



THE TRIBUTARY

A Newsletter of the

Western Division of the American Fisheries Society

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2010 AFS Western Division Annual Meeting



“The Future of Aquatic Resources in the West: Science, Management, and Politics”

April 19—23, 2010
Salt Lake City, Utah

On behalf of the Utah Chapter, we invite you to join us in Salt Lake City, April 19 – 23 for the 2010 Western Division of the American Fisheries Society Annual Meeting. The meeting will be held at the Downtown Radisson Hotel and adjacent Salt Palace Convention Center.

The theme of the meeting, “The Future of Aquatic Resources in the West: Science, Management, and Politics,” is meant to highlight the multiple stakeholders/demands placed on aquatic resources; how these demands drive the direction of scientific inquiry and management; and the political interaction that results. The Western US is home to the five driest states in the nation and three of the top five states with the fastest population growth. The West’s aquatic resources are facing increasing demands resulting in intersections between science, management,

and politics.

Early registration rates are \$125 for student members and \$315 for AFS members. After March 1, 2010 registration rates increase to \$175 for student members and \$395 for AFS members.

Contributed oral presentations and poster abstracts must be received by March 1, 2010.

Please see the call for abstracts on page AAA.

See <http://utahafs.org/wdafs2010/> for more information.



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A New Newsletter Editor

Beginning with this issue, the Western Division newsletter has a new editor. Travis Neebling, a fisheries biologist with the Wyoming Game and Fish, has taken over for Kajsa Stromberg. I would like to thank Kajsa for all her assistance with the transition and look forward to serving as your newsletter editor. All future submissions, requests, or recommendations for the newsletter should be sent to:

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President's Hook

For my first president's hook, I felt the pressure to be inspirational, to make a big entrance. However, I am just not that inspired at the moment, so the entrance may be less than stellar. I am brooding over the effect that the recession is having on the discussions of resource use. This is nothing new. Whenever an environmental modification action seems less than palatable to a proponent, the proponent often cites "economic pressures" as a reason for letting the environmental requirements slide. As resource managers, we know that this is short-term thinking and that the slide often snowballs into an avalanche down the road when the proponent has extracted the resource or completed the development. The long-term value of the associated resources is in their conservation and maintenance, particularly in the case of ecosystem or population resources such as the ocean or other aquatic communities. We all understand this and can get quite animated making our case to others in our professional clan. However, our clan is not the entity who gets to make many of the resource decisions in the end. Therefore, if we want to achieve our goal of conservation we must learn to communicate our reasoning and make it stick. In my parallel life as an educator, I am often involved in discussions with new teachers about what teaching is. Teaching is not lecturing the finer points of what you know in terms that you are comfortable with but that are meaningless to your audience or class. Teaching is imparting information. My Encarta Dictionary provides the following definitions: impart: to communicate knowledge, to teach. Teach: to impart knowledge or skill via instruction or example 2. to bring understanding of something to someone. I like the last one best. If we want others to support our approach to our work we must bring them understanding. The proponents of "economically necessary" actions are often masters of this. They bring the understanding that if gas prices go up, my take home pay will go down. They connect their action to the public's realm of reference. As biologists we must remember how to do this as well. If we privatize that shoreline, I cannot visit it with my friends or walk my dog there. If we mine the slopes that feed into the Alaskan coast, well, I may never get to see a real Alaskan salmon. Personal connections make very convincing arguments and often aid understanding on several levels. I guess the message is to remember to connect with those who use the resources we study and attempt to conserve.

On a lighter note: Introducing the **Cheap Fish Tricks Column**: At the Albuquerque meeting, I had lunch with Pam Spoonholtz and we were trading our best cheap fish field tricks. In the spirit of "doing more with less" I would like to ask folks to submit ideas for their best cheap fish trick to be featured in our newsletter. Send your ideas to me and I will select one or two to put in each newsletter. I will happily buy the selectees a WDAFS hat as their reward- one per selected idea please (plus we need to sell those hats). Here is this month's idea: Super cheap live car: You can use a pop up mesh laundry hamper (available at many dollar stores and other department stores for less than \$10) as an inexpensive live car for holding fish while you are working them up. I carry one with me folded up and then pop it open and place it in a quiet part of the stream with a smooth rock in the bottom to hold it in place. The mesh allows water to flow through and the whole thing is light and easy to pack in. The mesh is fine enough to hold small minnows and reasonably tough. Hope you can use the idea.

