The Confluence

# The Confluence Spring-Summer 2014

**Newsletter of the WA-BC Chapter of AFS** 





2013-14 WA-BC Executive Committee Members

Photograph taken in front of the Ray Troll mural at the University of Washington. Executive Committee members, pictured from left to right: John Morgan, Brian Missildine, Emily Pizzichemi, Martina Beck, Sean Naman, Megsie Siple, Mark LaRiviere, and Orlay Johnson. (Not shown: Stephanie Caballero and Matt Kungle)

# In this Issue

- "The President's Line" by Brian Missildine
- Upcoming Events: 2014 Parent Society AGM in Quebec, Canada
- President-Elect Matt Klungle: Summary of our AGM in Vancouver, WA
- Past-President John Morgan: Student activities report from our AGM
- Student Subunits: News from AFS-BC and AFS-UW
- The Book Nook: Summer Reads!
  - o <u>4000 Hooks</u> by Dean Adams, review by Orlay Johnson
  - <u>The Martian</u> by Andy Weir, review by Joel Crockett
- Student Essays: *Semelparous* a haiku by Natalie Sopinka
- Education Corner: NAME meeting in Bandon, Oregon on July 13-17

Have a short article you'd like to see in print and on the web? Do you have an idea/topic for a future article you'd like to see in *The Confluence*? Email us! Orlay Johnson: orlay.johnson@noaa.gov Stephanie Caballero: scaballero@fs.fed.us

### The President's Line - by Brian Missildine

Hi Chapter Members,

It has been a busy couple of months with our AGM in Vancouver, Washington and the Western Division meeting in Mazatlán. Our AGM attendance was up from last year and we even managed to make a bit of a profit. For those of you that may not know, the profits from the AGM go to support Chapter activities, such as supporting student functions and



student travel. We also provide small grant funding to fisheries-related projects and programs, such as youth fishing camps and project support to non-profits and researchers, to name a few.

Mazatlán was quite spectacular. I have to admit that I would like to go back sometime soon. The fishing was good as several members caught Dorado while our own AFS President, Bob Hughes, hauled in a 120 lb. Marlin. I worked the registration desk for a couple of days and what an eye-opener that was. The biggest challenge was that many of the students that showed up were non-English speaking and most of us were non-Spanish speaking. Dealing with this language barrier made me think about the language barrier between science, the media, and the general public. At times, the general public must think that we, as scientists, speak a completely different language; and, in part, they are correct. When talking to the general public, I know that I need to remind myself to use common terms and, if necessary, explain what these terms mean. However, back to Mazatlán - we had over 500 attendees from 14 countries and, believe it or not, most were from the U.S. I was amazed to meet folks from as far away as Pakistan, Saudi Arabia, and South Africa; I am sure the location had something to do with it. The talks were great and we had a great symposium on sharks and rays, as well as one on mangroves. The Western Division staff did a great job with all of the logistical challenges that were encountered.

I know the field season is kicking off so everyone stay safe and I hope to see you either in Quebec at our national parent society meeting or in Richmond, BC at our next Chapter AGM.



### **Upcoming Events** The 144<sup>th</sup> Annual General Meeting of AFS

Québec City, Canada August 17-21, 2014

### From Fisheries Research to Management: Think and Act Locally and Globally <<u>http://afs2014.org/</u>> Registration Info: <<u>http://afs2014.org/registration-2/</u>>

#### Anna Parma, one of three plenary speakers, has deep Seattle roots Leveraging local experience to improve sustainability of global fisheries: It is not about tools but processes

Anna (pictured at right) earned a PhD in Fisheries in 1989 from the University of Washington and worked for 10 years as a stock assessment scientist at the International Pacific Halibut Commission in Seattle. Ana will be speaking about the importance of process, and also about local stakeholder implication for the success of management and the sustainability of fisheries on local and broad geographical scales. She will be using coastal fisheries as an example.



Other speakers and their topics are: David Bella - systematic distortion, Thierry Oberdorff - river fish diversity, and Louis Bernatchez - using basic science to improve fisheries management.

