



# THE TRIBUTARY

A Newsletter of the

Western Division of the American Fisheries Society

Volume 38, Number 1

February 2014

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## 2014 Meeting in Mazatlán

The Western Division of the American Fisheries Society is proud to announce that the 2014 Annual Meeting will be held in **Mazatlán, Mexico**. The meeting theme is 'Rethinking Fisheries Sustainability – The Future of Fisheries Science'. The meeting will be held at the El Cid Convention Center from **April 7—11, 2014**. The primary language for this meeting is English.

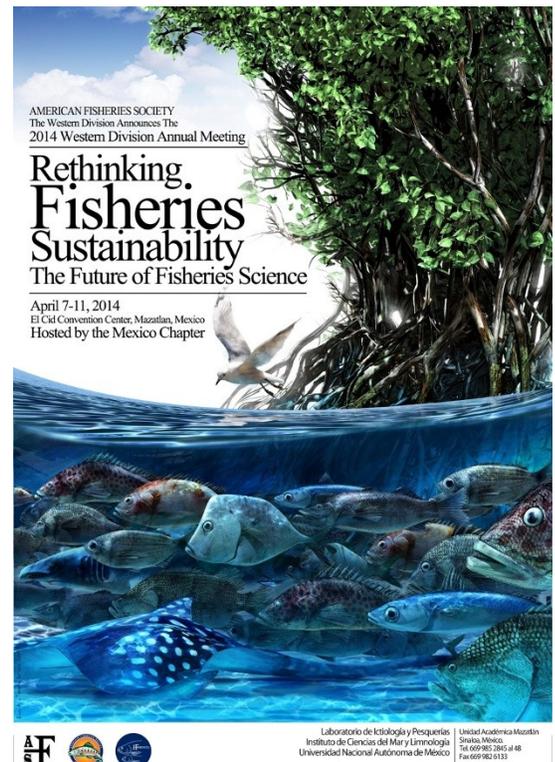
In conjunction with the meeting, The Fisheries Conservation Foundation and Ecologists without Borders have organized the **2nd International Symposium on Mangroves as Fish Habitat**, the Mexican Society of Cartilaginous Fishes (SOMEPEC) has organized the **6th National Symposium of Sharks and Rays**, and the Universidad Nacional Autónoma de México Student Subunit is hosting the **5th Annual WDAFS Student Colloquium**. There will also be symposia on:

- Native Trout of Western North America: where are we 20 years later?
- Challenges of invasive Northern Pike in the West: threats and management options
- Emerging interactions of energy production on fisheries in the Americas: technologies and methodologies to promote sustainability
- Globalized Fisheries
- Fish barriers for conservation: from design to monitoring and lessons learned
- The state of rocky reefs in the Gulf of California: how much have we fished them and how can we recover their productivity?
- Emerging opportunities for culture of marine fishes in Mexico
- Fate of fish released from fisheries: issues and solutions

We are anticipating that over 400 fisheries professionals from throughout the United States, Canada, Bahamas, Mexico, France, and other countries will be participating in this international conference.

It is not too late to join us. The early registration deadline has been extended to **February 28**. See page 4 for more details on registration, lodging, and continuing education courses, or check out the meeting website at:

<http://wdmeeting2014.wordpress.com/>



## Officers

### President

Pam Sponholtz  
8525 W. 32nd Avenue  
Wheat Ridge, CO 80033  
Phone: (928) 814-8421  
[longfin@infomagic.net](mailto:longfin@infomagic.net)

### President Elect

Hilda Sexauer  
Regional Fisheries Supervisor, Wyoming Game and Fish Department  
432 East Mill Street  
Pinedale, WY 82941  
Phone: (307) 367-4353 ext. 231  
[Hilda.Sexauer@wyo.gov](mailto:Hilda.Sexauer@wyo.gov)

### Vice President

Jim Bowker  
US Fish and Wildlife Service  
4050 Bridger Canyon Road  
Bozeman, MT 59715  
Phone: (406) 994-9910  
[Jim\\_Bowker@fws.gov](mailto:Jim_Bowker@fws.gov)

### Secretary-Treasurer

Travis Neebling  
Fisheries Biologist, Wyoming Game and Fish Department  
3030 Energy Lane  
Casper, WY 82604  
Phone: (307) 233-6410  
[Travis.Neebling@wyo.gov](mailto:Travis.Neebling@wyo.gov)

### Past President

Christina (Tina) Swanson  
Director, Science Center, Natural Resources Defense Council  
111 Sutter Street, 20th Floor  
San Francisco, CA 94104  
Phone: (415) 875-6100  
[cswanson@nrdc.org](mailto:cswanson@nrdc.org)



