

# Tributary

The Newsletter of the Western Division of the American Fisheries Society

Volume 42 Issue 1

Spring 2018



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**President:** Brian Missildine **Vice President:** Daniel Dauwalter **Sec.-Treasurer:** Tracy Wendt  
**Student Representative:** Britta Baechler **Tributary Editors:** Niall Clancy & Tim D'Amico

# PRESIDENT'S HOOK

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Hello Western Division

I hope your winter/early spring is going well. I am sure many of you are getting ready for the upcoming field season; hiring staff, ordering equipment, selecting sites, etc. I do miss some of the field work, just not the late night/early morning surveys. On top of that, I know that your ExComm is preparing for your chapter's upcoming meeting, if you haven't had it yet. I had the opportunity to travel to Butte, Montana for their chapter meeting and I have to say I really like their meeting format. Everyone is in one room so there is no dashing between rooms to try to make the next talk. I want to personally thank Montana's ExComm for the hospitality and Montana is truly Big Sky country.

I have mentioned in the past but wanted to mention again that we have two new committees; the Diversity and Inclusion committee and the Early Career professional committee. If you are interested in being part of one of these committees, send an email to [Cheyenne owens@fws.gov](mailto:Cheyenne_owens@fws.gov) for the D&I committee and Zachary Beard at [ZBeard@azgfd.gov](mailto:ZBeard@azgfd.gov) for the

Early Career professional committee. You can check out the Early Career professional website at:

<https://wdafs.org/about-us/committees/early-career-professional-committee/> I am sure they would love more committee members.

Your Western Division officers along with the Alaska chapter ExComm are feverishly working on the Western Division meeting that will be held in Anchorage Alaska May 21-25. Registration is open and we expecting a great turn out. Currently, we have approximately 300 talks and 40 posters submitted with the expectation that this will increase by the time you are reading this.

Here is the website link:

<http://wdmtg.fisheries.org/> so get registered and come on up to Alaska to join us for a great meeting.

If you have any comments, suggestions, etc. to help improve the Western Division, just drop me an email at [brian.missildine@dfw.wa.gov](mailto:brian.missildine@dfw.wa.gov). Until next time, be safe in the field and I will see you in Anchorage.



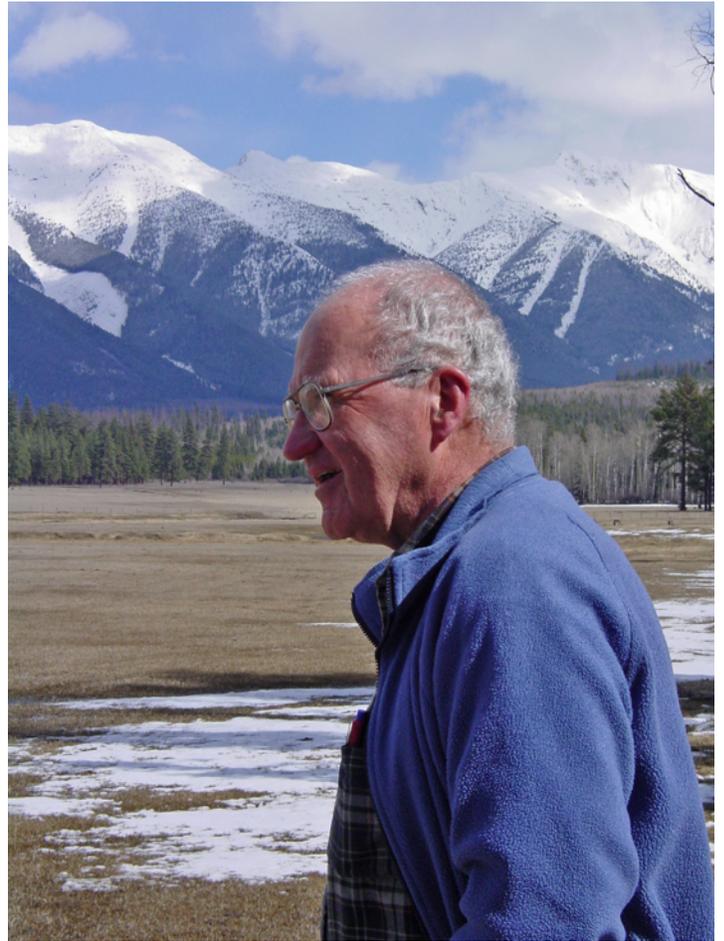
Brian Missildine  
*WDAFS President*



# IN MEMORIAM

## In Memory of Dr. Andy Sheldon

Dr. Andy Sheldon joined the faculty at the University of Montana in 1969 and retired in 2003. As an Emeritus Professor, he continued to work on research projects, publish on stonefly distribution and ecology, and collaborate with colleagues until his recent death. Andy was an accomplished, dedicated, and demanding teacher who challenged and engaged students intellectually, balanced theory and empirical studies, and introduced historical perspective as well as the latest ideas and innovations in a discipline. He possessed an encyclopedic knowledge of the entire field of ecology and evolution from a voracious appetite for learning, which he shared graciously with students and peers. Many zoology, biology, and wildlife biology students and faculty gained from his careful, encouraging, and firm mentoring. One of his many important legacies is the large number of his students who are making their own contributions as university faculty, aquatic biologists, fisheries managers, and ecological consultants. Andy's research addressed issues in an impressive array of disciplines including aquatic ecology, fisheries biology, invertebrate biology, conservation biology, community ecology, biogeography, quantitative analysis, and limnology. His prodigious knowledge of the scientific literature and unbridled love of streams, earned him the affection and respect of those who have worked with him. Andy was recognized for his



contributions to the fisheries profession by being awarded the Distinguished Teaching Award from UM and the Career Achievement Award from the MT American Fisheries Society, both in 2003.

