

*Meet, learn and share about the
world of water*



NORTHWEST AQUATIC AND MARINE EDUCATORS 2019 CONFERENCE

FOR EDUCATORS, SCIENTISTS, VOLUNTEERS,
RESEARCHERS, STUDENTS AND RESEARCH
PROFESSIONALS FOCUSED IN WASHINGTON,
OREGON, ALASKA AND BRITISH COLUMBIA

**PORT TOWNSEND, WA
AUGUST 11-15, 2019**

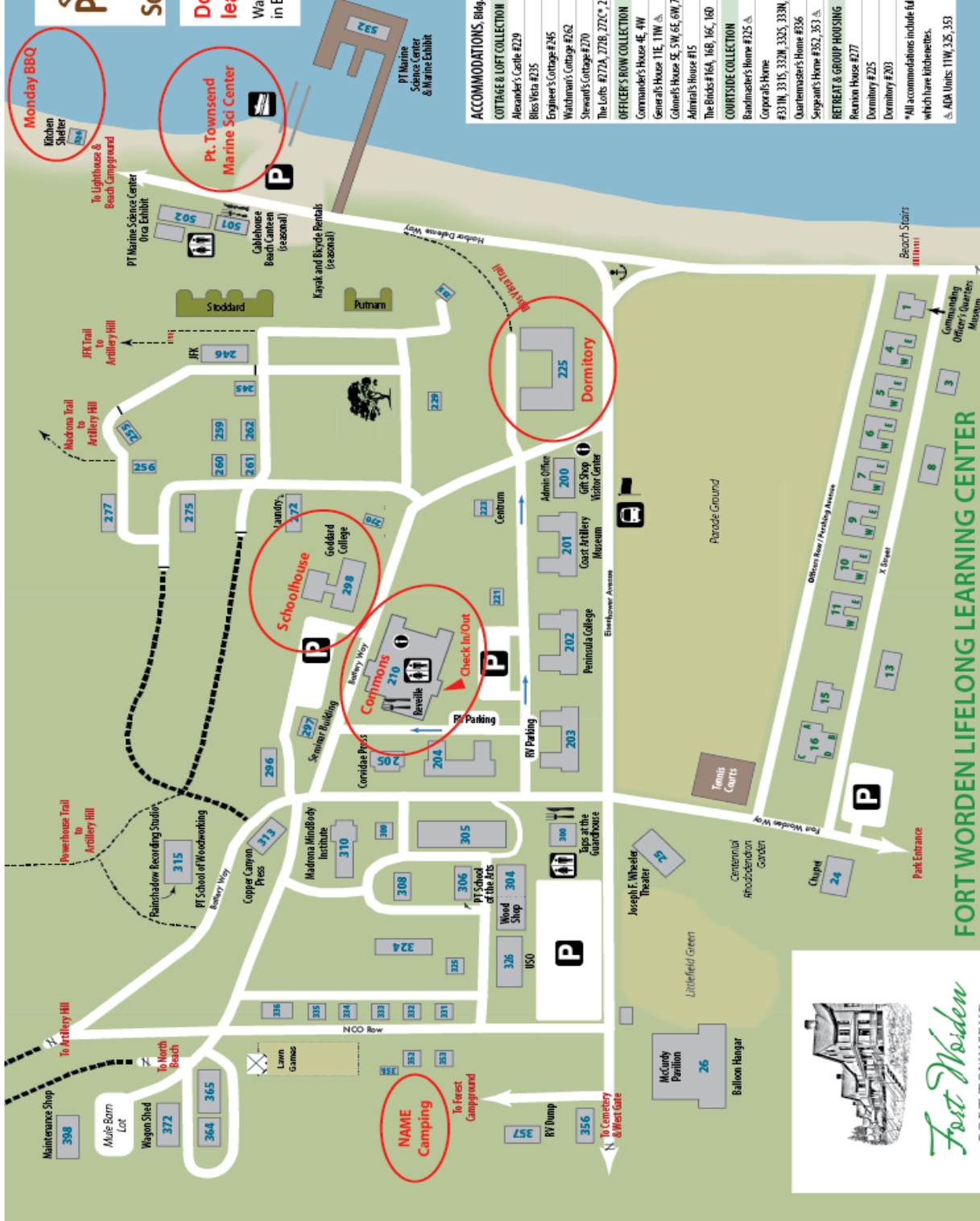


www.pacname.org/conferences



Dogs must remain on leash at all times.

Water bottle filling stations are located in Bldgs. 200, 202 and 210.



ACCOMMODATIONS, Bldg. #	Bedrooms	Baths
COTTAGE & LOFT COLLECTION		
Alexander's Cottage #229	1	1.5
Bliss Vista #235	1	1
Engineer's Cottage #245	2	1
Watchman's Cottage #262	2	1
Steward's Cottage #270	2	2
The Lots #272A, 272B, 272C*, 272D*	2-4	1-2
OFFICER'S ROW COLLECTION		
Commander's House #4E, 4W	6	3.5
General's House 11E, 11W	6	2.5
Colonel's House 5E, 5W, 6E, 6W, 7E, 7W, 9E, 9W, 10E, 10W	4	1.5-2
Admiral's House #15	5	2.5
The Bldgs #16A, 16B, 16C, 16D	4	1
COURTSIDE COLLECTION		
Bandmaster's Home #325	2.5	1
Corporal's Home		
#331N, 331S, 332N, 332S, 333N, 333S, 334N, 334S, 335N, 335S	2	1-1.5
Quartermaster's Home #336	3	2
Sergeant's Home #352, 353	4	3
RETREAT & GROUP HOUSING		
Reaction House #277	14	4
Dormitory #205	83	12
Dormitory #203	30	4

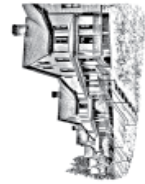
*All accommodations include full kitchens except Bldg. 277, units A & B, which have kitchens.

ADA Units: 11W, 2.5, 353

FORT WORDEN LIFELONG LEARNING CENTER

210 Battery Way, Port Townsend, WA 98368 • 360-344-4400 • www.fortworden.org • reservations@fortworden.org

Buildings not to scale.



Fort Worden
PORT TOWNSEND
A HISTORIC GATHERING PLACE

Welcome to Fort Worden State Park!

