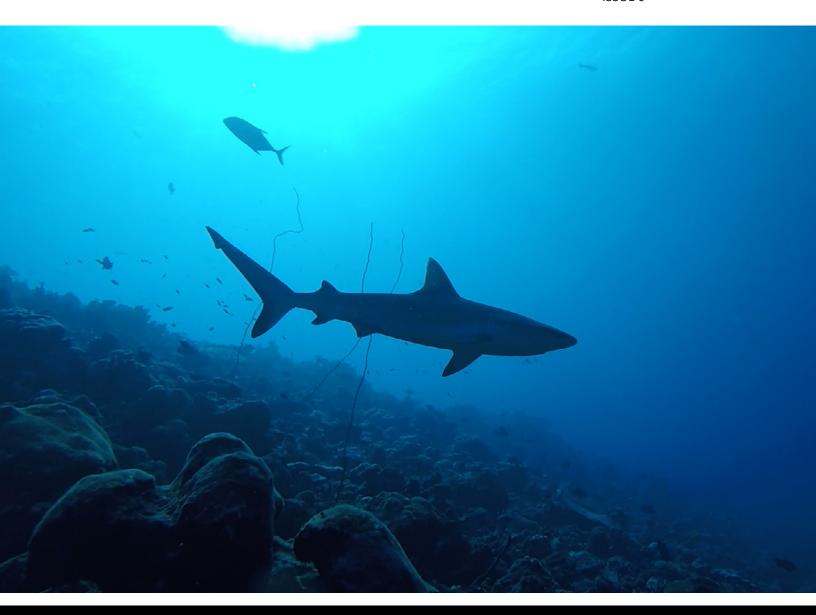
GENERATIONS

Department of Fisheries, Wildlife, and Conservation Sciences

FALL/WINTER 2023 ISSUE 6



Generations is a biannual newsletter designed to connect the past, present, and future generations of our program while celebrating our accomplishements and our impact in fisheries, wildlife, and conservation sciences.



Generation Fall/Winter 2023 Issue 6

Editor: Bruce Dugger **Designer:** Amanda Polley

Generations is a project organized by the Alumni Committee. The 2023-24 members are:

Chair: Bruce Dugger Sam Chan Liz Kelly Bob Lackey Amanda Polley

Front Cover: Healthy marine ecosystems support both predators and prey. A Silvertip shark patrols a reef in the Chagos Archipelago. The Big Fish Lab (BFL) studies the movements of sharks and other predators, working to understand their role in healthy marine ecosystems. Photo credit BFL

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Message from the Department Head



The dark, grey days of autumn are here, and the beautiful fall colors of maples and alders are nearly gone. But now we can cozy up to the fire, spend holidays with friends and family, and help our neighbors in need. Our sense of community is so important right now, and I hope all of you are feeling connected and supported.

The new OSU Strategic Plan was unveiled at President Murthy's investiture on November 17. "Prosperity Widely Shared: The Oregon State Plan" will direct our efforts for the next several years, playing a large role in our department's strategic plan. Fortunately, our department is already actively engaged in many of the goals of the new plan – a large, vibrant Ecampus program, cutting edge research on climate change impacts to wild animal populations and their habitats, research and public engagement on renewable energy planning, and new research directions that incorporate conservation technologies and Al. We will continue to lead the way! leadership.oregonstate.edu/strategic-plan

Scott Heppell, Josh Stewart, and I gave short talks with faculty from CEOAS and College of Engineering in celebration of the gift for the new Gaulke Center for Marine Innovation and Technology. It was great to meet the Gaulkes and learn about exciting marine technology projects in other programs. Our talks were the best, of course, and highlighted the amazing work that our faculty and students are doing at the coast and on main campus.

Our Internship Coordinator Shalynn Pack, pictured above, traveled to the Wildlife Society national meeting in Kentucky to receive our award for the VIEW Program (fwcs.oregonstate.edu/VIEW). Great to receive this honor and attention to our highly successful program. I've been meeting with the OSU Foundation to secure more permanent funding for the program, which selects students with little or no research experience to work with our professors and labs in a paid summer internship.