Dr. Lisa Eby  
*University of Montana*  
*Missoula, MT*



Dr. Sheldon with colleague in 2017



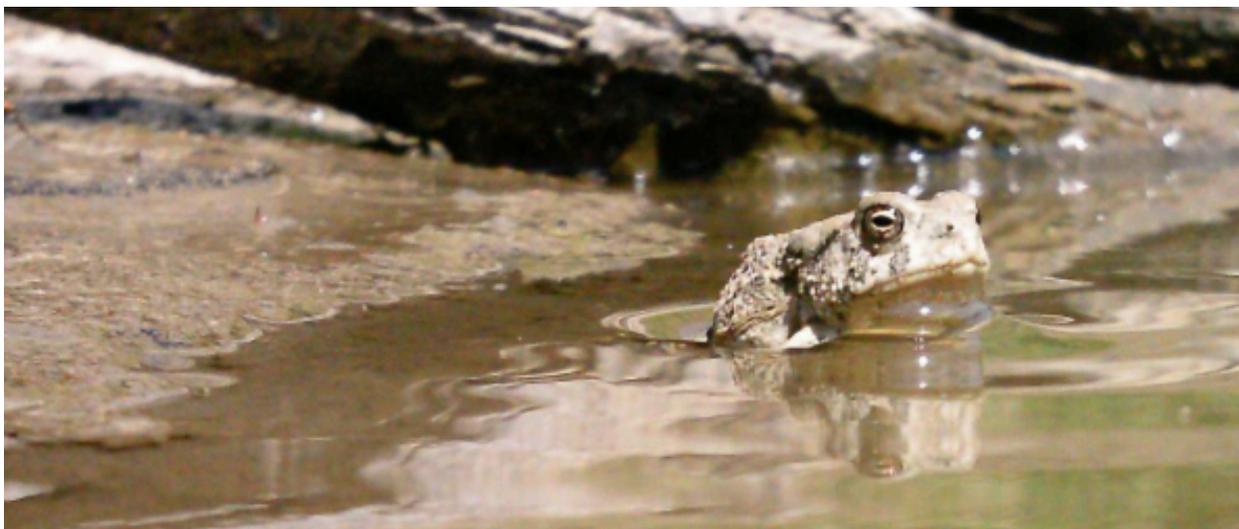
### Recovering America's Wildlife Act

In 1937, recognizing the importance of state wildlife management agencies, President Franklin Roosevelt signed the Pittman-Robertson Act. This bill supplies up to 75% of state wildlife agencies' total budget, using funds generated by taxes on hunting equipment. A similar bill, the Dingell-Johnson Act, passed in 1950 and provides funds for fisheries management generated by taxes on fishing gear. Hunter and angler groups around the nation are very supportive of these acts. While the better-known Endangered Species Act has been instrumental in providing a way to recover at-risk species, the Pittman-Robertson Act provides the funds necessary to keep a multitude of other species from being listed as threatened or endangered in the first place. Provided enough funds to adequately monitor game species such as deer, elk, or black bears, agencies can set appropriate harvest quotas so

that game populations keep producing enough animals for a yearly hunt. However, a quick glance at the species that are now being listed as endangered, reveals that non-game species (songbirds, frogs, bats, clams, etc.) are being added at an alarming rate. There is a reason for this. Unlike harvestable species, non-game animals do not have a consistent source of funding. That is why the Recovering America's Wildlife Act (RAWA), introduced to the House in December, is so critically important. RAWA would take pre-existing funds generated from leases on federal lands and send them to the states for management of non-game species. These funds are badly needed to prevent more species from becoming endangered. Currently, the bill is in the hands of the House Natural Resources Committee. Please consider reading up on how what AFS is doing to support this bill using the link below.

< <https://fisheries.org/recovering-americas-wildlife-act/> >

Niall Clancy  
*Tributary Co-Editor*



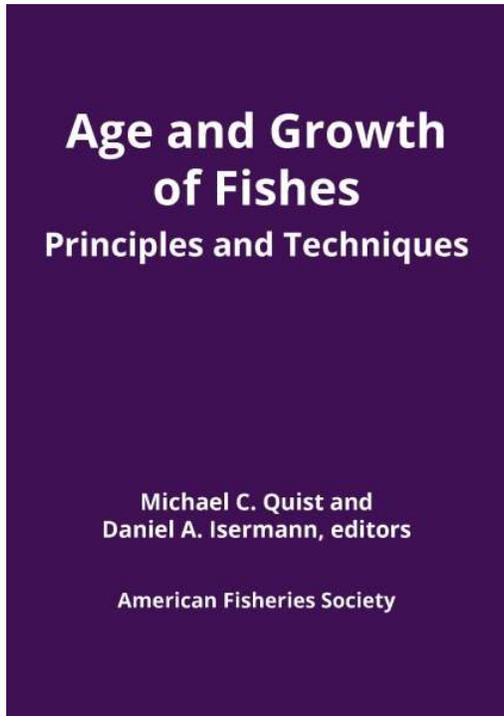
### Age and Growth of Fishes – AFS Press

Estimating age structure of fish populations and growth of individuals is at the core of evaluating fish population demographics and dynamics. Obtaining high-quality age and growth information provides important insight on not only growth, but also on recruitment variability, year-class strength, and mortality. Thus, age and growth investigations are critical for providing information on the basic ecology of a species and guiding management and conservation actions. At first glance, age and growth investigations seem straightforward and commonplace; however, obtaining useful age and growth information is not a trivial process and fishery scientists regularly fail to fully capitalize on their efforts.

