



AQUATIC & FISHERY SCIENCES NEWS

SCHOOL OF AQUATIC & FISHERY SCIENCES COLLEGE OF THE ENVIRONMENT UNIVERSITY OF WASHINGTON

fish.washington.edu/newsletter

From the Director

Dear Alumni and Friends:

The holidays are over, the world happily did not end, and we are into a new year. The buildings are again filled with students, staff, faculty, and friends. As always, things are a-changin' at SAFS.

Bob Naiman, SAFS faculty member for nearly 25 years, retired at the end of 2012 (see pages 2-3). Congratulations Bob, enjoy your well-earned retirement—of course, we hope to see you around the corridors and at seminars. Nate Mantua, who has been an Associate Professor since 2006, accepted a position at the NOAA Southwest Fisheries Science Center in Santa Cruz, where he will lead the Landscape Ecology Team. This will be a new challenge for Nate, but we know he will excel. He will continue to serve on several graduate student committees and collaborate with colleagues at SAFS, the Joint Institute for the Study of the Atmosphere and Ocean, and the Seattle NOAA Science Centers.

On a somber note, long-time SAFS Emeritus Professor, Dr. John Halver, passed away suddenly on 24 October 2012. Although retired for about 20 years, John continued to be very active, passionately continuing to publish papers in top journals until very recently, and serving as editor for the *Proceedings of the National Academy of Sciences* (he had been a member of the Academy since 1978). John will be remembered by all for his dedication to the School and to science in general. We thank John's family for requesting that gifts in his memory be given to the John E. Halver Fellowship.

The School continues to receive numerous prestigious awards for research, teaching, and service. I was particularly delighted to hear that the School was honored last September when the Alaska Salmon Program received the Carl R. Sullivan Fisheries Conservation Award, one of the highest recognitions by the American Fisheries Society. The Alaska Salmon Program (ASP; previously the Fisheries Research Institute) was established in 1947 to facilitate better understanding of the ecology of salmon relevant to managing sustainable fisheries in Alaska. Since 1999, the program has offered the Aquatic Ecological Research in Alaska course, which enables 6 students to spend 6 weeks at the field camps in western Alaska, working with project leaders Daniel Schindler, Tom Quinn, and Ray Hilborn. Students who were involved with the ASP are well represented throughout the academic and management community. We feature the ASP in this issue (see pages 4-6).

Dr. Noble Hendrix (MS 2000; PhD 2003) is our alumnus focus for this newsletter. In common with Bill Dewey, who was interviewed for the Spring-Summer 2012 issue, Noble has

—continued on last page

- 1 From the Director
- 2 Faculty Focus: Robert J. Naiman
- 3 Alumni Update
- 3 Consider a Gift
- 4 The Alaska Salmon Program
- 7 Alumni Feature: Noble Hendrix
- 8 Degrees Awarded
- 9 Awards & Honors
- 10 Gifts

Photos (left to right): Jackie Carter, Jeremy Monroe, Amanda Phillips, Jonathan Moore

AUT 2012/
WIN 2013



Faculty Focus

Robert J. Naiman, Professor

MA, Zoology (Ichthyology), UCLA, 1971

PhD, Zoology, Arizona State University, 1974

Bioenergetics of herbivorous pupfish population (*Cyprinodon*) and its algal food supply in a thermal stream
en.wikipedia.org/wiki/Robert_J._Naiman



Courtesy of Robert Naiman

After almost 25 years as a faculty member of the School, Bob Naiman retired at the end of 2012. Bob is from Pasadena, California. As a child, he spent time with his uncle, a professor who taught human anatomy. His uncle would take Bob to his anatomy lab and, using the abundant human body parts, teach him about nervous systems, muscle structure, and the like. His uncle also took Bob on salmon fishing trips, patiently explaining how things worked.

These adventures with his uncle motivated Bob to take a college zoology course, ultimately leading to a graduate program at Arizona State University, where he studied desert streams and their role in the broader ecosystem.

Bob then underwent an extreme climate change to take a postdoc at the Pacific Biological Station in Nanaimo, British Columbia, to investigate land–ocean interactions.

He then worked at the Woods Hole Oceanographic Institution as a research scientist and MIT faculty member.