Leanne Roulson
WDAFS President

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Call for Abstracts for the 2010 WD Annual Meeting

Contributed Oral and Poster Abstracts

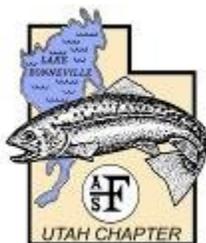
The Program Committee for the 2010 WDAFS Annual Meeting invites abstracts for contributed oral presentations and posters. The meeting will include a poster session to encourage discussion between poster presenters and attendees. Contributed oral presentations and poster abstracts must be received by March 1, 2010. All submissions must be made by using the online abstract form, which is available on the 2010 Western Division meeting webpage (<http://utahafs.org/wdafs2010>).

When you select the "Call For Papers" option on the 2010 Western Division meeting webpage, you will be re-directed to a 'SurveyMonkey.com' page where you can submit your abstract. List all authors using their first and last names along with affiliations. Separate author names and their affiliation with an @ symbol. When entering the title, be brief but descriptive and avoid using acronyms or scientific names in the title unless the common name is not widely known. Indicate the presentation format (poster or oral) and if the presentation should be placed in the student or professional category. Abstracts are restricted to 300 words and should summarize the findings. All presenters will receive an e-mail confirmation of their abstract submission and notification of the time and place of their presentation in March.

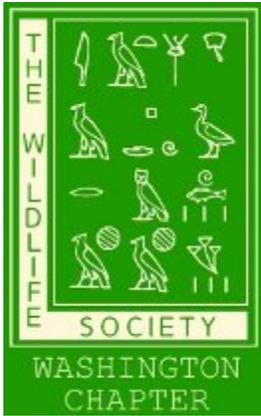
General topics for contributed papers and posters include but are not limited to:

Aquatic Nuisance Species, Bioengineering, Communities and Ecosystems, Community Fisheries, Contaminants and Toxicology, Cutthroat Restoration, Education, Fish Culture, Fish Health, Fish Conservation, Fish Passage and Barriers, Freshwater Fish Ecology, Freshwater Fisheries Management, Genetics, Habitat and Water Quality, Human Dimensions, Illicit Fish Introductions, Larval Fishes, Marine Fish Ecology, Marine Fisheries Management, Native Fishes, Invasive Species, Physiology, Policy, Population Dynamics, Salmonid Restoration, Species Specific (i.e., Percids, Sturgeon, etc.), Statistics and Modeling, and Stream Restoration. A special Student Symposium is scheduled to provide an opportunity for students to present their research and receive an objective critique by fisheries professionals. The Best Student Oral and Poster presentations will receive a cash award. While students are encouraged to participate in the Symposium, it is not required.

Late submissions will not be accepted. Please note that the WDAFS and the UT AFS Chapter do not waive registration fees for symposium, workshop, or contributed sessions participants. All presenters and meeting attendees must pay registration fees. Registration forms will be available on the 2010 Western Division meeting webpage (<http://utahafs.org/wdafs2010>) in early January. Register early to take advantage of a cost savings. Late registration will start March 2, 2010.



Washington Chapter of The Wildlife Society and Society for Ecological Restoration Northwest Chapter Meeting



"Creating Thriving Rural and Urban Communities through Ecological Restoration"

The Washington Chapter of The Wildlife Society and Society for Ecological Restoration Northwest Chapter will be hosting a joint conference. Conference tracks will include technical sessions, workshops, field trips, and special presentations focused on promoting the preservation, conservation, enhancement, and restoration of urban and rural ecosystems, including the wildlife of the Pacific Northwest.

More information is available at:

http://www.ser.org/sernw/Conference_2010.asp

February 16—19, 2010

Marysville, Washington



Ecological Interactions between Wild & Hatchery Salmon

Please join State of the Salmon for Ecological Interactions between Wild & Hatchery Salmon — the first international effort to explore the scale and magnitude of the ecological effects of hatcheries, identify important gaps in our knowledge and work towards resolving key issues.

The agenda and expected outcomes from the conference are being shaped by a steering committee composed of agency and academic experts from the United States, Canada, Russia and Japan.

The conference will feature:

- Presentations from throughout the North Pacific
- A special welcoming reception at the Jean Vollum Natural Capital Center
- Active dialogue facilitated among participants
- A panel discussion focused on managing risk to wild salmon

Learn more online at:

www.stateofthesalmon.org



Advances in the Population Ecology of Stream Salmonids



International Symposium

To avoid late fees, register before 1
March 2010
Abstracts due February 1, 2009

May 17—21, 2010

Luarca,
(Asturias) Spain

The cultural, societal, economic, ecological, and scientific importance of stream salmonids has resulted in thousands of papers published over the last 150 years. However, during the last several decades human interventions such as stockings, introductions, and translocations of salmonid species coupled with severe damage to stream habitats through construction of dams and weirs and canals, pollution, and a variety of landscape changes have reduced the distributional ranges of many salmonid species, while other species have declined to alarming

numbers or are threatened. Further, the introductions of salmonids into exotic habitats have resulted in serious damage to native faunas.