More info about the AGM speakers can be found at: <<u>http://afs2014.org/plenary-speakers/></u>



Info on where to drink beer during the pub crawl (it should be a swim, but...) is at: < <u>http://afs2014.org/pug-crawl/</u>>





### **Summary of our 2014 AGM in Vancouver** - by Matt Klungle, President-Elect



The WA-BC Chapter of AFS held its annual general meeting on March 24-27 on the banks of the Columbia River at the Vancouver Hilton in Vancouver, WA. This year's meeting theme was The Media of Fisheries: From Watershed and Seas to the World Wide Web.

Conference delegates were welcomed to Vancouver by Bill Ivall. Chairman of the Cowlitz Indian Tribe. The technical portion of the program was kicked off with a plenary session featuring Dr. Donald Gunderson, Emeritus Professor at University of Washington, giving an insightful talk about his

seminal book The Rockfish's Warning. He was followed by Dr. George Pess from the NOAA-Northwest Fisheries Science Center who presented some entertaining and eye-opening initial results of the ecosystem response to the removal of the Elwha River dams.

The technical sessions included 80 oral and six poster presentations in nine symposia and three contributed paper sessions. Symposia topics included: coastal cutthroat trout, Pacific lamprey, steelhead trout, carrying capacity estimation and application, Columbia River sturgeon, eulachon, habitat extremes, ecological models, and social media. The full program is still available on our meeting website (http://agm2014.wabc-afs.org/).

WA-BC students were once again well represented at the meeting giving talks, posters, helping out with registration and talks, and running a very successful silent auction. The Chapter awarded student travel scholarships to Natalie Sopinka (UBC). Sean Neaman (UBC), Megsie Siple (UW), Jennifer Gardner (UW) and Mark Sorel (UW) to attend this year's AGM.

The annual WA-BC Chapter awards were presented at the business luncheon. Congratulations to all of the award winners! Haig-Brown Award: Volunteer Organization: Scott Hinch (thefisheriesblog.com) **South Sound Estuarium** Certificate of Achievement: **Conservation Organization of the Year** Surfrider Foundation **Patrick Cooney** Worthy Coelacanth Award: **Meritorious Service:** Peter Bisson **Jim Shannon** 



Vice-President Mark LaRiviere presenting the Chapter awards

The Best Student Oral Presentation Award went to co-honorees Natalie Sopinka of UBC for her talk "From 3 minutes to 3 lines: my quest to share fisheries research in creative ways" and Jennifer Gardner of UW who presented "DNA based identification of snailfish egg masses found in the gill cavities of king crabs". Each received a \$250 (USD) award from the Chapter. Congratulations!

In addition to the technical program, there were also plenty of opportunities to socialize at the welcome and trade show socials, the student/mentor mixer, and at the banquet. Thank you to the local band, Jawbone Flats, for playing at the banquet. The spawning run also continued its annual tradition with a soggy early morning run/walk along the Columbia, thanks to Jim Shannon and the other dedicated runners.

A final thanks to all who attended the AGM and to the volunteers that helped make the meeting a success. We hope you enjoyed your time in Vancouver and invite you to join us at the next Chapter meeting on February 16-19, 2015 in Richmond, BC.



# Student Activities Report from our 2014 AGM

### - by Past-President John Morgan

The 2014 Chapter AGM was a great success, thanks in large part to the students that gave excellent presentations, ran the silent auction, and helped out with registration and audio-visuals. Special thanks to Sean Naman (UBC), Megsie Siple (UW) and Natalie Sopinka (UBC) for keeping things running smoothly.



Below is a summary of some of the student activities at the meeting.

#### Awards for Best Talk

There were a total of 6 talks and 1 poster by students at the AGM. All were interesting and informative, and two were recognized for their achievements. Natalie Sopinka (University of British Columbia) was awarded co-winner of the Best AFS Student Oral Presentation for her talk titled "From 3 minutes to 3 lines: my quest to share fisheries research in creative ways". Jennifer Gardner (University of Washington) was also co-winner for Best Student Presentation, for her talk titled "DNA based identification of snailfish egg masses found in the gill cavities of king crabs".