Young-of-the-year sculpin—about 30 mm, Woods Creek, Snohomish River basin. Photo courtesy of L. Ted Parker, Aquatic Biologist Senior Environmental Coordinator, Snohomish County-Roads Maintenance

## President's Hook

Dear Western Division: This year so far has been filled with all sorts of changes, beginning with big changes in Bethesda and the arrival of our new Executive Director, Doug Austen. I think it is fair to say that everyone is excited about Doug's arrival and some of the new policies he is already implementing. This includes engaging Chapters, Sections, and Divisions in how AFS can better serve them. Doug held a conference call several weeks ago to discuss what AFS can do for us and plans to have more calls in the future. Our current President, Bob Hughes continues to redefine how AFS engages in advocacy; this is something that our Past President Tina is very passionate about and was the subject of the most recent governing board meeting in Kansas City, Kansas.

Now that I am about halfway through my term as President I thought it would be good to highlight some of our Division level accomplishments so far.

- Draft MOU to define Chapter involvement in the Division's Endowment Fund (Travis Neebling)
- Integration into new listserv process under AFS (Dave Lentz)
- Comments submitted on the final watershed assessment for Bristol Bay (Tina Swanson)
- Together with AFS, funded nearly 60 professional and students either wholly or partially at a cost of nearly \$58k to attend the WDAFS meeting in Mazatlán. 75% of the recipients were WDAFS members!!

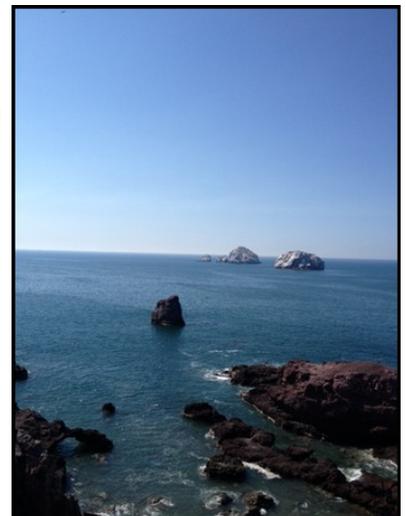
And none of this could be accomplished without the help of the Division's Officers, including Jim Bowker (Vice President), Hilda Sexauer (President Elect), Tina Swanson (Past President), Travis Neebling (Secretary/Treasurer), and our Division committee chairs. The role of the Chapter Presidents is also very important as the Chapters make up the core of the Division. Without the input of the Chapters and their participation on the monthly calls, none of this would have been possible. Finally I'd like to acknowledge our Student Representative Tracy Wendt. Tracy has really taken this position to a whole new level and has reached out to students and student sub units like no one before her. She has a significant role along with our Mexican partners in organizing the Student Colloquium, all while maintaining a full time job and school schedule. As her term is ending soon, she will leave big shoes to fill for whoever is her worthy replacement.

And for those of you, like me are still in the throes of winter, spring is just around the corner which we can all celebrate together with the Mexico Chapter at the Western Division's Annual meeting in Mazatlán, Mexico from April 7—11, 2014. This meeting has been a huge focus of my Presidency so far and I'm honored to be working with so many Mexico Chapter members and Division members who are putting in crazy hours to make this meeting a success. I am very proud of our efforts to establish the funding opportunities to assist students and professionals to attend this meeting. As I mentioned above, the Division and AFS has provided funding nearly 60 people to attend this meeting. This is an unprecedented show of support for a Division level meeting and sends a clear message to the Mexico Chapter about AFS's commitment to partnerships and cooperation.

As a final note, just reminder that deadlines are fast approaching for nominating your coworkers, colleagues and partners for WDAFS awards. These will be awarded during the WDAFS business meeting in Mazatlán in April. Recognition of our efforts in the fishery world is a big deal, so take some time to get your nominations in by March 7th. And do you have an idea or need funding for a smaller project? Well the WDAFS can help!! Small project grants are available that can help get a project started or augment other funding sources. These are due by March 15th. Both of these opportunities can be found on the WDAFS webpage at [www.wdafs.org](http://www.wdafs.org).

Hope to see you all in Mazatlán in April!!!

Best wishes, Pamela Sponholtz, President



## Announcements

### 2014 Western Division Award Nominations – March 7th Deadline

Now is the time to recognize your friends, colleagues, chapters, organizations, and others you feel have gone beyond the call of duty for fisheries management and conservation in western North America. The good news is the application process won't take more than a few minutes of your time, and will mean a lot to both the person awarded, and the fisheries profession. Please take the time and recognize someone special! Nominate now! Nominate often! For more information, please visit: <http://wdafs.org/awards/information-deadlines-applications/>

### Western Division AFS is now on Facebook

Check us out on Facebook at: <https://www.facebook.com/groups/471328552983525/> Or click on the link on the front page of the Western Division website.