MD: Were you the only freshwater person at Woods Hole Oceanographic Institution (WHOI)?

RN: Yes, for the most part. Seeing how the oceanographers at WHOI and Nanaimo thought so comprehensively—about entire oceans—inspired me to look at watersheds similarly. This set the stage for the rest of my career.

MD: What brought you to the UW?

RN: When I became Director for the Center for Water and Environment at the University of Minnesota, I thought I'd put down roots. But then SAFS Professor Bob Wissmar told me that the new Center for Streamside Studies—a joint UW College of Forest Resources and School of Fisheries program—was seeking a director. I started that job in 1988 and have been here ever since, moving to SAFS full-time when the Center was dissolved.

MD: What is your nutrient deposition research about?

RN: We've focused on nutrient cycling and productivity in the coastal rivers of Alaska and the Olympic Peninsula, with an emphasis on nutrient deposition. Besides studying salmon in Southeast Alaska, we found other sources of nutrients that weren't quite as "sexy." For example, in the Peninsula's Queets River, tree epiphytes and nutrients in old geological deposits play major roles in driving the incredible productivity in the riparian forest.

By understanding what drives production in our rivers, we can avoid mistakes. For example, we know that the big trees contribute organic matter such as epiphytes and large woody debris to rivers. Also, we better understand how floodplains provide a buffer zone against flooding. And the work also applies to having a sufficient supply of nutrients and clean water.

Editor's note: For the complete interview, see: fish.washington.edu/news/newsletter/autwin_2012-13

Alumni Update

Update your record and sign up for the newsletter by email.

Our spring–summer issues are distributed online only (email, website), but for the near term, the fall–winter issues will be both printed and online.

If you are still receiving printed newsletters, please consider switching to email/web. If you would like to do so or if you need to update your contact information (or both!), go to the following UW Alumni Subscription Center and/or SAFS Alumni Update webpages (applies to alumni and friends):

- Update your contact information
www.washington.edu/alumni/subscribe/address-change.html?src=coe
- Change newsletter subscription format
depts.washington.edu/safs/alumni/update.php

MD: In your River Ecology and Management course, you talk about building your “green” home. What brought that on?

RN: Years ago, a student in my watershed management class criticized the other students for just giving lip service to important issues. That changed the class direction in a very positive way.

Meanwhile, I had just bought property on San Juan Island. When I told my students about this, one of them said, “You’ll build an environmentally friendly house, right?” Well, I hadn’t thought that at all! But the student was right: there have to be actions behind the words. So I learned how to build a green home and began to educate the many people involved. Showing my students what I was doing with my house to demonstrate how to put beliefs into action was very inspiring for them; some students even visited my home.

We get almost all our water from our roof and store it in a cistern. We have solar power, some of which we sell back to the grid. We have a gray-water recycling system. Our passive solar design and insulation keep the house warm with very little energy use. And we use composting toilets.

MD: You are pursuing some new avenues of research. What are those?

RN: As one of 10 members of the Independent Science Advisory Board, I’m advising the Northwest Power and Conservation Council on possibly the largest restoration project in the USA—the Columbia River Basin. We’re putting into practice what I’ve been teaching for approximately 30 years, so for me, this is a great challenge and requires thinking deeply about difficult issues.

I’ve also been working with the Australia Rivers Program. I’ve taken a part-time faculty position at the University of Western Australia’s Center of Excellence in Natural Resource Management, where I’m investigating river restoration and climate change.

Most recently, I’ve been advising on river restoration in China, where the ruling party has identified water as their first priority. Over the next 10 years, they plan to invest billions of dollars to restore about 130 basins. ■



Left to right: Courtesy of SAFS, Jonny Armstrong

Consider a Gift inspire *new ideas*

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giving.uw.edu/planned-giving

For questions, please contact:

Office of Planned Giving

206-685-1001 giftinfo@uw.edu



The Alaska Salmon Program

The Alaska Salmon Program developed many of the original methods and data needed to sustainably manage Alaskan salmon



Tom Quinn

The ecosystems of western Alaska are home to some of the world's largest runs of wild salmon and support some of the most valuable fisheries in the history of US commercial fishing (www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html). These fisheries are as productive now as they ever have been, and are internationally recognized as leading examples of sustainability.