Fort Worden is the kind of destination that stays with you for a lifetime. Amidst the magnificent natural setting and the influence of its military past, Fort Worden is home to inspiration, education and personal transformation. People gather here to participate in arts and music events, woodworking classes, conferences, camping and outdoor activities, family reunions, weddings, and much more. Once you explore this picturesque park, you'll leave with enriching experiences you'll never forget.

Originally designed as a military base to protect Puget Sound, Fort Worden evolved into an iconic and cherished state park. The fort – featuring 100 historic structures – spans two miles of saltwater shoreline with views of the Olympic and Cascade Mountains, and the San Juan Islands. The fort offers exceptional meeting space, comfortable accommodations and delectable dining options, all within a campus-like setting. Located within a couple of miles from historic downtown Port Townsend, shopping and sightseeing opportunities are just minutes away.

Conference Themes

Connecting cultures and communities

How do programs reflect the diverse communities of their area? How are social justice and equity issues in aquatic and marine science programming addressed? How do programs ensure the curriculum is culturally sensitive and relevant to the students they serve? Tips, techniques and lessons learned for successfully connecting all learners with the aquatic world.

Innovative Teaching, Research and Restoration

As educators, we are constantly looking for new and exciting ways to engage our students, or entice our audience to dive in to what we are teaching. As both the natural world and landscape of education continue to shift and change, so must our teaching strategies. Sessions will highlight innovative new lessons and approaches that you can take back and incorporate into your own classrooms or in the field.

Place-Based Learning

Do you teach using your local community and landscape? How do you incorporate “calls to action” and solutions in discussions about human impacts on aquatic and marine ecosystems? Sessions will share knowledge and tips about programming a local setting and how you make the connection to our one big ocean.



NAME Conference Traditions

With forty four conferences under our collective belt, we can't help but have a few traditions. If you are a first time NAME member or conference attendee (and even if you aren't), read on...

- **NAME Board Meeting:** This is a gathering of NAME's leaders (at least, the elected and appointed ones). All NAME members are invited to witness leadership in action (or bring your complaints).
- **SeaFaire:** Consider it an idea and innovation garage sale, except that most of the ideas and innovations are available free of charge. Conference attendees and local organizations are welcome to reserve a table and show off during this event.
- **Annual NAME Awards Banquet and Auction:** Always a conference highlight, the awards banquet and auction recognizes outstanding members of the marine education community. The auction raises funds for NAME's mini-grant and scholarship programs. Auction items are varied and donated by members and local organizations, and you never know what will be on the table. There is both a silent and live auction.
- **Provincial and State Meetings:** These meetings give each province and state a chance to meet together and plan the upcoming year. Find out what great stuff is happening in your own backyard.
- **NAME Annual General Meeting:** U.S. non-profit law requires a general membership meeting once each year, and this is it. Don't miss the opportunity to learn the latest NAME innovations, programs, and plans for the future. Be involved.

General Conference Information

NAME Registration/Information Desk: Registration and check-in will begin at 3 pm on Sunday, August 11th. The NAME Registration/Information Desk will be in the Commons, and will remain open as needed on Monday, Tuesday, Wednesday and Thursday.

If you are a presenter or exhibitor: Please check in at the registration table and double check the media set up prior to speaking. Don't hesitate to ask for support if you need it.

SeaFaire: SeaFaire will be held in the Commons Room A. Booths will open on Monday at 3 pm and coincide with the afternoon coffee break and poster session. We encourage exhibitors to be near their booths after workshops on Monday afternoon so folks can ask you questions about your programs.

Message Board: There will be a message board at the registration table in the Commons if you want to coordinate rides or simply leave people messages.



NAMEtags: Wear 'em! They are your tickets to events, food, and other cool stuff. Besides, it helps you hide the fact that you can't quite remember that person you met last year, and helps people you meet for the first time remember you next year.

Meals:

- Sunday evening Welcome Reception - heavy appetizers and drinks at Port Townsend Marine Science Center from 5:00pm to 7:00pm
- Breakfast on Monday, Tuesday, Wednesday and Thursday mornings will be provided to those with conference lodging in the dormitories. Breakfast will be in the Commons Dining Hall. Breakfast will be served between **7:30-8:00am**, you will have until 8:30am to enjoy your meal.
- Lunch on Monday, Wednesday and Thursday will be provided to all those registered. Lunch will be served between 12:00pm and 12:30pm, we will have until 1:00pm to finish enjoy our meal.
- Lunch on Tuesday will be brown bag, available for pick up at the Commons at 7:30 am.
- Monday evening we will host a BBQ at the beach at Fort Worden from 5:00pm until sunset. (*guest tickets are available*).
- Tuesday evening, folks will be on their own for dinner and will have a chance to explore Port Townsend. Alternatively, there is a local pub at the Fort, Taps, where you can get a bite to eat. Don't forget to come back at 7:30pm for an evening talk by Daniel Evans of Race to Alaska, in the Schoolhouse, School Room H.
- Wednesday evening we have our annual banquet and auction at the Northwest Maritime Center in downtown Port Townsend (*guest tickets are available*).

Guest Meal Tickets: If you have purchased for your guest/s for meals, BBQ, auction, etc., you will receive a nametag for your guest at registration. Please use these for entrance to these events.

Field Trips: If you have signed up for a field trip, please check in at the registration table and check for departure time and carpool information.

Beverage Cup/Water Bottle: Please, don't forget to ***carry your own water bottle with you.***

Event Waiver Form: Just in case you snuck by us, make sure you have a signed Event Waiver Form turned into Registration. These forms are protection for NAME and you!

Parking: Upon arrival, you will be given a permit to park at any authorized location on the Fort Worden Campus. If you would like to park at the beach or a trailhead, you will also need a [WA State Discover Pass](#).



Special Thanks to our Conference Planning Committee

The following people put in countless hours to coordinate everything that made this conference a success: speakers, field trips, presentations, lodging, food, the auction and dance, registration, and all the other details that often go unnoticed.

