

“The Confluence”

Summer 2013



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Have a newsletter article or ideas for future articles that you'd like to submit?

Email your idea/topic to one of our editors:

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The President's Line - by John Morgan

I hope everyone has enjoyed the great stretch of summer weather we have been having – either in the field, on the beach or casting your favorite fly! Your ExCom has been enjoying the summer as well, but we have also been busy preparing for next



year's AGM and running the latest election for new Chapter Officers. Look forward to more information on both in the next newsletter or on the Facebook and web sites. In the meantime, I hope many of you get to attend the annual meeting in Little Rock, Arkansas in early September. They are a great way to stay connected with the Society, discover the latest in fisheries science, and meet friends both old and new. More information on the meeting

can be found elsewhere in this newsletter, as well as many other interesting articles put together by our dynamic duo, Orlay and Stephanie.

Tight Lines, John Morgan

September 8-12, 2013: AFS Annual General Meeting in beautiful downtown Little Rock, Arkansas <http://afs2013.com/>



For a list of all AFS meetings: <http://fisheries.org/calendar>

The Arkansas Chapter of the American Fisheries Society and our 2013 AFS President, John Boreman, cordially invite you to attend the next Annual Meeting in Arkansas, “The Natural State”. The meeting will be held September 8-12, 2013 at the Statehouse Convention Center in Little Rock.

Plenary Speakers:

Interestingly, both will be speaking on preparing a new generation of fisheries biologists.

The first plenary speaker is PAMELA MACE of the New Zealand Ministry for Primary Industries who has been a NOAA research scientist and who will be speaking about *Preparing for the Challenges Ahead: What types of fisheries professionals will be needed?*

The second speaker is KELLY F. MILLENBAH, an Associate Dean and Director for Academic and Student Affairs in the College of Agriculture and Natural Resources at Michigan State University. Her title is:

Education in the Era of the Millennials: Implications for Future Fisheries Professionals and Conservation.

There are many symposia of interest to all fish bios, but two with local connections are:

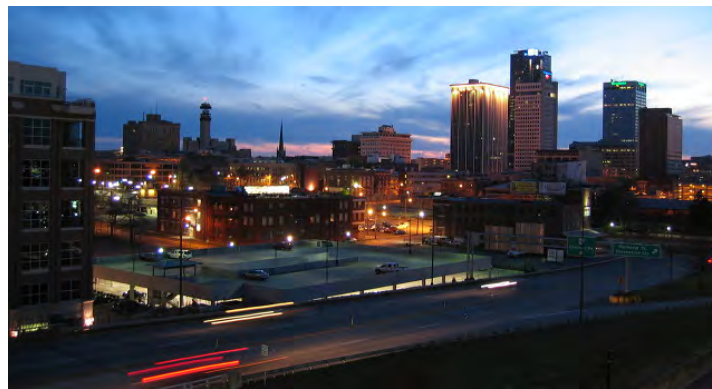
[Applying Genetic Principles and Technologies to the Management and Conservation Of Fishery and Aquatic Resources - Part 1](#)

William S. Grant, Carol A. Stepien, Jeff Olsen, Marlis R. Douglas and Andrew Whiteley

[Applying Genetic Principles and Technologies to the Management and Conservation Of Fishery and Aquatic Resources - Part 2](#)

Jeff Olsen, William Eldridge and William D. Templin

[Environmental DNA \(eDNA\) Analysis : A New Genetic Tool for Monitoring, Managing, and Conserving Fishery Resources and Aquatic Habitat](#) Denise Hawkins, Jeff Olsen, Meredith Bartron and Jon J. Amberg



Downtown Little Rock, Arkansas at night.

Among the many WA-BC Chapter members presenting papers at AGM 2013 are:

1. Traci Sanderson, Golder & Associates
2. Jill Cady, Washington Department of Fish and Wildlife
3. Brien Rose, U.S. Geological Survey
4. Nathan Furey, student at University of British Columbia

Photos and abstracts will be included in the fall edition of *The Confluence*, just in case you miss these great talks in Little Rock!