The Alaska Salmon Program (ASP), a SAFS program now more than 65 years old, developed many of the original methods and data needed to sustainably manage Alaskan salmon. Over its history, the ASP has accumulated one of the world's most extensive long-term datasets that continues to be used to evaluate ecological responses to fisheries exploitation and climate change, and to assess potential risks to these ecosystems from the watershed development emerging in western Alaska.

In 2012, the American Fisheries Society recognized the regional, national, and international accomplishments of the ASP by naming it as the recipient of the prestigious Carl R. Sullivan Fisheries Conservation Award.

The President of the Society noted that, "The Alaska Salmon Program at the University of Washington was selected for this award because this program is without question one of the most outstanding models anywhere of a working laboratory. With its direct connections to local communities and the global community, the program provides amazing educational and scientific outreach."

To celebrate the contributions and accomplishments of the ASP, we have dedicated this article to a short history of the program, an overview of its recent accomplishments, and some glimpses into its future.

fish.washington.edu/alaska

The Early Years

Commercial salmon fisheries developed in western Alaska in the late 1800s and rapidly became producers that rivaled any salmon fishery in the world. By 1900, stocks were heavily exploited, supporting an enormous industry focused on producing canned salmon for international markets. Reduced catches in the 1940s were cause for alarm within the salmon canning industry, which saw a need to manage such profitable resources scientifically.

In 1945, the canning industry approached the Director of the University of Washington School of Fisheries, William F. Thompson, to develop a program to improve understanding of the biology of salmon and their ecosystems. This led to the establishment of the Fisheries Research Institute (FRI) in 1947.

FRI developed a science and monitoring program in the watersheds of the Wood, Kvichak, and Chignik rivers. The initial science program was remarkable in that it used what we now call an “ecosystem approach” to understanding salmon ecology, while navigating the formidable practical challenges of performing research in a remote and challenging wilderness. The development of the field program is described in detail by past FRI Director Robert “Bud” L. Burgner in his book, *My Career with Fisheries Research Institute, University of Washington* (fish.washington.edu/research/publications/pdfs/Burgner_Memoirs.pdf). (See fish.washington.edu/alaska/ for more information.)

The current program maintains many of the original methods for observing salmon and their freshwater habitats, and now provides the only long-term environmental baseline in western Alaska against which potential impacts of emerging environmental threats can be measured. The monitoring program has a broad emphasis, spanning hydrology, limnology, and stream ecology, in addition to the ecology of salmon and their habitat requirements, which was the original research focus of FRI’s founding scientists (Bud Burgner, Ole Mathisen, Ted Koo, and their first cohort of graduate students, including Don Rogers).

The Present

Since its initial focused relationship with the canning industry, the ASP has also developed a broad base of collaborators and constituents, including state agencies (Alaska Departments of Fish and Game, and Parks and Recreation), federal agencies (US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, US Army Corps of Engineers), regional development associations (Bristol Bay Native Association, Bristol Bay Economic Development Corporation), and commercial, sport, and subsistence fishers in western Alaska.

In recent years, ASP has expanded its research dimensions beyond its original “count, measure, and harvest salmon” mission:

- SAFS Professors Jim Seeb and Lisa Seeb use state-of-the-art genetics and genomics tools (fish.washington.edu/research/seeblab/people) to better understand the relationship between salmon and their environment.
- SAFS Professor Lorenz Hauser (fish.washington.edu/people/hauser/) is studying the controls on reproductive success by genetically identifying salmon offspring.
- Bioeconomic analyses and geomorphology studies are being conducted to improve our understanding of watershed responses to changing climate, as well as studies linking terrestrial predators to salmon resources (fish.washington.edu/alaska/research.html).

—continued on page 6

Opposite Page: Students sampling juvenile coho salmon in the Lake Aleknagik watershed.