#### Student Travel Scholarships

The following AFS students received travel scholarships (ranging from \$150-\$500) to help with travel, registration and accommodation costs at the meeting: Jennifer Gardner (UW), Megsie Siple (UW), Mark Sorel (UW), Natalie Sopinka (UBC) and Sean Naman (UBC).

#### Silent Auction

The University of Washington and BC Universities Student Sub-units held a successful silent auction during the Banquet. Approximately \$600 was raised, with the proceeds going towards student travel scholarships and the student activities fund. Thanks to the students for organizing this event. The generosity of the donors and bidders on the auction items is also greatly appreciated.

Congratulations to the award winners and thanks to all of the AFS students that attended. We hope that you enjoyed the AGM and we look forward to seeing you again at future AFS meetings!

Report submitted by John Morgan Past-President, WA-BC Chapter of the AFS

# Student Subunits: News from AFS-BC and AFS-UW

#### British Columbia Student Subunit (AFS-BC) President's Report: Sean Naman

AFS-BC Student Subunit



Spring has involved coordinating the student activities at the AGM and distributing calls for travel funding. First and foremost, we acknowledge the student volunteers at the 2014 AGM! Justin Pearson, Ashley Catania, Nathan Rourche, Aaron Stroud, Mark Sorel and Jennifer Gardner helped this meeting go smoothly and we greatly appreciate their efforts! We would also like to thank all of the donors to the silent auction. Proceeds from this will be used to fund student activities associated with the Chapter. Keep on the lookout for upcoming funding opportunities for the national meeting in Quebec City!

More BC-Student Subunit news: On March 7th, the BC

Student Chapter hosted a screening of the PBS documentary, *Alaska Gold*, which was well attending and generated some interesting discussion about the effects of mining on salmon habitat, an issue with high relevance to British Columbia. The next BC-Student Subunit event will be the third annual beach BBQ, likely in July.

#### University of Washington Student Subunit (AFS-UW) President's Report: Megsie Siple

http://afsuw.wordpress.com/

This spring, our student chapter hosted our last career development seminar, with Kate Litle from Washington Sea Grant. She gave a talk on citizen science as a tool for research to about 25 students. Our other event this spring was the SAFS research derby, a furious 48-hour writing session, in which students collaborate in small

groups to draft manuscripts for publication. More info on the SAFS research derby is available <u>here</u>. In the fall, we will be hosting a screening of the documentary *DamNation*, in collaboration with the American Water Resources Association. See the AFS-UW website for new and old officer email addresses and other links: http://afsuw.wordpress.com/officers-3/



### **The Book Nook: Summer Reads!**

This is the spring-summer edition of *The Confluence* so our book reviews are meant to focus on books that are light, entertaining, a bit on the edge, and appropriate for a beach read. We have two such books: <u>Four Thousand Hooks</u> by Dean Adams, a local Seattle author, and <u>The Martian</u> by Andy Weir. <u>The Martian</u>, as you might have guessed, is not about marine science, but it is a thrilling tale of how things can go dreadfully wrong on expeditions - whether it's an expedition to the depths of the ocean or to the far-flung reaches of space. Another reason why this book is appropriate for this fisheries newsletter: major screw-ups are something most fisheries folk can identify with.



book is quite a bit more.

#### Four Thousand Hooks: <u>A True Story of Fishing and Coming of Age</u> <u>on the High Seas of Alaska</u> By Dean Adams

Review by Orlay Johnson Kindle: \$11.80 Paperback: \$12.42 Hardcover: \$20.37 Website: http://www.fourthousandhooks.com

My guess is that most people who <u>start</u> to read <u>Four</u> <u>Thousand Hooks</u> (or who do a review) will describe it by saying something about how, in the opening chapter, the author sinks his grandfather's halibut boat or they may say it is a coming of age story based on a young man working on an Alaskan halibut boat. This is exactly what I did – but this

Yes, the book will appeal to readers who have ever been involved with a commercial fishery (or maybe they just wanted to), or who have gone through puberty and been unsure of themselves, or are just looking for a fun read about a unique and long-gone slice of time and place.