Woody Moses, NAME Washington Director & Conference Co-Chairperson
Maile Sullivan, NAME Washington Director & Conference Co-Chairperson
Cathy Carolsfeld
Stefanie Hawks-Johnson
Vanessa Hunt
Orlay Johnson
JoAnn Moore
Jennifer Magnusson
Casey Ralston
Sarah Rubenstein
Amy Sprenger
Suzi Wong-Swint

About Northwest Aquatic & Marine Educators

NAME was founded in 1976 and became a chapter of the [National Marine Educators Association](#) in 1980. In the early 1990s NAME expanded its mission and membership to include all aquatic environments, recognizing that marine and aquatic ecosystems, environments, and issues are linked together, and that educators working in both environments share common beliefs and strategies. NAME includes members from Alaska, British Columbia, Washington, and Oregon. Annual NAME conferences rotate through these states and provinces. In addition, each state or province offers local professional development opportunities for formal and non-formal educators.

NAME's Mission: To create, support, and inspire an international community of marine and aquatic educators throughout the Pacific Northwest.

NAME Members Believe:

- Every human on Earth should be water literate
- Using the allure of water enriches and facilitates learning
- Sharing our knowledge and experience with others creates a community of informed stewards

Our Goals

- Encourage professional growth by offering quality workshops, conferences, field experiences, and in-services in the Pacific Northwest
- Share information and education materials focused on marine and aquatic environments and issues
- Support a growing network of NAME educators who reflect the diverse communities of the Pacific Northwest



2018-2019 Northwest Aquatic & Marine Educators Leadership

Amy Sprenger, President, WA

Kay Shoemaker, Alaska Director

Jennifer Howell, Past-President, AK

Mary Holmes, British Columbia
Co-Director

Cathy Carolsfeld, President-elect, BC

Joachim (Yogi) Carolsfeld, British
Columbia Co-Director

Amy Cole, Secretary, WA

Melissa Keyser, Oregon Director

Rob Coats, Treasurer, OR

Maile Sullivan, Washington Co-Director

Bill Hanshumaker, NMEA Rep, OR

Woody Moses, Washington Co-Director

Committee Chairs

Jennifer Magnuson, Membership Chair, BC

Alan Rammer, Award Chair, OR

Fawn Custer, Mini-grants/Scholarships Chair, OR

Communications Committee

Orlay Johnson, Co-chair, WA

Stefanie Hawks-Johnson, Co-chair, WA

Jenna Kulluson, Flashmail Manager, OR

Jennifer Magnusson, Webmaster, BC



Conference at a Glance

Sunday, August 11

9:00 am	NAME Board Meeting	Schoolhouse, School Room H
3:00 pm	Registration Opens	The Commons
5:00 pm–7:00 pm	Welcome Reception at Port Townsend Marine Science Center	

Monday, August 12

7:30 am–8:30 am	Breakfast (for those staying in dorms)	The Commons Dining Hall
8:00 am	Registration Opens	The Commons
8:30 am–10:15 am	Plenary	The Commons A/B
11:00 am–11:45 am	Concurrent Session A	The Commons & Schoolhouse
12:00 pm–1:00 pm	Lunch	The Commons Dining Hall
1:00 pm–1:45 pm	Concurrent Session B	The Commons & Schoolhouse
2:00 pm–2:45 pm	Concurrent Session C	The Commons & Schoolhouse
3:00 pm–4:30 pm	SeaFaire and Poster Session	The Commons
5:00 pm–Sunset	Beach Social, BBQ & MAME	The Beach (Kitchen Shelter)

Tuesday, August 13

7:30 am–8:30 am	Breakfast (for those staying in dorms) and pack lunches (for all registered)	The Commons Dining Hall
7:30 am–5:00 pm	Morning and Afternoon Field Trips	Meet @ The Commons
7:30 pm–8:30 pm	Race to Alaska (R2AK) Presentation	Schoolhouse, School Room H

Wednesday, August 14

7:30 am–8:30 am	Breakfast (for those staying in dorms)	The Commons Dining Hall
8:30 am–9:15 am	Concurrent Session D	Schoolhouse
9:30 am–9:45 am	Concurrent Session E	Schoolhouse
10:30 am–11:15 am	Concurrent Session F	Schoolhouse
11:30 am–11:45 am	Concurrent Session G	Schoolhouse
12:00 pm–1:00 pm	Lunch (all registrants)	The Commons Dining Hall
1:00 pm–1:30 pm	Chapter Meetings	TBD
1:45 pm–2:30 pm	Concurrent Session H	The Commons
3:00 pm–4:30 pm	Session I	Schoolhouse
6:00 pm–11:00 pm	Awards Banquet and Auction	Northwest Maritime Center

Thursday, August 15

7:30 am–8:30 am	Breakfast (for those staying in dorms)	The Commons Dining Hall
8:30 am–9:00 am	Annual General Membership Meeting	The Commons
9:00 am–9:45 am	Plenary Speaker	The Commons A/B
10:45 am–11:30 am	Concurrent Session J	Schoolhouse
11:45 am–1:00 pm	Lunch and Plenary	The Commons A/B
1:00 pm–2:00 pm	Youth Panel and Closing	The Commons A/B



Conference Details

Sunday, August 11

- 9:00 am NAME Board Meeting (School Room H)
- The NAME Board of Directors will meet in the Schoolhouse, School Room H. Board meetings are open to any NAME member who would like to sit in and hear what's happening in the organization at the grass-roots level!
- 3:00 pm Registration opens in The Commons.
- 5:00 pm–7:00 pm Welcome Reception at the Port Townsend Marine Science Center
Join us for an informal evening welcome with appetizers and drinks - co-hosted with Port Townsend Marine Science Center.

Monday, August 12

- 7:30 am–8:30 am Breakfast (The Commons Dining Hall)
- ◆ Breakfast will be provided to those with conference lodging in the dormitories. Breakfast will be served between **7:30-8:00 am**, you will have until 8:30 am to enjoy your meal.
- 8:00 am Registration Opens (The Commons)
- ◆ Please bring in your Auction Item to drop it off here
 - ◆ Pick up NAMEtags, keys, maps, program etc.
 - ◆ Field trip check in, volunteer sign up
 - ◆ Message Board Available
- 8:30 am–10:15 am Welcome and Keynote Speaker (The Commons A/B)



Dr. Deborah Giles, Science & Research Director, [Wild Orca](#)

Dr. Deborah Giles (she goes by her last name) received her PhD from the University of California Davis in 2014. Her master's thesis and PhD dissertation both focused on the federally listed southern resident killer whales. Formerly the research director at the Center for Whale Research, she is currently a resident scientist and lecturer at the University of Washington's Friday Harbor Labs, where she teaches Marine Mammals of the Salish Sea and Marine Biology. Since 2009 Giles has been the vessel captain for Dr. Samuel Wasser's project – University of Washington's Center for Conservation Biology – utilizing a scat detection dog to locate floating killer whale scat to monitor the physiological health of southern resident killer whales.