### 2014 Western Division AFS Meeting Details

#### Registration

Discounted early registration pricing is available until February 28th. Registration prices are outlined below. To register, please visit: <https://www.123signup.com/register?id=dtznb>

	<b>Early</b>	<b>Late</b>
Regular Parent Society AFS Member	\$260	\$370
Non-AFS Member	\$320	\$430
Mexico Chapter Member	\$150	\$180
Student (not from Mexico)	\$100	\$120
Mexico Student	\$60	\$80
One-day Registration	\$180	\$220
One-day Registration for Student (includes Student Colloquium-Monday April 7th)	\$40	
One-day Registration for Student (any day other than Monday April 7th)	\$20	
Guest Registration	\$25	

#### Lodging

Special rates have been negotiated with El Cid Resort for meeting attendees. These rates are all-inclusive (all food and drinks are included). Because of the unique nature of the meeting in Mazatlán, all meeting breaks and socials are included in your lodging cost, not in your meeting registration as is the case with most AFS meetings; therefore, you will not be able to participate in these functions unless you make your lodging reservation with our group code. Lodging costs are quite reasonable and range from \$70 USD per person, per night to \$187 USD per person, per night, depending on the hotel and room occupancy. For more details and information on how to make your reservation, please visit: <http://wdmeeting2014.wordpress.com/lodging-2/>

#### Continuing Education

Three Continuing Education courses are offered at the 2014 Western Division meeting. They are: Mangrove ecology, management, conservation and restoration – A field tour; AFS standard methods for freshwater fish sampling & comparing your data with North American standards; and Evaluation methods in elasmobranch populations. For more information on these courses, please visit: <http://wdmeeting2014.wordpress.com/continuing-education/>

## Announcements

### 2014 Western Division Small Project Grants – March 15th Deadline

The Western Division currently has project funding available for Division Chapters, Subunits, and other fisheries-related groups. Grants are usually modest (a total of \$5,000 is available for FY 2014) ,but can help get a project started or be used to complement other funding sources. For more information, please visit:

<http://wdafs.org/awards/small-project-grants/>

### Oregon Chapter Annual Meeting

**February 25—28, 2014 – Hilton Eugene and Conference Center , Eugene, Oregon**

<http://orafs.org/annual-meeting/>

### Colorado-Wyoming Chapter Annual Meeting

**March 4—6, 2014 – Hilton Garden Inn, Laramie, Wyoming**

[http://www.cowyafs.org/?page\\_id=268](http://www.cowyafs.org/?page_id=268)

### Montana Chapter Annual Meeting

**March 4—7, 2014 – Chico Hot Springs, Montana**

<http://www.montanaafs.org/events/annual-chapter-meeting/>

### Utah Chapter Annual Meeting

**March 11—13, 2014 – Utah State University Eastern, Price, Utah**

<http://utahafs.org/annual-meeting-2014-2>

### Washington-British Columbia Chapter Annual Meeting

**March 24—27, 2014 – Hilton Hotel, Vancouver, Washington**

<http://agm2014.wabc-afs.org/>

### Cal-Neva Chapter Annual Meeting

**March 27—29, 2014 – Embassy Suites, Sacramento, California**

<http://www.afs-calneva.org/>

### Alaska Chapter Annual Meeting

**October 20—24, 2014 – Centennial Hall, Juneau, Alaska**

<http://www.afs-alaska.org/annual-meetings/2011-2>

# Western Division AFS Student News

*Tracy Wendt, WDAFS Student Representative*

With temperatures in Montana in the single digits this week, I am sure looking forward to the WDAFS Annual Meeting in Mazatlán this April! And not only will it be warm and sunny, but there are some really great activities planned for students.

If you haven't booked your travel yet, make sure you plan to arrive by Sunday! Sunday night there will be a Welcome Social for students only at 7pm. This event happens on the beachside patio – watching the sunset on the waves, eating tacos, enjoying drinks and new friends will be a great way to kick off the meeting.

All day Monday is the 5th Annual Student Colloquium, hosted by the new UNAM (Universidad Nacional Autónoma de México) Student Subunit! The day starts at 9am with a welcome presentation by WDAFS president, Pam Sponholtz. The remainder of the day, students will have the option of attending presentations of research by other students or attending various workshops on career development. After lunch, there will be a presentation by Kelly F. Millenbach, followed by more presentations and workshops. From 5—7pm, there will be a mentoring/poster session.

