, U.S. Fish & Wildlife Service, 101 12th Ave Room 110, Fairbanks, 99701-6237, Phone: 456-0218, email: Jeff_Adams@fws.gov.

Commercial Fisheries Management

Bert Lewis, Alaska Department of Fish and Game, Box 669, Cordova 99574, Phone 424-3212, email: bert.lewis@alaska.gov.

Sport Fish Management

Brian Marston, Alaska Department of Fish and Game, Box 669, Cordova 99574, Phone 424-3212, email: brian.marston@alaska.gov.

Contributed Papers

Andy Piston, Alaska Department of Fish and Game, 2030 Sea Level Dr. Suite 205, Ketchikan 99901, Phone: 225-9677, email: andrew.piston@alaska.gov.

Fairbanks Student Subunit Activities

Scott Ayers

The Fairbanks campus group of the Student Subunit of the Alaska Chapter would like to share some notable highlights of our activities from this past year. We participated in the Alaska Statewide High School Science Symposium (ASHSSS). This is a University of Alaska outreach program in support and celebration of secondary students conducting original scientific research, usually with the guidance of a mentor. Students whose papers are accepted for competition present the results of their work at a symposium in a manner similar to that of a professional conference. The ASHSSS is a regional event with winners from seven categories going on to participate in the 45th National Junior Science and Humanities Symposium, in Huntsville, Alabama. The Fairbanks Student Chapter presented an award for Best Aquatics Paper and assisted with judging some of the presentations. This was the third year that we have attended ASHSSS and we plan to continue this tradition in the future.

Kaitlyn Mead, of West Valley High School, and Linda Junge, of Mount Edgecombe High School, split the award for Best Aquatics Paper as judged by our Fairbanks

Student Subunit judges. Kaitlyn, a graduate this year, presented her work entitled: “An Adventure into the Stomach of Northern Pikes.” She plans to attend UAF in the fall, pursuing a degree in Biological Sciences. Kaitlyn's mentors were Brendon Scanlon and Eric Anderson of ADF&G. Linda, who has one remaining year of high school, presented her work entitled: “Immunogenetics of the Major Histocompatibility Complex in Humpbacked Whales (*Megaptera novaeangliae*).” She plans to attend college after she graduates, but may defer for a year to hike the Appalachian Trail. Linda's mentor was Dr. Marissa Chelius of Sheldon Jackson College. Both students received a \$100 cash award and a one-year student membership to AFS. The Alaska Chapter assisted the Fairbanks Student Subunit in sponsoring this award. They generously agreed to pay the cost of the student memberships and a portion of the cash award.

The Fairbanks Student Subunit also sponsored a series of seminars and a workshop this spring by hosting Michael Fraidenburg at the University of Alaska Fairbanks campus.

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Juneau Subunit Hosts Student Symposium

Lisa Kamin

The Juneau campus group of the Student Subunit of the AFS Alaska Chapter held their annual Student Symposium at the University of Alaska Southeast campus on April 4th, 2007. This was the 11th year that the symposium has been held. The symposium is intended as an opportunity for students to present the results of their theses and other projects in front of an informal crowd of peers. It is also designed to provide constructive reviews of the presentations by fisheries professionals. Subunit officer Katie Palof provided opening remarks which were followed by 10 student presentations in front of a 50-member audience comprised of staff from the University and various government agencies, as well as other students. Presentation topics included: outbreeding depression in coho salmon, estimation of age-specific migration in walleye pollock, catchability of giant Pacific octopus, demographic analysis of spiny dogfish, the effects of food deprivation on hatchery-produced salmon smolts, the future of Chilean salmon aquaculture, Seward Peninsula sockeye smolt age, growth and productivity, and artificial reefs



Scott Ayers, AFS Alaska Chapter, Student Subunit President, with Kaitlyn Mead (photo left) and Linda Junge (photo right)—winners of the Alaska Statewide High School Science Symposium.

in Southeast Alaska.

