FALL 2021 ISSUE



THE CONFLUENCE

NEWSLETTER OF THE WASHINGTON-BRITISH COLUMBIA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

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Letter from the President

In the past few days the weather has signaled a new season's beginning. The cool nights, shorter day length, and fall Chinook arriving on the spawning grounds of the Hanford Reach all provide signs that we are nearing the end of 2021. The end of another orbit of the sun frequently leaves me reflective and considering how drastically COVID-19 has impacted our families, communities, and workplaces, it seems timely to pause and acknowledge the efforts of our peers. It was March 2020 when my lockdown began. My office moved to my spare bedroom and interactions with my team were reliant on virtual connectivity. Personal protective equipment and social distancing became part of the norm when planning any field activity. Meanwhile countless tasks were all accomplished by teams operating under rules that stressed the most basic functions of our organizations. Suffice to say we are comprised with some of the best and brightest problem-solving professionals that are driven by a passion for aquatic resources that was necessary to complete their work, despite the burdens imposed. We are approaching a time when in-person gatherings might once again be more commonplace, and I suggest it will be necessary then to collectively celebrate our peers for all their efforts during this period.

The last in person AFS gathering I attended was the WA-BC chapter meeting in Bremerton in 2019. Since then, we almost had a meeting in Vancouver in 2020, and we all stumbled through my own learning curve when presenting a virtual meeting in 2021. It's time to look forward and we have the opportunity now to harness our pent-up energy to support the planning and program development for the Spokane AFS meeting in August 2022. The meeting will be co-hosted by the WA-BC chapter, Western Division, and the parent society of the American Fisheries Society. Planning has begun and we are beginning to sort out division of labor to build the best AFS meeting ever! It is clear that we need to cast the widest possible net over our membership to recruit volunteers for this effort. Please reach out to me or any member of our executive committee if you are interested in contributing to committees being formed.

Finally, I suspect I will become a nuisance in your email mailbox in the upcoming year. Not only with updates on the progress towards Spokane 2022 but with some general outreach to our membership to better identify your priorities for your WA-BC chapter. While I am blessed with a dynamic collection of officers that serve on our chapter's executive committee, I am convinced that there is an untapped wellspring of ideas that can bubble up from our membership with a little prompting that will contribute to chapter activities that need nurturing in order to position us where we want to be in the future.

Cheers.

Alf Haukenes

President, WA-BC Chapter of AFS

ahaukenesafs@gmail.com

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Welcome to the new Executive Committee



ALF HAUKENES
President



JEFF FRYER

President Elect



JANINE BRYAN
Vice President



PAUL SPRUELL
Past President

This July AFS Washington-British Columbia members voted in the new Executive Committee, or "ExComm" for short. A number of fresh new faces joined a core of experienced leaders. The new ExComm had their first offical meeting in September to hand off and transition from the outgoing ExComm. Thank you to the past chapter leaders.



DYLAN GLASER
Secretary



TAMARA KNUDSON Treasurer



HALEY TUNNA

Communications



ALEX LOPEZ
Student Subunit Rep



Figure 1. Kavi Rana, A UWT Environmental Science major, helps prepare SLMS students for their upcoming salmon survey in 2019



Figure 2. SLMS students collecting data on Coho salmon carcasses that they found in Swan Creek.

Students get hands-on with Chum and Coho Salmon

by Erik McDonald, Associate Teaching Professor at the University of Washington-Tacoma

October 2021 marks the fifth consecutive year that Coho pre-spawn mortality is being monitored in Swan Creek (Tacoma, WA). University of Washington Tacoma (UWT) undergraduates and Surprise Lake Middle School (SLMS) students have actively participated in this study in three of the last four field seasons; however, they were unable to do so in 2020 due to COVID-19 concerns. Each year, SLMS students receive an introduction to pre-spawn mortality and in-class training on how to identify this phenomenon in the field (Fig. 1). Then, they join UWT undergraduates and faculty at Swan Creek to apply their newly acquired skills (Fig. 2). This is a powerful experience in that:

- 1. It is the first time that many of these kids see salmon in the wild,
- 2. For some, it is their first experience walking along a creek, and

3. It allows them to see how science addresses relevant real world problems in their community.

Young people around this age start to lose their curiosity of the natural world, and it is my hope that this experience stokes a fire that they will maintain for the rest of their lives.

Projects like this exist or are currently being developed elsewhere in the Puget Sound basin. For example, King County staff have been monitoring coho and chum pre-spawn mortality in the Miller-Walker watershed (Burien, WA) with almost complete reliance on citizen scientists. Contact Matt Goehring (mgoehring@kingcounty.gov) if you are interested in learning more about their program.