On Tuesday evening, all students and professionals are invited to the student social at Senior Frogs, next door to the hotel. We'll have food, drinks, and SALSA DANCE LESSONS will be provided by Cal-Neva President, Jim Hobbs and his lovely partner. This social is open to all students and professionals attending the annual meeting.

Visit the Student's page on the 2014 meeting website for a full schedule of student events:  
<http://wdmeeting2014.wordpress.com/students/>

If you register for the entire annual meeting, there is no additional charge to attend the Colloquium. If you plan to come for the colloquium only, the cost is \$40. Register here: <http://wdmeeting2014.wordpress.com/registration/>

Opportunities will exist at the meeting for you to help out, earning \$\$\$ to help offset your expenses. Email [WDAFSstudent@gmail.com](mailto:WDAFSstudent@gmail.com) for details! We need more volunteers – please complete this survey if you are willing and able to help out for a few hours at the meeting: [Click here for survey](#)

\*\*Don't forget to nominate your local Chapter, Student Subunit, or professionals for awards by March 7! Information can be found at: <http://wdafs.org/awards/information-deadlines-applications/> \*\*



The many faces at the AFS-British Columbia Student Subunit 2013 Beach and BBQ Day

# British Columbia Student Subunit Update

*Natalie Sopinka, President, University of British Columbia Student Subunit*

It is incredible how one tiny and timid salmon fry can grow into a bursting and vivacious smolt in just one year. The British Columbia Student Subunit (AFS-BC) has also shown tremendous growth in just one year. From its official establishment in August 2012, the Subunit has evolved from six plucky fisheries students with a paper petition to over 144 Facebook followers with an enthusiastic dedication to aquatic sciences.



The 2012—2013 executive committee was formed following the Subunit's first elections. Natalie Sopinka (President, University of British Columbia [UBC]), Martina Beck (Vice-President, University of Victoria), Sean Naman (President-Elect, UBC), Graham Raby (Communications Officer, UBC/Carleton University), and Shannan May-McNally (UBC) started off the term by hosting a design contest that recruited students to create a logo for the Subunit. The winning logo (right), designed by Ameila Stegeman (UBC), incorporates multiple elements core to British Columbia's ecology and culture (a salmon, tree and, mountain).

AFS-BC was thrilled to lead the fundraising efforts for the silent auction held in March at the Washington-British Columbia (WA-BC) Chapter's Annual General Meeting in Lake Chelan, Washington. Over 15 donors including the Canadian Wildlife Federation, Pacific Salmon Foundation, Freshwater Fisheries Society of British Columbia, Trout and Ducks Unlimited Canada, Smith-Root Fisheries Technology, and Biomark, generously contributed auction items. The silent auction was an incredible success raising \$1,800 for student travel, scholarships, and Subunit events. Subunit members Natalie Sopinka (winner Best Student Oral Presentation), Martina Beck (Honourable Mentions), and Brett Favaro (Simon Fraser University (SFU), Honourable Mentions) all received Student Travel Scholarships from the WA-BC Chapter to attend the meeting. Photos from the meeting, and all AFS-BC events, are

posted on the Subunit's Facebook page:  
<https://www.facebook.com/afsbstudent>



AFS-BC VP Martina Beck with Subunit poster

The Subunit held its first ever Trivia Night in May. Students were tested on their knowledge of fishes, celebrities, sports, movies, and politics. Along with pizza and beverages, the evening was filled with many friendly debates and discussions. Winners received prizes donated by UBC's Faculty of Forestry, Starbucks, and Backroad Mapbooks.

The Subunit wrapped up summer with the 2nd Annual Beach and BBQ Day at Jericho Beach. With homemade hamburgers in tow, students gathered to exchange stories from the field and relax in the sun prior to the fall semester ahead.



Attendees of the first Trivia Night social

The Subunit's online presence was quite impressive. The AFS-BC Facebook page and website are now recognized as a hub for finding the latest job postings, scholarship opportunities, and fisheries-related news. Throughout the year AFS-BC members were regularly featured in the WA-BC Chapter newsletter, *The Confluence*. Natalie Sopinka, Martina Beck, and Brett Favaro were recognized for their engaging presentations in Lake Chelan (Spring). Graham Raby reported on his travels to Valencia, Spain to attend the Society for Experimental Biology's annual meeting where he presented his research on by-catch mortality in Fraser River coho salmon. Natalie Sopinka's fiery memories of studying plainfin midshipman were also published (Summer), along with her poem "Ballad of the Grad Student" (Winter).