But what really makes <u>Four Thousand Hooks</u> worth the read is how it describes a colorful and unique fishing culture that has similarities to the TV series, "Most Dangerous Catch", as well as to Hemingway's timeless book, "The Old Man and the Sea". In both, catching fish is the top priority. However, in Dean's world (Dean is the protagonist of this story), success was measured in a far more personal way. Dean was working with a small crew on a wooden boat with only their own skills, trust in their captain, and a sense of survival nurtured over millennia, and they were carrying on a fishing tradition that stretches from Scandinavia to the north Pacific.

Dean's descriptions of the coordination and cooperation of the crew working on the back deck, all while 4,000 hooks flailed though the air, is well done and riveting. Even more exciting was when those hooks came back aboard with a hundred pound halibut attached. Descriptions of the captain searching for and finding new and dangerous fishing grounds (inside a reef, no less) will keep you reading and in a state of awe of both his experience and determination. However, here is a warning: Four Thousand Hooks describes a male-only world, and a Norwegian male-only world at that, so the reader can expect to get quite a bit of "male-only" humor and behavior, just as one might expect from such a situation.

This is Dean Adams' first book and he does a great job of describing what it is like to be an inexperienced kid working day and night in a dangerous place and with little knowledge, and, above all, a strong determination to do well and survive. After his coming of age on a wooden fishing boat, Dean went on to captain his own halibut boatsand earn his BSc and Master's degrees from the University of Washington's School of Aquatic and Fishery Sciences Department. In this book, the spirit of the ancient Vikings is far more in evidence than Dean's future academic achievements. And, of course, this story would not be complete if we didn't learn that, in 8<sup>th</sup> grade, Dean earned a "D" in English and was told he'd never be a writer. I guess we can only say that he "wildly exceeded expectations".

As I've been a Fish Biologist for a long time, I feel there are two equally important parts of this book: not only does it document a historic fishery and way of life that is almost gone, but it also demonstrates how our society has ignored a so-called "shifting paradigm" of contracting species' ranges, even though the species in question here is halibut and the halibut fishery is one of the best managed in the world.

I started <u>Four Thousand Hooks</u> while sitting in a deck chair at the back of the Seattle Aquarium. I was watching tourists line up for Seattle's new waterfront Ferris wheel located on a former "working" pier. In the book, the author discusses how, as a kid, he would come down to the Seattle waterfront and watch his relatives and other fishermen fling Alaska- and Washington-caught halibut from their boats onto the pier to be processed in wholesale "fish houses". Today, these piers no longer receive commercial catches and the fish houses are boutiques, museums, aquariums and art schools. Equally gone are the fish – few people, if any, are going to be catching a large halibut in Elliot Bay.

The world has changed and, though academics may debate this point, it is clear we have greatly diminished the major fish runs that once sustained both economies and ecosystems. We're not just soiling our own nest; we're blowing it out of the water. Another factor that makes <u>Four Thousand Hooks</u> a worthwhile read is that it has a glossary. I love glossaries and this is one I used over and over again because there are hundreds of interesting and obscure words unique to the halibut fishery.

I'm not saying this book will be a classic, but I'd bet you a halibut steak it will come pretty close. Plus, I just read that Dean Adams is writing a sequel that details his experiences as a ship captain. I'm greatly looking forward to its publication.

Oh, and you really *do* need to read this book all the way to the end to see what happened to the boat that Dean sunk – it's worth the suspense.

#### About the book's author:

Dean Adams (1956 -) was born in Seattle and grew up on the shores of Lake Meridian near Kent, Washington. In 1972, at the age of 15, he began his commercial fishing career working on his uncle's schooner, the *FV Grant*. Dean went on to become the owner and captain of the *Quest* in 1979 at the age of 22. In the 1990's, Dean returned to the University of Washington to finish a B.Sc. in Fisheries Science (1994) his M.S. in 1998. Dean retired from commercial fishing in 2007 and is now working on his second book in the *Four Thousand Hooks* story.