Photo: Jackie Carter

Below: Current students, staff, and faculty of the Alaska Salmon Program. Robert “Bud” Burgner front and center. Photo: Jim Seeb



—continued from page 5

Research from the ASP has contributed directly to the successful management of regional salmon fisheries, but has also provided critical insights for developing sustainable fisheries globally. The program has produced more than 200 peer-reviewed scientific publications in the last 10 years; you can find the full citations and links to the articles at fish.washington.edu/alaska/research.html. These publications span topics ranging from bioeconomic assessments of harvesting strategies (Bue et al. 2009) to the effects of salmon biodiversity on sustainability of fisheries (Hilborn et al. 2003, Schindler et al. 2010), to the ecology of stream-dwelling fishes that depend on salmon resources (Denton et al. 2009, Armstrong et al. 2010), to the effects of bear predation and fishery selection on salmon evolution (Carlson et al. 2009, Kendall and Quinn 2009), to the effects of climate change on salmon populations in both historical (Rogers and Schindler 2011) and paleo-ecological time scales (Rogers et al. 2013).

The Challenges of Longevity

Since its inception, the UW-ASP has been supported largely through partnerships with the seafood processing industry. During the last decade, the program has expanded its research and education programs, and the funding base has diversified

to support these missions. Efforts by the core SAFS faculty (Ray Hilborn, Tom Quinn, and Daniel Schindler) have garnered continued funding from the salmon processing and harvesting industry, the National Science Foundation (NSF), philanthropic foundations—especially the Gordon and Betty Moore Foundation—and state and federal agencies.

Currently, the program is primarily supported by NSF through a grant to explore the social-economic feedbacks in western Alaska salmon fisheries in collaboration with professors Gunnar Knapp from the University of Alaska–Anchorage and Chris Costello from the University of California–Santa Barbara (fish.washington.edu/alaska/research). Despite the extensive legacy of scientific contribution to salmon fisheries and aquatic ecology, the ASP funding base remains highly transitory—a serious hurdle to the ongoing viability of our science and education programs. Ironically, while the strength of the ASP lies in long-term monitoring programs, the necessary long-term funding to maintain such programs continues to be difficult to obtain. Securing more stable funding to support these core activities remains a major programmatic goal.

To support the program, please see the Alaska Salmon Program Fund webpage: <http://fish.washington.edu/fund> ■



Students sorting and measuring fish in a beach seine haul at Chignik Lake.

Photo: Jackie Carter

Alumni Feature

Noble Hendrix

MS, UW, Aquatic and Fishery Sciences, 2000
PhD, UW, Aquatic and Fishery Sciences, 2003

Crayfish (*Procambarus* spp.)
response to hydrologic restoration
of the Florida Everglades



Courtesy of Noble Hendrix

Noble Hendrix grew up in Miami, Florida. He developed his affinity for aquatic environments at a young age, when his father started taking him and his brother fishing, first in mangrove channels and canals, and later offshore.

Noble attended Duke University for his undergraduate program. He recalled a highlight from his time at the Duke Marine Lab: “One spring semester, we were able to run all over Piver’s Island catching animals, bringing them into the lab, getting a good look at them, and then letting them go.” This was also when Noble discovered the joys of experimental design, data collection, and data analysis.

While looking for a graduate program on the West Coast, he came to Seattle and “spent an August riding bikes around town, making several climbing trips in the Olympics, and enjoying one of those spectacular Seattle summers.” That was it—he decided to stay in Seattle and try to enroll in the [then] School of Fisheries graduate program.

He initially volunteered to work with a toxicology group at NMFS while working as a barista; Noble quipped “I was making lattes to support an ecology habit!” This led to a project with Professor Frieda Taub, comparing zooplankton assemblages in Florida and Wisconsin. On applying for the SAFS graduate program, Noble received an Achievement Reward for College Scientists (ARCS) award.

For his MS program, Noble studied the habitat requirements of crayfish in the Everglades (David Armstrong, adviser). Noble reflected that, “the process of putting together a proposal for the project, developing the budget, organizing the schedule, and providing the deliverables was a particularly valuable experience.”

Towards the end of his MS studies, Noble was faced with two options for a PhD focus: crayfish ecology in the Everglades or mathematical models of crayfish population dynamics. He chose the latter to enhance his skill set, stay

in Seattle, and study with Professor Ray Hilborn. He related what he described as a “geek’s confession”: “I’ll never forget spending an entire afternoon (one of many) in the computer lab and finally grasping the concept of estimating the coefficients of a model using maximum likelihood.”

After earning his PhD, Noble joined R2 Resource Consultants, Inc., a small consulting firm specializing in fisheries-related issues. He observed that he continues to apply what he learned at UW/SAFS on the job. He emphasized the importance of quantitative skills: “There continues to be a need for this—it was true when I finished almost a decade ago, and it is still true now.”