Having built a foundation rooted in communication and community, the next generation of AFS-BC is planning more student events and looking forward to expanding its membership, social media usage, and community outreach.

## Students Take Righteous Trip to Flaming Gorge

*Carlin Girard, University of Wyoming Student Subunit*

Thanks to the organizational efforts of Zack Underwood, students from the University of Wyoming and Colorado State University student subunits had a great fishing trip to Flaming Gorge Reservoir. The trip was spurred by the interagency goal to reduce the burbot population in the Gorge by promoting harvest from fishermen. In two nights and one day of fishing, the five anglers hand drilled nearly 100 holes, landed about 30 burbot, a few lake trout, and a nice rainbow trout. We had beautiful weather (clear skies, no wind, and temperatures hovering around freezing), but perhaps at the expense of optimal fishing; a tradeoff a true ice fisherman would never make, but can't complain about either. Wyoming Game and Fish allows ice fishermen on the Gorge to use six rods, which, combined with the fact that we were fishing at night with glow in the dark jigs and a plethora of flashlights, provided a unique experience and explains why the popularity of burbot fishing has caught on. Being that burbot are a fantastic eating fish, I am sure I speak for the group when I say, you savor every bite...twice.

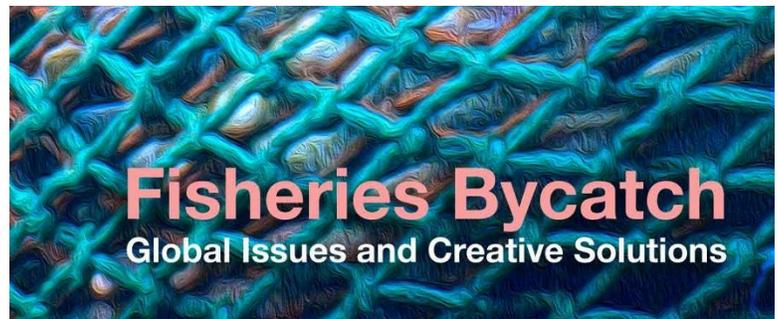


## 29th Lowell Wakefield Fisheries Symposium

Fisheries Bycatch: Global Issues and Creative Solutions. **13—16 May, 2014**, Hilton Hotel, **Anchorage, Alaska.**

Gordon Kruse, Steering Committee chair.  
Organized by Alaska Sea Grant, University of Alaska Fairbanks.

The symposium will bring together fishery and social scientists, managers, fishermen, and other stakeholders from around the world to report on creative approaches to solving fishery bycatch issues. Keynotes, invited talks, and oral and poster contributions will be presented on new technologies, advancements toward full accounting of fishing mortality into harvest control rules, approaches to industry-derived solutions, incentive programs, new regulatory solutions, and studies on social and economic implications related to bycatch issues.



For more information please see: <http://seagrant.uaf.edu/conferences/2014/wakefield-bycatch/index.php>

# Salmon Pass a 60 ft Dam for the First Time in 60 Years

*Rich Grost, Aquatic Scientist, North Umpqua Hydroelectric Project, PacifiCorp Energy*

After four years of design and three years of year-round construction, the new fish passage facilities at Soda Springs Dam were completed at the end of November 2012. The facilities were painstakingly designed to meet agency criteria for volitionally passing all native anadromous fish within the constraints imposed by the narrow canyon, steep topography, unstable slopes, and temperamental river. Observations during 2013 indicate that plenty of fish have already passed the dam and spread into the six miles above it for the first time since 1951.

The facilities include a fish ladder about 800 feet long with 59 pools. It is a "half-Ice-Harbor" design with smooth, continuously sloped floor and smooth, rounded corners at all turning pools for smooth hydraulics and to facilitate volitional upstream passage of native fish, including Pacific lamprey. At each pool, fish have the option of swimming through an 18-inch square opening along the bottom, or swimming / leaping over a 4-foot-wide weir at the top, either way gaining a 1-foot rise in elevation. A special video system was installed in February 2013 at the fish ladder counting station, from which Oregon Department of Fish and Wildlife (ODFW) is documenting the number, size and species of adult salmon, steelhead, trout, and lamprey using the ladder.

