

THE CONFLUENCE

Newsletter of the Washington-British Columbia Chapter of the American Fisheries Society

Winter 2018/2019

Inside this Issue

President's Report	2
WA-BC 2019 AGM Preview	3
Book Nook: <u>Return of the</u> <u>Sea Otter</u>	7
Logo contest submissions	9
BC Student Subunit Update	10
Education/ Outreach	11

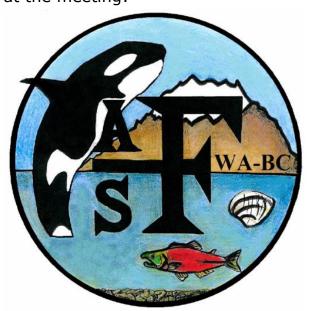
Corner

Chapter

Information

Our upcoming 2019 WA-BC Annual General Membership Meeting, "Feast and Famine from the Headwaters to the Sea," is less than two months away! This edition of *The Confluence* contains a meeting preview, our logo contest results, a book review, an update from the British Columbia Student Subunit, and more. There are also several important deadlines approaching like the **final call for abstracts** and **early-bird registration** (both **close March 1, 2019**) for our meeting at the Kitsap Conference Center in Bremerton, WA on April 8–11, 2019. For those attending the Salmon Recovery Conference in Tacoma on April 8—9, we are offering a **25% discount** on registration to the 2019 WA-BC Chapter meeting to account for the time overlap. Here's a couple of highlights of what to expect at the meeting:

- Plenary speakers- Dr.
 Greg Ruggerone and Dr.
 Michael Phelps (pg 4)
- Intertidal foraging/ cooking workshop– limited seats (pg 3)
- Underwater photography workshop- free, limited availability (pg 6)
- Beautiful banquet on the water with great music!
- Tradeshow and Poster Social
- And of course, lots of great presentations and networking opportunities



Artist: Kaitlin Thurman

2019 AGM in Bremerton, WA on April 8–11

14

More details about the meeting can be found at: https://wa-bc.fisheries.org/2019-meeting/

WA-BC Chapter Executive Committee



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President's Report

For me, winter is not the most glamorous season to be a fish biologist as the previous field season seems so long in the past, and the next so far in the future. The long cold dark days of winter come and go one after another in seemingly endless repetition. It is however, a good time to reflect on the accomplishments of the previous year, and to plan for the coming one.

Your WA-BC Chapter Executive Committee remains active during these cold dark winter days and we have been busy. First off, we have been working diligently to pull together all the pieces for our 2019 meeting scheduled for April 8-11 at the Kitsap Conference Center in Bremerton. We will look forward to a wide selection of activities in Bremerton including world class plenaries and symposia, exciting workshops for you to attend, several social events, and we have a wide variety of vendors and sponsors lined up for this meeting. Our communications director Ben Cross has been consistently updating our meeting website with new event information as it becomes available so be sure to check regularly for updates. Registration is now open so be sure to take advantage of the Early Bird registration option available on the meeting website https://wa-bc.fisheries.org/2019-meeting/registration/.

If you didn't already know, the WA-BC Chapter will be hosting the Western Division meeting in 2020. It will be held in Vancouver BC, April 12-16, 2020 at the Pinnacle Harbourfront Hotel (https://wa-bc.fisheries.org/2020-meeting/). We are currently developing our advertising campaign for the meeting and intend to have an information booth at the 2019 National meeting in Reno as well as some meeting specific swag so keep an eye out for that. Please notify your colleagues and plan to attend our Vancouver meeting in 2020 as it will certainly be a big show! We are also recruiting steering committee members for this meeting so if you are available and have interest in being involved in the planning stages of the meeting, please let one of your executive officers know. Speaking of 2020, the AFS will celebrate it's 150th anniversary at the annual meeting in Columbus OH, and the WA-BC Chapter is developing a Chapter display for the meeting. The theme of our display is centered on our chapter history so if you, or someone you know, has any historical information on the chapter, please contact myself or one of our executive officers.

I have been following our chapter membership over the last several months and we have realized a decline in members between December of last year, and January of this year. We generally do see a lag in the membership renewals with the passing of each year and I am confident we will regain our numbers but we need your help to ensure you are registered as a chapter member for the coming year. The federal shutdown certainly impacted our federal members so the AFS extended the membership renewal grace period to February 15 to allow everyone to get caught up after returning to work. If you are in that boat, don't forget to renew before the deadline to take advantage of the grace period and additional member only benefits, including discounted registration to our annual meeting in April. Finally, our chapter Treasurer Ryan Klett generated a nice membership heat map to geographically visualize the distribution of our chapter members and I have been thinking of new ways we can use this kind of information to target recruitment and retainment of our members. If you have suggestions or ideas that we on the Executive Committee can better represent you as a WA-BC Chapter member, please let me know.