Exciting news – we have been given two new tenure track faculty positions! The College has many stakeholders who need help with wildlife conflict issues, including wolf depredation of livestock and vole damage to some of Oregon's most important crops. We will be hiring a small mammal ecologist and a wildlife conflict social scientist to help, and both positions will include Extension work to help stakeholders and agencies find ways to sustainably manage and co-exist with wild mammals on working landscapes.

I have been working on the University's new Core Ed curriculum since my days as Faculty Senate President, and we are finalizing the course review processes and training modules for course development and teaching. My focus has been on Seeking Solutions, a new set of signature courses that will require every OSU student to participate in transdisciplinary group problemsolving focused on the toughest issues faced by our society and planet. This is a progressive, highly ambitious addition to our general education curriculum, and one that has not been attempted at an institution of our size and diversity. Seeking Solutions will demonstrate our strengths and strategic goals while training students in the teamwork skills that employers need. Our Seeking Solutions courses will include Global Crises in Resource Ecology, Food From the Sea, and Ridge to Reef: Sustainable Management in Palau.

I wish all of you the very best for the holiday season, and good cheer.

Selina Heppell



the classroom, the lab, and beyond. Whether you're a first time donor or a long term contributor, we thank you for your committment to our mission.

We appreciate you all, and wish you a wonderful new year.

The Honor Roll recognizes Fisheries, Wildlife, and Conservation Sciences annual supporters who have made outright gifts or pledge payments of \$100 or more between January 1, 2023, and November 27, 2023.

Additional thanks to our past endowment contributors who established the Scholarships named below. New endowments will be listed soon!

Vickie Jackson Athay '72 & Steven G. Athay '72 Patricia Farthing Bowers '80 & Wayne L. Bowers '72 Kay Brown '72 **Bullitt Foundation** Gregory L. Carich '76 Barbara J. & John L. Casteel '71 Terri L. & Corby J. Chappell Alice Chen Suzanne Lozier Coppock '61 & Lawrence A. Coppock **Cramer Fish Sciences** Mariann P. & Dale A. Crane '53 Delta Waterfowl Foundation Eija Huttunen Emmingham '73 & William E. Emmingham '72 Dale R. Evans '55 Susan Houston Fortune '65 & John D. Fortune Jr. '62 Eileen & Ronald C. Friesz '67

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Terryl J. & Bill H. Mast '71
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Patricia Starker '74 & Barte B. Starker '72
Jon M. Thorsby
Tillamook Estuaries Partnership
Jan E. & W. Alan Wentz '71
Kelly D. & Randall C. Wildman
Sally A. & Carl M. Yanagawa '66

Unrestricted Donations Spending 2022-2023



In Memoriam: Dr. Erin Peterson Internship Award in Fisheries, Wildlife, & Conservation Sciences



Erin Peterson, was born in 1992 in Bellevue, Washington. She graduated in 2010 and continued her studies at Oregon State University, earning a BS in Fisheries and Wildlife in 2014 while cultivating a love of stream ecology. She attended South Dakota State University, earning a Master of Science degree (2017).

Erin secured a fisheries biologist position in the State of Washington where she continued her professional and personal excellence. She lost her life in the line of duty in 2023 doing what she loved. She is remembered by FWCS faculty and staff as one of the most talented, promising, and self-motivated undergraduate scholars to have called our department home.

Though she excelled in the classroom, she shone most brightly when actively pursuing research. We forever celebrate Erin's spirit of excellence and her name greatly honors a new endowment from her family, the Dr. Erin Peterson Internship Award in Fisheries, Wildlife, & Conservation Sciences. This fund will provide new generations of scholars the opportunity to experience active research through internship opportunities, helping them to chart their own courses, much as Erin did before them.