Age and growth investigations have a long tradition in fishery science and were once a staple of fisheries education. One would think that focused instruction on age and growth analyses would be common in today's educational programs. Experience suggests the opposite is true in that most fisheries programs seem to be moving away from "traditional" population ecology. A lack of knowledge on the idiosyncrasies of age and growth analyses is problematic because the need for such information has not diminished. In many ways, the need for age and growth information is even more critical today than in the past. For instance, as our profession continues to focus on conservation of nongame species, the lack of information on the population ecology of those species is a hindrance to making appropriate management and conservation decisions. For many species with recreational or commercial value, the need for quality information on population dynamics has become more apparent as

management decisions increase in complexity. Although age and growth analyses can be traced to the very beginnings of our profession, the science of estimating age and growth continues to progress.

This book provides a comprehensive overview of concepts and techniques associated with the age and growth of fishes, with a particular focus on the use of hard structures (e.g., fin rays, otoliths). Although sections of the text briefly discuss marine fishes and larvae, the primary focus of the book is on post-larval fishes in freshwater systems. The concepts and techniques described in the text are applicable to systems around the world, but the focus is largely on North American fishes. The book is organized into four sections. Chapters in the first section provide an overview of the history and importance of age and growth information, as well as an introduction to how hard structures grow. Materials in the second section focus on validation and verification of structures, choice of structures, and sampling considerations. The third section provides a discussion of the most common structures used to estimate the age fishes. In addition to providing a background on each structure, these chapters provide insight on how to remove, process, and interpret each type of structure. The last section details methods for data summarization and analysis. Portions of the book will likely serve as reference material; whereas, other sections provide materials that will help in developing field and laboratory protocols. Lastly, the book will serve an important role in courses focused on fish population ecology, fisheries science, fisheries techniques, and fisheries management.



Michael C. Quist and Daniel A. Isermann

## ADVANCES IN THE FIELD

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Newly released Fish Bioenergetics 4.0 is now available as open-source software!

Recently released Fish Bioenergetics 4.0 (FB4) is the latest generation of the Wisconsin Model that provides a user-friendly, menu-driven environment for bioenergetics modeling. FB4 uses an R-based analytical approach linked to a graphical user interface, making simulations easy even for users with little or no experience in R programming. The R programming approach enables timely updates and bug fixes, and can rely on feedback from users to continuously improve the application. Users can add new or modified parameter sets for additional species and incorporate modifications such as habitat-dependent functions (e.g., dissolved oxygen, salinity) that are not part of the default package. Because the core model code is accessible to users it can be incorporated as a module in larger ecological models if desired.



During development of FB4, we conserved many aspects of the previous version of Fish Bioenergetics 3.0 while adding features that improved efficiency and ease of working from the user-interface. Fish Bioenergetics 4.0 contains 105 bioenergetics models representing 72 aquatic species. It is our hope that advances in the new modeling platform will attract a broad range of users while facilitating continued use of bioenergetics modeling to address ecological and management questions.

For more information about FB4 or to download the application, please visit our website at

<http://fishbioenergetics.org/>

David Deslauriers, *Fisheries & Oceans Canada*  
Steve R. Chipps, *South Dakota State University*  
James E. Breck, *University of Michigan*  
James A. Rice, *North Carolina State University*  
Charles P. Madenjian, *U.S. Geological Survey*



**Symposia Highlights:** Making Fish Habitat Great Again, Enhancing Diversity & Inclusion, Minimizing Impacts of Aquatic Invasives, Changing Food Webs, Marine Mammal-Fishery Interactions, and much more!

# FEATURE

## Understanding the Status of Alaska Salmon and People

Unlike most global salmon stocks, salmon in Alaska are sustainable across much of their historic range, largely due to a long tradition of community stewardship and a science-based management system. However, the species' long-term viability is under threat on several fronts: climate change, ocean acidification, overfishing, selective fishing, declining research and management budgets, and incompatible development of salmon watersheds, among them.

The State of Alaska's Salmon and People (SASAP) project is a knowledge synthesis designed to inform the future of management of Alaska's wild salmon. The sustainability of the Alaska salmon system depends on the long-term maintenance of a connection to people which is threatened by issues such as inequitable access to salmon fisheries, graying of the fleet, and other social shifts.

*The mission of the State of Alaska's Salmon and People project is to create an equitable decision-making platform for all stakeholders by addressing data gaps in Alaska's salmon system through information synthesis, collaboration and stakeholder engagement.*

The SASAP project specifically seeks to:

- integrate knowledge across disciplines and agencies and between cultures and users to influence research priorities, develop and monitor indicators of system health and facilitate equitable and efficient management of the system;
- create new institutional capacity for generation of salmon knowledge; and
- establish a shared and credible baseline for integrated knowledge that can be built on over time.