Despite a long tradition of research and management of salmonids, the question arises whether the knowledge acquired to date is sufficient not only to understand the complex ecology and overwhelming diversity of life-history strategies exhibited by stream salmonids but also to offer solutions to the numerous conservation issues currently faced by all countries that are home to stream salmonids.

This meeting will provide an international forum to:

- Update our knowledge on the population ecology of stream salmonids,
- Explore how we move from scientific knowledge to conservation principles so that salmonids might continue their successful evolutionary course,
- Evaluate how we may mitigate human impacts on salmonid populations, and
- Mitigate the impacts of introduced salmonids on native faunas wherever they have been introduced.

In addition, there will be a special workshop (22 – 23 May, 2010) on evaluating the best way to analyze long-term mark-recapture projects based on collection and evaluation of both genotype (microsatellite) data and indices of salmonid performance (survival, growth, parentage, breeding systems, etc).

For further information check out the conference website, or contact Phaedra Budy, phaedra.budy@usu.edu (North America Co-Chair)

www.symposiumsalmonids.com or contact: info@symposiumsalmonids.com



34th Annual Larval Fish Conference

34th Annual Larval Fish Conference
May 30–June 3 2010



Larval Fish Biology in the 21st Century:
Responding to a changing environment

UNT
UNIVERSITY OF
NORTH TEXAS

www.larvalfishcon.org



- Larval Fish Ecology and Conservation of Native Fishes in the American Southwest
- Larval Fish Ecology and Recovery of Missouri-Mississippi 'Big River' Fishes
- Freshwater Larval Fish Ecology, and
- Descriptions and Identification

Learn more online at: www.larvalfishcon.org

“Larval Fish Biology in the 21st Century: Responding to a Changing Environment”

This year's conference will be held at the Fort Marcy Hotel Suites in Santa Fe, New Mexico. The hotel is located amidst nine acres of natural and landscaped grounds and gardens and is just a four-block walk from the historic downtown Santa Fe Plaza.

Early registration and abstract submission opens on January 4, 2010, and closes on February 28. Late registration ends on May 30.

Planned theme sessions include:

- Integrative Developmental Systems: Where Developmental Biology, Physiology and Ecology Meet
- Developmental Programming and Ontogeny in Fish
- Reproductive and Early Life History Consequences of a Changing Environment

May 30—June 3, 2010

Santa Fe, New Mexico

Coastwide Salmonid Genetics Meeting



You are invited to attend the 2010 Coastwide Salmonid Genetics Meeting! Please join us for a stimulating meeting with all of your top colleagues.

- Located at Grove Hotel in rockin' downtown Boise!
- Proceedings planned to be published in special issue of Transactions of the American Fisheries Society
- Student travel scholarship to be provided by AFS Genetics Section
- Mug at registration entitles holder to free beer at Banquet!
- Finish with a rafting trip on the Payette River!

http://www.idahoafs.org/documents/coastwide_mtg_announce.pdf

June 2—4, 2010

Boise, Idaho



AFS Western Division Riparian, Watersheds and Habitat Committee

- 2010 Riparian Challenge Call for Entries -

The Riparian, Watersheds and Habitat Committee is seeking entries for the Western Division's 2010 Riparian Challenge Award. The Forest Service, Bureau of Land Management and other conservation agencies or private industries in the region encompassed by the Western Division (thirteen western states, British Columbia, Yukon Territories, Mexico and U.S. Islands and Trust Territories of the Western Pacific), are invited to participate in the Riparian Challenge. Winners will receive the Western Division's Award of Excellence in Riparian Management to be presented at the Western Division Annual Meeting hosted by the Utah Chapter AFS in Salt Lake City, Utah April 19-23, 2010. The purpose of the Riparian Challenge award is to:

- Encourage the Bureau of Land Management, Forest Service, and other conservation agencies or private industry to strive for excellence in riparian and watershed habitat management,
- Encourage agencies to progress in on-the-ground accomplishments which when added together throughout the West, will significantly improve riparian systems,
- Recognize managers and resource specialists for their efforts in maintaining, restoring, and improving riparian and watershed ecosystems.

If you are aware of a project that should be considered, please ask the appropriate USFS, BLM, conservation agency or industry to submit an entry form. Winners will be selected in the following categories (depending on the number of submissions received):

BLM

- Best Resource Area or Field Office

Forest Service

- Best Ranger District

Other (conservation agencies, consultants, or private industry)

- Best Riparian Project

More information, along with a description of the entry format, criteria for evaluating entries, and examples of recent winning entries, please visit:

http://www.wdafs.org/committees/Riparian_Watersheds_Habitat/Riparian_Watersheds_Habitat_comm.htm

Questions concerning the Riparian Challenge and completed electronic entries should be emailed to the Riparian Challenge Committee Chair, Troy Brandt (tbrandt@riverdesigngroup.net, 503-307-8367). Entries are to be submitted by March 1, 2010.