Starting in 2010, Giles also began work with an ongoing collaborative project with Cascadia Research Collective and National Oceanic and Atmospheric Administration's National Marine Fisheries Service deploying acoustic suction-cup recording tags on killer whales to measure received noise levels by whales. Giles is the killer whale scientific adviser for the Orca Salmon Alliance, a program advisor for Killer Whale Tales, and is on the Steering Committee for the Salish Sea Ecosystem Advocates (SalishSEA).



10:15 am–10:45 am Coffee Break (The Commons Lobby)

11:00 am–11:45 am **Concurrent Session A**

◆ **Visual Thinking Strategies in Science (VTSS): One Educational Tool, Two Different Worlds, Three Engaging Questions.**

Cari Garand, Danielle Carter, and Caitlin O'Morchoe, Seattle Aquarium
(The Commons - B)

◆ **Explore the Wild Coast with Sam and Crystal**

Gloria Snively, University of Victoria
Cathy Carolsfeld, Seaquaria Ocean Education Program, World Fisheries Trust
(Schoolhouse, School Room D)

◆ **Status and History of Netpen Aquaculture in the Pacific Northwest; Holy Moley, Why Are We Raising Salmon in Netpens?**

Orlay Johnson, Seattle Aquarium and NOAA - retired
(Schoolhouse, School Room H)

12:00 pm–1:00 pm Lunch (The Commons Dining Hall)

- ◆ Lunch will be provided to all those registered. Lunch will be served between **12:00 pm and 12:30 pm**, we will have until 1:00 pm to finish enjoy our meal.

1:00 pm–1:45 pm **Concurrent Session B**

◆ **Creating a Maritime and Place-Based School District in Port Townsend**

Sarah Rubenstein, Port Townsend School District
Dorothy Stengel & Dawn Braden, Salish Coast Elementary School
David Kelley, Port Townsend High School
(The Commons - A)

◆ **Shore-based Interpretation around the Whale Trail: Benefits and Opportunities**

Donna Sandstrom, The Whale Trail
(Schoolhouse, School Room D)

◆ **Water Chemistry activities for elementary and middle school**

Rob Coats, Portland Public Schools
(Schoolhouse, School Room H)

2:00 pm–2:45 pm **Concurrent Session C**

◆ **The Salish Sea with Billy B**

Billy Brennan
(The Commons - B)

◆ **Native or Invasive? Crayfish of the Pacific Northwest**

Janice Elvidge, NPS Lake Roosevelt National Recreation Area
Rick Reynolds, Engaging Every Student + ShareOregon
Deb Berg, Columbia School
(Schoolhouse, School Room D)



◆ Using Art for Environmental Awareness

Cara Mico, Cannon Beach Arts Association, University of Oregon

Pooka Morales, Haystack Rock Awareness Program

(Schoolhouse, School Room H)

3:00 pm–4:30 pm SeaFaire, Poster Session and Coffee Break
(The Commons A)

5:00 pm–7:00 pm Beach Social and BBQ
(The Beach, Kitchen Shelter)

Join the NAME Old-Timers, AKA “MAME”—the “Masters & Mavens of Aquatic & Marine Education”, who will be sharing stories and photos from the good old days and leading a Sea Shanty sing-a-long around the campfire.



Tuesday, August 13

7:30 am–8:30 am Breakfast (The Commons Dining Hall)

- ◆ Breakfast will be provided to those with conference lodging in the dormitories. Breakfast will be served between **7:30-8:00 am**, you will have until 8:30 am to enjoy your meal.

7:30 am Sack lunches available for pick-up at The Commons

8:00 am Field Trips begin to depart (The Commons)

- ◆ Please check at the registration table to ensure you know when your field trip is departing and if car-pooling will be needed.

4:00 pm–7:00 pm Dinner on your own in Port Townsend

7:30 pm Dan Evans, Executive Director of [Race2Alaska](#) (Schoolhouse, School Room H)



The inside passage to Alaska has been paddled by native canoes since time immemorial, sailing craft for centuries, steamboats full of gold prospectors elbowing each other out of the way for the promise of fortune. It's in the spirit of tradition, exploration, and the lawless self-reliance of the gold rush that Race to Alaska was born. R2AK is the first of its kind and North America's longest human and wind powered race, and currently the largest cash prize for a race of its kind. Join Dan as he shares the adventures and opportunities that have ensued after launching from Port Townsend each year!

Wednesday, August 14

7:30 am–8:30 am Breakfast (The Commons Dining Hall)

- ◆ Breakfast will be provided to those with conference lodging in the dormitories. Breakfast will be served between **7:30-8:00 am**, you will have until 8:30 am to enjoy your meal.



8:30 am–9:15 am

Concurrent Session D

◆ **Essential Elements of Place-Based Learning**

Sarah Rubenstein, Port Townsend School District
(Schoolhouse, School Room D)

◆ **Reflective Storytelling in Alaska: Place-Based Perspectives on Climate Change**

Kay Shoemaker, University of Alaska
Sam Kalarchik, Alaska Pacific University
(Schoolhouse, School Room H)

9:30 am–9:45 am

Concurrent Session E

◆ **Bringing ocean literacy into the hands of landlocked Canadians.**

Holly Neate, Ocean Wise Conservation Association
(Schoolhouse, School Room D)

◆ **Dive In! Exploring our Connection with the Ocean**

Ann Ericksson, Independent Writer/Orca Book Publishers
(Schoolhouse, School Room H)

10:00 am–10:30 am Coffee Break (Schoolhouse)

10:30 am–11:15 am **Concurrent Session F**

◆ **Building Capacity for Place-based Education on the West End**

John Hunter, Forks High School / Quillayute Valley School District
Julie Tennis, Pacific Education Institute
Nicole Harris, Olympic Coast National Marine Sanctuary
(Schoolhouse, School Room D)

◆ **Establishing Connections in Marine Science by Engaging Learners and Integrating Relevance, Responsibility, and Resilience.**

Valerie Stephan-LeBoeuf, The Animals' Trust
(Schoolhouse, School Room H)

11:30 am–11:45 am **Concurrent Session G**

◆ **Promoting Ocean Literacy through NMEA**

Jennifer Magnusson, National Marine Educators Association (NMEA)
(Schoolhouse, School Room D)

◆ **Seaquaria Ocean Education – Bringing the Ocean into Schools**

Maia Carolsfeld, World Fisheries Trust
(Schoolhouse, School Room H)

12:00 pm–1:00 pm Lunch (The Commons Dining Hall)

- ◆ Lunch will be provided to all those registered. Lunch will be served between **12:00 pm and 12:30 pm**, we will have until 1:00 pm to finish enjoy our meal.