Frank Davis

*NCEAS, Co-Principal Investigator, SASAP*

Ian Dutton

*Nautilus Impact Investing, Co-Principal Investigator, SASAP and Data Task Force*

Matt Jones

*NCEAS, Co-Principal Investigator, Data Task Force*

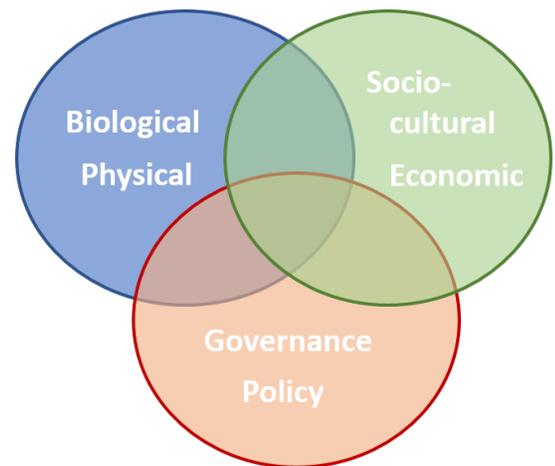
Peter Westley

*UAF CFOS, Co-Principal Investigator, SASAP Round 1 Working Groups*

The SASAP process is supported by a novel data science and synthesis partnership between the National Center for Ecological Analysis and Synthesis (NCEAS) at the University of California, Santa Barbara and more than 100 scientists and educators from academic, community and government organizations and Indigenous knowledge experts throughout Alaska and the United States.

Outputs from the SASAP Synthesis will be shared with government, tribal, education, research community and commercial interests to strengthen their understanding of salmon systems and prioritize future research, monitoring and management efforts. The knowledge generated is expected to play a seminal role informing future salmon management and research in Alaska and the North Pacific region.

A PDF of our booklet "The Status of Alaska Salmon and People" is available on the SASAP website [www.alaskasalmonandpeople.org](http://www.alaskasalmonandpeople.org). Designed to showcase the work of the interdisciplinary SASAP working groups, the booklet offers a preview of the many datasets, analyses and reports that will be produced from their work over the next year (Figure 1). We encourage you to reach out to the working group team leaders and NCEAS if you have any questions or would like to access and use these products.



**Figure 1.** SASAP 'Working Groups' are conducting broad scale, cross-cutting analyses of 1) Biophysical information on salmon distribution and habitat, 2) Sociocultural and economic dimensions of salmon systems, and 3) Governance and Subsistence

# CHAPTER UPDATES

## Montana AFS

The Montana Chapter recently held their annual meeting in the city of Butte. Career Achievement Awards were presented to Pat Bigelow (Yellowstone National Park), Chris Clancy (MT Fish, Wildlife & Parks), Buddy Drake (Private Consultant), Steve Leathe (NorthWestern Energy), Brent Mabbot (NorthWestern Energy), and Bruce Roberts (U.S. Forest Service). One of the most prestigious awards, the Outstanding Fishery Professional Award was presented to Mike Jakober (U.S. Forest Service).

Local news coverage:

<http://www.bitterrootstar.com/2018/02/13/local-fisheries-biologists-awarded/>

<http://www.bitterrootstar.com/2018/02/13/local-fisheries-biologists-awarded/>

Leslie Nyce

*MT Chapter Past President*



Mike Jakober, Bitterroot National Forest Fisheries Biologist

## Washington-British Columbia AFS



2018 WA-BC Annual Meeting  
"40 Years of Fish and Fisheries in the Pacific Northwest"  
March 19–22, Kelowna, BC



The Washington–British Columbia Chapter of AFS is getting ready to host their 40<sup>th</sup> Anniversary Annual Meeting in beautiful Kelowna, BC on March 19–22 with the theme of “40 Years of Fish and Fisheries in the Pacific Northwest.” The meeting will start by hosting a beginner workshop for R users on the 19<sup>th</sup>. The plenary session, Tuesday morning, features speakers Jordan Cobble (Westbank First Nation Sncəwips) and Paul Kariya (Costal First Nations) who will focus on native peoples’ connection to the resource and some of their experiences protecting the environment and pursuing sustainable economies. *A River Film* will

follow, demonstrating how watershed managers across the US-Canadian border can work together towards supporting their ecosystem and economic goals. There are some great symposia scheduled throughout the rest of the meeting, including some on Sockeye Salmon in the Pacific Northwest, Bull Trout status and management, Upper Columbia salmon reintroduction, hatchery reform progress and innovation, and regional salmon restoration. A student/mentor mixer followed by the tradeshow/poster mixer will occur Tuesday evening, and the banquet will be on Wednesday evening. It should be a great meeting, and we hope to see you there! You can check out all the meeting details at <https://wa-bc.fisheries.org/next-meeting/>.

Ben Cross, *WA-BC Chapter Communications Director*

## SUBUNIT UPDATE

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### Patagonia Donates Shirts to Colorado State University AFS

Patagonia® recently donated T-shirts to the Colorado State University American Fisheries Society student subunit in support of the Coldwater Conservation program at Colorado State University. All of the proceeds from the sale of these shirts are being donated to support the *Kurt Fausch-Shigeru Nakano Scholarship*, awarded to undergraduate and graduate students in the Department of Fisheries, Wildlife and Conservation Biology of the Warner College of Natural Resources who are studying conservation of coldwater fish and their ecosystems. The T-shirt's artwork (pictured) was drawn by acclaimed fish



**Bear Creek Greenback Cutthroat Trout**  
*Oncorhynchus Clarkii Stomias*  
**patagonia**

illustrator Joseph Tomelleri from a specimen captured from the only known remaining pure population of Greenback Cutthroat Trout *Oncorhynchus clarkia stomias* in tiny Bear Creek on the slopes of Pikes Peak near Colorado Springs, Colorado.