Chapter News



Your WA-BC Officers at the 2012 ExCom Retreat

Officer Reports are on vacation for the summer but see the WA-BC Chapter webpage for officers and contact information:

<http://wabc-afs.org/about-us/officers/>

Awards

Two local (UW and NWFSC) aquatic biologists have recently won international recognition for their research:

- Congratulations to **Dr. Robert T. Paine**, Professor Emeritus at the University of Washington, for winning the International Cosmos Prize and \$408,000 for his ground-breaking work.
- Another huge congratulations to **Dr. Robin Waples** for winning the prestigious 2013 Edward T. LaRoe III Memorial Award from the Society for Conservation Biology.

Below is an excerpt from the Washington webpage regarding Paine's award. The full article can be



excerpt from Sea Grant regarding Dr. The full read at:

<http://www.washington.edu/news/2013/07/30/fifty-years-of-ecological-insights-earn-uw-biologist-international-award/>

Fifty Years of Ecological Insights Earn UW Biologist an International Award

- by Sandra Hines and Natalie Hisdahl, Washington Sea Grant

The notion of keystone species, the loss of which can reverberate throughout the food web, is a concept taken for granted today but was unheard of when University of Washington biologist Robert Paine pioneered it in the 1960s.



Robert Paine with a pile of *Pisaster ochraceus*, a common starfish.

In recognition of that contribution and others, Paine, a UW Professor Emeritus, has been awarded this year's International Cosmos Prize. The prize carries a cash award of 40 million yen, about \$408,000, and has previously gone to well-known conservationists such as David Attenborough, the leaders behind the Census of Marine Life project, directors of the world's largest botanic gardens, and last year's recipient, the Pulitzer Prize-winning biologist E.O. Wilson. The 2013 award was announced July 30 by its sponsor, the [Expo '90 Foundation](#).

Paine has been with the UW since 1962, has served as chair of the Department of Zoology for 8 years, and has been an Emeritus Professor since 1998.

Dr. Robin Waples is awarded Edward T. LaRoe III Memorial Award by Society of Conservation Biology

The LaRoe Award recognizes the innovative application of science to resource management and policy by scientists. The 2013 LaRoe awardee is Robin Waples. Robin has had a creative and productive career and has a tremendous record of applying science to conservation. In his 25-year career with the U.S. government, Robin led the efforts of the National Oceanic and Atmospheric Administration to interpret what Congress meant when they stated that "distinct population segments" (DPSs) could be listed under the Endangered Species Act.



The result of this effort was his 1991 paper that set the foundation for defining criteria for DPS status for all taxa under the ESA. No scientist has had a greater effect on the application of the ESA to conservation than Robin.

Student Subunits: Reports and Activities

British Columbia Student Subunit (AFS-BC)

-by **Natalie M. Sopinka, President**



Our mission, as the British Columbia Student Subunit of the Washington-British Columbia Chapter of the American Fisheries Society (AFS), is to unite undergraduate and graduate students in fisheries research at universities and colleges in British Columbia.

[AFS-BC Student Subunit](#)

Officers of the BC Student Subunit

President: Natalie Sopinka (UBC) natsopinka@gmail.com

Vice-President: Martina Beck (UVic) mbeck@uvic.ca

President-Elect: Sean Naman (UBC) Naman@zoology.ubc.ca

Secretary/Treasurer: Shannan May-McNally (UBC) shannan.mcnally@gmail.com

Communications Officer: Graham Raby (Carleton University) grahamraby@yahoo.com

Faculty Sponsor: [Dr. Sean Cox](#) (Simon Fraser University)

Serving as the President of the AFS-BC Student Subunit has been an exciting and rewarding period of my graduate studies, filled with many memories and experiences I will take with me as I continue my adventure in fisheries science.

With the Subunit officially established in fall 2012, I embarked on the challenging task of uniting students from a mountain (Simon Fraser University), an island (University of Victoria) and a beach (University of British Columbia). We have had great success reaching students and expanding our membership via Facebook. I am looking forward to the Subunit delving into the world of Twitter, Instagram and Vimeo to further connect with students and also inspire and support the Chapter/Society's initiative to engage more students.