This year's Best Student Presentation Award was given to Derrek Faber for his presentation entitled: "Rising Land—Falling Fishery: The effects of glacial recession and subsequent land rebound on East Alsek River sockeye salmon (*Oncorhynchus nerka*) in Glacier Bay National Park and Preserve, Alaska." The runner up was Luke Neraas for his presentation entitled: "Directly comparing the ability of demographic and genetic estimators of abundance to monitor small sockeye salmon (*Oncorhynchus nerka*) populations." Appreciation is extended to the fisheries professionals that agreed to evaluate the student presentations! We are also proud to announce that the School of Fisheries and Ocean Sciences has funded a perpetual plaque which will hang in the Juneau Center of the School of Fisheries and Ocean Sciences office to commemorate previous winners of the Student Symposium. For additional information, contact Lisa Kamin at l.kamin@uaf.edu. 🐟



AFS Juneau Student Subunit President Lisa Kamin presents a perpetual plaque in honor of the winners of the annual AFS Student Symposium to Bill Smoker, Director of the Fisheries Division.

Thank You Letter from the Recipient of the 2nd Annual Molly Ahlgren Award

Excerpted from a letter by Christian Anderson

My name is Christian Anderson and I wanted to thank you personally for the Molly Ahlgren scholarship. I am honored to receive this prestigious award and hope that I can carry on the same passion for science that Molly Ahlgren exemplified during her career at Sheldon Jackson College. I never had the pleasure of knowing Molly on a personal level, but I am told by others that she was well-respected and loved marine biology.

I was raised on the rivers, lakes and oceans of the Pacific Northwest—in the evergreen state of Washington; it is here that my passion for the environment and the aquatic life it sustains led me to the study of fisheries. Some of my earliest recollections are of steelhead fishing on the beautiful rivers that meander through this magnificent state and its forested land.

I joined the U.S. Coast Guard at twenty-one and met my wife of four years in Sitka, when I was assigned to the Air Station there. I served six years of active duty and have four years of reserve duty. After I was honorably discharged, I married my wife, Irene, and moved to Hydaburg—where she began her teaching career. Irene teaches combined grades of second, third and fourth. Living in a rural village gave me the opportunity to go back to school via distance education; I am currently a student at Sheldon Jackson, where I am pursuing a Bachelor's degree in Environmental Science with a fisheries emphasis.

Receiving the Molly Ahlgren Scholarship is an honor and I will do the best I can to uphold Molly's passion and devotion to the sciences. This scholarship has been a blessing, relieving some of the stress associated with my tuition costs and improving the financial situation that my wife and I are in as a result of both having college debt. I am very grateful for being recognized and hope to continually exhibit the same enthusiasm that Molly Ahlgren had for the sciences. 🗨️



Pictured, from left are: Hal Geiger, Alaska Department of Fish and Game; Christian Anderson, recipient of the 2nd Annual Molly Ahlgren Award; Dr. Keith Cox, Sheldon Jackson Fisheries Professor; and The Rev. Dr. David Dobler, President of Sheldon Jackson College.

Fairbanks Student Subunit Activities, continued

Michael, a 30-year veteran of the Washington Department of Fish and Wildlife, runs Dynamic Solutions Group, LLC, a national consulting firm, and is the author of the forthcoming book "Intelligent Courage: Natural Resource Careers That Make a Difference."

In the week that he spent with us, Michael led discussions on creating careers that make a difference, and conducted a

project planning boot camp. The Fairbanks Student Subunit would not have been able to bring this speaker without the help of the School of Fisheries and Ocean Sciences, the Institute of Arctic Biology, the Graduate School, and the Associated Students, all of UAF. Other major contributors were the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service. 🗨️

New Books Available from AFS

Partnerships for a Common Purpose: Cooperative Fisheries Research and Management



Based on a September 2005 Sea Grant-sponsored AFS symposium, this book presents case studies, empirical research, and practical advice on innovative techniques used by partners working on cooperative fisheries research and/or management programs.