2023-24 Scholarship Recipients

UNDERGRADUATE

Lindsay Ball Fisheries & Wildlife Scholarship

Cristian Burke Matt Radin

Carl and Lenora Bond Scholarship Abbie Elrod

Mike and Kay Brown Scholarship

Mathias Anderson Marie Nanau Molly Shannon Avery Sternberger

Izma Bailey Conser Scholarship

Jack Hobe Carissa Stanz Ellie Winter

Davis Fisheries and Wildlife Scholarship

Cynthia Britt Hallie Bruckner Claire Clark Keannah Hollister Andrew Stratton

Roland E. Dimick Memorial Scholarship

Kalia Mork Marc Nickel Rowan Spangler

Fritzell Diversity Scholarship

Lauren Walls

GRADUATE

Robert Anthony Graduate Scholarship in Population Ecology

Cara Appel Kevin Wessels

Neil Armantrout Graduate Fellowship
Katherine Kennedy

David J. Ashkenas Memorial Fellowship

Briggs Scholarship in Biogeography

Clara Bird Carina Cusaka

Arif Jan

H. Richard Carlson Scholarship

Claire Rosemond

Jim and Bonnie Hall Fisheries and Wildlife Diversity Scholarship

Alisha Andrews Hannah Garcia Georgina Martinez Sofia Vazquez-Fernandez

Howard Horton Fisheries Management Scholarship

Cristian Burke Shirley Ann Deleon Guerro

Lee Wallace Kuhn Memorial Scholarship

Natasia VanDusen

Bob and Phyllis Mace Watchable Wildlife Scholarship

Marie Nanau Molly Shannon

Mentors Scholarship

Rachel Cherry Kristina Cook Haylee Pearce

William B.and Jean Morse Scholarship

Jacob Alexander Matt Radin Cierra Smith Madelynn Sweet

Coombs-Simpson Memorial Scholarship

Suzanne Winquist

Stan Gregory Stream Team Scholarship

Cailin Sinclair

Hugo Krueger Graduate Research Award in Fish Physiology

Janelle Layton

David & Georgia Leupold Marshall Wildlife Graduate Scholarship

Cara Appel Carina Kusaka

Munson Wildlife Graduate Scholarship

Scott Mitchell

Multnomah Anglers and Hunters Memorial Scholarships

Daisy Kritzer Marc Nickel AJ Kliewer

Oregon Coalition for Educating Anglers Scholarship

Paige Myers

Rogue Flyfishers Scholarship

Kristina Cook

Santiam Fish & Game Association

Natalie Godwin Meredith Love

Tamal Reece Memorial Scholarship

Nick Kehoe Clara Oliverson Mahi Pandey

Phillip W. Schneider Scholarship

Jack Hobe

Vivian Schriver Thompson Scholarship

Marissa Donovan Abbie Elrod

William Q. Wick Memorial Scholarship

Katja Erringer Erin Mongan Sophia Reid

James Sedell Graduate Scholarship

Hannah Barrett

Thomas G. Scott Achievement Award

Ph.D. Fang-Yu Shen, Marie Tosa M.S. Jennifer Waldo

Dr. Hari S. & Dr. Renuka R. Sethi Scholarship

Katherine Kennedy

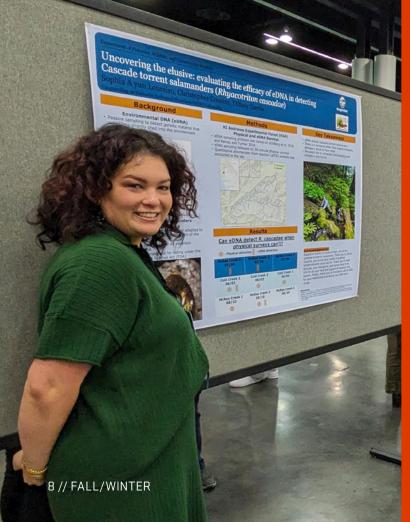
Ted Thorgaard Student Research Fund

Chris Cousins Vic Quennessen

Charles E. Warren Award

Jennifer Waldo









SACNAS NDISTEM 2023 National Meeting in PDX

By Shalynn Pack

This fall, FWCS was proud to attend, support students, and recruit at the National Diversity in STEM conference hosted by the Society for the Advancement of Chicanos and Native Americans (SACNAS) in Portland, OR. At this 3-day, 6500-person conference, many of our 2023 FWCS VIEW Fellows presented posters on their research, and we talked with hundreds of interested students at our recruiting and outreach table, shared with the Marine Mammal Institute.

FWCS has been a long-time supporter of SACNAS, and we were thrilled that for the first time, OSU was the premier sponsor of this year's event, inaugurating a deeper university commitment to SACNAS and its aims to advancing diversity, equity, and inclusion in STEM fields.