2nd Annual WDAFS Student Colloquium

The 2nd annual WDAFS Student Colloquium was held at Colorado State University on October 22 – 24, 2009. Twenty-nine undergraduates, graduate students, and post-docs from five universities attended: Colorado State University, University of Idaho, Montana State University, Oregon State University, and University of Wyoming.

The colloquium included a welcome social, presentations, and field sampling. Ten presentations were given, including two from undergraduate students. Two PhD candidates judged the presentations and Best Presentation Awards went to Lubia Cajas (University of Idaho) and Lora Tennant (Montana State University), who both received an AFS textbook. Field sampling was conducted on College Lake allowing some of the students to capture and handle their first northern pike.

Next year's colloquium will be hosted by the University of Idaho in Moscow, Idaho, where they hope to continue expanding this event.



Above: Nate Cathcart (BS, CSU) presenting background information.



Above: Brooke Penaluna (PhD, Oregon State) presents her research on cutthroat trout predation and habitat use.

Below: Kris Homel (PhD, Montana State) presents research on spawning patterns of cutthroat trout.



Below: Lubia Cajas (U of ID) presents her research on the more economical side of fisheries and aquaculture.



2nd Annual WDAFS Student Colloquium



Above: Dr. Kurt Fausch and two Idaho graduate students, Kelly Stockton (left) and Lubia Cajas (right) at the welcome social.



Above: Kristen Pilcher (U of ID) and a College Lake northern pike.

Below: Sarah Laske (MS, University of Wyoming) explains Roundtail Chub predation by lake trout and brown trout.



Acknowledgements:

We would like to thank the Western Division of the American Fisheries Society, The Colorado-Wyoming Chapter of the AFS, and the Education Section of the AFS. Thanks also to each subunit and school that sent representatives.



University of Alaska Fairbanks Student Subunit

New UAF AFS officers, Jason Stolarski (president) and Aaron Dupuis (vice president) were elected at the end of the 2008-2009 academic year. Short Alaskan summers combined with often momentous amounts of field work limited the activity of the unit until the start of the 2009 academic year. Laura Guitierrez began the school year by redesigning the UAF AFS logo. After a successful grant writing campaign, we were able to purchase t-shirts and hoodies affixed with our new logo. The apparel has been a hit and bolstered the unit's coffers. We currently have three more grants awaiting decision by UAF student government and other organizations for water bottles, coffee mugs and more apparel.



At our first meeting we showed the film "Running down the man", a documentary about fly fishing for rooster fish in Baja California. Dr. Milo Adkison, associate professor of fisheries at UAF and a member of the independent science committee for the pebble mine, spoke at our second meeting regarding the pebble mine controversy. Following his talk we viewed "Red Gold" the now famous documentary about the proposed Pebble Mine. At our third meeting Martin Schuster, a marine science graduate student gave us an introduction to underwater sampling techniques with plenty of gadgets to pass around the room.

Future events taking place next semester include our annual undergraduate research symposium. This year we plan on extending invites out to the graduate community as well to bolster the number of talks. Last year the best presenter was awarded a trip to the national AFS meeting in Nashville. This year we plan to do the same with smaller awards going to the runners up. Furthermore, depending upon ice out we will also have a burbot fishing trip in the spring.

Prepared by: Jason Stolarski (UAF AFS President)

More information can be found at: <http://www.fisheries.org/units/afs-ak/student/index.html>

Colorado State University Student Subunit

We are currently in the process of finishing our study investigating mercury dilution in sport-fish using our own College Lake. Since 2006, this lake has served as the study site for our ongoing predator study looking at bass and pike, and it has also hosted our annual fishing derby for the past 25 years. The mercury study has already been a poster and presentation at WDAFS and CO/WY AFS meetings, and the WDAFS Student Colloquium. We just received the rest of our data and currently are in the process of writing the paper. This has been a collaborative effort between the DOW, CSU (Jesse Lepak, PostDoc), and CSU-AFS. Everyone involved has the chance to help write the paper and potentially be an author.