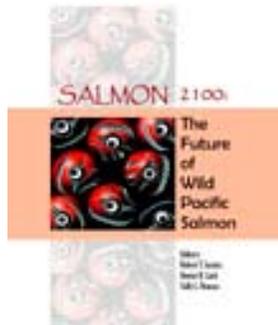
In addition to keynote speakers, the program incorporated panels consisting of an industry representative, a manager, a scientist, and a community participant. This format offered a broad range of perspectives, with panelists and keynote speakers selected for their many years of expertise and first-hand experience. Participants discussed lessons learned, characteristics of successful programs, and future opportunities.

This book will be a valuable resource for fisheries scientists, managers, fishermen, and other stakeholders interested in cooperative strategies for promoting effective fisheries management.

Salmon 2100: The Future of Wild Pacific Salmon

Restoring wild salmon to the Pacific Northwest is a daunting challenge. In this innovative book, 36 salmon scientists, resource managers, and policy experts identify realistic options to restore and sustain wild salmon runs in California, Oregon, Washington, Idaho, and southern British Columbia through this century.

The policy prescriptions offered are candid, sometimes uncomfortably radical, and occasionally sobering. Most authors conclude that major, sometimes wholesale

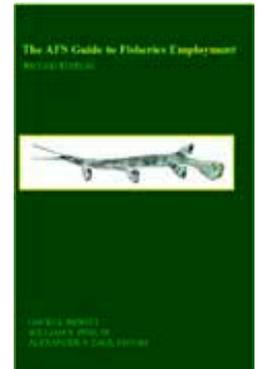


modification of core societal values and priorities will have to occur if significant, sustainable populations of wild salmon are to be present in the region through 2100.

This work will be appreciated by those involved in the policy and science of salmon recovery, as well as by nonexperts who care about the resource.

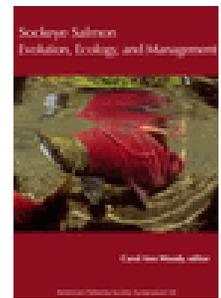
AFS Guide to Fisheries Employment Second Edition

This updated handbook provides education, employment, career advancement, and professional development guidance to fisheries students and professionals. It includes practical advice on building undergraduate skills, designing an effective resume, and pursuing graduate studies. In 15 chapters, experienced fisheries professionals discuss fisheries careers with State and Federal agencies, academia, cooperative research units, nongovernmental organizations, and private consultants. The book also examines foreign employment, equal opportunity issues, things to know about assuming administrative positions, and how AFS can help individuals become fisheries professionals.



Sockeye Salmon Evolution, Ecology, and Management

The importance of sockeye salmon *Oncorhynchus nerka* to commercial and subsistence fisheries around the Pacific Rim has led to over a century of research on their evolution and ecology. This volume compiles 12 manuscripts or extended abstracts from the 2005 symposium "Sockeye Salmon Ecology, Evolution, Life History, and Management" in Anchorage, Alaska. Exciting work in all four major themes is included. 🐟



Western Division AFS, Eugene Maughan Graduate Student Scholarship

Applications for Western Division graduate-level student scholarships are now being solicited. This scholarship program provides up to \$3,000 annually in scholarships to masters or doctoral students in the general area of fisheries science with one to three awards to individual students. Beginning in 2002, the Sustainable Fisheries Foundation established the William Trachtenberg Memorial Scholarship Fund, which augments the Western Division scholarship program. This fund provides up to \$600 annually to a graduate-level student conducting studies on fisheries sustainability. Applications for the Western Division scholarship program will automatically be considered for the Sustainable Fisheries Foundation scholarship program as well. An award committee of five fisheries scientists from the Western Division will make the decision regarding the award of scholarships. The application package should be

sent (postmarked) no later than August 15, 2007 to: Bob Gresswell, Western Division Scholarship Award Committee, USGS-NRMSC, 1648 S. 7th Ave., Bozeman, MT 59717, phone 406-994-7085, bgresswell@usgs.gov. Instructions are on the website at <http://www.wdafs.org/>. 🐟

Award Nomination Forms

A reminder that nominations for the Meritorious Service, Chapter Service and Almost Darwin Awards and the Wally Noerenberg Award for Fishery Excellence must be submitted by July 31, 2007 to be considered for this calendar year.

For the award nomination form, see the website at <http://www.fisheries.org/units/afs-ak/>.

