



STATE OF THE COAST

November 3 - 4, 2023 • Newport, Oregon

6:00 - Friday, November 3: Welcome Discussion and Social

7:30 pm

Conference will start with an evening discussing art and science including artist Sarah Fitzsimon displaying and talking about her Pacific Quilt, Amanda Gladics and Chris Peterson sharing approaches and gear for getting videos while commercial fishing, meeting presenting students, and more! Discussion followed by light reception.

Saturday, November 4:

8:00 am.....Coffee & Registration Marine Studies Building (MSB) Lobby

9:00 am.....Welcome & Keynote Marine Studies Building Auditorium

Keynote Address: Darryl Thomas Western Oregon University
Bridging Art and Science for Inclusive Communication

10:00 am.....Coastal Snapshots MSB Auditorium

Updates on issues, challenges, or opportunities related to coastal Oregon

- 1. The Oregon Coastal Dune Management Guidebook: A New Reference Document for Oregon's Coastal Decision Makers** Carly Ringer & Megan Wengrove, OSU
- 2. Oregon Offshore Wind Updates:** Karina Nielsen, Oregon Sea Grant/OSU
- 3. Monitoring Snowy Plovers on the North Coast, a Volunteer Model:**
Allison Anholt, Portland Audubon
- 4. Amplifying the 'A' in Coastal STEAM K-8 Education:**
Alison Dennis, Sitka Center for Arts and Ecology
- 5. The Community Teams of the Oregon Marine Reserve Partnership:**
Katy Bear Nalven, Angela Whitlock, Taylor Brooks, Paul Robertson, Tom Calvanese

11:30 am -

1:15 pm

Lunch MSB Lobby

Student research & art exhibit Visitor's Center & MSB

1:15 -

2:30 pm

Breakout Sessions #1 (5 concurrent sessions)

- 1. Turf to Surf: Understanding and managing marine contaminants from Oregon land uses**
176 MSB
- 2. Crab Encounters of the Carcinus Kind: Invasion of the Oregon coast by non-native European green crab** Guin Library Seminar Room
- 3. Sharing our coast with wildlife** Ed Wing 30/32
- 4. Working at the Interface of Science, Policy, and Management on the Oregon Coast**
MSB Auditorium
- 5. Oceanic Printmaking as a Pathway to Science Communication** 146 MSB

2:45 -

4:00 pm

Breakout Sessions #2 (5 concurrent sessions)

- 1. Supporting Resilient Coastal Communities through the Cascadia CoPes Hub** Ed Wing 30/32
- 2. Watershed Restoration in a Changing Climate: From Headwaters to Estuaries in coastal Oregon** Guin Library Seminar Room
- 3. Oregon Kelp Alliance - Sunflower Sea Stars in Oregon - Past, Present, Future?**
MSB Auditorium
- 4. Confluences: Interdisciplinary Explorations by OSU Art-Sci Fellows** 176 MSB
- 5. Oceanic Printmaking as a Pathway to Science Communication** 146 MSB

4:15 pm.....Student Awards MSB Auditorium

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See SOTC Website for Full Session Abstracts

Breakout Session #1 Descriptions

1. Turf to Surf: Understanding and managing marine contaminants from Oregon land uses *From pesticides and microplastics to fluorinated chemicals, contaminants are increasingly in the news and in our awareness. We will explore the current state of knowledge and action on this issue in Oregon and how that translates regionally and nationally.*

Elisa Granek, PSU; **Susanne Brander**, OSU; **Paul Meyer**, USA EPA; **Lauren Kashiwabara**, OSU; **Amanda Gannon**, PSU; **Allie Tissot**, PSU; **Scott Mansell**, Clean Water Services; **Representative David Gombert**, Oregon State House / Oregon Department of Fish & Wildlife

2. Crab Encounters of the Carcinus Kind: Invasion of the Oregon coast by non-native European green crab *European green crab (Carcinus maenas) are global invaders. Join us for a summary of the history, management, and regulation of green crab in Oregon, as well as the status of green crab populations and ongoing research.*

Steve Rumrill, ODFW; **Shon Schooler**, South Slough National Estuarine Research Reserve; **Sylvia Yamada**, OSU; **Rebecca Flitcroft**, US Forest Service; **Mitch Vance**, ODFW; **Sumner Henricksen**, ODFW; **Derek Wilson**, ODFW; **Curtis Roegner**, NOAA Fisheries Service; **Catherine deRivera**, PSU

3. Sharing our coast with wildlife *Oregon's coast is important for wildlife but is also an incredibly popular place for people to recreate. Hear what is currently being done and how we can better address the challenges around balancing protection of wildlife and habitats with human use.*

Joe Liebezeit, Portland Audubon; **Laurel Hillmann**, OPRD; **Allison Anholt**, Portland Audubon; **Dawn Harris**, USFWS; **Charlie Plybon**, Surfrider; **Lindsay Adrean**, American Bird Conservancy