Thank you for supporting the students who are studying to become the next leaders in coldwater fisheries conservation in Colorado, the West and beyond!

Tim D'Amico  
Tributary Co-Editor

## CONFERENCE INVITATION

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### 2018 Lake Roosevelt Forum

The 2018 Lake Roosevelt Forum Conference is scheduled for April 24<sup>th</sup> and 25<sup>th</sup> at the historic Davenport Hotel in Spokane, WA. The LRF Conference is open to the public and registration fees and information can be found at <http://www.lrf.org/conference>. Numerous presentations covering an array of regional issues are scheduled. Session topics include the threats of invasive Northern Pike to Columbia River impoundments, Upper Columbia Salmon Reintroduction, and numerous other issues

specific to Lake Roosevelt (agenda will be online soon). Poster and Exhibit space, and special room rates for conference attendees are available. Early registration and student registration rates are also available. For more information, please visit the LRF website or email [info@LRF.org](mailto:info@LRF.org). Hope to see you there!

Elliot Kittel  
Spokane Tribal Fisheries



# COMMITTEE UPDATES

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## Diversity and Inclusion Committee

As one of Western Division's newest committees, the Diversity and Inclusion Committee aims to bridge the gap between chapter efforts, such as those of the Oregon chapter, and national efforts geared toward bringing diversity and inclusion to the American Fisheries Society. Our mission is to foster the inclusion, participation, and equitable treatment of members of the Western Division American Fisheries Society (WDAFS) without regard to gender or gender identity, race, national origin, ethnicity, religion, age, sexual orientation, physical or cognitive ability, political affiliation, or family, marital, or economic status and further, to increase awareness of and encourage diversity and inclusion within the fisheries workforce. To best achieve our mission, our goals include: researching and identifying diversity and inclusion issues and challenges within WDAFS, increasing outreach, engagement, recruitment, and retention efforts with the goal of building and maintaining a membership that reflects the human diversity present within the geographic region of WDAFS; increasing the overall diversity of speakers at annual meetings,

increasing the overall diversity of volunteers and members in leadership roles, encouraging an inclusive culture within WDAFS, and increasing awareness of the mission and efforts of the committee. As part of our efforts, we will be holding our first symposium at the upcoming WDAFS meeting in Anchorage entitled, "Turning the Tide: Enhancing Diversity and Inclusion in the Fisheries Profession". The symposium will consist of professionals across the academic, federal, state, tribal, non-profit, and private sectors sharing their own initiatives toward encouraging diversity and inclusion. The session will conclude with a town hall style discussion of the state of diversity and inclusion within WDAFS and initiatives toward building a more diverse and inclusive fisheries profession. The Diversity and Inclusion Committee invites you to join us in these and future discussions as we aim to "turn the tide" on diversity and inclusion in the fisheries workforce. For more information or to become involved in the committee, contact committee chair, Cheyenne Owens, at [cheyenne\\_owens@fws.gov](mailto:cheyenne_owens@fws.gov).

## Early Career Professional Committee

The Western Division of the American Fisheries Society (WDAFS) has a new Early Career Professional Committee chaired by Zachary Beard (Arizona Game and Fish Department)! The committee's mission is to promote the professional development of early career professionals (within five years of terminal graduation) through education, outreach, mentorship, and facilitating networking among early career professionals, students, and other professionals in fisheries science, and encouraging participation in the American Fisheries Society. To help the committee achieve their mission, they have established four goals:

1. Generate workshop topics, and solicit and collect professional development workshop proposals from the Western Division membership.
2. Generate mentoring opportunities, provide access to mentorship resources, and facilitate discussions and activities between early career professionals and mentors.
3. Facilitate networking between early career professionals, students, and professionals by organizing networking events.
4. Facilitate early career professional involvement in the American Fisheries Society by encouraging active member participation, and by advocating on the

member's behalf for involvement with the American Fisheries Society.

Currently the committee is working to get a website setup. On this website the committee plans to share their mission and goals, as well as contact information. Additionally, they plan to make information collected from all the WDAFS chapters about opportunities currently available at the chapter level to early career professionals available on the website. The committee is also investigating acquiring a booth and organizing an informal social for early career professionals to promote the committee and solicit feedback on how they can best serve early career professionals at the upcoming WDAFS annual meeting in Anchorage, Alaska. The committee is always looking for new members and would ideally like to have at least one member from each chapter in the WDAFS. If you are looking to get involved with the American Fisheries Society this would be a great way to start! If you are interested in joining the committee, want more information, or have ideas about what you would like to see from the Early Career Professional Committee contact Zach Beard [zbeard@azgfd.gov](mailto:zbeard@azgfd.gov). Stay tuned for more to come from the Early Career Professional Committee!

# VICE PRESIDENTIAL CANDIDATES – It’s Your Choice!

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Elections for 2018-19 Vice President of the Western Division AFS are right around the corner! During the month of April, Western Division members will be able to vote electronically for one of two VP candidates. Anthony (Tony) Siniscal and Todd Pearsons have thrown their hat in the ring; both have carved out successful fisheries careers, and both are highly motivated and capable leaders. No matter who wins the election, WDAFS will be well-served.

Voting is open April 1<sup>st</sup> – 30<sup>th</sup> and can be completed at: <https://wdafs.org/2018-officer-elections/>  
**Please vote!**

## Todd Pearsons

I have always loved water and what lives in it. I grew up in California swimming, surfing, angling, snorkeling, spearfishing, and SCUBA diving. As a kid, I watched Jacques Cousteau and his team bring images from below the water surface into my home. I was hooked and I knew I wanted to spend my life working in and around water.