The fish screen, for protecting downstream-migrating fry, smolts, and adult steelhead kelts, is actually a series of three different screens over a length of about 400 feet. The primary screens are about 200 feet long by 19 feet tall; the secondary and finishing screens are smaller in area. All screen material is stainless steel wedgewire, with gaps less than 1.7 millimeters (<3/32 inch). Screen surfaces are cleaned by a combination of moving brushes and water jets to move sediment along the bottom and backwash the finishing screens. Most water, up to 1,850 cfs, passes through the screens into the penstock (and hence to the 11-megawatt powerhouse a half-mile downstream) and into the fish ladder entrance to help attract fish and supply water to the river. The remaining water flow, about 25 cubic feet per second, carries the fish back to the river via a custom, super-smooth pipe system. When fish are being sampled, the fish flow will be routed into an evaluation building and further screened so that fish can be retained in a holding tank and examined for size, number, condition, and species.

Despite 30 days of rigorous testing and commissioning of the new facility in fall 2012, during which it passed a mid-November high flow event, a larger and faster high flow event early on December 2, 2012, washed a slug of debris into the screen which, within about three minutes, plugged and severely damaged the primary fish screens. Review of this incident led to several modifications of the fish screen structure and operational protocols which are being implemented now. Construction of the fish screen modifications is expected to be completed by February 2014.



Soda Springs Dam before (left) and after construction of fish passage facilities.

## Salmon Pass a 60 ft Dam Continued

Fortunately, during 2013 there were not yet any smolts upstream of the dam to need fish screen protection. With the fish screen out-of-service, we opened the spillway from April through June 2013 to allow downstream passage for steelhead kelts that spawned above the dam.

Once repaired and improved, the fish screen and ladder facilities will undergo a rigorous performance evaluation during 2014 and 2015 to tune the flows and ensure they are working and protecting fish properly. Beyond that, monitoring of fish movement through the ladder and screen, along with redd surveys and smolt trapping, is planned through 2038 (the entire current license period) to evaluate the overall benefit realized from restoring fish passage.

After so much study, discussion, design, and construction to provide fish passage, it is rewarding to now see the fish actually using it. Chinook salmon were observed moving into the fish ladder as soon as it was watered-up for testing in mid-October 2012, and several coho salmon redds were confirmed upstream of the dam during November and December 2012. During 2013, although fish ladder counts are incomplete, observations suggest that at least 60 winter steelhead and 200 Spring Chinook have spawned upstream of Soda Springs dam. Summer steelhead have also been observed upstream of the dam also, but will not spawn until winter and spring. Most fish observed above the dam are unclipped. Beginning in 2013, the North Umpqua River is closed to fishing between the fly area boundary near Soda Springs powerhouse and Slide Cr dam, to protect the fish recolonizing this area.



Rich Grost hoists the decomposing carcass of a toothy wild Spring Chinook buck that spawned this October in the North Umpqua River about 2 miles upstream of Soda Springs Dam.



A wild hen and buck winter steelhead passing Soda Springs fish ladder window in March 2013. The window is video-monitored; ODFW analyzes the video to identify, measure, and count fish.

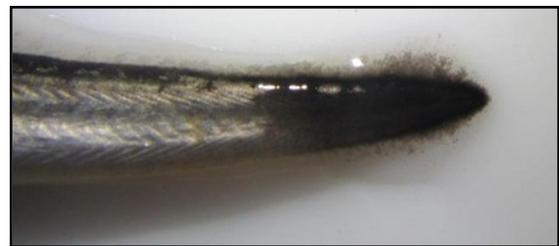
# Do You Really Know Who I Am? (*Entosphenus* vs. *Lampetra*)