Helping to organize, advertise and fundraise for Subunit social events and the AGM silent auction were invaluable opportunities for hands-on event planning. The stage is now set for the Subunit to continue to host annual events and I am eager to see how career, communication and community development are embraced in future events. Writing updates for *The Confluence* are a great reminder of all the accomplishments of the Subunit thus far and excellent practice of writing that isn't restricted to Methods, Results, Discussion, repeat! I am confident the Subunit will carry on providing fruitful updates to the newsletter, and hopefully extend contributions to other divisions of AFS. I am very grateful for being encouraged to take on this role and have met many new peers and mentors as a result. My time as President and continued involvement with AFS has truly shed light on where my path will wind next as a fisheries scientist. Though my current post is now ending, as many now established AFS members, I foresee a long and happy relationship with the Chapter and Society!

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A few other notes that our retiring president neglected to mention: Natalie Sopinka (University of British Columbia) was awarded Best AFS Student Oral Presentation for her talk titled "Intergenerational effects of stress in Fraser River Sockeye".

At left: Dr. Morgan presenting Natalie with her award.

University of Washington Student Subunit (AFS-UW)

About AFSUW

Welcome to the [American Fisheries Society](#) (AFS) [University of Washington](#) (UW) Student Chapter website. Established in 2009, this student chapter unites undergraduate and graduate students at UW with the professional society for fisheries biologists and managers. AFSUW is a valuable resource to students pursuing careers in fisheries.



We provide networking opportunities with local professional researchers at our [events](#), and outlets for community [outreach](#). We archive [career resources](#) and [scholarship opportunities](#) on this website. Follow us on [Facebook](#) and [twitter](#) for the most recent employment opportunities and fisheries news.

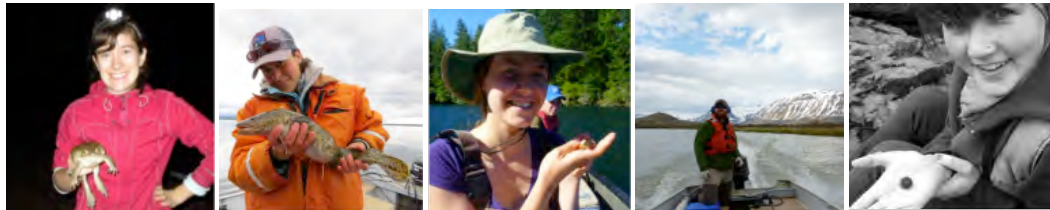


Officers of the AFSUW Student Subunit

President: President: Jessica Hale (jrh33@u.washington.edu)
Vice President: Rachel Hovel
Secretary: Laura Twardochleb
Treasurer: Tim Walsworth
Communications director: Shannon Hennessey

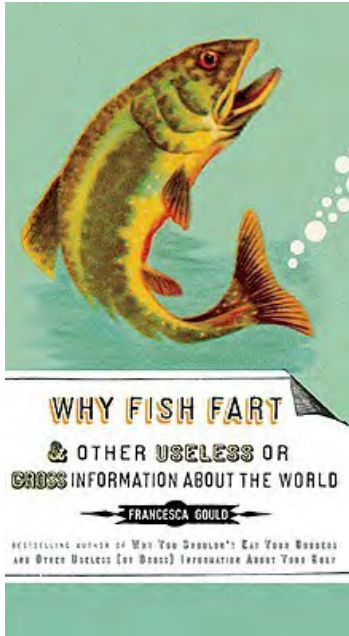
See the AFS-UW website for officer email addresses and other links

Web page: <http://afsuw.wordpress.com/>



THE BOOK NOOK

This is the summer edition, 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. Kevin Bailey's book, Billion Dollar Fish - The Untold Story of Alaska Pollock, will be reviewed in the fall in tandem with a companion book on pollock published by Alaska Sea Grant.



Why Fish Fart and Other Useless or Gross Information About the World

Book by [Francesca Gould](#)

Review by Orlay Johnson

Paperback, 272 pages.