4. Working at the Interface of Science, Policy, and Management on the Oregon Coast *Ever wonder how science informs policy or how regulations shape the landscape? Join us for an informative session about Oregon's unique system of coastal zone management and land use that has been in place since the 1970's and works at the interface of these topics.*

Meg Reed, Oregon Dept. of Land Conservation and Development; **Kevin Herkamp**, Oregon Parks & Recreation Department; **Michael Moses**, Oregon Department of Land Conservation & Development; **Carl Hendrickson**, Oregon Department of Land Conservation & Development; **Elissa Connolly-Randazzo**, Oregon Department of Land Conservation & Development

5. Oceanic Printmaking as a Pathway to Science Communication *Make a print while learning arts-inspired tips for communicating oceanic and other scientific concepts to diverse audiences in this hands-on workshop presented. Explore how art-making can open new pathways and deepen our connection to the ocean. Explore various block printing, linocut and monotype printmaking methods and techniques. No experience or knowledge is needed. All levels welcome.*

Leeauna Perry, Sitka Center for Arts and Ecology

Breakout Session #2 Descriptions

1. Supporting Resilient Coastal Communities through the Cascadia CoPes Hub *Coastal communities face significant risk due to a multitude of hazards including sea-level rise, flooding, erosion, earthquakes and tsunamis, climate change, and human development. Learn about the Hub's work on increasing the diversity coastal hazard researchers and practitioners, enhance sharing between coastal communities, and the co-production of knowledge.*

Alessandra Burgos, OSU; **Felicia Olmeta Schult**, Oregon Sea Grant; **Jenna Tilt**, OSU; Hub stakeholder

2. Watershed Restoration in a Changing Climate: From Headwaters to Estuaries in coastal Oregon *Watershed Councils seek to protect, restore, and improve the quality of lands and waters for fish, wildlife, plants, and people. Learn about the new Focused Investment Partnerships (FIPs) on the coast, promising ~\$11 million to the Coos, ~\$12 million to the Siuslaw, and \$7.8 million to the MidCoast for Coho salmon recovery efforts and tidal wetland restoration.*

Evan Hayduk, MidCoast Watersheds Council; **Cheryl Horton**, MidCoast Watersheds Council; **Mizu Burruss**, Siuslaw Watershed Council; **Haley Lutz**, Coos Watershed Association

3. Oregon Kelp Alliance - Sunflower Sea Stars in Oregon - Past, Present, Future? *Sunflower sea stars were nearly wiped out by the Sea Star Wasting epidemic. Join this session to meet this charismatic benthic predator, learn what is needed for population recovery, and what is happening to restore this 20-armed ocean icon.*

Tom Calvanese, Oregon Kelp Alliance / OSU; **Sara Hamilton**, Oregon Kelp Alliance / OSU; **Aaron Galloway**, Oregon Institute of Marine Biology / U of O

4. Confluences: Interdisciplinary explorations by OSU Art-Sci Fellows *Confluences: Interdisciplinary explorations by OSU Art-Sci Fellows* *Facing the challenges of conserving our marine environment will require integrating the customarily isolated lenses of the arts and sciences to re-envision solutions. The Interdisciplinary Fellowship at OSU challenges students to work across the disciplines of the arts, humanities, sciences and engineering.*

Jerri Bartholomew, OSU; **Vaishnavi Padaki**, OSU; **Aliya Jamil**, OSU; **Ali Trueworthy**, OSU; **Olivia Burleigh**, OSU; **Anne Krone**, OSU

5. Oceanic Printmaking as a Pathway to Science Communication *Make a print while learning arts-inspired tips for communicating oceanic and other scientific concepts to diverse audiences in this hands-on workshop presented. Explore how art-making can open new pathways and deepen our connection to the ocean. Explore various block printing, linocut and monotype printmaking methods and techniques. No experience or knowledge is needed. All levels welcome.*