In addition to hosting the 2nd Annual WDAFS Student Colloquium this past October, we had a great crew of undergrads, graduate students, and faculty attend the WDAFS meeting in Albuquerque and the CO/WY meeting in Loveland. This year is our second year of working with the City of Fort Collins to assist in monitoring fishes and aquatic species within the city which in turn helps fund our student subunit. Additionally we have had officers assist with DOW fish work in volunteer roles. Our bi-weekly meetings have been very well attended (averaging between 25-30 people) and have had great speakers. See our website for more: <http://warnercnr.colostate.edu/AFS-Home/>

University of Idaho Palouse Student Subunit



The Palouse Unit has been busy this year with exciting and educational opportunities for our members and the Moscow community.

List of Activities (January-December 2009):

Annual Fish Bowl—Undergrads vs. Grads Students touch football game played on the outdoor Kibbie Dome Turf field in the snow. This year, the graduates dominated the field.



ICAFS Annual Meeting

—The Double Tree Boise was the location of the 2009 Annual Meeting with the Plenary Session

entitled: "Hatchery supplementation for fishery conservation: diverse policies and applications". Palouse Unit students volunteered their time in exchange for free attendance to the meeting with tasks including: A/V technical coordination, moderating, judging and fundraising assistance. Students also hosted a student/professional pizza mixer where students could gain access to professionals in a relaxed environment and ask advice, probe for job opportunities, and meet the leaders in the fishery profession. Furthermore, several students presented paper and poster presentations at the meeting sessions.



Wild Game Feed Annual Potluck and Fundraiser—We had a great turn out once again this year raising a record total of ~\$4500 for our unit. University of Idaho students, faculty, and staff along with members of the Moscow community brought dishes to the potluck style dinner where the theme is "wild game". After endless taste-testing of various game dishes and side fixin's, participants engaged in various fundraiser activities including raffles, silent auctions, live auctions, and a deck of cards raffle featuring an R. L. Winston fly rod. The night was accompanied by live music provided by PUAFS members and a slideshow showcasing the events that transpired since the last game feed.

Paradise Creek Annual Clean-up Event—Each year the Palouse Unit extends a hand to help the Palouse Clear-water Environmental Institute (PCEI) in their efforts to keep Paradise Creek, a natural water feature that snakes its way through campus, free of garbage and pollution. The Palouse Unit has a segment of creek that we are dedicated to protecting and keeping clean throughout the year and this year was no exception.

University of Idaho Palouse Student Subunit



Lake Pend Oreille (LPO) Predator Removal Workshop—Palouse Unit students joined Idaho Fish and Game in the Panhandle Region of Idaho to partake in a unique project set on Lake Pend Oreille, the deepest lake in Idaho and 5th deepest in the U.S. Efforts have been put in motion to remove lake trout, a piscivorous predator that has decimated the kokanee population and ultimately altered the trophic food chain of this very unique lake. Students spent time reviewing a presentation given by Jim Fredricks, Regional Fish Manager Panhandle Region, and Mark Liter, Regional Fish Biologist that encompassed the predator removal program to control and eliminate the lake trout population in LPO. After the briefing, students headed north to Hope, ID where we boarded the commercial gill-netting and trap net fishing vessels. Commercial fishing professionals demonstrated their techniques and effective removal of the lake trout and gave students the opportunity to experience what being a commercial fisherman is all about. Students gained a better understanding of the predator removal program and were able to gain experience learning how to pull and set gill-nets and trapnets.

Extreme Fisheries Workshop @ Magee—Palouse Unit members had the opportunity to network with fisheries professionals from the U.S. Forest Service, Idaho Department of Environmental Quality (IDEQ), and Idaho Fish and Game at this all encompassing workshop that covered several topics related to the fisheries profession including: Fish and amphibian identification, stream hydrology and geomorphology, stream restoration and dynamics, and sediment loading. This workshop took place on the beautiful Coeur d' Alene River and tributaries at Magee Ranger Station in the Coeur d' Alene National Forest.

Red Ives Bull Trout Redd Counts—Palouse Unit volunteers met with U.S. Forest Service fisheries professionals and were trained on how to identify bull trout redds. Sampling took place in various tributaries in the St. Joe River drainage based out of Red Ives Ranger Station.

3rd Annual Sturgeon Fishing Trip—Idaho Fish and Game once again volunteered their time, equipment, and expertise to our members and took them on another fabulous sturgeon fishing trip on the lower Snake River near Asotin, WA. Efforts were coupled with and IDFG initiative where professionals were sampling different hook and line techniques to minimize mortality to young sturgeon and better fisheries practices.