- 1:00 pm–1:30 pm Chapter Meetings
- ◆ Alaska
 - ◆ British Columbia
 - ◆ Washington
 - ◆ Oregon
- 1:45 pm–2:30 pm **Concurrent Session H**
- ◆ **Scientific Sleuthing: Using Deductive Reasoning to Learn about Local Ecology**
Kristina Tirman and Janet Clarke, Sitka Sound Science Center
 (Schoolhouse, School Room D)
 - ◆ **Interacting with Inverts**
Ali Redman and Marley Loomis, Port Townsend Marine Science Center
 (Schoolhouse, School Room H)
- 2:30 pm–3:00 pm Coffee Break (Schoolhouse)
- 3:00 pm–4:30 pm **Concurrent Session I**
- ◆ **Fund Your Project: Dissecting Grant Proposals**
Jennifer Dumlao, Viriditas Consulting
Jacqueline Laverdure, Pacific Northwest BWET Program, Olympic Coast National Marine Sanctuary
 (Schoolhouse, School Room D)
 - ◆ **Making Plaster Scrimshaw Medallions with your Kids**
Rob Coats, Portland Public Schools
 (Schoolhouse, School Room H)
- 6:00 pm–11:00 pm Awards Banquet and Auction (Northwest Maritime Center)
- The **NAME Awards** are our chance to honor and recognize the work of NAME members who have put their hearts into aquatic and marine education.
- The **NAME Auction** is always a conference highlight, the silent and live auction raises funds for NAME's mini-grant and scholarship programs. Auction items are varied and donated by members and local organizations, you never know what will be on the table!



Thursday, August 15

7:30 am–8:30 am Breakfast

- ◆ Breakfast will be provided to those with conference lodging in the dormitories. Breakfast will be served between **7:30-8:00 am**, you will have until 8:30 am to enjoy your meal.

8:30 am–9:00 am General Membership Meeting

Besides the fact that U.S. non-profit law requires a general membership meeting once each year, this is an opportunity to learn the latest NAME innovations, programs, and plans for the future – and there are BIG plans, for a BIG conference in a BIG province to be hosted by NAME coming up next year...

9:00 am–9:45 am Plenary Speaker (The Commons)



Jessica Plumb is an award-winning filmmaker and writer, known for exploring the relationship between people and place. She is the Producer, Co-Director and writer of *Return of the River*, a feature documentary about the restoration of the Elwha River, and the largest dam removal in history. Recognized with a dozen festival awards, including “Best Storytelling” by the International Wildlife Film Festival, the film was reviewed as “hell-raising documentary filmmaking at its best”. Her short environmental films and video installations, described as video poetry, have screened in galleries and theaters throughout the United States and internationally. Plumb directs a video production company that creates educational and promotional films for clients. Her freelance writing has been published in the Seattle Times op-ed pages, Mountaineers Magazine, and the Boston Sunday Globe among others. Before moving to the Olympic Peninsula, she worked in Boston and Beijing, and served as interim editor of the Yale China Review. Plumb holds a B.A. from Yale University and an interdisciplinary MFA from

Goddard College.

10:00 am–10:30 am Coffee Break (The Commons)

10:45 am–11:30 am **Concurrent Session J**

- ◆ **Thinking Clearly about Climate Change Causes, Effects, and Solutions** *Susan Wood*, Padilla Bay National Estuarine Research Reserve
Chandler Colahan, Padilla Bay National Estuarine Research Reserve
(The Commons - B)

- ◆ **The Evolution of an Environmental Tall Ship: Adventuress’ People and Programs**
Amy Kovacs & Jenny Huntley, Sound Experience
Julie Masura, Sound Experience and UW Tacoma
(Schoolhouse, School Room D)



12:00 pm–1:00 pm Lunch and Plenary: Betsy Peabody, Director, [Puget Sound Restoration Fund](#) (*The Commons*)

- ◆ Grab your lunch in Commons A and find a seat at a table to enjoy the conversation with Betsy Peabody

Betsy Peabody is executive director of Puget Sound Restoration Fund (PSRF), a nonprofit organization founded in 1997 to restore marine habitat, water quality and native species in Puget Sound. She is also President of the Pacific Shellfish Institute, a research organization developing and disseminating scientific information to foster sustainable shellfish resources and a healthy marine environment. In 2012, Betsy served on the Governor's Blue Ribbon Panel on Ocean Acidification, and continues to be actively involved in efforts to mitigate the effects of ocean acidification. In 2013, she collaborated with NOAA to establish a conservation hatchery at NOAA's Manchester Research Station dedicated to restoring native shellfish and other living marine resources. Betsy has a bachelor's degree in English from Stanford University – and a strong appreciation for the role that marine resources play in our human story.



1:00 pm–2:00 pm Youth Leaders Panel and Closing (*The Commons* - A/B)

- ◆ **Young Leaders Making a Splash!**

To close the conference on a high note, a panel of inspiring young leaders from the region will share their stories and perspectives on how they are making a difference and motivating change for our ocean and aquatic environment!

Our Conference Sponsors



DONATIONS from:

- | | |
|--------------------------------|--------------------------------------|
| ❖ The Western Flyer | ❖ NW Gyotaku - Dennis Moore |
| ❖ Port Townsend Creamery | ❖ Chavah's Garden - Sydney C'de Baca |
| ❖ Sea J's | ❖ Infine Detail- Terri Arino |
| ❖ Quimper Mercantile | ❖ Sea Hags |
| ❖ Waterfront Pizza | ❖ Finnriver Farm & Cidery |
| ❖ Kevin Wickersham Photography | |

ABSTRACTS

MONDAY ♦ AUGUST 12 ♦ 11:00 am-11:45 am
♦ Concurrent Session A ♦

Visual Thinking Strategies in Science (VTSS): One Educational Tool, Two Different Worlds, Three Engaging Questions.