I prepared myself for an uncertain career in the aquatic profession by going to the University of California at Santa Barbara and getting a degree in Aquatic Biology with a heavy emphasis on surfing – go Gauchos. I did laboratory and field work to understand the influence of sea urchins on kelp bed communities including diving with torpedo rays at night while netting and tagging surf perch underwater. I also harvested mussels from offshore oceanic oil rigs to help pay the bills.

I furthered my aquatic preparatory education by traveling north to graduate school at Oregon State University, where I earned my M.S. and Ph.D. in Fisheries Science – go Beavers. While I studied in Oregon, I had the privilege of working with great people such as the brilliant Douglas Markle and “discovering” a new species of fish and petitioning to have the Oregon Chub added to the Endangered Species list (which later became the first fish to be delisted as a result of recovery). After my work on the wet side of the state I began working on the factors that influence stream fish communities in eastern Oregon. With felt-soled basketball shoes, knee pads and masks I joined with the creative Hiram Li’s scrappy crew crawling up shallow streams in the John Day Basin and counting every fish we saw and examined the data to determine factors (e.g., habitat complexity, predation, flooding, cattle grazing, and



temperature) that could be responsible for the variation we observed. Those were some of the best summers of my life.

After an initial contact during an AFS meeting in Texas, I landed a job with the predecessor to the Washington State Department of Fish and Wildlife (WDFW) in 1992 and moved north to Central Washington to work out my dream job. I led science teams that evaluated hatchery programs and studied hatchery and wild fish interactions for much of my tenure at WDFW. I also had the opportunity to

represent the United States as a delegate in talks with Russia about interactions and salmon conservation, developed risk management approaches, and co-developed a nutrient restoration tool called the carcass analog. In 2008, I began working with Grant County Public Utility District as a means of contributing to the challenge of balancing power generation and natural resource stewardship. Species reintroductions, restoration, and harvest augmentation have been some of the key thrusts of my job. One of the biggest tests in my current job was working with others to pass all of the migratory fishes in the entire upper Columbia River that could have been blocked as a result of a fracture in a mainstem Columbia River Dam (Fisheries 41(11):622-629).

Along the way, I have had opportunities to serve at a variety of Universities (e.g., University of Washington, Central Washington University, and University of Haifa), author or co-author over 170 publications, speak around the world, consult on important natural resource issues, and work with great folks. I have also enjoyed work as a professional underwater photographer as a means to increase awareness about the underwater beauty in fresh waters (see recent

interview in Fisheries and the Todd Pearsons gallery at [www.underwaterfishphotos.com](http://www.underwaterfishphotos.com)).

#### *AFS Involvement*

I became an AFS member in 1986 and later became a life-member because of the compelling mission of the organization. I also obtained my professional certification through AFS. I have attempted to further the mission of AFS by organizing and chairing many symposia at chapter and national AFS meetings, presenting many talks at AFS conferences throughout the country, publishing articles in most of the AFS journals, serving as a reviewer for many AFS journals, consulting on national AFS issues, serving on committees, recruiting new members, and contributing photographs to AFS publications.

My hope is to further advance the mission of AFS through serving as Vice President and ultimately President of the Western Division. My involvement in AFS for over 30 years, my experience in a diversity of natural resource issues, and leadership experience in a variety of professional and non-profit organizations has prepared me to serve AFS in a greater capacity than I have in the past.

If elected, I would vigorously seek to improve natural resource stewardship for the benefit of current and future generations. I would endeavor to build upon our great meetings by increasing participation, opportunity, and influence. Some strategies to achieve this include: 1) adding more communication formats

such as debate, video, interview, and demonstration, 2) adding important training opportunities such as negotiation, communication, and conflict management, and 3) leveraging the influence of our annual meetings by creating captivating evening sessions that could be attended by the public. I would also seek to improve the influence of AFS professionals through methods such as: 1) developing linkages between broader societal values such as physical health, water use, economy, and world view and the expertise of AFS members, 2) building upon transboundary and ecotone issues through intentional collaborations among AFS members in the United States, Canada, and Mexico (e.g., Columbia River Treaty, estuaries, riparian zones), 3) improving the interaction and communication of science and policy, 4) forming teams of experts to provide solutions to critical issues such as competing resource laws and lowering barriers to cross-cultural communications, and 5) increasing publication of innovative ideas and inspirational topics.

Thank you for taking the time to evaluate the candidates for this important election. I hope to serve you in a greater capacity in the future and advance sound science, promote professional development, and disseminate science-based fisheries information for the protection, conservation, and sustainability of fishery resources and aquatic ecosystems.

## Tony Siniscal

#### *Background*

I remember the day when a good friend, after observing my affinity for all things aquatic, suggested that I consider a career in fish biology. My response was "You can actually do that?!" I often recall this memory when I try to explain what I do for a living to a non-fisheries person. I suspect that many of you can relate. The best name bestowed on our collective trade would be from my fiancée when we first met; while describing me to friends and family she would refer to me as a fish ranger... A Fish Ranger! Heck Yes! Protect (the resource) and serve (the fishing public). I wish I had thought of that.