Published September 3, 2009

by Tarchers

This book was given me by my sweet daughter for my birthday because she thought it was hilarious and it sadly turns out we have the same grotesque sense of humor (genetic or learned - you decide).

Bottomline: "Why Fish Fart" is distasteful, in more ways than one (read the food section), but like a wreck on the freeway, you can't look away – and like a freeway wreck, you will remember it for a long time – so be careful. I would suggest the book is a great primer for anyone involved in marine-oriented trivia games, and it does have a great deal of interesting and worthwhile information, but overall it is a **compendium of odd, quirky, and otherwise nauseating information.**

Be forewarned that this book describes supposedly true, but gross, occurrences and it constantly crosses the line from decency to distasteful and well beyond. If you don't have a sense of humor that enjoys this sort of thing -- stop reading now and move on to the next article. If you can't stand Tosh 1.0 on the Comedy Channel or the mention of the Kardashians, stop reading now. Most of the info is benign, such as fish farting, but some goes well beyond vulgar to obscene. An example of this is the practice in some parts of the world of eating live animals, including monkeys (and be warned, the author goes into detail, it is horrible).

First a word about the book's author: Francesca Gould has a biology background, but focuses on human biology, health, and therapy at Soundwell College,



Bristol, England. She is a prolific author of at least 13 health-related books ranging from textbooks, such as *Anatomy and Physiology for Holistic Therapists*, to NY Times best sellers, (Apr 17, 2008) *Why Dogs Eat Poop and Other Useless or Gross Information About the Animal Kingdom*, written with co-author David Haviland (Jun 10, 2010). See a pattern?

However, she is not a fisheries biologist or particularly knowledgeable about marine organisms (which she admits), so I would not recommend this book if you are looking for totally accurate fisheries information. Still, it is worthwhile fodder to gross out friends at the family Thanksgiving dinner (particular the section on tape worms or the monkey part).

On the good side - the book is loaded with what some would consider interesting information about just about every weird thing on earth. Plus there are over 27 entries on aquatic organisms, so it is a worthy present for the fisheries bio on your summer reading list.

A side bar - the author implies fish farting is something weird or bizarre - but as I'm sure we all know, it is a hot topic of study. See these references for more info:

Wilson, B., R.S. Batty, and L.M. Dill. 2004. Pacific and Atlantic herring produce burst pulse sounds. *Proceedings of Biological Sciences*. 271(Suppl 3): S95-S97. Abstract at:
<<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1809969/>>

Owens, J. 2003. Herring Break Wind to Communicate, Study Suggests. *National Geographic Magazine*:
http://news.nationalgeographic.com/news/2003/11/1110_031110_herringfarts.html

The book avoids boring scientific writing, as witnessed by its organization: it is divided into more or less random and overlapping sections with obscene, weird, vile, pernicious, and disgusting names:

- Obscene cuisine
- Weird creatures
- Vile bodies

- Pernicious practices
- Disgusting diseases, curious cures, and savage tortures

Each section is organized into a series of questions that the author answers (a peeve for me is why the author does not capitalize any of the first letters in these questions). As this is a WA-BC *Confluence* book review, let's whet your appetite with a few fish-related questions, of which there are a good many:

Page 6. Which dish, properly prepared, should contain just enough poison to numb your lips?

Page 14. What is a cod worm?

Page 29. Which fish uses slime to kill its enemies?

Page 30. What is the hagfish's even uglier cousin?

Page 49. What is so dangerous about "silver carp"?

Page 46. What is a sea cucumber and why does it eat feces?

Page 42. Can it really rain frogs and fish?

Page 40. Why do herring fart?

And finally: In what species and where might you see a penis 5 feet 6 inches (1.5m) long?