#### <u>The Martian</u>

By Andy Weir Review by Joel Crockett (owner of Four-Eyed Frog Books in Gualala, California)

Six days ago, astronaut Mark Watney became one of the first people to walk on Mars. Now, he's sure he'll be the first person to die there.

I once was a member of the Science Fiction Book Club. Those were my favorite books as a teen. It's been some time, though, since I've read anything from the SciFi genre.

When I picked up *The Martian*, I wasn't sure what to expect. I knew it was about an astronaut, Mark Watney, who'd been deserted by his crew on Mars, but that was it. Why was he left behind? Was he going to be surprised or challenged by extraterrestrial life? Would



he mysteriously adapt to the Martian environment? Was there an element of fantasy? In a word, the answer is "no". If you're looking for "Beam me up, Scotty" or "Danger, Will Robinson", this book is not for you. Ender Wiggin isn't going to save the world. But if you want good, authentic science and a gripping, suspenseful story, <u>The Martian</u> belongs in your library.

The novel opens with Watney's first entry; he tells his story through his daily logs, logs he's not sure anyone will ever see. He's been stranded on Mars. He's pretty sure he's doomed. But he is smart, resourceful and determined. As he figures out how to get through the first few days, or "sols", on Mars, he throws a lot of science at you. Good science. Unless you're a bit of a physics nerd, however (I'm not), you might get a bit impatient. Stay with it. This is a true survivor thriller.

As his fight to live unfolds, you come to know the NASA team that's trying to save him. No two-dimensional characters here, the stress and the people are real. Ultimately, the world finds out that, against all odds, there's an abandoned astronaut on Mars and he's still alive; the "all-news" stations celebrate a windfall. And finally, well into the book, the crew that left him for dead and is now headed back to Earth learns the truth. They'd been sheltered from the fact that he survived.

Those who are my age might well remember going to Saturday afternoon matinees at the local theater. Each week there was a serial with a suspenseful ending prior to the feature film; the goal? To encourage us to come back the following week to see what would happen. There's a bit of that in this book as each success opens up another risk. It makes the book hard to put down. But the situations are dramatically real. They *could* happen. We might well be following news of this sort ourselves 15 years from now.

One of my favorite novels from many years ago is Ken Follett's <u>Pillars of the Earth</u>. The story was absorbing and I learned a lot about architecture, construction and the history of cathedrals in England. Thanks to <u>The Martian</u>, another absorbing novel, I've learned a great deal about the reality of space travel and more about physics than I ever did in school. Physics in a hostile environment; make that a deadly environment. In a frigid desert called Mars.

You'll learn a lot about oxygen deprivation, space probe electronics, chemistry in an intensely cold and airless environment, the topography of Mars, static electricity, mylar and potatoes. This is an adventure that includes anger, fear, hopefulness, hopelessness; even mutiny — all as the world watches. It's fast-paced and tense. But a bit of good news; as the first sentence of the book (which is unprintable in this

publication) suggests, <u>The Martian</u> will also appeal to your sense of humor.

This is Andy Weir's first novel (pictured at right). His career and hobbies give credence to his story. He's a software engineer and a lifelong space nerd. He's also a devoted hobbyist of subjects like relativistic physics, orbital mechanics, and the history of manned spaceflight. It turns out he's also an author who can write a gripping survival story.



From the very beginning you're likely to think you know how the book will end. But 28 pages from the final page I was pressing a pillow against my stomach as I read. That's what I do when I'm really nervous. And it got even more intense as the ending neared.

Mark Watney is a genius, no doubt. And he's also very funny. I laughed aloud at least a half-dozen times. <u>The Martian</u> is well worth putting on your nightstand. My guess is it won't rest there unread.