University of Idaho Palouse Student Subunit



2nd Annual Western Division Student Colloquium—Members of the Palouse Unit participated in the WDAFS Student Colloquium hosted by Colorado State University in Fort Collins, Colorado, October 22nd-24th. The Palouse Unit would first like to thank ICAFS for their generous monetary donation which made it possible for us to travel to this meeting. During the meeting, PUAFS members were able to present their research to their peers, engage in hands-on field work, network with fellow students and fisheries professionals, and above all, gain a new appreciation for research being conducted in the western region of our country. The Palouse Unit would like to extend our thanks to the Colorado State University AFS chapter for organizing this educational and entertaining meeting. At the conclusion of the Colloquium, it was decided that PUAFS would host the 2010 Western Division AFS Student Colloquium in Idaho next fall!! This is very exciting for us as a student unit and as young professionals. Thank you once again to everyone who supported this endeavor!!

Guest Speaker Phil Mamer—Phil Mamer, the Fish Pathologist Supervisor for IDFG at Eagle Fish Health Lab in Eagle, Idaho, gave a talk about aquatic nuisance species entitled: "ANS--A LOVE HATE RELATIONSHIP". Topics included IDFG's role in working with ANS and how it impacts their operations and fisheries. It was a presentation about how an IDFG employee may have to think about ANS in their own lives. It was also a great opportunity for people to learn some basics about New Zealand mud snails, and zebra and quagga mussels.

Annual Salmon Bake and Print Auction—This year, we offered a Mark Susinno print silent/blind auction a week before the salmon bake and announced the winner with the highest bid during the salmon bake lunch. Each year, Palouse Unit members contribute side dishes, desserts, and beverages to our salmon bake lunch offered to UI students, faculty and staff. Our advisor, Christine Moffitt, generously donated about 50 lbs. of fresh Chinook salmon to our unit for this event. It is a great fundraiser and a well established tradition that members and the UI community looks forward to every year.



Aquaculture Campus Tour—Jimmy Barron, our aquaculture committee chair set up a couple of tours of the aquaculture facilities on campus. The University of Idaho has four aquaculture facilities all of which have great and interesting projects involving the culture and health of fishes. The tour consisted of viewing the College of Natural Resources cold-water wet lab with species such as steelhead, adult rainbow trout, and New Zealand Mud Snails. Then the tour moved upstairs to the Fish Health and Diagnostics lab where students were briefed on the various fish health projects in progress by CNR faculty and graduate students. Finally, students were taken to the Aquaculture Research Institute's (ARI) Burbot Lab where Jimmy talked about the Burbot recovery program and project.

Monthly Fly-Tying nights—Several members have expressed an interest in the art of tying flies and since we have several people quite capable of hosting such workshops, we decided to have monthly fly-tying nights. Most of the flies that are tied during these nights go towards the "fish-o-flies" live auction item for the annual wild game feed fundraiser in the spring.

University of Idaho Palouse Student Subunit



Boat Project—This year, a staff member at the University of Idaho donated a 14' fiberglass boat, trailer and motor to our unit to be used for fundraising for our unit. This project is unique in that the entire restoration of this boat has been accomplished through volunteer hours of dedicated PUAFS members. The final product will not only be a working manageable boat great for steelhead fishing, but it will also be a symbol of PUAFS: teamwork and camaraderie to accomplish a common goal. That is what our unit is all about, working together as a unit to carry out the mission of AFS and be the flag ship of leadership for other units.

For more information about our unit, please contact Tarah Johnson john3002@vandals.uidaho.edu or visit our website: www.cnr.uidaho.edu/afs

List of Accomplishments (January-December 2009):

Unit Awards:

- 2009 College of Natural Resources "Organization of the Year" Award
- 2009 Western Division AFS "Outstanding Student Sub-unit of the Year" Award
- 2009 National AFS "Outstanding Student Sub-unit of the Year" Award

Member Awards:

- 2009 ICAFS Annual Meeting "Best Paper Presentation—Student Division" Award—Lubia Cajas de Gliniewicz and Rebecca Fritz
- 2009 ICAFS Annual Meeting "Best Poster Presentation—Student Division" Award—Kara Ravenscroft-Ligman
- 2009 ICAFS Undergraduate Scholarship—Attila Felnagy
- 2009 ICAFS TOP Award—Dean Holecek
- 2009 Ted Bjornn Graduate Scholarship—Tarah Johnson
- 2009 PUAFS "Undergraduate of the Year" Awards—Kara Ravenscroft-Ligman and Chris Thornton
- 2009 PUAFS "Graduate of the Year" Award—David Burbank