I am an assistant professor with the Coastal Oregon Marine Experiment Station (COMES) and lead the Integrated Marine Fisheries Lab, which is based at OSU's Hatfield Marine Science Center. I also serve as the Oregon Department of Fish and Wildlife representative on the Scientific and Statistical Committee for the Pacific Fishery Management Council.

My research involves quantifying population and community dynamics of marine species — particularly groundfishes in the North Pacific Ocean. The projects that I lead are specifically designed to inform stock assessments and support ecosystem-based fisheries management. To promote success in these arenas, I prioritize transdisciplinary collaborations and work to build bridges among ecologists and statisticians, scientists and stakeholders, and students and fishery professionals. I also integrate DEI (diversity, equity, and inclusion) initiatives into every aspect of my work as a way of increasing access to fisheries science and related disciplines.

Our team is currently working on a variety of field-, lab-, and model-based projects. One of which involves estimating biogeographic effects on rockfish life history traits to inform population structure and state-based stock assessments. Another uses predators as samplers (via diet data) to assess differences in the quality of foraging habitat for use in spatial management.

Got a burning question that may help promote fishery sustainability in Oregon or elsewhere? Let me know! I'd love to hear from you.

Location: Hatfield Marine Science Center, Newport

Email: cheryl.barnes@oregonstate.edu



As a kid, I lived across the street from a federal hatchery central to the Atlantic salmon restoration program in the Connecticut River Basin. Initially a pastime, my frequent visits to the station evolved into a transformative experience, where I volunteered for over a decade. The hatchery managers' enthusiasm and willingness to involve and teach me ignited my passion for science and empowered me to overcome the educational barriers I faced as a student with a learning disability. The work and lessons learned at the hatchery laid the foundation for my career pathway and my dedication to expanding experiential learning opportunities for students.

My career began with a research focus, addressing conservation and management questions by applying physiological concepts to understand how organisms respond to stress. I earned a master's in marine sciences from the University of New England and was supported by an NSF graduate research fellowship to investigate discard survivability and the physiological impact of trawl capture on skates.

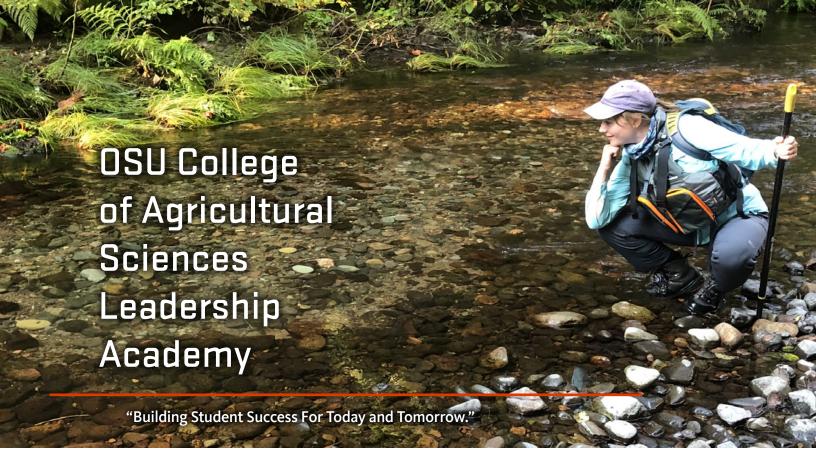
I gained further field experiences as a fisheries biologist for the National Marine Fisheries Service and amassed 2000+ hours at sea, collecting stock assessment data for commercially managed fish and shrimp populations. I also investigated the physiological tolerance of the Atlantic Sharpnose Shark to low salinity environments to provide insights into habitat use and distribution patterns within nearshore nursery grounds.

Transitioning from research, I channeled my expertise into supporting academic units and faculty in expanding placebased, hands-on learning opportunities for undergraduate students. As a Lab Coordinator at the University of New England, I oversaw the operational support for all marinebased teaching labs. I gained former instructional experience as an Assistant Teaching Professor and Course Coordinator for the Introductory Majors Biology Series at Arizona State University's West Campus. In this role, I revised the lab curriculum to emphasize scientific investigation and communication. This involved establishing a cross-disciplinary collaboration with the ASU Communication Lab to develop and implement a STEM Oral Communication Workshop to provide directed instruction in scientific oral presentation. Outside the classroom, as the Assistant Director of Student Support, I worked to execute initiatives to prioritize student well-being, belongingness, and community.