And sometimes there’s a bonus: Noble related a situation where he gave a practical demonstration to a client on how one can fit models to data. When the client saw the result, he said, “It’s magic!”

Recently, he has been working in southeast Alaska, evaluating the potential for cruise ship traffic to affect populations of humpback whales. This project was initiated by one of his SAFS classmates, Scott Gende (2003 PhD with Tom Quinn), who works for the National Park Service.

Noble exemplifies how SAFS alumni have found success in areas besides academia and government.

Noble mentioned the value of his SAFS fellowships: about a year into his Master’s program, SAFS provided some bridging support through a VanCleve Fellowship that allowed him to “find” David Armstrong and develop the proposal that would eventually lead to his PhD.

As a SAFS Affiliate Assistant Professor, Noble enjoys serving on graduate committees and sharing his knowledge of Bayesian methods in classes such as FISH 558 and 559. He continues to collaborate with Professors Hilborn and André Punt. You can often see Noble at the Friday Quantitative Seminars and the UW-NOAA Think Tank series. ■

Degrees Awarded, 2011–2012

Our student research encompasses numerous and diverse disciplines, including aquaculture, biology, ecology, disease, toxicology, genetics, statistics, and physiology—as well as interdisciplinary subjects—in pursuit of improving our understanding of the interactions between humans, our environment, and the resources upon which we rely. (Advising professors in parentheses.)

BS Degrees

Alexandrea Kimiko Abe
Kimberly Ann Axberg
David Deforest Berman
Derek Lee Brady
Justin Redman Brown
Kevin Wayne Brown
Benjamin Joseph Burnett
Jeffrey Michael Caisman
Catherine Cordelia Carlile
Selina Kim Cho
Andrew Clark
David Michael Cox
Andrew Victor Davison
Bethany Anne Diehl
Audrey Felicia Djunaedi
Katherine Marie Dowell

Elizabeth Leeann Govas
Levi Rex Hay
Anne Franklin Johns
Keith Tatsuo Kamikawa
Miranda Joan Kyle
Ying-Ying Lin
Hannah Lorraine Linder, *cum laude*
Allison Elizabeth Linnell,
SAFS departmental honors; cum laude
Jessica D McDaniel
Christopher Matthew Riso
Reed Kazuo Sakamoto
Jacqueline Kimberly Schwartzstein,
SAFS departmental honors; cum laude
Arielle Marie Tonus Ellis
Francisco Castro Villagomez

MS Degrees

Elene Dorfmeier (Friedman) The influence of elevated pCO₂ on *Vibrio tubiashii* growth and Pacific oyster (*Crassostrea gigas*) disease susceptibility
Lauren Kuehne (Olden) Direct and indirect effects of predation on juvenile Chinook salmon
David Metzger (Roberts) Characterizing the effects of ocean acidification on larval and juvenile Manila clam, *Ruditapes philippinarum*, using a transcriptomic approach
Shannon O'Brien (Gallucci) Examination of the ecological roles and genetic relationships of north Pacific sharks
Piper Schwenke (Hauser) History and extent of introgressive hybridization in Puget Sound rockfishes (*Sebastes auriculatus*, *S. caurinus* and *S. maliger*)
Erin Seghesio (Simenstad) The role of an intermittently closed, northern California estuary for the feeding ecology of juvenile steelhead (*Oncorhynchus mykiss*) and Chinook salmon (*Oncorhynchus tshawytscha*)
Caroline Storer (Roberts) Genetic and phenotypic diversity in sockeye salmon, *Oncorhynchus nerka*
Samuel Army (Horne) Temporal variability and bio-physical coupling in the pelagic fauna of Monterey Bay
George Whitehouse (Essington) Modeling the eastern Chukchi Sea food web with a mass-balance approach
Daniel Widener (J. Anderson) Migration and bioenergetics of juvenile Snake River fall Chinook salmon