In summary, we have lots of big events on the horizon and there will be lots of opportunity for you to participate locally, regionally, and nationally, so stay engaged because we are going to start picking up the pace rapidly.

See you this April in Bremerton! Gabe

2019 WA-BC Annual General Meeting Preview

Kitsap Conference Ceter, Bremerton, WA **April 8–11, 2019**

Deadlines

- **Student volunteers,** registration fee waived for the **first 10 student volunteers**. To take advantage of this opportunity, send an email to the ExCom at afs.wabc@gmail.com with the subject: "2019 AGM Student Volunteers." Detail can be found at wa-bc.fisheries.org/ students/.
- **Student travel awards** application period closes **February 22** (wa-bc.fisheries.org/ about-us/awards/).
- **Early-bird registration** closes March 1, register at wa-bc.fisheries.org/2019-meeting/ registration/.
- Final call for abstract submissions are due March 1, submit abstracts at wabc.fisheries.org/2019-meeting/abstract-submission/.
- Chapter award nominations are due March 1. Application information at wabc.fisheries.org/about-us/awards/.
- **Book your hotel room** before they fill-up; room blocks close March 11. Hotel booking information at wa-bc.fisheries.org/2019-meeting/venue-accommodations/.

Schedule Highlights

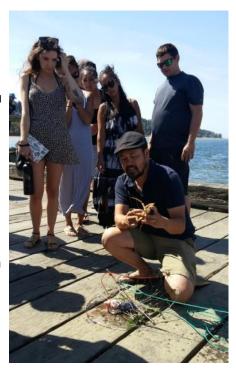
Monday, April 8

Intertidal Foraging/Cooking Workshop, 5–8 pm

Description: British Columbia and Washington are blessed with miles and miles of wonderful, accessible shoreline inhabited by a diverse array of organisms that are not only fun to discover, but also tasty to eat. We will explore all the different creatures and seaweeds you can forage for in the intertidal zone including sea urchins, crabs, sea cucumbers, squid, clams, geoduck, whelks, oysters, mussels, gooseneck barnacles and more. We will also cover all the different ways you prepare and cook your harvest. Cooking demos of geoduck and seabiscuit (biscuit made with sea lettuce) are planned with samples to try.

About the instructor: Ficus Chan is a *Jack of All Trades* within the world of fish and forestry of British Columbia and Washington State. He followed his inner compass on a journey that allowed him to learn through his work as a resource technician, educator, fishery observer, manager, consultant, and commercial harvester. Ficus combines his passion for cooking with his knowledge of edible wilds and has led foraging and wild food workshops since 1995.

Cost: \$5



Continued on Page 4

2019 WA-BC Annual General Meeting Preview

Tuesday, April 9

- Breakfast, 8:00-9:00 am
- Welcome and Plenary Session, 9:00–11:00 am
 - Greg Ruggerone, President of Natural Resources Consultants, Inc. and previous chairman of the Columbia River Independent Scientific Advisory Board and the Columbia River Independent Scientific Review Panel, Along with his co-authors, Dr. Ruggerone recently published a paper titled "Unprecedented biennial pattern of birth and mortality in an endangered apex predator, the southern resident killer whale, in the eastern North Pacific Ocean" in Marine Ecology Progress



Series which he will be presenting on.

- * Michael Phelps, Acting Instructor at the University of Washington Department of Pathology where he was previously a Senior Fellow. Dr. Phelps earned his PhD from the Department of Fisheries, Animal and Veterinary Sciences at the University of Rhode Island in 2010. He recently authored a paper titled "Transforming ecology and conservation biology through genome editing" with Lisa Seeb and James Seeb that was published in Conservation Biology.
- Spawning Run, 11:00 am 12:00 pm

Join us in fun 5k run/walk along the Bremerton waterfront, registration is free.



- Concurrent Sessions, 1:20-5:00 pm
- Student/Mentor Panel & Mixer, 5:00-6:00 pm

Join Fisheries Professionals in a panel discussion of career paths and opportunities following graduation, followed by a chance to mingle informally.