In my opinion, the sections which relate to fish and other animals are, in general, not only the most interesting but also contain a great deal of interesting information, rather than the gross and gory stories in many of the other sections. Still, as I said, much like watching a car wreck, the other sections, besides often being disgusting, make amazingly compelling reading – and, sadly, it's reading that you tend to remember. Within each section, as in all of her books, she asks a series of questions which you probably never wanted to ask, and then she answers them -- and the answers make it clear why you never asked in the first place. A few examples:

- What goes into sausage? Plus, she even includes the famous Otto von Bismarck quote on politics and sausage.
- Which cocktail contains a human toe?
- What exactly is maggot cheese?
- How did anal hair help to lead to the conviction of the Great Train Robbers?
- What is the job of a fart catcher?



- How exactly do crabs cause such intense itching around one's private parts?
- Who carried around Sir Walter Raleigh's head for nearly thirty years? (and no, the answer is not Walter Raleigh)
- What happened when William the Conqueror's corpse was placed into his tomb?
- And, perhaps the most important for us in BC and WA, is on page 189: "How much coffee would it take to kill a man?"

Within these sections and questions, she discusses some of the most grotesquely imaginable creatures, diseases, physical deformities, food delicacies, religious or ritual practices, and terrible torture tactics. I would wager that, if there is a horrific and stomach-turning behavior or fact anywhere in the world, she has hunted it down and pulled it kicking a screaming into the light of day. However, a lot of her fish "facts" are a bit odd, such as why she considers lamprey far more horrific than the hagfish is a mystery to me.

Bottom line - If you've read this far, this type of humor is probably your piece of lutefisk or live shrimp and this is a woman you'd probably like to have a beer (or several) with, just don't let her order the appetizers or main meal. The book is a fun summer read, but I'd only recommend it to my offspring or friends of similar weird and not easily insulted tastes. But, I must admit, I liked it.

A second book review on fish farting, but this one is for children and is really quite amazing. The following Book Nook gem is a review from THE UBYSSEY, the UBC student newspaper (a student newspaper first published in 1918). This review was written by Nicole Gall and it is printed here with permission.

Bubble Homes and Fish Farts

Book by Fiona Bayrock

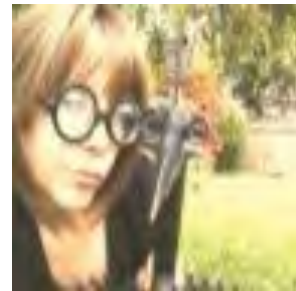
Review by Nicole Gall

What do fish bubbles do?

By: [Nicole Gall](#) April 15, 2010

Fiona Bayrock makes me giggle. This author also has a way with kids, as is evident with her book, Bubble Homes and Fish Farts, which has been nominated for the 2010 Christie Harris Illustrated Children's Literature BC Book Prize. Bayrock understands how to get kids interested and then incorporates science into her work.

Bubble Homes and Fish Farts is a non-fiction picture book about “the amazing ways animals use bubbles”, with a double-page spread of Carolyn Conahan's beautiful watercolors and just a 100-word explanation for 16 animals' uses of bubbles.



For Bayrock, writing children's stories is both a science and an art. She graduated from UBC with a Commerce degree. After homeschooling her children, she discovered that educating her kids was easier when they were entertained. Her career as an author began by writing science articles for kids and then illustrating children's books. She compares writing 250- to 400-word children's stories and articles to “writing executive summaries”. Her creative writing is fraught with logic, research, and a strong understanding of her young audience.

Charming and concise, her story doesn't ask children for their patience. Bayrock says adults are forgiving in giving an author time to get to their point, but that is not the case with a young audience. She shares her tricks with other writers by posting articles on her website at fionabayrock.com, to help them avoid “that tilted head, raised lip, and eyebrow thing kids do with their faces when they haven't got a clue what you're talking about”.

Bayrock's career as a storyteller has provided her with the opportunity to teach children. When she is invited to schools, Bayrock reads a passage from her work, then helps students with their writing. Simple and encouraging, one of her lessons is the importance of drafting their work. "Sometimes the kids think there is something wrong with their writing skills when they are told to rewrite something". Bayrock emphasizes that she rewrites her work at least 12 to 15 times, inspiring confidence in her audience—in addition to the giggles.