AFS 2022 Annual Meeting - Preliminary Call for Proposals



Co-hosted by the Western Division AFS and the Washington-British Columbia

AFS Chapter

WHAT DO FISH MEAN TO US? PERSPECTIVES ABOVE AND BELOW THE WATER

Our theme, "What do fish mean to us?" seeks to examine the ways that people value fish and fisheries from a variety of perspectives. We expect to develop a program that includes symposia that cover topics of marine, estuarine, and freshwater fisheries management; commercial, subsistence, and sport fishing; cultural and historical roles of fish and fisheries; impacts on water and fish populations from energy, resource extraction, and land use; native and nonnative fisheries; the intersection of traditional cultural knowledge and western research practices; and the role of the many publics who rely on or enjoy aquatic resources. Spokane's location in the intermountain west is uniquely positioned to offer a program that tackles all these issues.

The Spokane Program Committee invites proposals for symposia, pre-conference workshops and continuing education courses, and innovative sessions that support the theme and look to advance the fisheries profession.

SYMPOSIUM PROPOSALS:

Symposia are the scientific centerpiece of these annual conferences and are sessions organized around a specific topic. The 2022 Spokane Program Committee is seeking proposals for half-day and full-day symposia. The committee is soliciting proposals that cover the topics that include incorporation of cultural perspective and traditional knowledge in management and policy, increasing equity and inclusion in the fisheries profession, and how the fisheries field could better prepare for change. Additional topics could include advancing technology and techniques, data management improvements, and hatchery reform. They may include individual presentations, panel discussions, or other formats.

Symposium organizers will be responsible to prepare proposals, coordinate with the program committee as the program is developed, solicit presentations for the sessions, approve/deny the inclusions of additional abstracts from the general abstract submission, communicate with speakers, and identify moderators for the live session.

We encourage all organizers to visit our web-based whiteboard that will allow for people to post session ideas and to collaborate with others in the development of sessions. This will also provide the opportunity for connections to be made prior to the meeting and potential reduce the overlap in session topics. Access to this tool will require that you establish an account and will be linked to our submission page.

WORKSHOP/CONTINUING EDUCATION PROPOSALS:

Pre-conference workshops and continuing education courses will be offered onsite as half-day, full-day, or two-day sessions. Workshops should be designed to offer in-depth professional development that is of interest to a variety of participants, ranging from students to professionals. It is also acceptable to propose workshops for specific audiences.

INNOVATIVE SESSIONS:

The Program Committee encourages organizers to submit creative proposals for sessions that utilize and engaging design, approaches, and formats. These proposals could include lightening/speed presentation sessions, slam sessions, or other interactive and non-traditional sessions.

AFS 2022 Annual Meeting - Preliminary Call for Proposals

PROPOSAL SUBMISSION AND REQUIREMENTS:

All proposals need to be submitted through the online portal. Proposals will be reviewed and the Program Committee may request revisions or collaborations to reduce overlap in topics and strengthen offerings. Organizers will be notified regarding the status of their proposals by February 11, 2022.

Proposals will be asked to include the following information:

- 1. Session Type: Symposium, workshop, innovative session
- 2. Intended length: 1 block, half day, full day, 2 days
- 3. Session Title
- Organizer(s): Name and contact information, submitting organizer will be the point of contact
- Description: A brief description of your session that will be included in the online program
- 6. Session abstract: There will be a 350 words or 2,500 characters limit.

Questions: Please contact the Program and Symposia Chair, Laurie Earley, laurieearley@outlook.com for questions related to the submissions of Symposium or Innovative Session proposals. Please contact Lauren Maza, Imaza@fisheries.org with any questions on workshops or continuing education questions.

Please note: As we have learned through the COVID-19 pandemic, virtual conference options provide the opportunity to increase accessibility and involvement. Although conference details are still in the works, there will likely be a virtual/hybrid option. This will mean that presenters in symposia and contributed sessions will be required to provide a recorded version of their presentation prior to the meeting. These presentations will be available for all registrants at the start of the meeting and an in-person session will be scheduled for live presentations during the meeting. More details will be provided as the program is developed and session organizers can work with the Program Committee Co-Chairs (Laurie Earley, laurieearley@outlook.com; Jeff Fryer, fryj@critfc.org) as more details are determined.

The Book Nook: Homewaters A Human and Natural History of Puget Sound

Book Review By Orlay Johnson

I can begin by saying this is one of the best books (perhaps the best) I have ever read. I may be a bit biased as I live on the subject of the book and also consider it my favorite place in the world to work and play. I must also confess I talked with the author on various topics including oysters and salmon. However, if I didn't think it was an excellent book, I'd just not review it.