• Trade Show Social & Poster Session, Includes Dinner Buffet, 6:00-9:00 pm

Enjoy learning about the latest research, management, and technology while perusing through the Poster Session and the exhibitor tables at the Trade Show.

Continued on Page 5



2019 WA-BC Annual General Meeting Preview

Wednesday, April 10

Breakfast, 8:00-9:00 am

Concurrent Sessions, 9:00 am - 12:00 pm

• Underwater Photography Workshop, 9:00 am - 12:00 pm

Instructed by Todd Pearsons, Ph.D., a long-time fisheries scientist, award winning communicator, and professional photographer who specializes in capturing images of life below the surface of the water, particularly rarely photographed species. His images have been published in many forms such as books, magazines, journals, museum displays, interpretive center displays, art pieces, and professional websites. You can see/read a "Photography Interview of Todd Pearsons" that appeared in *Fisheries* on our meeting webpage (https://wa-bc.fisheries.org/2019-meeting/underwater-photography-workshop/). More details about this workshop can be found on page 6 of this newsletter.

- Chapter Business Meeting, Lunch Buffet, 12:00–1:20 pm
- Concurrent Sessions, 1:20-5:00 pm
- **Silent Auction**, 5:30–8:00 pm

Each AGM we host a Silent Auction to raise funds for our Student Travel Awards. We always have an excellent selection of items to bid on, thanks to our generous donors and the students who organize the auction. If you would like to donate an item to the silent auction, please contact us at afs.wabc@gmail.com.

• **Dinner Banquet and Live Band**, 6:00–9:00 pm

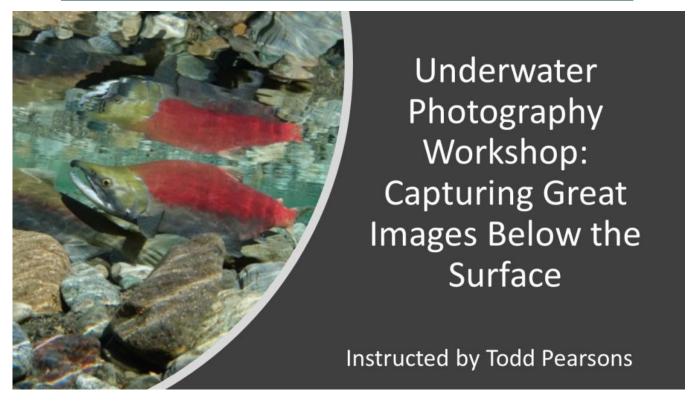


Enjoy a delicious banquet on the waterfront while we announce the recipients of this year's WA-BC Chapter Awards. We are thrilled to have **Play It Forward** performing throughout the night. Play It Forward plays brass music that's a little bit different. These five guys banded together through music in the UW Husky Marching Band in Seattle to share their love of the art with the city. They strive to cover anything they like from street music to rock to pop, shaking off the expectations set for traditional brass bands. Their mission? To pay it forward to their community, bring good vibes, and inspire connections with the world around us... even if they're still figuring out what that means.

Thursday, March 22

- Breakfast, 8:00-9:00 am
- Concurrent Sessions, 9:00 am 12:00 pm

Underwater Photography Workshop at WA-BC AFS 2019 Meeting



When/Where: April 10, 2019 from 9am-12 pm at the Kitsap Conference Center in Bremerton, WA

Description: All the information is available at <u>wa-bc.fisheries.org/2019-meeting/</u>. One of the best ways to inspire audiences about communicating and valuing aquatic resources is to bring audiences to where aquatic life lives through underwater photography. This workshop will help you get started and improve your ability to take great images underwater. Topics to be covered include: getting started on a limited budget, assembling your underwater photography toolkit, behavior of the underwater photographer, underwater photography principles and tips, and many other topics. Common mistakes and hard won secrets of underwater photography will be revealed. This workshop will focus on challenges and opportunities in freshwater environments, but many of the topics will apply to marine environments. Improve your fisheries talks, publications, and other communications by developing and improving your underwater photography skills.

Cost: The course is free but space is limited to the first 20 individuals to sign-up.

Shop Amazon Smile, Percentage Donated to WA-BC AFS

The WA-BC Chapter is now linked up with Amazon! If you love to shop on Amazon, please listen up! Through the AmazonSmile program, 0.5% of all your eligible purchases made through the AmazonSmile link will be donated directly to the WA-BC Chapter! This can add up quickly and help our Chapter tremendously! Here's how it



works. Just paste this link into your browser and enter AmazonSmile before you shop! https://smile.amazon.com/ch/61-1534241.