Understanding how to effectively communicate with children is a valuable asset to parents, teachers, or anyone who has been asked to make a child eat their vegetables. While Bayrock teaches science to children, she reminds adults of the importance of engaging their audience with creativity.

Published in the UBC student newspaper, [THE UBYSSEY](#)

Pickets and Dead Men Seasons on Rainier
-by Bree Loewen

- A woman's view of the world of macho backcountry climbing rangers
- A book for anyone who is starting their careers and/or thinks they want that dream job in the field.



Around \$20-25 paperback
192 Pages, 978-1-59485-101-8
Mountaineers Books 03/5/2009

Average Rating: ★★★★★

*star ratings imported from Goodreads.com

Review by Orlay Johnson

This may or may not be another beach read – while it is short, easy to read, and full of adventures; it also includes some very heavy (literally, dead bodies weigh a lot) issues. It is not specifically about fisheries or fish biology, but if you want to be a field biologist or work outdoors in any arena (particularly if you are a woman), it is worth the read before you take that “dream job”.

Why do the review if it is not about fisheries? The reason to review the book is that the author Bree Loewen relates her experiences as a brand new back country-climbing ranger on Mt Rainier (the big white thing we rarely see in Seattle). What happens to her is what many new field biologists have experienced over the years. Hey, she copped a dream job with the US Park Service, what could go wrong?

A dream job – and this is of course, exactly how most of us in the fisheries or aquatic biology felt about our field work. Hopefully for everyone in fisheries, our jobs will never be as dangerous as Bree's was, but if you do work in the field a lot, you have most likely been in situations where it was

appropriate to ask whichever Deity you hold most dear to “Please, please get me out of here in one piece.”

In her introduction she has a quote that quite a few field bios can identify with: “The greatest skill I ever had, though, was the one I started with: being able to suffer for long periods of time and not to die. In exchange, I got to see some amazing things.” Haven’t we all.

This may not be a motto to live by, but for many of us in fisheries, it hits a lot closer to home than we care to admit.



Some such experiences for me include going around a bend of the middle fork Salmon River, Idaho, and seeing a bear stand up about five feet away. Another time in eastern Oregon we were electroshocking when a guy in camouflage with a notched arrow stepped out of the bushes and the arrow was aimed right at me. You think the beeping electro shocker, net man, and our talking would have clued him in we were not wild game – you’d think. Then there was the so-called Jacob’s ladder used to transfer observers between Soviet ships during gale force winds (and this was before we all had survival suits). Anyway you get the point.

However, unlike Ms Loewen, few of us have jobs that intentionally put us near the top of Mt. Rainier in bitter cold, with poor equipment, in whiteout conditions, and where we are supposed to either rescue those making the previously noted religious

requests, or if that is not possible, pick up the bodies afterwards and get them home for proper burial.

This is a person who has experienced the harshness of Mt. Rainier and even worse, the harshness of government bureaucracy and evil people. However, as much as possible, she really does keep her sense of humor, her dogged determination to never give up (almost), and her obvious love of climbing and the mountains – plus a compassionate and caring sensibility so very rare anywhere, but particularly among Park Service personnel in this story.

Bree's experiences hopefully would not occur today (my rose colored glasses are glowing), but I do think this is a book that should be read by



anyone who has, or wants, a field job and needless to say; especially every woman who wants to work in the field. Bottom-line, this is a book about a place and its people who we all idealize, and it shows the iron determination of a strong and intelligent woman who meets intimidation and what can only be described as brutal abuse – and while she does not totally overcome it, she certainly beats it to a bloody standstill.

Review by Orlay Johnson

Pickets and Dead Men by Bree Lowenwen

Student Writing Section

We are always soliciting student essays and scientific articles appropriate for *The Confluence*! So, if you are a student or you know one, please send us an essay you'd like us to publish and our crack team of editors will evaluate it and work with you to get it published.

Science started the fire

Wherein Natalie Sopinka recounts some steamy and very hot adventures with wild midshipmen, brawny firemen, and lost personal identification...