I am excited to bring my unique blend of field experience, instructional innovation, operational support, and academic administration to my new dual appointment as a Senior Instructor in the Department of Fisheries, Wildlife, and Conservations Sciences and as the Academic Development Coordinator for the Marines Studies initiative and look forward to contributing to the department's educational initiatives and working to advancing OSU coastal-based courses and curricula.

Location: Hatfield Marine Science Center, Newport **Email:** angela.cicia@oregonstate.edu





By Ken Munson, OSU 74', 79' Chair, Leadership Academy Advisory Board

When I graduated from OSU Fisheries & Wildlife several decades ago, I left campus believing that my college program prepared me for a successful career in natural resource management. Boy, I was wrong. It did not take long to encounter situations for which I was unprepared. Those challenges had nothing to do with my ability to identify animals or fish, to recite scientific names from memory, or balance chemical equations. The difficult situations I encountered were related to my relative lack of core skills like motivation principles, managing conflict, negotiations, effective listening, compromise, and personal effectiveness.....in a nutshell, leadership skills. Fortunately, most of my decades-long career was with an organization that had great leaders as examples and invested in developing people as future leaders. Formal training over the years helped, but I learned much in the proverbial "school-of-hard-knocks." During the second half of my career I realized that my college experience would have been enriched had I been encouraged to develop the core skills critical to both personal and professional success. When I learned about the College of Agricultural Sciences Leadership Academy, I realized that was exactly what I needed....and should have been required.... during my undergraduate experience. Thus began my commitment to helping the Leadership Academy grow; to impact immediate student success and to sharpen core skills sought by employers. Please allow me to share a little more about the Leadership Academy.

The goal of the Academy is to produce graduates who are lifelong learners and leaders in their industries with the vision, passion, and drive to make an impact in their world.

One of only a few programs in the country, the Academy prepares students to effectively lead themselves and others by providing critical leadership perspectives from academic and industry professionals through yearlong coursework, experiential learning, and mentoring relationships. Academy students are primarily juniors and seniors.

The Academy is a proven catalyst for students realizing who they were created to be and gifted to become. Purposeful learning and impactful application enable students to develop leadership skills with a brand that stamps Academy students as having the best talent in, and outside of the classroom.

If you are a student at OSU, I encourage you to explore the Academy to complement your program. If you are an OSU alum and want to help students succeed, consider contributing to one of the Academy's three Endowed Scholarships on Dam Proud Day or Giving Tuesday. It's a great way to show your support with high confidence of making an impact.

For more information and how to apply, please contact Faith Vawter, Assistant Director of the Academy.

agsci.oregonstate.edu/leadershipacademy

Above: Academy alum Marina Larson. Page 13 left to right: FWCS undergraduates Charlotte Hussain and Heather Thomas, two current Leadership Academy students.



Cohort size > doubled from 25 students in 2018 to 67 in 2023/24



17 majors represented



More than \$50,000 in scholarships awarded



28% of students from underrepresented groups (vs CAS population 16%)



Over 300 students graduated and 98% OSU graduation rate of Academy alums



82% of Academy graduates receive a job offer prior to graduation





"I have really enjoyed being a mentor for the Leadership Academy. My biweekly visits with mentees help me reflect on my experiences and leadership style, and I love hearing their stories, plans, and achievements. Mentoring is the primary reason why I am in academia, and it is great to have this opportunity for quality time with students."

Selina Heppell, Department Head



"Leadership will play an important role in teaching me an open way to understand and listen better without judgment. In my professional life, as my career goals are mainly in the field of conservation with the goal to have my own organization in the future, having good leadership qualities become a stronger factor in building credibility, confidence, and the proper way of communication. For me, a good leader is one who takes their whole team together respecting everyone's thoughts and opinions while protecting their own beliefs, and making the appropriate decisions with every factor in consideration."