PhD Degrees

- Steven Barbeaux (Horne) Scientific acoustic data from commercial fishing vessels: eastern Bering Sea walleye pollock (*Theragra chalcogramma*)
- Charlotte Boyd (VanBlaricom, Punt) The predator's dilemma: investigating the responses of seabirds to changes in the availability and distribution of small pelagic prey
- Gavin Fay (Punt) Spatial modelling for monitoring and management of marine metapopulations
- Jennifer Lam-Anh Gosselin (Anderson) Cumulative experiences and heterogeneity affect fish survival: examples from a model species (*Poecilia reticulata*) and salmonid species (*Oncorhynchus* spp.)
- Nicolas Gutierrez (Hilborn) Managing invertebrate resources: interplay among biology, spatial structure and community-based governance
- Eva Dusek Jennings (Simenstad) Toxic or not? Modeling *Pseudo-nitzschia* consumption and domoic acid cycling in Washington's intertidal bivalves
- Neala Kendall (Quinn) Fishery selection and Pacific salmon life histories: patterns and processes.
- Eric Larson (Olden) Crayfish ecology, conservation, and invasions from regional to global scales
- Jocelyn Lin (Hauser, Hilborn) Microevolution, local adaptation, and demography in wild populations of Pacific salmon
- Carey McGilliard (Hilborn) Utility and implications of no-take marine reserves in fishery management strategies
- Anthony Orr (VanBlaricom) Foraging ecology of immature California sea lions (*Zalophus californianus*)
- Thomas Pool (Olden) Conservation biogeography of fish faunas in the lower Colorado River basin
- Joshua Strange (Wissmar) Behavioral adaptations of Chinook salmon to adverse riverine conditions during their spawning migration in the Klamath River basin
- James Thorson (Punt) Improved biological realism in the design and analysis of surveys
- Pamela Woods (Quinn) Ecological diversity in the polymorphic fish Arctic char (*Salvelinus alpinus*) ■

Awards & Honors

Students

Faculty advisers in parentheses

Graduate Student Symposium Awards

Morgan Bond (Quinn), Best PhD Oral Presentation: Bust a gut! Phenotypic flexibility in a sometimes anadromous salmonid

Charlie Waters (Naish), Best MS Oral Presentation: Evaluating the effectiveness of managed migration to reduce adaptation to captivity in supportive breeding programs

Louisa Harding (Young), People's Choice Oral Presentation: Effects of 17-alpha ethynylestradiol on the coho salmon pituitary transcriptome

Juliana Houghton (VanBlaricom), Best Poster Presentation: Do whales hear what we see at the surface? The relationship between vessel traffic and noise levels received by killer whales

Other Awards

Louisa Harding (Young) took third prize for Best Oral presentation at the 10th International Congress on the Biology of Fish, 15–19 July 2012, Madison, Wisconsin. Her presentation was titled, "Effects of ethynylestradiol on the coho salmon pituitary transcriptome."

In September 2012, Emma Timmons-Schiffin (Roberts) won second place for Best Student Presentation at the Physiomar 12 Conference in Santiago de Compostela, Spain. The title of her presentation was "The physiological response of *Crassostrea gigas* to CO₂-induced ocean acidification."

Dan Drinan (Naish) was awarded a tuition scholarship to attend the UW Summer Institute in Statistical Genetics 2012. The Institute's program is hosted by the UW Department of Biostatistics.

Jonny Armstrong (Schindler) was awarded a David H. Smith Conservation Research Fellowship. The award will fund Jonny's postdoctoral research into the functional significance of intra-species biodiversity, and it will also provide opportunities for professional development by pairing Jonny with conservation practitioners.

—continued on page 10

Awards & Honors continued

Kate McPeck (VanBlaricom) received the Gilbert Pauley Award for the best presentation at the Washington Cooperative Fish and Wildlife Research Unit Annual Cooperator's Meeting. Her talk was titled "Patterns of utilization of geoduck aquaculture plots by Pacific staghorn sculpin in Puget Sound, Washington." Kate also netted the Best Student Paper award at the Pacific Coast Shellfish Growers Association Conference, held at Tulalip, Washington.

Kalyn MacIntyre (Mantua) was the recipient of a North Pacific Research Board Graduate Research Award. In addition to providing support for tuition, the award is enabling Kalyn to pursue outreach projects as part of her MS thesis program.

Iris Kemp (Beauchamp) hooked a scholarship in 2012 from Anchor QEA. The award arose in part from a letter of recommendation from her employer, Long Live the Kings, where Iris works on the Salish Sea Marine Survival Project.