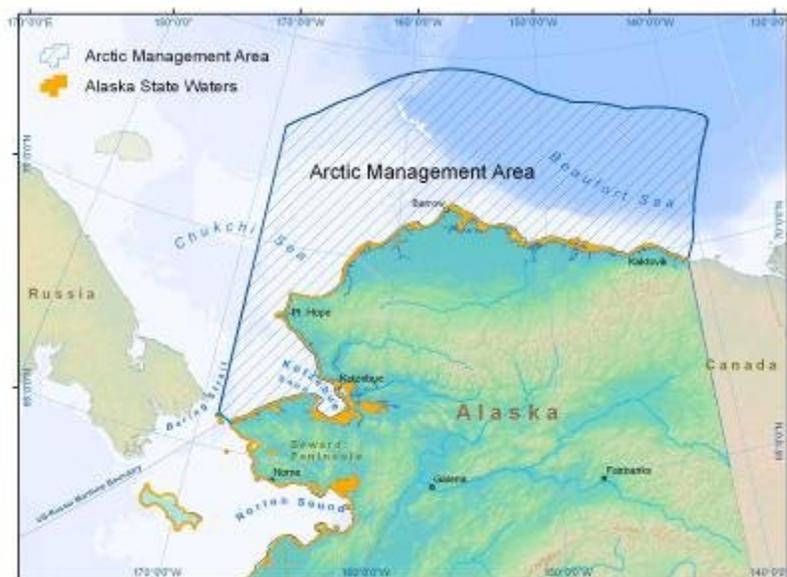
New Fishery Management Plan for the U.S. Arctic

In anticipation of potential future climate change, the North Pacific Fishery Management Council adopted a management plan for the fishery resources in the U.S. Arctic Management Area. This new Arctic Fishery Management Plan was approved by the Secretary of Commerce in August 2009, and will become law December 3, 2009. The Arctic Management Area is all marine waters in the Exclusive Economic Zone of the Chukchi and Beaufort Seas from three nautical miles off the coast of Alaska or its baseline to 200 nautical miles (nm) offshore, north of Bering Strait (from a line between Cape Prince of Wales to Cape Dezhneva) and westward to the 1990 maritime boundary line and eastward to the U.S./Canada maritime boundary (see figure). No significant fisheries exist in the Arctic Management Area, either historically or currently. However, the warming of the Arctic and seasonal shrinkage of the sea ice may increase opportunities for fishing in this region. The Council's new Arctic Plan (1) closes the Arctic to commercial fishing so that unregulated fishing does not occur and until information improves so that fishing can be conducted sustainably and with due concern to other ecosystem components; (2) establishes the fishery management authorities in the Arctic and provides the Council with a vehicle for addressing future management issues; and (3) implements an ecosystem-based management policy that recognizes the resources of the U.S. Arctic and the potential for fishery development that might affect those resources, particularly in the face of a changing climate.

The management structure in the FMP establishes two categories of FMP species: Target Species and Ecosystem Component Species. For each species, the FMP specifies Maximum Sustainable Yield (MSY), status determination criteria of Maximum Fishing Mortality Threshold (MFMT) and Minimum Stock Size Threshold (MSST), and Optimum Yield (OY) as required by the Magnuson-Stevens Fishery Conservation and Management Act and establishes procedures for setting the annual specifications for Target Species including Total Allowable Catch (TAC) levels and for conducting annual stock assessments. The FMP sets a tier system for MSY, Overfishing Levels (OFLs), and Acceptable Biological Catches (ABCs), similar to the Council's existing groundfish and crab FMPs, when or if fisheries develop in the future. OY is derived from reductions in MSY for Target Species based on uncertainty (e.g., lack of knowledge of Arctic fish stocks), costs (e.g., expense to fish in the Arctic), and ecosystem factors (e.g., ecosystem value of Target Species to Arctic marine mammals). The analysis resulted in OY that is a de minimus catch for bycatch in subsistence fisheries (OY=0 for commercial fisheries). Thus by setting OY=0 in the FMP, the Council prohibits commercial fishing in Federal waters of the Arctic Management Area until information is collected with which the Council can begin a planning process for an orderly and sustainable fishery.

More information, including copies of the analysis document and the FMP, is available on the Council's web site at: http://www.fakr.noaa.gov/npfmc/current_issues/Arctic/arctic.htm

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National Marine Fisheries Service Convenes Technical Meeting Regarding the Evaluation of Alternative Marking and Tagging Programs for Hatchery Produced California Fall Chinook Salmon

Southwest Fisheries Science Center of the National Marine Fisheries Service recently convened the first meeting of a workgroup (2-3 November, 2009) to evaluate alternative marking and tagging programs for hatchery produced California fall Chinook salmon. This scientific workgroup was formed in response to a joint request from the National Marine Fisheries Service (NMFS) Southwest Regional Office, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service to the NMFS Southwest Fisheries Science Center (SWFSC) to more thoroughly review the costs, benefits, and risks of alternative marking/tagging systems, including the current tagging system.