Ralph Lampman, Yakama Nation Fisheries, Lamprey Research Biologist

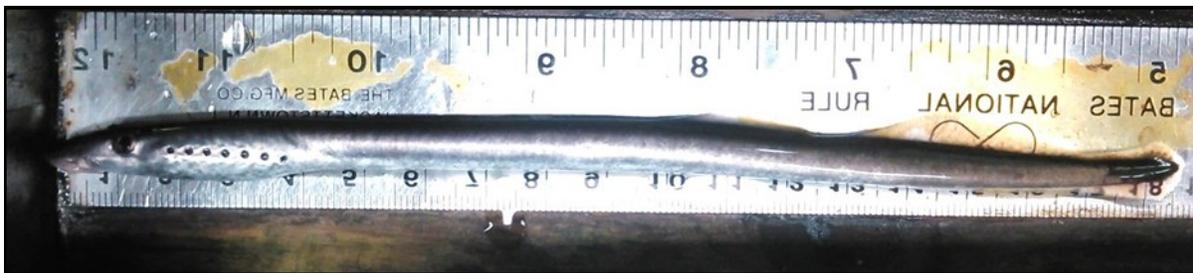
So you catch a lamprey during winter monitoring (screw trap, electrofishing, you name it). You notice that it has a set of eyes, well not just eyes, but large googly eyes (Photo 1). The body is very silvery, like a long, torpedo-shaped silver bullet, hence a smolt (or aka macrophthalmia; Photo 2). What lamprey species is this? Pacific lamprey (*Entosphenus tridentatus*) smolt? Think again. Let's look at the tail feature carefully (Photo 3). Upon close examination, the caudal ridge (area in the middle) doesn't have a clear translucent area like typical Pacific lamprey (see "Ammocoete Identification Guide" Photo 4 - A). Additionally, the caudal fin is blotchy and is not as darkly pigmented as Pacific lamprey, and it looks more like a Western brook lamprey (*Lampetra richardsoni*) tail (Photo 4 - B). Okay, so the tail definitely looks unusual – now where else should we look? Let's move on to the mouth to see the dentition pattern (Photo 5). For this, you can either place them in a glass or clear plastic jar in water (as they will likely suck on the surface to show the dentition pattern) or you can anesthetize them (remember lamprey needs roughly twice as much on the anesthetic dosage than regular fish). Ah ha! The mouth sure looks different than Pacific lamprey (Photo 6). The best evidence is with the endolateral teeth (orange dotted circles in Photos 5 and 6); Pacific lamprey have four while Western brook or river lamprey (*Lampetra ayresi*) have three. The supraoral and infraoral lamina teeth (green and blue dotted circles, respectively, in Photos 5 and 6) are also good to examine. Pacific lamprey have 3 supraoral teeth (although at this life stage, only two may be visible) and 5–6 infraoral teeth, whereas Western brook or river lamprey has 2 supraoral teeth and 7–10 infraoral teeth. Dentition patterns of Western brook lamprey (Photo 7) and river lamprey are similar except that the river lamprey teeth are a lot more "sharp" looking (showing readiness to feed in the estuary) compared to those of Western brook lamprey, who do not feed at all as adults. Based on all these evidences (\*pending genetic confirmation), this is likely an ocean-going *Lampetra* species, hence a (Western) river lamprey, which was found all the way up in Yakima River (major tributary in Mid-Columbia Basin), a place far away from the ocean where we did not expect to find them. If you are still unsure of the identification, take good photos of overall body and tail features and send it to: [lamr@yakamafish-nsn.gov](mailto:lamr@yakamafish-nsn.gov) [I'll then relay it with experts such as Steward Reid (Western Fishes) and others in this field].



1. Large eyes on the captured lamprey from Yakima River, WA.

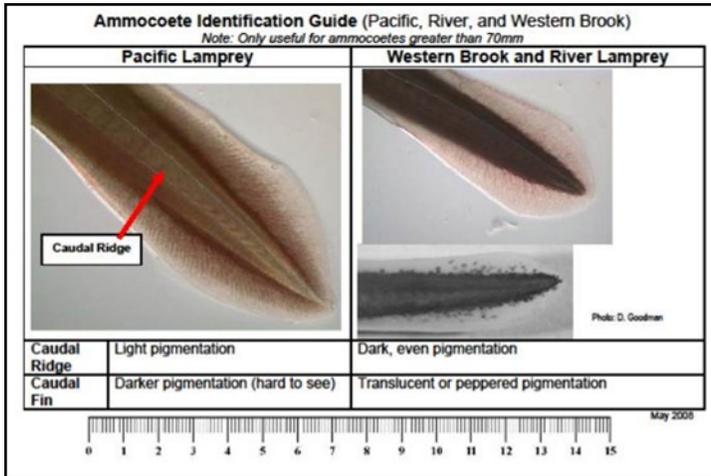


3. Tail features of the captured lamprey from Yakima River, WA.

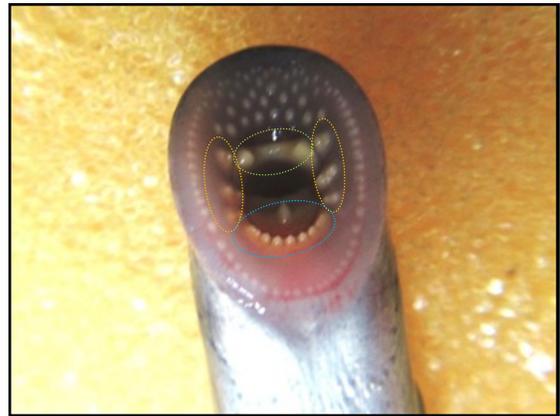


2. Silvery body of the captured lamprey from Yakima River, WA.

# Lamprey Continued



4. Tail features of Pacific lamprey and Western brook / river lamprey.



5. Dentition patterns on the lamprey from Yakima River, WA.



6. Dentition patterns on a Pacific lamprey from Klickitat River, WA (Photo by Patrick Luke).



7. Dentition patterns on a Western brook lamprey from Knowles Creek, OR (\*caution – in the fall season, Western brook lamprey can appear silvery especially on the belly and have much sharper teeth).