The Book Nook

"Return of the Sea Otter: The Story of the Animal That Evaded Extinction on the Pacific Coast"

Review by Shawn Larson

Author: Todd McLeish. Pub: Sasquatch Books. 2018.

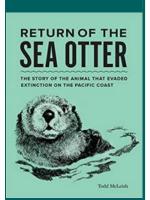
Todd McLeish starts his book like many that start stories about sea otters. In the first few sentences, he notes that they are arguably the cutest animals ever to grace our oceans. Even though the first scientist that he introduces, Karl Meyer, long in a list of well-known sea otter biologists and scientists McLeish interviews, adamantly disagrees with him. Meyer states that sea otters are not cute but wild animals that can be vicious when cornered likely due to his experience with many unhappy sea otters in his care for rehabilitation. I can see both sides but in my opinion, Karl is wrong and Todd is right, sea otters are cute, in part due to their extreme fuzziness unique to sea otters but also due to their playful nature common to most in the otter family that endear them to many people.

In each chapter of his book, McLeish tackles aspects of sea otter history, biology or ecology and doesn't shy away from the controversial topics. While diving into each subject, he interviews some of the top sea otter biologists in the field to seek out their opinions about sea otters and the stories they have to tell from years of working with them. McLeish highlights the sea otter complex and interesting history with people starting with the fur trade of the 1700s when their populations were severely reduced due to the demand for their furs and their subsequent population recovery following protection in the 1900s. The rebound of the apex predator into many systems where generations of people were used to them being absent stimulated many unanticipated conflicts between people and sea otters over marine invertebrates that both like to eat like urchins, abalone, crabs and clams. Sea otters are the only marine mammal without a blubber layer and they adapted to living in the cold water of the north Pacific by two methods: 1. Evolving the densest fur in the animal kingdom, up to 1,000,000 hairs per square inch such that their skin doesn't even get wet and 2. Having a high metabolism requiring them to eat at least 25% of their body weight every day to maintain body condition. Both of these adaptations have brought them into close contact with people, their fur almost driving them to extinction with the international maritime fur trade and their huge appetite for large macro-invertebrates that have caused conflict and resentment with fisher people throughout their range. Much of the book's content revolves back to these two subjects - the sea otters populations reduction and subsequent expansion and the conflicts with people.

McLeish also educates readers about basic sea otter biology and ecology. In Chapter 1, he delves into the sea otter's nearshore habitat and the sea otter's connection to kelp forests through the otter's reduction in kelp eating

Continued on Page 8







Todd McLeish, Author

The Book Nook (Continued from page 7)

invertebrates such as urchins. He interviews the biologists who first discovered the sea otter-urchin-kelp connection, Dr. Jim Estes, arguably the most well-known sea otter biologist alive. McLeish writes knowledgeably about the sea otters history and their role as keystone species in the marine environment setting the scene for the rest of the book and the sea otters story.

What follows is the success story of the sea otter's recovery after international protection from the fur trade and a series of successful translocations. Today's sea otter population is approaching the lower estimate of what we think their numbers were before the fur trade with many nearshore communities healthier and more complex from the return of the sea otter. However, their return has not been without controversy, and McLeish does a good job describing the controversy the sea otter's return has caused in fishing communities. The book is fairly complete with McLeish touching on most of the current knowledge of sea otters.

Halfway through the book, McLeish finally shifts gears to discussing the sea otter population status, biology, ecology and interactions with humans in California to otters that live in Alaska and elsewhere on page 85 of 222 pages of main text (excluding accoutrements and bibliography). Even when he starts a chapter in Alaska, he often goes back to stories based in California within those chapters. The result is that over half of the books content focus is on otters in California and the researchers that study them. This may be frustrating to a reader with any knowledge of sea otters throughout their current range. The California population has just over 3,000 of the existing 125,000 sea otters alive today, the vast majority living in the northern pacific. The four chapters based in Alaska, Vancouver BC and Washington include some of the top and emerging sea otter biologists in the region and discuss sea otter biology and ecology and again the conflicts that local people, both fishers and first nations, have with the recovery of the sea otter. Many wishing that there was more managed take of sea otters so there may be more shellfish for people to harvest. The stories from California are true, worth inclusion and well written, it just makes the book feel lopsided and biased. In fact, the last chapter finds McLeish back in California talking to more biologists about sea otters recovering and moving into new habitat at the ends of the range.