Leeauna Perry, Sitka Center for Arts and Ecology

2023 Student Research & Art Presenters

Student Researchers *Research abstracts are available on the conference website*

- 1: Kristine Alford OSU** *Short-Term Dissolved Oxygen Trends as a Response to a Large Dam Removal*
- 2: Hamzah Alzanbaki OSU** *Toward developing super seaweed*
- 3: Katherine Berreman OSU**.... *Sublethal Toxicity Testing of Commonly Used Pesticides at Varying Salinities in *Menidia beryllina**
- 4: Joshua Blockstein OSU**..... *Preferred Community Assets and Latinx Social Capital: A Tale of Trust, Resilience, and Vulnerability.*
- 5: Hailey Bond OSU**..... *Dynamic Revetments for Erosion Control in the Pacific Northwest*
- 6: Hannah Brachfeld OSU**..... *Roles and Responsibilities of the Department of Defense and the Department of Homeland Security in Marine Renewable Energy Siting and Policy*
- 7: Lara Breitreutz OSU** *Characterizing Eelgrass (*Zostera marina*) recovery potential in South Slough, OR*
- 8: Gregory Christie OSU**..... *Avoiding Yelloweye Rockfish in the Halibut Longline Fishery and Smaller-Sized Sablefish in the Sablefish Trawl Fishery*
- 9: Savanna Clax OSU** *The Impacts of the Pacific Marine Heatwave on Recruitment of Fish*
- 10: Kaeden Fletcher-Vogel OSU** *Five-round battles: Tracking aggressive repetitive interactions in the sea anemone *Anthopleura elegantissima**
- 11: Devin Forest-Hines PSU**.... *Above the Salt: Monitoring Green Crab Abundance in Relation to Salinity Within Three Arms of the Coos Estuary*
- 12: Sof Fox UO** *One Nudibranch One Sponge? Using Genetic Barcoding to Analyze the *Rostanga pulchra* Species Complex and Prey Differentiation*
- 13: Trevor Gelling PSU** *Dungeness face high predation risk from green crabs across increased temperatures at different salinities*
- 14: Morgan Johnston OSU** *Predictive Species Distribution Modeling of Yelloweye Rockfish (*Sebastes ruberrimus*) in Oregon, Ås Rocky Reefs for Improved Stock Management*
- 15: Jamon Jordan OSU** *Seascape Applications: Swordfish Habitat in Chumash National Marine Sanctuary*
- 16: Jake Marshall OSU** *Effects of temperature-driven population distribution shifts of Pacific hake and Oregon offshore wind energy and on Oregon, Ås hake fishery*
- 17: Sean McCollum** *Monitoring Changes in Water Quality to Identify Stressors in Eelgrass Extent Throughout the Coos Estuary*
- 18: Izzy Mize PSU** *An analysis of offshore wind on the Oregon Coast*
- 19: Marlina Penn OSU** *Quantifying native *Olympia* oyster growth responses to environmental conditions in a space for time experiment in Yaquina Bay, Oregon*
- 20: Clarissa Raguso** OSU & University of Milano-Bicocca *Effects of Tire Wear Micro- and Nanoparticles in the Model Estuarine Species Fish → *Menidia* → *Beryllina* → †*
- 21: Lauren Rice OSU**..... *California and Oregon Shellfish Farmers: Perceptions of Stressors and Adaptive Strategies*
- 22: Grace Roal OSU** *Age-and-growth relationships of an ecosystem engineer shrimp and its invasive parasite*
- 23: Ericka Rosen OSU** *Sex and Aggression in *Anthopleura elegantissima**
- 24: Miles Rough OSU** *Exploring the impact of sunflower sea stars on localized grazer densities*

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Student Researchers Continued

- 25: Greg Stelmach** OSU *Human Dimensions of Marine Energy in Oregon*
- 26: Grace Stephens** ^{North}
^{Bend HS} *The Effects of Manure on Plant Growth: Grass Fed vs. Grain Fed*
- 27: Sarah Stone** OSU..... *Short-Term Changes in Dissolved Oxygen as a Response to a Large Dam Removal*
- 28: Luke Stuntz** OSU..... *Linking the Terrestrial and the Marine: Predation of Leach's Storm-Petrels by Northern River Otters*
- 29: Hossain Taufiq** OSU..... *Community Benefit Agreements for Offshore Wind: US, Europe, and the Asia Pacific*
- 30: Ali Trueworthy** OSU..... *Community-Drive Design for Marine Renewable Energy*
- 31: Arthur Veremchuk** OSU *Carbon dioxide uptake of red macroalgae agarophyton vermiculophyllum in an engineered system*
- 32: Garrett Vetter** ^{North}
^{Bend HS} *How Wildfires Affect Algae Population*
- 33: Jennifer Waldo** OSU..... *Using message framing to inspire collective urgency in response to ocean change*
- 34: Michael Weingartner** OSU.... *Invasive Green Crab (Carcinus maenas) Management in Oregon*

Student Artists

Artists statements, artwork and abstracts are available on the conference website

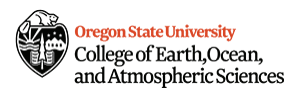
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|-------------------------------|--------------------------------|-----------------------------------|
| A: Olivia Burleigh OSU | E: Kate Larson OSU | I: Rose Pond OSU |
| B: Natalie Donato OSU | F: Aspen McCallum OSU | J: Claire Schlagenhaft OSU |
| C: Ian Hermanson OSU | G: Clara Oliverson OSU | K: Jason St Clair OSU |
| D: Aliya Jamil OSU | H: Vaishnavi Padaki OSU | |

Many Thanks to the 2023 Advisory Committee

Sarah Adams-Schoen UO Law School
Michael Boonstra Oregon State University
Scott Heppell Oregon State University

Andy Myers Oregon State University
Charlie Plybon Surfrider Foundation
Cinamon Moffett Oregon State University

Brought to you by Oregon Sea Grant, STATE OF THE COAST is a coastal conference where everybody from scientists to industries to citizens can learn, network, and engage in the current and future state of Oregon's marine environment.



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