Meetings and Events

Alaska Chapter of the American Statistical Association Annual Meeting

July 24–26, 2007: This meeting will be held in Anchorage and will consist of a two-day short course taught by Dr. George Casella, followed by a day of member talks and a short business meeting. Please visit the website at <http://www.amstat.org/chapters/Alaska/> for further information.

Ecological Society of American and Society for Ecological Restoration Joint Meeting

August 5–10, 2007: “Ecological Restoration in a Changing World” will be held in San Jose, California. The meeting website is located at: <http://www.esa.org/sanjose/>.



Wild Trout IX

October 9–12, 2007: This international symposium with its theme of “Sustaining Wild Trout in a Changing World” will be held in West Yellowstone, Montana. The website is at <http://www.wildtroutsymposium.com/>.



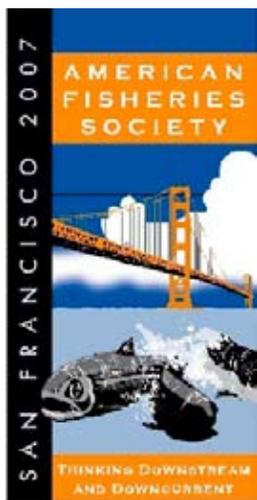
Mid-Year Meeting October 14-17, 2007

La Serena - Coquimbo, Chile



TCS

October 14–17, 2007: The mid-year meeting of, organized by the Universidad Católica del Norte will be held in Coquimbo, Chile. The website is at <http://tcs2007.sede.ucn.cl/index.htm>. For more information, email TCSchile2007@ucn.cl.



American Fisheries Society 137th Annual Meeting

September 2–6, 2007: The 2007 annual meeting of the AFS parent society is being co-sponsored by the Cal-Neva Chapter and Western Division. The theme is “Thinking Downstream and Down Current: Addressing Uncertainty and Unintended Consequences in Fish and Fisheries.” The meeting will be held in San Francisco, California. The program, which includes 61 separate symposia, is currently on the website at <http://www.fisheries.org/sf/>.



PICES 16th Annual Meeting

October 26–November 5, 2007: Hosted by Fisheries and Oceans Canada, the theme of this meeting is: “The changing North Pacific: Previous patterns, future projections, and ecosystem impacts.” It will be held in Victoria, British Columbia. The website is at <http://www.pices.int/meetings/annual/PICES16/background.aspx>.



ICES Annual Meeting

September 17–21, 2007: The Annual Meeting of the International Council for the Exploration of the Sea, will held in Helsinki, Finland. Please visit <http://www.ices.dk> for more information.

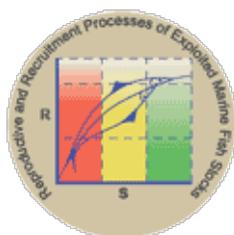


ICESCIEM

International Council for the Exploration of the Sea
Conseil International pour l'Exploration de la Mer

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. Visit the website at <http://www.nafo.int/symposium.html>.

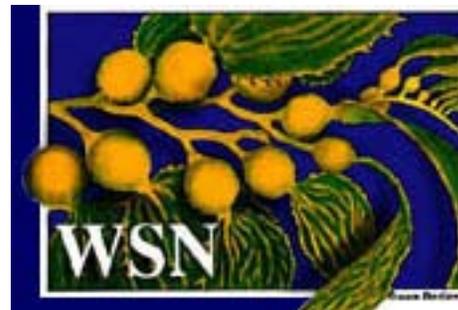


Estuarine Research Federation Meeting

November 4–8, 2007: The ERF 2007 meeting will be held in Providence, RI., visit <http://erf.org/erf2007/>.

WSN

November 8–11, 2007: The annual meeting of The Western Society of Naturalists will be held at the Marriott Ventura Beach hotel in Ventura, California. Abstract submission for the meeting will open in September and the website is at <http://www.wsn-online.org/>.



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://www.fisheries.org/afs/> 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
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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)

¹ Prices are for AFS members only ² 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 AFS¹ N.A. Journal of Fisheries Management¹
 \$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
of Aquaculture² Animal Health¹
 \$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.