Cari Garand, Danielle Carter and Caitlin O'Morchoe, Seattle Aquarium
(The Commons - B)

Join us to experience and learn about a new inquiry-based teaching technique that puts the experience back into the hands of our audience. VTSS creates an inclusive learning environment, allowing participants to use their backgrounds to create individual connections and meaning without worrying if they have the “right” answer. Adapted from a well-researched and tested method used in art museums, VTSS empowers the individual, creating accessible and learner-driven experiences in which educators can adapt programs to connect with their diverse audiences. Could VTSS transform your programs? Come find out!

Explore the Wild Coast with Sam and Crystal

Gloria Snively, University of Victoria and Cathy Carolsfeld, Seaquaria Ocean Education Program, World Fisheries Trust
(Schoolhouse, School Room D)

Two recently released children's marine science books *Exploring the Wild Coast with Sam and Crystal* and *Exploring the Rocky Shore with Sam and Crystal* are a feast for the eyes and inquiring minds of all ages. The books feature the adventures of two children, Sam and Crystal, who live on the Northwest coast in a location in the Salish Sea. While visiting their Aunt Kate, Uncle Charlie and their First Nations friend Ada, the children learn about the wildlife above and below the tideline. The full-colour illustrations and margin drawings are detailed and accurate, complementing the wealth of information contained in the text. Throughout, the children learn that everything is connected, and they have a role to play in saving our animal friends. This workshop will feature readings by the author as well as activities from related curriculum materials published by Gloria Snively: *High Tide, Low Tide; Once Upon a Seashore: A Curriculum for Grades K-6; Beach Explorations: A curriculum for Grades 5-10*, and the *Ocean Animal Clue Cards*. All materials will be available for sale and all proceeds will be given to NAME.

Status and History of Netpen Aquaculture in the Pacific Northwest; Holy Moley, Why Are We Raising Salmon in Netpens?

Orlay Johnson, Seattle Aquarium, NOAA
(Schoolhouse, School Room H)

To understand the environmental issues surrounding salmon pens, it is important to know how salmon farms arose and why. Raising salmon in netpens started after WWII in Scandinavia and Great Britain and has since spread around the world. In 1970, NMFS began rearing salmon in netpens to pan-sized adults. By the early 1980s, 16 different small locally owned netpen operations flourished in WA. However, a variety of environmental and legal concerns doomed many of these small operations and first Icicle Seafoods, and then Cooke Aquaculture purchased all netpens in Washington and began upgrading facilities. Then in August 2017, a Cooke netpen near Cypress Island collapsed releasing 305,000 Atlantic salmon into the Sound. This initiated a backlash against pen operations and the WA House passed, and Governor Inslee signed, bills phasing out netpen operations using non-native salmon. So, what does the future hold?

MONDAY ♦ AUGUST 12 ♦ 1:00 pm-1:45 pm
♦ Concurrent Session B ♦

Creating a Maritime and Place-Based School District in Port Townsend

Sarah Rubenstein, Port Townsend School District
Dorothy Stengel & Dawn Braden, Salish Coast Elementary School
David Kelley, Port Townsend High School
(The Commons - A)

A panel discussion with Port Townsend School District Teachers (TBD) sharing highlights of the maritime focused and place-based projects that have been developed as part of the five year initiative of the Port Townsend

School District, Maritime Discovery Schools. Teachers will share their successes, and what they have learned over the past five years.

Shore-Based Interpretation around The Whale Trail: Benefits and Opportunities

Donna Sandstrom, The Whale Trail
(Schoolhouse, School Room D)

The Whale Trail is a networked series of sites to watch orcas and other marine mammals from shore. Land-based whale-watching provides a unique opportunity to reach a broad diversity of people. Learn about the benefits of land-based whale-watching, especially for the endangered southern residents, and how you can be a part of it.

Water Chemistry Activities for Elementary and Middle School

Rob Coats, Portland Public Schools
(Schoolhouse, School Room H)

Learn by participating in four inquiry activities into the chemical/physical nature of water. All are fun, simple and intriguing. All launch into much broader inquiries into the adaptations of aquatic and marine life, and earth science in general. And they're cheap!

MONDAY ♦ AUGUST 12 ♦ 2:00 pm-2:45 pm
♦ Concurrent Session C ♦

The Salish Sea with Billy B

Billy B. Brennan
(The Commons - B)

Join Billy B., The Natural Science Song and Dance Man, as he presents songs, funny poems, and audience participation activities from his new show inspired by the Salish Sea. Billy uses his skill set to reach students, Kindergarten through 8th grade. Attendees can expect a large visual backdrop, salmon jumping, orca vocalizations, keystone species, sea stars, and hip-hop tidal zones to all be represented. Billy's songwriting/show creating, has been commissioned by The World Wildlife Fund, The National Geographic, Project Learning Tree, and others. He has performed in 46 states, 2 Canadian Provinces, for two Presidents and millions of kids.

Native of Invasive? Crayfish of the Pacific Northwest

Janice Elvidge, NPS Lake Roosevelt NRA/The River Mile Network
Rick Reynolds, Engaging Every Student + ShareOregon
Deb Berg, Columbia School
(Schoolhouse, School Room D)

The River Mile Network's Crayfish Study is a citizen science project collecting data on species distribution throughout the Pacific Northwest. The project is supervised by Dr. Eric Larson, assistant professor in the Department of Natural Resources and Environmental Sciences at the University of Illinois. He works primarily on freshwater species, communities, and ecosystems, with an emphasis on crayfish in the western United States. Participants will explore aspects of the Crayfish Study and how to participate. Participants will also get a copy of our NEW! 2nd-12th grade curriculum-based educators' guide "Investigating Crayfish + Freshwater Ecosystems" and accompanying poster!