First published in a blog run by the AFS Ontario Student Subunit

President Lee Gutowsky: <http://overlyhonestmethods.blogspot.ca/>

Science started the fire -- Well, not really. But science was beside the fire.

For my MSc, I studied a gnarly looking toadfish, the plainfin midshipman (*Porichthys notatus*). Though grotesque looking, and possessing two horns that upon contact with your skin will numb your entire hand, these fish are special little creatures. Parental males guard developing offspring that are affixed to the bottom of impossibly difficult to lift rocks. Despite being trapped under these rocks and enduring low tide desiccation, these males still manage to attract the ladies with song (female midshipmen also don't score so well in the looks department), and fend off pesky sneaker males that try to sneak sperm into nests during spawning.

These Mr. Moms can be found in intertidal areas along Vancouver Island in British Columbia. Some areas are picturesque; other areas are significantly altered by historical and current sawmill industry, recreational marinas, and



agricultural and urban sewage effluent. I wanted to know if living in polluted environments was compromising plainfin midshipman sperm quality.

To begin my MSc adventure, I toted a bulky microscope (a.k.a., the Sperm Tracker) and 70 pounds of other equipment across the country. Next I located a graduate-student-salary-friendly

(read: dingy) motel in the study area. Diligently, I set up my mobile laboratory in the motel room the night before the first day of fish collection. It's always difficult for me to fall asleep when I know exciting science is at hand, but I had to be awake at 5 a.m. in order to be in the field before low tide.

After what seemed like a split second of sleep, I was up and about admiring the immaculate set-up of the motel lab. Microscope assembled, scales balanced, eppendorfs neatly arranged on the table I would be eating my toast at. Wait. Why does it already smell like toast?

No, that's not toast, that's smoke! I approached the room door and tapped the door handle quickly with my fingertips; it was cold (I am not sure if I learned this strategy from Smokey the Bear or Home Alone). I still smelled smoke. I woke up my trusty, 6 foot tall, outdoorsy research assistant, who opened the room door, informed me the couch in the adjacent room was on fire, and told me to call 911.

Panic set in and the next 30 minutes are mostly a blur for me to recall now. Why does this microscope have to be disassembled with an Allen key?! I wish I diluted the ethanol to 1%! Why did I set up every single minutia of equipment last night?! Why didn't we just stay at the Howard Johnson?! Why can't I find my purse as I sit on the curb of a gas station at 6 in the morning watching a motel burn?!

The good news, only my purse and all my personal identification were damaged. The bad news, I was wearing sweat pants and had horrible bed head when I tearfully accepted the remains of my purse from a brawny, handsome fireman.

Hold your fire!

There is more good news; the science went on! The rest of the field season was uneventful. The days were sunny, the sperm plenty and the pub kindly accepted my charred Visa. Finally, and best of all, my peers reviewed and [accepted my work](#).

Sopinka, N. M., Fitzpatrick, J. L., Taves, J. E., Ikonomou, M. G., Marsh-Rollo, S. E., Balshine, S., 2012. Does proximity to aquatic pollution affect reproductive traits in a wild-caught intertidal fish? *Journal of Fish Biology* 80, 2374-2383.

Education Corner

The Northwest Aquatic and Marine Educators Conference, “Sky 2 Sea!”, was held on July 14-18, 2013 in Crescent Beach, BC at Camp Alexandra. A large contingent of AFS members attended. Below are the themes and a few photos from the event. The next meeting will be in Bandon, Oregon, also in mid-July. For information on attending, contact WA Subunit directors Casey Ralston at Casey.Ralston@noaa.gov or Amy Sprenger at asprenger@apl.washington.edu. More info and photos are at website: <http://www.pacname.org/conf.shtml>





Top left: NAME Board

Top center: Teacher studying differences in saltwater and freshwater

Top right: Joy Tally, next year's NAME president

Bottom: Crescent Beach venue

Washington Sea Grant will be hosting both the
Washington Orca Bowl contest
AND the **national finals** in early 2014!