While my early education and career had nothing to do with aquatics or fisheries, I have always managed to find



myself around water, nature, and fish wherever I have lived. My trek into the sciences began in the pre-med program at a small but formative university in upstate New York, University of Rochester (U of R). I had started out working towards a degree and career in immunology and working as a technician in a cancer research lab. Then, I took my first ecology class and realizing I had found my niche, I switched my focus the following semester to evolutionary biology and ecology. Although I continued in the medical research curriculum, I also spent time on a research project on invasive dreissenid mussels in the Finger Lakes, NY.

When it came time to apply to graduate school, I found myself at a crossroad; continue in medical research or pursue aquatic ecology. It was a tough choice. In the end, I applied to State University of New York College of Environmental Science and Forestry (SUNY ESF and yes, it is the longest college name in the country). Knowing very little about fish ecology but having some solid science and statistics under my belt I accepted a graduate position researching fish ecology in a hypereutrophic, inland lake in Syracuse, NY. After my graduate work, I was hired as project coordinator for the engineering department at SUNY ESF and gained some invaluable experience in environmental, economic, and engineering feasibility studies. After some time in a cubicle, I decided that I needed to try out my sea legs and worked as a fisheries observer in the Northern Mid-Atlantic. Spending about 18 months at sea on the Atlantic Coast I started looking to the other side of the country for the next adventure. After a few applications and interviews with Oregon Department of Fish and Wildlife (ODFW) I landed a job and finally returned to where I smolted (I was born in Oregon) in 2011. Since my return to Oregon I have been employed with ODFW working in recreational and commercial fisheries management in the lower Columbia River.

#### *AFS Involvement*

I have been a member of AFS since 2005 and have been continually involved in committees at the academic, state, division, and national levels. It was at SUNY ESF where I was introduced to the American Fisheries Society. My advisor asked if I was interested in helping to rejuvenate the SUNY ESF Chapter as participation had slumped in previous years. Knowing nothing about AFS but completely eager, I jumped in, dusted off the bylaws, and assembled a team of officers. Within a few months, we had a functioning chapter on our hands and were planning trips to NY Chapter and AFS meetings. After organizing student trips to national meetings in Lake Placid (2006), Ottawa (2008), and Nashville (2009), I knew that AFS would be a long-term synergetic component of my education and career.

After moving to Oregon in 2011, I immediately sought opportunities with the Oregon Chapter (ORAFS) and was nominated and elected as secretary/treasurer. During my 4-year tenure on the ORAFS Executive Committee, I worked to improve the financial sustainability, bolster its organizational structure, and build upon membership services of the Chapter. I co-authored position papers, internal documents, and policies, and I drafted a Financial Sustainability Plan. I was on the planning and budget teams for 3 successful Chapter meetings, a provocative hatchery vs wild

salmonid symposium, and the 2015 AFS meeting in Portland, OR. During my tenure, the Oregon Chapter won the AFS Outstanding Chapter of the Year Award three years in a row.

After 4 years on the ORAFS Executive Committee, it was time to take a break. I stayed involved, though, and have served as chair of the ORAFS Financial Sustainability Committee since its inception and was nominated to the WDAFS and AFS Investment Committees in 2015.

#### *Vision*

Committees are intended to foster teamwork. AFS committees draw together people with diverse perspectives, concerns, interests, objectives, and talents to achieve shared goals and represent the membership. I believe in observing the operation of a committee, getting to know its members, and looking for ways that my perspectives and proficiencies can be most helpful. I would not immediately offer any promise of novel committees, resolutions, or projects. Instead, I offer thoughtful leadership, levelheadedness, diplomacy, and my tireless dedication to aquatic resources, the fisheries profession, and the AFS membership.

My experience on AFS committees has imparted a few key principles: remember the mission, develop and enhance governing documents, strive for long-term financial sustainability, leave a legacy, and represent the diverse interests of the membership. The AFS mission statement is multifaceted; we are here to enhance not only a natural resource but also the science and scientists that support it. Governing documents are critical to the efficiency and efficacy of an organizations leadership; handbooks, guidance documents, and policies should be augmented or created so that we are not recreating wheels after passing the torch. Enduring financial sustainability is critically important; even non-profits must think about making and saving money so that that they can continue to do good things. Leave a legacy; in the spirit of my U of R motto, *Meliora*-Ever Better, I think is important to add something demonstrable to the foundation of the organization so that it will continue to grow. Finally, consider the diverse disciplines and values of the membership; we run the full gamut of disciplines, from geneticists, fisheries managers, biometricians, ichthyologists, hatchery biologists, and population ecologists (etc. etc.). I believe we need to foster relationships and understanding between disciplines while pursuing the AFS mission.

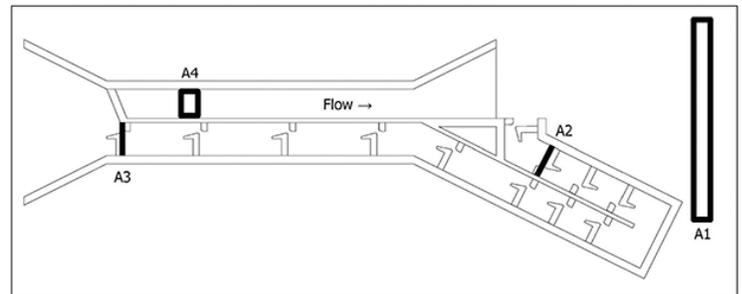
I am honored by this nomination for Vice-President of the Western Division of AFS. I hope that you will give me yet another opportunity to contribute to AFS.