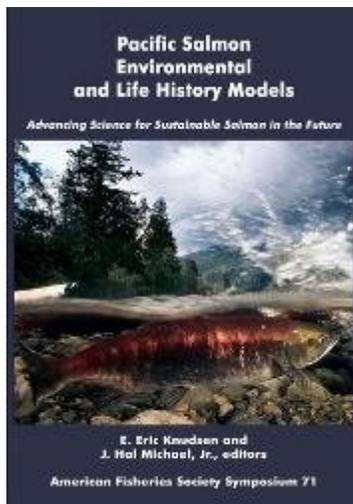
Mass marking and mark-selective fisheries have recently been proposed as a basis for an alternative management system for fall Chinook salmon in California. The possible benefits that would accrue from the proposal include improved genetic fitness of hatchery broodstock and natural spawning populations, and significantly increased overall harvest and fishing opportunity with decreased fishing mortality on ESA-listed and unmarked stocks. However, many questions and concerns have been raised about this proposal regarding the certainty of these benefits accruing, the unintended consequences that could occur with implementation, and the costs of such a program. Other marking/tagging system proposals have also been put forward that promise certain benefits over the current system.

The SWFSC accepted the request and charged the director of the Fisheries Ecology Division with organizing and executing the process. A steering Committee was formed of designees from the requesting agencies and the American Fisheries Society (Churchill Grimes and Thomas Williams - NMFS SWFSC Fisheries Ecology Division, Alice Low - California Department of Fish and Game, Jim Smith - US Fish and Wildlife Service, and Don Jackson - American Fisheries Society). Workgroup members include Pete Bisson (US Forest Service), Don Campton (US Fish and Wildlife Service), Brad Cavallo (Cramer Fish Sciences), Scott Hamelberg (US Fish and Wildlife Service), David Hankin (Humboldt State University), Dave Hillemeier (Yurok Tribal Fisheries), Steve Lindley (NMFS SWFSC), Michael Mohr (NMFS SWFSC), Melodie Palmer-Zwahlen (California Department of Fish and Game), and Jim Smith (US Fish and Wildlife Service).

Two additional meetings are scheduled for early 2010 and a report from the workgroup is scheduled to be completed by May 2010.



Pacific Salmon Environmental and Life History Models: Advancing Science for Sustainable Salmon in the Future



A new publication from the American Fisheries Society

Many Pacific salmon and anadromous trout populations are in chronic decline. An important aspect of salmon management is an understanding of the factors that drive salmon population production and the ability to predict run sizes. Advanced simulation methods are needed for better describing and understanding the complex interactions between salmonids and their environment and improved decision-making about the effects of human activities on their productivity.

This book presents recent progress in modeling tools that have practical application for estimating full production capacity, determining appropriate harvest levels, and providing information essential for habitat remediation.

The retail price is \$69.00 (\$48.00 for AFS members) and can be purchased at:

<http://www.afsbooks.org/54071P>

A special thanks goes out to the AFS Divisions and Chapters that sponsored this publication including:

The WA-BC Chapter, the Western Division, the Cal-Neva Chapter, the Alaska Chapter, the Oregon Chapter, and the Idaho Chapter.

New Website Available to Help Stop Illegal Introductions

Illegal introductions of aquatic organisms are a problem worldwide. These introductions are a leading cause of range expansions of invasive species. Even the illegal movement of fish within their native range can jeopardize recipient fish communities through the introduction of disease and aquatic nuisance species that are hitchhiking with illegally stocked fish. Mitigating the effects of an introduced species and catching the culprits are often difficult or impossible. Thus, preventing illegal introductions should be a high priority for fisheries professionals and resource management agencies.

A new website devoted to the illegal stocking problem is available at <http://stopstocking.cowyafs.org/>. If you are concerned about illegal stocking or simply want to learn more about the issue please visit the website. We are looking for feedback from professionals, soliciting outreach materials, and we are seeking to expand the geographic coverage of our "expert network".

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About the Tributary

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About the American Fisheries Society

The mission of the American Fisheries Society is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.

<http://www.fisheries.org>

About the Western Division of the American Fisheries Society

Established as the first Division of the [American Fisheries Society](#) in 1948, the Western Division now includes [Chapters](#) from thirteen western states, British Columbia, Yukon Territories, and U.S. Islands and Trust Territories of the Western Pacific. Our members represent a tremendous array of fisheries workers involved in all aspects of the fisheries profession. The collective diversity and expertise of Western Division members is the basis of an intimate and unparalleled familiarity with fisheries resources and issues within our geographic region. Division objectives are to provide a forum for exchanging technical and policy information, promote understanding by regional, Federal, and state policy-makers of the nature and extent of fishery matters of concern to the membership, facilitate timely exchange of information to chapters and the general membership, and provide a vehicle for the active participation of individual members in Society business and professional activities.

<http://www.wdafs.org>