If you are interested in volunteering for a plethora of different positions (including: Science Judge, Moderator, Runner, etc.) see their webpage <wsg.washington.edu>

Seattle Times and NOAA - A reality show with depth: Live ocean exploration -- Viewers are watching science as it happens, however weird and wild, courtesy of a research ship off the coast of Massachusetts.

Excerpted from an August 9, 2013 article in the Seattle Times, originally from the Associated Press and NOAA Education. Read the entire article: http://seattletimes.com/html/television/2021570857_deepseatvxml.html>

NOAA has a new live deep water field from the Okeanos
- by SETH BORENSTEIN



NOAA via The Associated Press.
A brisingid seastar rests on a small bubble gum coral in
Hydrographer Canyon off of Nantucket, Massachusetts.



WASHINGTON — Vicious fights! Stunning beauties! Surprises around every corner! Yes, it's reality TV but with a lot more depth, up to 10,000 feet of depth. It's live coverage of deep-sea exploration off Nantucket, Mass. and tens of thousands of people are tuning in.

They're watching an eel suddenly attack a squid, oohing-and-aahing over hot-pink starfish and listening as excited researchers discover a canyon so downright alien that sea life lives on methane escaping from the seafloor instead of sunlight.

They're watching science as it happens, however weird and wild. "We've been calling it '[Deep-Sea TV](#),'" said National Marine Fisheries Services scientist, Martha Nizinski, in a ship-to-shore interview. "It's much better than any other reality show being broadcast."

For years, the world of the deep-sea floor has mostly been the province of scientists. A few researchers would huddle on a ship and watch the video from below, take notes, and two or three years later, write a scientific paper.

Now, as the National Oceanic and Atmospheric Administration's (NOAA) ship, Okeanos Explorer, and its robotic submarine explore thousands of feet deep, the view is broadcast live, usually from 5:30 a.m. to 1:30 p.m. PDT, for other scientists and everyday people to follow along, to the tune of 50,000 visits.

Leona McKinney, of Hiram, Ga., started watching from home about three weeks ago. "I've watched every day since then. In fact, I'm watching now. I'm hooked on it," she said in a phone interview.

The expedition, which costs about \$40,000 a day, continues until Aug. 16. As the robotic sub roams the Atlantic Ocean off Massachusetts, scientists can call in or send messages with requests to see this or that.

In past years, the ship explored the Pacific Ocean, but the next several missions will be off the East Coast. Officials are considering a deep Puerto Rico trench dive in the winter, with live coverage.

Aboard the ship, the researchers explain the science and the action for viewers. "It's a bit like color commentary from sports," said U.S. Geological Survey scientist, Amanda Demopoulos, whose voice is often heard calling the underwater action. "These are mysterious ecosystems. We don't always know what we're going to find."

The expedition seems to be gaining loyal viewers, Nizinski said. “We’re giving everybody a really good diversion and keeping them from doing their work,” she said.

On the ship’s Facebook page, comments from viewers include raves from McKinney, who’s become a fan of some of the commentators. “I love it when they say ‘Ooh, I haven’t seen that before,’” McKinney said. One of the highlights for her: Watching an eel circle an unsuspecting squid, attack, and bite its would-be lunch. The squid played dead and then suddenly escaped.

It’s that sense of surprise that makes the ocean view more compelling to him than the Kardashians, said NOAA’s acting chief of exploration John McDonough. “It’s a reality show, but it’s more real than reality. You don’t know what you’re going to witness in one of those dives.”

You can get more info from NOAA Live Stream
<http://1.usa.gov/19ekgp0or>
<http://oceanexplorer.noaa.gov/oceanos/welcome.html>

Up Coming Articles

- Details of the Jeff Cederholm Memorial Endowment Fund for undergraduate and graduate students.
- Review of two recently published books on the infamous Pollock: Kevin Bailey’s Billion Dollar Fish: The Untold Story of Alaska Pollock and from Alaska Sea Grant Fishing for Pollock in a Sea of Change.
- Review of Wendy William’s book, Kraken: The Curious, Exciting, and Slightly Disturbing Science of Squid.
- WA-BC members’ presentation info from the 2013 AFS Annual Meeting in Little Rock, Arkansas.