# Bear Lake Bonneville Cisco

*Scott Tolentino, Utah Department of Wildlife Resources Aquatic Project Leader at Bear Lake*

We celebrate the Bonneville cisco each year during the spawning run which only lasts about 10 days (approximately January 20—30). The cisco come into shallow, rocky shorelines to spawn and you can dip-net them. Bag limit is 30 fish. Bonneville cisco are endemic to Bear Lake, but are also considered a sportfish in Utah. They are quite tasty when eaten fresh or they are caught by anglers and used for bait for cutthroat trout and lake trout fishing later in the year. We use hydroacoustics to estimate the population in mid-July. Currently there are about 8—10 million cisco in Bear Lake. Here is a link I made yesterday of our activities:

<http://www.youtube.com/watch?v=SL1369sLYwg>

**FIRST CALL FOR PAPERS**  
**The Wild Trout XI:**  
*Looking Back and Moving Forward*  
**September 22-25, 2014**  
**West Yellowstone, Montana, USA**



The Wild Trout Symposium brings together a broad and diverse audience of governmental agencies, non-profit conservation groups, media representatives, educators, anglers, fishing guides, and business interests associated with trout fisheries to exchange technical information and viewpoints on wild trout management and related public policy. Held every 3 years, each symposium has led to innovative wild trout management approaches.

Wild Trout XI offers a unique forum for professionals and anglers to interact, and where participants are exposed to the latest wild trout science, technology and philosophies. This conference will equip participants to better manage, preserve, and restore these significant but declining resources.

The symposium plenary session will begin by looking back on the history of wild trout research and management, both in terms of past science and the nearly four-decade lifespan of the Wild Trout Symposiums themselves, and wrap up with a look forward to where wild trout management is headed.

Unfortunately, the federal government shutdown in October 2013 resulted in the postponement of the Wild Trout Symposium until 2014. Most individuals selected to provide presentations and manuscripts in 2013 have agreed to participate in 2014; however, several open positions remain in the program. The following topics are of particular interest to the organizing committee and may be developed as entire sessions, given sufficient interest. Additionally, presentations on all aspects of wild trout research, management, conservation, education, and recreation are welcome and will be considered in the call for papers:

**Proposed session topics:**

- Non-trout salmonids
- Wild trout socioeconomics: understanding a diverse group of users and values
- Special regulations: have we gone full circle or have some issues never gone away?
- Taxonomic, phylogenetic, and genetic tools for wild trout management
- Wild trout population monitoring techniques – including further understanding of impacts of global climate change, population dynamics, and evolutionary ecology
- Struggling with invasive species
- Stressors to, and restoration of, wild trout habitats – what have we learned and what do we need to know?
- Brook trout research and management across the species' historic and introduced range
- Role of ecological resilience in wild trout persistence and management, using the past to inform the future

Additional session topics will be added based on the papers that are submitted. Presentations will be accepted in oral or poster format. **Please note the authors who are selected for oral presentations at the symposium must submit a complete manuscript ready for Symposium Proceedings publication by August 1, 2014.** Successful applicants will receive further information upon acceptance of their paper.

Complete abstract preparation guidelines and online submission forms can be found at: [www.wildtroutsymposium.com](http://www.wildtroutsymposium.com)  
**Deadline for abstract submission: April 1, 2014**

For additional information, contact one of the Program Committee Co-chairs:

Jacob Rash  
 North Carolina Wildlife Resources Commission  
 Tele: 828-659-3324 ext. 225  
 Email: [jacob.rash@ncwildlife.org](mailto:jacob.rash@ncwildlife.org)

Jason Burckhardt  
 Wyoming Game and Fish Department  
 Tele: 307-527-7125  
 Email: [jason.burckhardt@wyo.gov](mailto:jason.burckhardt@wyo.gov)

[www.wildtroutsymposium.com](http://www.wildtroutsymposium.com)





## About the Tributary

The Tributary is the newsletter of the Western Division of the American Fisheries Society published three or four times per year.

### **Editor**

Travis Neebling [Travis.Neebling@wyo.gov](mailto:Travis.Neebling@wyo.gov)

## 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 twelve western states, British Columbia, Yukon Territories, and Mexico. 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>