So, what makes this book so good?

One -- David Williams is a popular historian who makes every effort to create a readable book for the non-scientist general public – while still documenting all his claims with footnotes and references.

Two – He is an excellent writer and author of several books including "Too high and Too Steep" about Seattle's massive re-organization of the landscape to suit its businesses. His writing style is very easy to read and he doesn't use confusing scientific or historian jargon.

Three – without a doubt he has done his homework – which must have been a massive effort as the book covers virtually the entire history of the Sound as well as details on most of its commercial species and another aquatic species. Just reading the acknowledgements is a who's who of Seattle's historians, biologists, and water users.

Four – Photos and especially maps (e.g. Page 52, map of Salish defense sites from 1,600 years ago to 1880), well support the written material and consistently presented information or insights that are not common knowledge.

What is the book about and how is it organized? In typical historian fashion David goes from the early history of the Sound, up through modern days with chapters emphasizing how the mighty Pacific, continental plates, and multiple glaciers created the Sound and molded the lives of those who live on and near it from pre-history to the present day.

There are ten chapters, starting with "Birth of a Name" which covers how we have named the different parts of Puget Sound (the oldest name we have is Whulge and in Lushsootseed means "stretch of saltwater), how what we think of as Puget Sound differs significantly from the official designation is, and why this book is focused on Puget Sound and not the larger Salish Sea.

Chapter 2, "Birth of a Place", is on the geologic history (i.e. volcanoes and glaciers) of the Sound and how they impact us today such as our volcanic soils and the mighty but collapsing cliffs of Whidbey and Camano Islands as well as along many other shorelines.

Chapter 3 "Peopling Puget Sound" focuses on the history and culture of the people who first lived here and then on the waves of migrants who came later as raiders, explorers, soldiers, settlers, gold diggers, immigrants, and entrepreneurs. He puts special emphasis

on what it must have been like to be the first humans to set foot in the area.



The author of Homewaters, David B. Willliams

The Short Review

This is one of the best books I have read and it goes into wonderful details of all things Puget Sound. It begins with glaciers and volcanoes creating the Sound, examines early Native communities' relationships with their environment, up to present day exploitation of its natural resources. Also, great stories on oysters, crabs, rockfish, and one most people know little about – the development of the modern Geoduck industry. It includes info on the world of indigenous canoes and the history of the Mosquito fleet, Washington State Ferries, the building of the Iron Triangle forts, and the railroads. One of the best sections is on how keystone and emblematic species like rockfish, herring, kelp, salmon, and Orca are enduring the deteriorating conditions of the Sound today. It is a fascinating exploration of how a place shapes the lives of the people and cultures that live along its shore from earliest times to the present day. He writes "If we can allow our relationship to Puget Sound to flourish, as the wilder species have done, then surely we can create a better future for all who live here." Wonderful history and excellent read.

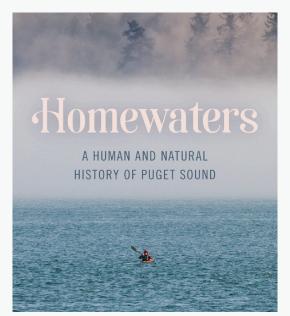
Chapter 4 "Defending the Sound" David goes into detail on the various ways the first inhabitants protected themselves from northern slave raiders, including a map (page 53) of Salish defensive sites back to 1,600 years ago which suggest a very sophisticated military organization. The chapter also covers more recent military establishments on the Sound – with special emphasis on the triangle of forts built in the late 1880s to protect us from the Spanish war fleet. For me, a memorable part of the book is the first paragraph of this chapter which describes the 1792 discovery by Peter Puget near what is now Port Townsend of "a truly horrid sight". However, Williams point out "the young British officer displayed a rare display of objectivity for an 18th century European explorer" and wrote that what he witnessed had been happening for centuries in England and that the London Bridge actually had a "keeper of the heads.".

Chapter 5 "Marine Highway" concerns the vastly different types of vessels that have plied the Sound since humans first arrived. The author begins by retelling his adventures when he decided to ride all of the ferries in the greater Puget Sound area – there are 27 different ferry runs ranging from the scenic San Juan Islands tour beginning in Anacortes and ending in Victoria, BC to the 3 minutes' ride from Everett to Jetty Island (an artificial sandy island that is a treasure for younger kids). Whether you are a ferry rider or not – his trips on the different routes are all fun to read.