McLeish's writing style is clear and concise and the information presented about sea otters in the book is accurate but doesn't tell the whole story, although it is a good start for anyone who wants to learn about sea otters. The biggest take away is the recovery of the nearshore regions with the return of the sea otter and the conflicts with human harvest of seafood that both people and sea otters like. The ending sentiment is from Tim Tinker, another renowned sea otter biologist, and is that the sea otter has taught us the most with their presence and absence from areas over the centuries about how nearshore marine ecosystems function and they have much more to teach us if we allow them. This reviewer agrees, and they are really cute.



WA-BC

Submitted by Kaitlin Thurman



Submitted by Larry Dominguez



Submitted by Vaughn Lodge

2019 Meeting Logo Contest

The WA-BC Chapter would like to thank all the artists that took the time to develop such outstanding logo designs for our 2019 meeting logo contest! Voting was extremely close, as you might imaging based on the four great submissions we had (displayed on this page). We would like to congratulate our winner, Kaitlin Thurman! Kaitlin will receive waived registration costs for our 2019 meeting and a free meeting themed item with her logo on it. Artists were asked to create a simple, scalable, memorable, and versatile logo that would help emphasize the theme of this year's meeting, "Feast and Famine from Headwaters to the Sea."



Submitted by Tarah Johnson

Call for Officers—Western Division of the American Fisheries Society

Have you ever wanted to add a little more excitement to your career? Meet new people? Get more involved in AFS? Consider running for a Western Division officer. We are currently seeking nominations for Vice



President, Secretary/Treasurer, and Student Representative (students only). If you have an interest or know of a good candidate, please contact Brian Missildine for additional information at brian.missildine@dfw.wa.gov or 360-902-2676 by **February 28, 2019**.

British Columbia Student Subunit Update

The British Columbia Student Subunit just finished their officer elections this past month. Although they have a skeleton crew (President, Vice President, and Communication

Officer, they look forward to advancing their Subunit mission and contributing to the American Fisheries Society. Currently, they are working on collecting items for the silent auction. The top priority for the Subunit this year will be to improve student engagement and recruitment.

President: Yangfan Zhang (University of British Columbia), yangfan(at)zoology.ubc.ca

Yangfan is a Ph.D. student in Dr. Anthony P. Farrell's lab in Comparative Physiology group at UBC. He studies cardiorespiratory physiology in general, with a focus on the entry of environmental effects upon fish integrated performance and their consequences at ecological and evolutionary levels. He enjoys fitness, running, swimming, hiking and golfing at spare time.



Vice-President: Yovela Wang (University of British Columbia)

Communications Officer: Olivia Adams (University of British Columbia), adams (at)zoology.ubc.ca

Olivia is a MSc student in the Department of Zoology at UBC. She studies the thermal acclimation capacity in rainbow trout with the Farrell lab group, with a focus on how fish will be able to adapt to climate change and rising temperatures. She enjoys going to the beach, hiking mountains, and discussing the differences between the East Coast and West Coast over a cold beer.

Education / Outreach Corner

AFS WEBINARS—https://fisheries.org/category/webinars/

- Connecting the Dots: Diversity, Inclusion, and Collaborative Networks in Fisheries—Wednesday, **February 20, 2019** 1:00 pm EST, Presented by: Brooke Penaluna
- Waters of the US (WOTUS) What You Need to Know about the Rule and How to Take Action—**February 27, 2019**, 1:00 2:00 pm EST

SALMON RECOVERY CONFERENCE



The Salmon Recovery Funding Board's Salmon Recovery Conference is an event for sharing information and improving salmon recovery in Washington State. Details on the meeting are online at: https://www.rco.wa.gov/salmon recovery/2019-SalmonConference/
ConfHome.shtml. For those attending the Salmon Recovery Conference, WA-BC Chapter of AFS is offering a **25% discount** on registration to the 2019 WA-BC Chapter meeting.

WESTERN DIVISION AFS—TRAVEL GRANTS

The Western Division of AFS is pleased to offer funding in the form of travel grants for the annual meeting in Reno, Nevada to be held September 29-October 3, 2019. The application period closes **March 1, 2019**. Please visit their website for more information about the travel grants and to fill out an application: https://wdafs.org/travel-grants/.

2019 LARKIN AWARD

Canadian Aquatic Resources Section of AFS is now accepting applications for the Peter A. Larkin Award for Excellence in Fisheries at a Canadian Institution. Applications are due **June 15, 2019**. More information about the Larkin Award, including how to apply, can be found at: https://cars.fisheries.org/larkin-award/.