Using Art for Environmental Awareness

Cara Mico, Cannon Beach Arts Association, University of Oregon
Pooka Rice, Haystack Rock Awareness Program
(Schoolhouse, School Room H)

The Cannon Beach Arts Association and the Haystack Rock Awareness Program have partnered to provide environmental art classes ranging from marine debris awareness to bird identification. Students work with and in the local marine environment to learn the importance of the intertidal ecosystem using a variety of art techniques from local art instructors. This presentation will highlight program successes and next steps, and will include a guide for starting this type of program including sources of funding. The program is supported by the Cannon Beach Arts Association and the Oregon Coast Visitors Association.

MONDAY ♦ AUGUST 12 ♦ 3:00 pm-4:30 pm
♦ Poster Session ♦

Don't Forget Fun: A Science Festival's Role in Engaging Undergraduates in STEM

Kristina Tirman and Janet Clarke, Sitka Sound Science Center

Science Symposium for Stem Engagement (S-Cubed) is an innovative program combining college coursework with an informal science festival. The S-Cubed program is designed to help undergraduate students feel that a career in STEM is attainable at a key point in their college careers. S-Cubed prepares participating students in ocean science topics prior to attending the festival and pairs them with an upperclassman or graduate student mentor during the festival so they are ready to engage with the content, with presenting scientific experts, and the community at Sitka WhaleFest, a 3-day symposium and science festival.

Jelly Biology and Husbandry

Bri Gabel, Joanne Park and Rus Higley, Marine Science and Technology Center (MaST)- Highline College

A team of community volunteers, under the direction of part-time staff, but who have been largely self-educated in jelly biology and husbandry, have developed a protocol for culturing moon jellies on a budget. After years of hard work, the MaST now has a self-sustaining 'Jelly Team' and the public enjoys an ongoing supply of cultured jellies of various local species beyond moon jellies. This poster details how the technical challenges of culturing jellies inexpensively in a small facility, the dynamics of recruiting, training, and maintaining an active and skilled body of volunteers with minimal direction from professional staff.

Tracking Temporal/Seasonal Changes in Nudibranch Populations: Citizen Science Data from a Community Aquarium

Joanne Park and Rus Higley, Marine Science and Technology Center (MaST)- Highline College

Since 2013, the Nudibranch Team at the MaST has been identifying and collecting species abundance on several nudibranch species. These nudibranchs enter our aquarium as plankton, traveling from the Puget Sound through the open-flow seawater system, and recruit in our tanks and work as a model system for the local environment. It is less difficult to accurately identify and count nudibranchs in our center than in the field. Our aquarium based data collection also provides the opportunity to participate in scientific research to a wide range of abilities, and does not require citizen scientists to be SCUBA certified.

Amar Al Mar Environmental Education and Awareness Program

Vanessa Hunt, Central Washington University

Grupo Tortuguero de las Californias has been working for 20 years in marine turtle conservation in Northwestern Mexico. In 2014 we launched 'Chapuzon Submarino', an environmental program that relies on gamification, arts, and a holistic approach to promote empathy and respect for the environment in students from primary to high school. With time we realized that waste and plastic pollution were major issues in the communities where we were working, therefore, we launched a new program called "Amar al Mar", that aims at working with coastal communities to reduce plastic pollution and improve waste management.

Sea Turtle Spotter: Using Citizen Science Data to Increase Knowledge of the Spatial Distribution of Sea Turtles in Pacific Mexico

Vanessa Hunt, Central Washington University

The Mexico coordinator of Upwell, a San Diego based sea turtle conservation and research organization, has reached out to tourists, fishermen, and local boaters willing to train in sea turtle identification, record their at-sea sightings of turtles, and upload pertinent data to iNaturalist.org. This data is imported into ArcGIS to be used for spatial ecology analysis. Analysis has been conducted to date using 820 observations from 308 citizen observers. Of the five species of sea turtle found along the Pacific coast of Mexico, Green Sea Turtles were the most frequently sighted, followed by Hawksbills.

Population Size Structure and Patterns of Recruitment in Novel South Puget Sound Pacific Oyster Populations

Stena Troyer, Harbor WildWatch

Pacific oysters (*Crassostrea gigas*) are now common at many locations in Carr Inlet. This change in community structure was detected by a community-based monitoring program initiated in 2013 at rocky sites in Carr Inlet and the Gig Harbor area. This initial recruitment was associated in time with increased water temperature associated with the NE Pacific “blob” and the beginning of the 2015-2016 ENSO event. While variable across sites, recruitment has continued in spite of cooler water temperatures during late 2016-2018. Continued recruitment may lead to persistence of these novel populations of the introduced Pacific oyster on South Puget Sound beaches.

Partnerships Growing Healthy Food, Students, and Watersheds: The Franklin Pierce School District Farm in the Puyallup Watershed

Mary Coleman, Pierce County Planning and Public Works

For 9 years the Environmental Education program, of Pierce County Planning and Public Works, has partnered with the FP Farm, the Pierce Conservation District, and other partners over the years to teach 4-6th graders about how their district's farm considers the local watershed, and nearby Swan Creek, in its farming practices. Students receive formal and informal education about actions in our community that effect the local creek, the Puyallup River and the Puget Sound. During field trips to the farm, the EE program and its partners involve students in organic farming practices and soil/water quality testing. This poster highlights the hands-on activities students receive in this program.

The Art of Science

Amy Linhart, Washington State University Kitsap Extension

The Water Stewardship Program aims to increase understanding of Kitsap stream ecosystems and inspire stewardship. We provide a range of educational programs that have predominantly relied on the traditional PowerPoint presentations and field trips, but we're working to expand our methods to include more innovative forms of communication and understanding. This year, we've developed several events that utilize either visual or culinary arts to bring a new audiences into the environmental learning space, and held these events outside of traditional classroom spaces (i.e. brewery, kitchen etc.). We are reaching aim to continue reaching new audiences by using new channels of communication, and look forward to connecting with other educators to grow this idea and build upon our programming efforts.

Nutritional Quality of Giant Kelp in Sitka Sound

Callie Simmons and Janet Clarke, Sitka Sound Science Center

Through a mentored research project with the Sitka Sound Science Center, undergraduates from the University of Alaska Southeast and Mt. Edgecumbe high school explored the seasonal and annual variation in Giant Kelp nutrition (*Macrocystis pyrifera*) in Sitka Sound. Giant kelp is an important subsistence and cultural resource that also provides food and habitat for a variety of marine life in Sitka Sound. Through this experience, local-rural students gained exposure to data collection, sample processing, skiff operation and handling, and data analysis. This poster details their experiences exploring a resource in their community as well as their findings on the nutritional quality of kelp in Sitka Sound for human harvesters and invertebrate grazers.