Mahi Pandey, Academy Alum



"My favorite part of Leadership Academy so far has been the connections I have made with my peers, leaders, and my mentor! There are so many amazing folks I have gotten to learn from, it's a unique community that will change your mindset and push you to grow. So many good discussions, reflections, laughs and dance parties!"

Marina Larson, Academy Alum



"My biggest takeaway from Academy is that you are exposed to perspectives that you may not have thought of before. I was able to dive into that more and it helped me interact with people in my role. It's important to work on communication, strengths, weaknesses and Leadership Academy showcased. This is a program that can reach no, particularly in a large program like FWCS with a large online population, it can be hard to make connections with others and practice those skills."

Melissa Robell, Academy Alum



Researchers observe wolves hunting and killing sea otters and harbor seals on Alaska's Katmai coast

Firsthand observations of a wolf hunting and killing a harbor seal and a group of wolves hunting and consuming a sea otter on Alaska's Katmai coast have led scientists to reconsider assumptions about wolf hunting behavior.

Article: OSU Newsroom

VIEW Fellows Seize Opportunities To Diversify Wildlife Profession

Thanks to support from a fellowship program from Oregon State University, students underrepresented in the wildlife field have gone on to work for the U.S. Geological Survey tracking Burmese pythons, earn competitive national scholarships, become presidents of TWS student chapters and more.

Article: The Wildlife Society

Fulbright Scholar, Kelly Biedenweg, Leads Efforts To Provide Better Guidance On How To Integrate Considerations Of Human Wellbeing In Protected Area Management

Human wellbeing considerations in protected area management are a growing phenomenon internationally. To achieve international certification, the IUCN Green List requires that protected areas consider social and economic impacts.

Article: FWCS Website

How Far Will Salmon Swim for a Craft Beer?

Several years from now, however, if scientists at the Oregon Hatchery Research Center have their way, some chinook salmon will be chasing a very different scent: the rich, beery bouquet of brewer's yeast. The alluring aroma of ale is a bid to solve a sticky conservation conundrum: how do you get hatchery-reared salmon to come home?

Article: Hakai Magazine

GPS tracking, simulations show optimal locations to help desert bighorn sheep cross freeways

Desert bighorn sheep whose Southern California range is bisected by freeways may one day benefit from Oregon State University modeling designed to show where the animals would be most apt to use overpasses to safely cross the interstates Article: OSU Newsroom

Blue whales: Ocean giants return to 'safe' tropical haven

Blue whales - the largest animals on Earth - are making their home in a part of the Indian Ocean where they were wiped out by whaling decades ago. Researchers and filmmakers in the Seychelles captured footage of the whales in 2020 and 2021. A year of underwater audio recording revealed the animals spend months in the region.

Article: BBC News

Oregon State Everywhere: Finding community and support from all points on the map

Fulbright scholar Jane Vinesky says she benefited from Oregon State's experiential learning opportunities while pursuing her degree online.

Article: OSU Ecampus

In a small Cascade Mountains lake in Oregon, the world's smallest lamprey is making a comeback

Using hook and line to ply the waters of Miller Lake all summer, Jordan Ortega caught brown trout with an unlikely purpose in mind, and it panned out in spades.

Article: The Spokesman-Review

Stay up to date on research developments, departmental announcements, events, seminars and more by signing up for our mailing list!

beav.es/fwcs-stay-connected

FWCS by the Numbers 2022 - 23

1,291 Students Enrolled

- » 790 Undergrad
- » 131 M.S./Ph.D.
- » 48 Professional Science Masters
- » 332 Grad Certificates

228 Students Graduated

- » 125 Undergrad Degrees
- » 43 Graduate Degrees
- » 60 Grad Certificates

\$113,609 Awarded Scholarships

» You can read more about our offered scholarships and see all our past recipients on our website beaves/Zma

Ways to Contribute

- » Make a donation beav.es/Zma
- » Get involved with student organizations and clubs
- » Volunteer to give a seminar or host a workshop
- » Email fw.alumni@oregonstate.edu to learn more

Fisheries, Wildlife, and Conservation Sciences 104 Nash Hall Oregon State University Corvallis, OR 97331