**Joel Crockett** is the President/Owner of Four-Eyed Frog Books, Inc. and he is the President/Co-Owner of KTDE (the TIDE) at 100.5 FM. Four -Eyed Frog Books is an independent bookstore located in Gualala, California located near Mendocino. At "The Frog", you can place special orders and receive your books as fast as you would from most online booksellers. And shipping within the continental 48 states is free! http://www.foureyedfrog.com



Open 7 Days Monday - Saturday 10AM - 6PM Sunday 11AM - 5PM (707) 884-1333



# **Student Essays**

WA-BC Student Writing! Haiku by Natalie Sopinka - Ph.D. student at UBC <http://nataliesopinka.wordpress.com/>

A version of this post was published on the "Phish Doc" blog: phishdoc.com

### **Semelparous**

one more mile they said a thunderous clamour – then beat, beat, flatline **Author** - Natalie Sopinka is en route to her Ph.D. at the University of British Columbia and is the author of the "Phish Doc" blog (<u>www.phishdoc.com</u>). In Natalie's own words, "Phish Doc is a creative hub where you will find poetry and images that weave together my curiosity of nature and passion for science communication."

Inspiration - Pacific salmon (Oncorhynchus spp.)

**Facts** - Pacific salmon and Canadian rapper Drake have something in common; they both live according to YOLO, or "you only live once". I study Pacific salmon and celebrities (though only the former professionally), so I thought this would be an excellent topic to cover.

Pacific salmon are semelparous, which means they only have a single opportunity to reproduce before death. Once in a lifetime, adult Pacific salmon migrate from the ocean to spawn in the freshwater rivers they were born in. No matter what, these fish need to get home, acquire a mate and have babies. Doesn't matter if the river you are swimming in is warming, polluted or teeming with ravenous predators and fishing hooks. YOLO. Once the migration starts, senescence kicks in and fish start rapidly "aging" as vital organs shut down. All fish die at the end of the journey. No second chances. Some salmon die en route to spawning grounds. Some of the salmon that make it to spawning grounds die before doing the deed. Ultimately, no babies means no fitness for you. Without offspring your genetic material does not exist in the next generation, or the generation after that, and so on. In contrast, Drake is iteroparous and has multiple opportunities to reproduce before death.

Photo Credit (at right): Jennifer O. Reynolds www.flickr.com/photos/fishwhisperer



## **Education Corner**

The Northwest Aquatic and Marine Educators (NAME) Summer Conference will be held in beautiful Bandon, Oregon on July 12-17, 2014. For more information, go http://www.pacname.org/conf.shtml. This year's conference theme is: to: "Connecting Communities through Water". This is a great opportunity for fisheries folk to meet and connect with educators who are passionate about meaningful aquatic learning. This 39<sup>th</sup> annual NAME conference will host over 30 informative workshops and numerous innovative speakers, as well as exciting field experiences. Registration is now open! Register online or fill out and return the registration form by mail, fax, or email.

NAME is a community of marine and aquatic educators from public and private schools, aquariums, museums, nature centers, public agencies, and non-profit organizations dedicated to marine and aquatic education from Alaska, British Columbia, Washington, and Oregon.

#### Washington Sea Grant successfully sponsored:

(1) A successful **Orca Bowl** that was held on March 1, 2014 at the University of Washington AND (2) the 17th annual National Ocean Sciences Bowl (NOSB) that was held in Seattle on May 1-4, 2014!

Congratulations to this year's Orca Bowl winning team, Ocean College Research Academy (ORCA) Team A from Everett, Washington (pictured at bottom left). ORCA and 21 other winning teams from around the country competed for the national title Check it out at: http://nosb.org/competitions-2/finalshere in Seattle. competition/2014-nosb-finals/

Another hearty congratulations to **Boise High School** of Boise, Idaho (pictured at bottom right) for winning the 17<sup>th</sup> annual National Ocean Sciences Bowl. More info can be found here: http://nosb.org/boise-high-school-wins-17th-annual-nationalocean-sciences-bowl/



Orca Bowl teams at UW

Boise High School, winners of the National Bowl at UW