## Effectiveness of a Fishway for Restoring Passage of Colorado River Cutthroat Trout

Brian W. Hodge, Eric R. Fetherman, Kevin B. Rogers, and Richard Henderson

### Abstract:

Little is known about the effectiveness of fishways for restoring passage to inland (nonanadromous) salmonids. We used PIT telemetry to evaluate the biological effectiveness of a vertical-slot fishway constructed to restore passage of adult Colorado River Cutthroat Trout *Oncorhynchus clarkii pleuriticus* (CRCT) in a small Rocky Mountain stream. Our objectives were to assess (1) fishway efficacy (whether or not the fishway restored fish passage), (2) approach efficiency (the probability that a tagged fish encountered the fishway; an index of population use), (3) attraction efficiency (the probability that a fish near the fishway located its entrance), and (4) passage efficiency (the probability that a fish entering the fishway navigated successfully through it). To account for antenna detection probabilities and avoid biases that can result from simple, proportion-based calculations, we used a variation of the Cormack–Jolly–Seber model to



Design of fishway used in the study.

derive efficiency estimates. The fishway restored passage of adult CRCT to long-vacant habitats. Approach efficiency was 4%; attraction and passage efficiencies were 100%. We conclude that fishways can effectively restore passage of inland salmonids, and we recommend that additional fishway monitoring studies be conducted to inform decision-making and elucidate which designs and conditions will best facilitate passage.

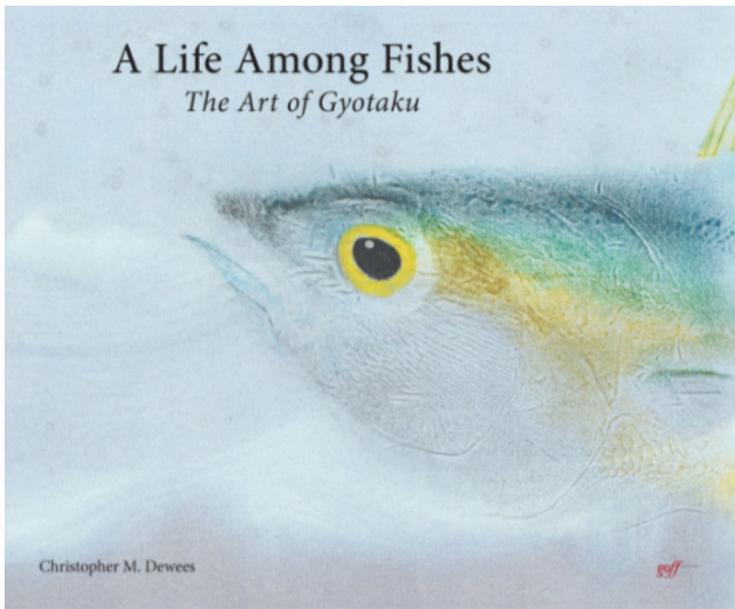
### Citation:

Hodge, B. W., Fetherman, E. R., Rogers, K. B., & Henderson, R. (2017). Effectiveness of a Fishway for Restoring Passage of Colorado River Cutthroat Trout. *North American Journal of Fisheries Management*, 37(6), 1332-1340.



**October 30 – November 2, 2018**

**The Call for Abstracts is Open!**  
North American Lake Management Society  
[www.nalms.org/nalms2018](http://www.nalms.org/nalms2018)



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## PROPOSED BYLAW AMENDMENT

Hello WDAFS,

The Western Division is proposing to amend our Bylaws. If you are a Western Division AFS member in good standing, i.e., Society dues paid, please review the proposed amendments and submit your vote here: <https://docs.google.com/forms/d/e/1FAIpQLSe2Q8V47bb8rkZ1-ERqM2oC-1E7XjhsQNM0yUDnPZjNddAicw/viewform> or visit [www.wdafs.org](http://www.wdafs.org)

If you have questions, comments, or concerns regarding the proposed Bylaws please feel free to contact me at [jackiewatsonafs@gmail.com](mailto:jackiewatsonafs@gmail.com) or any of your WDAFS officers.

Jackie Watson

## IMPORTANT DATES

### March

16<sup>th</sup>

Abstract submission deadline for AFS National Meeting  
<https://afsannualmeeting.fisheries.org/call-for-papers/>

19<sup>th</sup> – 22<sup>nd</sup>

WA-BC Chapter Meeting in Kelowna, British Columbia

31<sup>st</sup>

Application deadline - Early Career Professional Exchange Award to attend the 2018 Meeting of the UK's Institute of Fisheries Management.  
<https://fms.fisheries.org/2018-early-career-professional-exchange-award/>

### April

1<sup>st</sup>

Nomination deadline for the Emmiline Moore Prize from national AFS.  
<https://fisheries.org/about/awards-recognition/call-for-award-nominations/emmeline-moore-prize/>

1<sup>st</sup>

Eugene Maughan Scholarship deadline  
<https://wdafs.org/students/scholarship-travel-award-information/>

11<sup>th</sup>

AFS Webinar: Surviving Peer Review, 1 - 2pm ET.  
Presenter: Jesse Trushenski-Director, Animal Health & Welfare Evaqua Farms  
<https://register.gotowebinar.com/register/2545904168154439683>

30<sup>th</sup>

Last day to vote for WDAFS Vice President  
<https://wdafs.org/2018-officer-elections/>

### May

21<sup>st</sup> – 25<sup>th</sup>

Annual Meeting of the Western Division of the American Fisheries Society in Anchorage, Alaska  
<http://wdmtg.fisheries.org>

### August

19<sup>th</sup> – 23<sup>rd</sup>

Annual Meeting of the American Fisheries Society