International Fisheries Section Fellow Award

AFS-International Fisheries Section Fellow Award - travel funding (up to \$2100) for students and early career professionals to attend the Fisheries Society of the British Isles Annual Symposium. **March 15th** deadline. Details here: https://units.fisheries.org/ifs/ifs-awards/fsbi-fellowship-program/.

Education / Outreach Corner

INTRO TO SCIENCE COMMUNICATION WORKSHOP

When: **April 3, 2019**, 8:30 am -12:30 pm

Where: ATLAS Workbase 500 Mercer St Seattle, WA



A lively half-day workshop, with plenty of research-grounded insight and hands-on practice in science communication! We'll begin with an introduction to the Message Box, a powerful tool for sorting your thoughts into messages that are clear and compelling, then practice sharing those messages and giving and receiving feedback with the other participants. Participants will receive a copy of Escape from the Ivory Tower by Nancy Baron, and a hard copy of the Message Box Workbook. Register online (https://www.compassscicomm.org/) before March 3rd for Early Bird Pricing! \$250

There will be a limited number of full scholarships available, applications due Feb. 24; more information on how to apply is available at https://www.compassscicomm.org/seaHle-workshop-scholarship

WESTERN DIVISION AFS— RIPARIAN CHALLENGE AWARD

The Western Division of the American Fisheries Society (WDAFS) established the annual Riparian Challenge to encourage the conservation and sound management of riparian habitat in the western United States. Each year, the WDAFS recognizes outstanding achievements in riparian management by bestowing "Excellence in Riparian Management" awards on three projects, including one from each of the following categories: U.S. Forest Service projects, Bureau of Land Management projects, and projects completed by other entities.

To be considered for an award, the nominated project must have directly resulted in improved riparian habitat conditions. Projects that did not directly result in on-the-ground improvements, such as land use plans, research projects, handbooks or technical guidelines, are not eligible. Projects must be completed; projects in planning do not qualify. To simplify comparisons across entries, individual projects (as opposed to programmatic accomplishments) are preferred.

The WDAFS Riparian, Watersheds, and Habitat Committee will select award winners based on the mean number of points awarded by multiple judges. Points will be awarded based on responses to questions and issues raised on the form. The Committee reserves the right to disqualify entries that are incomplete or do not follow instructions. One winner will be chosen from each category.

Entry deadline is: 5:00 pm, April 15, 2019.

The application can be found here: https://wdafs.org/awards/information-deadlines-applications/riparian-challenge-award/

Education / Outreach Corner

AMERICAN FISHERIES SOCIETY & THE WILDLIFE SOCIETY

From **September 29 to October 3, 2019 in Reno, Nevada**, The Wildlife Society and American
Fisheries Society will come together for the firstever joint national conference of these two
organizations. The event will likely be the largest
gathering of fish and wildlife professionals ever,
and will provide unprecedented opportunities for
science-sharing and potential collaboration.









Washington-British Columbia Chapter of the American Fisheries Society

Chapter Information

Website: http://wa-bc.fisheries.org/

Facebook: https://www.facebook.com/wabcafs

Twitter: https://twitter.com/wabcafs

Want to join AFS and the WA-BC Chapter? http://membership.fisheries.org/

Questions? Suggestions? Contact:

President Gabriel Temple at gabriel.temple.wabc.afs@gmail.com

Want to write an article or submit any type of fisheries-relevant information to this newsletter? Contact:

Benjamin Cross at bekecr@gmail.com

The WA-BC Chapter of the American Fisheries Society, which includes members in Washington State and British Columbia, is an organization composed of professional biologists interested in the scientific conservation and enhancement of fish populations and their environment.

The mission of the Chapter is to:

- advance the conservation and intelligent management of aquatic resources within a context of sound ecological principles,
- 2) gather and disseminate information pertaining to aquatic science and fisheries management, and
- 3) promote the educational and technical aspects of the fisheries profession.

In pursuit of our mission, we will strive to equitably represent the views of members, develop opportunities for effective leadership and conservation, and generate the resources necessary to carry out our programs.

The next WA-BC Chapter Annual General Meeting will be held in Bremerton, WA on April 8—11, 2019.

Watch for the latest updates!

https://wa-bc.fisheries.org/2019-meeting/



2018-2019 Executive Committee of WA-BC Chapter

From left to right: Gabriel Temple, Orlay Johnson, Kirstin Gale, Tamara Knudson, Brittany Jenewein, and Benjamin Cross. Not present: Ryan Klett and Paul Spruell