He then describes the Mosquito fleet as a flotilla that acted as ferries, delivery boats, postal service, a communications hub for isolated communities, provided medical doctors, and anything else needed by early inhabitants of Puget Sound. It is far more than just a part of our history as it had a tremendous influence on how and what Puget Sound has become.

This chapter also describes various types and uses of canoes by native people as described by Bill Durham, local marine historian. David quotes archaeologist Ken Ames that "it is apparent that the canoe was essential to life on Puget Sound and it seems clear that literally everyone, at least on the Northwest coast, had one".

Drawings on page 70 are of 6 types of canoes and are based on research in 1910s by Geraldine Coffin and Thomas Talbot Waterman. The canoes pictured are a war canoe, freight canoe, trolling canoe, shovel-nose canoe, one-man canoe, and children's canoe.



Chapter 6 "Forest in the Sound" is an in-depth discussion with Tom Mumford on kelp – the many different kinds, how essential they are to indigenous culture, and how important they are to the health and ecological success of animals in the Sounds.

Chapter 7 "The Silver Wave" was a term coined by biologists to describe the relationship of scoters (diving birds) and herring. The chapter describes the large herring fisheries and how overfishing almost drove them to extinction in many locations and restoration efforts across the regions, included downtown Seattle. He also includes info on the long-term research being done by many agencies, including excellent info on recent genetic research by Ph.D. student Elini Petrou and population studies by Post-Doc Margaret Stiple (former UW student WABC member).

Chapter 8 "Old Fish and New Laws" refers to all the various battles fought over any fish species of commercial value, starting with native fisheries and the early days of commercial fishing and going all the way to recent US supreme court rulings. Williams documents accounts of human investments in a wide and diverse range of ways to corner the market for a species. These efforts include native clam ponds, State and Federal fish hatcheries, net pens, salmon ranches, and the never-ending attempts to regulate the multitude of fishing boats and fishers in our waters – all poor attempts to manage species better than Mother Nature.

While this chapter can be depressing, it does point out some successes and that research on restoring ESA listed species, suggests that rockfish and other species may be able to rebound and rebuild their populations if we humans are willing to constrain our actions.

Chapter 9 "The Table is Set" focuses on the history of shellfish fisheries such as oysters, clams, scallops, and geoducks with special emphasis on native Olympic Oysters and their amazing comeback, in both population numbers and as a delicious delicacy. This chapter also covers the discovery of massive geoduck populations and birth of geoduck farming and provides a little-known history of how the South Sound became dotted with arrays of blue plastic tubes. Because of this, Geoducks farms are seen by some as ugly beyond measure and others see them as a way to harvest the clams in a regulated and sustainable manner. David covers both sides very well, but there is still something very familiar in the quotes from the large corporations doing the farming that seems so familiar from decades' past.

Chapter 10 "Homebodies" – This is the chapter most readers will remember as it covers salmon and Orca whales. It begins with a wide-ranging discussion on the history of salmon and their close relationship with early humans in the Sound (e.g. 12,500-old salmon bone was found near an encampment on Bear Creek) as well as their biological adaptions to the Sound. He covers native use of salmon and how the salmon were caught and the runs maintained. An undated photo of a salmon bake by three Suquamish women using ironwood sticks is on page 188 – a technique going back millennia). There is also a long section on how the state tried to use hatcheries to "one up" mother nature – a measure found questionable even by the likes of John Cobb, the founder of the UW College of Fisheries.

He begins and ends the book with accounts of how our resident Orcas went from being considered terrifying monsters to icons of the Northwest. He tells how they were once randomly killed and then trapped and taken from their family pods to be sold around the world, how the pods are family units with a dominant female, and includes the dire situation of the local resident pods today. He "humanizes" these formerly feared and misunderstood animals with stories with the sad story of a mother Orca, Tahlequah, who lost her baby and then in a display of maternal grief, carried her dead baby around the Sound for days and days.

He does end the book on a positive note with a discussion of how we can work together to protect this unique body of water, and finishes with a quote by Swinomish Tribal member Jamie Donautoof. In Jamie's work on sense of place, she has found that those connections motivate people to be more responsible. Her advice is simple:

Be present on the land. Engage with the goal of actually learning, and therefore caring about the place where you live... If we can allow our relationship to Puget Sound to flourish, as the wilder species have done, then surely we can create a better future for all who live here."

Thanks for reading.

WASHINGTON-BRITISH COLUMBIA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

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:

- 1. 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

Contact Information

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

Questions? Suggestions?

Contact President Alf Haukenes at ahaukenesafs@gmail.com

Want to write an article or submit any type of fisheries-relevant information to this newsletter? Contact the Communications Officer Haley Tunna at haley.tunna@gmail.com