Last fall, Joe Bizzarro (Summers) was distinguished with a Letter of Commendation from the Pacific Fishery Management Council (PFMC) for his work with the Pacific Coast Groundfish Essential Fish Habitat Review Committee. PFMC Executive Director Don McIsaac (SAFS '90) noted that Joe's "willingness to expend tremendous time and energy has been very apparent, and his contributions have been vital to the overall effort."

Faculty

Ted Pietsch recently published the book, *Trees of Life: A Visual History of Evolution*, which has been ranked third in a list of top-ten history titles published this year and sixth in best science books of 2012. The book has also been featured on the Johns Hopkins University Press Blog as "A Science Book Success Story."

André Punt was the winner of the American Fisheries Society's 2012 Oscar Elton Sette Award, which recognizes an outstanding marine fishery biologist. The award acknowledges sustained excellence in marine fishery biology through research, teaching, administration, or a combination of the three.

Alaska Salmon Program Award

In 2012, the American Fisheries Society recognized the regional, national, and international accomplishments of the Alaska Salmon Program by naming it as the 2012 recipient of the prestigious Carl R. Sullivan Fisheries Conservation Award. For more information, see feature article, pages 4-6.

Gifts 2011-2012

During 2011-2012, SAFS alumni, faculty, and friends continued their longstanding tradition of supporting our students, faculty, and programs with generous financial gifts. We acknowledge and thank you for your sustained support.

More than \$10,000

Alaska General Seafoods
American Sportfishing Association
Arctic Storm, Inc.
At-Sea Processors Association
Bering Sea Fisheries Research Foundation
Clairmont/Evelyn Egtvedt Charitable Trust
Fidelity Investments Charitable Gift Fund
Fluidigm Corporation
Freezer Longline Conservation Coop.
Icicle Seafoods Inc.
North Pacific Seafoods, Inc.
Pacific Seafood Processors Association
Quinault Indian Nation
Trident Seafoods Corporation
United Catcher Boats

Up to \$10,000

Alaska Seafood Cooperative
American Institute of Fishery Research Biologists
Dr. James J. Anderson
Ms. Tanya L. Bevan
Prof. Robert L. Burgner and Ms. Jeanne Aronszajn
Chignik Regional Aquaculture
Dr. Loveday Conquest and Mr. Von Kleinschmidt
Double E Foods, LLC
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Fishing Vessel Owners Assoc. Inc.
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The Boeing Company
Willapa-Grays Harbor Oyster Growers
Dr. and Mrs. John G. Williams
Dr. Craig Wingert & Ms. Janet Ilg-Wingert

Up to \$1,000

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Mr. and Mrs. Abdul S. Alidina
Dr. and Mrs. Dayton L. Alverson
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Mr. Ray A. Hanowell
Dr. George Y. Harry, Jr.
Mr. Kim Heidebrink & Ms. Victoria Poage
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—From the Director, continued from page 1

not followed the tried-and-tested path of an academic or agency career. Rather, he is one of an increasing number of our graduates who have found positions with consulting companies, or, as in Noble's case, in private consulting.

We are all watching events in our Nation's capitol regarding budgets. I cannot over emphasize the impact of large budget cuts on the major funding sources of our program. If these cuts do eventuate, the management agencies that have historically funded us will understandably need to dedicate a larger fraction of their budgets to monitoring activities and other core duties. This will decrease the funds available for research at universities such as the UW. The loss of programs that fund our graduate students, such as the hugely successful NMFS–Sea Grant Population Dynamics Fellowship, will reduce the number of graduate students we can enroll, and hence the research we can do. You can help us by continuing with your generous giving, which supports our programs, helps us to create professorships to allow faculty to pursue new research directions, and provides funding for the best and brightest graduate students to join our program. Please join me in rededicating yourselves to supporting SAFS through meaningful gifts.

I have enjoyed getting to know many of you better through our many meetings, formal and informal, over the last six months and look forward to continuing to meet more of you in the coming years.

—André Punt, Director

AQUATIC & FISHERY SCIENCES NEWS

The *Aquatic & Fishery Sciences Newsletter* provides current information on teaching, research, and service.

Comments are welcome.

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