Aquaculture Mentorship at the Sheldon Jackson Hatchery

Callie Simmons and Janet Clarke, Sitka Sound Science Center

The Sitka Sound Science Center houses the Sheldon Jackson Hatchery, an operating salmon hatchery that raises and produces 250,000 coho, 3 million pink, and 12 million chum salmon each year. It also serves as an educational and training tool—the only training facility of this scope in Alaska and only one of two in the Pacific Northwest. The Sitka Sound Science Center is uniquely positioned to offer mentorship positions and aquaculture courses to local high school students- where students gain hands-on tangible experiences like diagnosing pathogens, calculating fish growth rates, and more. This poster lays-out our unique tiered mentorship model that connects students with resources (like salmon) that they themselves, their families, and communities depend on.

Sealife Response, Rehab and Research- Filling a Critical Need in the Pacific Northwest

Allison Bjornstad and Gianna Pachen, Sealife R3

Sealife Response Rehab and Research mission is to advance the health and welfare of marine animals by building the first dedicated marine animal hospital in the Pacific Northwest, assisting animals entangled in debris and contributing to scientific understanding of marine wildlife including the endangered Southern Resident killer whales. Current photogrammetry studies are being used to monitor the body condition and growth of endangered Southern Resident killer whales.

Engaging Communities through Marine Mammal Research & Education

Cindy Ellis, Pacific Mammal Research

Pacific Mammal Research (PacMam) conducts long-term photo-identification research on harbor porpoises and harbor seals in the Salish Sea. Though research is critical, impactful education is equally important to the continued conservation of these charismatic mammals and their environment. Through engaging, hands-on education and our dedicated citizen science program PacMam brings pioneering place-based research and education to all ages of our community, connecting individuals with these unique animals and fostering ongoing stewardship of the Salish Sea. Learn more about our research and education initiatives, the species we study and how we actively engage with students and the wider public.

WEDNESDAY ♦ AUGUST 14 ♦ 8:30 am-9:15 am
♦ Concurrent Session D ♦

Essential Elements of Place Based Learning

Sarah Rubenstein, Port Townsend School District
(Schoolhouse, School Room D)

Over the past five years the Port Townsend School District has been implementing place-based learning across the district from preschool to twelfth grade. Sarah Rubenstein, Maritime Discovery Schools Project Director, will share the seven essential elements of place-based learning that the district has used to guide this project. Participants should come with an existing place-based project or project idea that they want to evaluate and improve. Time will be allocated for project evaluation and everyone will leave with a set of resources for designing and improving place-based learning.

Reflective Storytelling in Alaska: Place-based Perspectives on Climate Change

Kay Shoemaker, University of Alaska
Sam Kalarchik, Alaska Pacific University
(Schoolhouse, School Room H)

Education and Outreach is a prime integration piece within the EPSCoR Fire and Ice Project. Stakeholder engagement and community member co-production of knowledge will increase as the impact of outreach and education is expanded in both the remote rural villages and urban Anchorage schools connected to the 4-H Salmon in the Classroom Program. Outreach through Cooperative Extension's Alaska Master Naturalist Volunteers will offer new models and scenarios of place-based education to community members. Together, these community volunteer programs reach across the state with over 400 volunteers providing hands-on experiential education to youth and adults on how each community can adapt to climate change issues that are relevant to them. Activity demonstrations and engagement will allow participants to explore place-based Reflective Storytelling techniques that can be adapted to communities in their region.

WEDNESDAY ♦ AUGUST 14 ♦ 9:30 am-9:45 am
♦ Concurrent Session E ♦

Bringing Ocean Literacy into the Hands of Landlocked Canadians

Holly Neate, Ocean Wise Conservation Association
(Schoolhouse, School Room D)

For the majority of Canadians, the ocean is inaccessible and can be very expensive to explore, which limits exposure to the ecosystems that need our attention and conservation. Mobile Education Programs at Ocean Wise have facilitated the exposure of ocean literacy opportunities for students across the country and use hands on, inquiry-based teaching to maximize the impacts of these educational experiences. Our goal is to encourage Canadians to better understand their impact on local waterways and the cascade of effects this has on our coastlines, specifically focusing on plastic pollution and species at risk.

Dive In! Exploring Our Connection with the Ocean

Ann Eriksson, Independent Writer/Orca Book Publishers
(Schoolhouse, School Room H)

The ocean plays an essential role in our lives. But we haven't been as kind to the ocean in return. In an interactive presentation based on her book *Dive In!*, author and biologist Ann Eriksson explores our intimate connection with the ocean and gives the audience an achievable set of actions that can help improve ocean health. *Dive In!* is published by Orca Book Publishers as part of their ecological literacy series *Footprints*. *Dive In* is directed at 9 to 12-year olds (and their adults). Books will be available for purchase.

WEDNESDAY ♦ AUGUST 14 ♦ 10:30 am-11:15 am
♦ Concurrent Session F ♦

Building Capacity for Place-based Education on the West End

John Hunter, Forks High School / Quillayute Valley School District
Julie Tennis, Pacific Education Institute
Nicole Harris, Olympic Coast National Marine Sanctuary
(Schoolhouse, School Room D)

The West End of the Olympic Peninsula has diverse cultural and natural resources, from indigenous communities with relationships to this place that span millennia, to contemporary relationships that range from commercial harvests to quests for spiritual renewal. We are challenged with building resilience in the face of climate change, earthquakes, and "the Blob". West End educators, agencies, leaders and others are building a collaborative community seeking to ground education here in the heritage, opportunities, and issues that surround us every day. We have just begun this journey, come hear what we have learned and share your own learnings.

Establishing Connections in Marine Science by Engaging Learners and Integrating Relevance, Responsibility, and Resilience

Valerie Stephan-LeBoeuf, The Animals' Trust
(Schoolhouse, School Room H)

Establishing relevance is a necessary precursor for fostering environmental stewardship and responsibility. Making place-based connections to both local and global issues includes utilizing a variable model that leads to responsible human behavior toward the environment. Incorporating elements of technology can build relevance, establish equity, solidify interconnections, expand knowledge, and empower solutions. This session presents several strategic activities that establish place-based relevance to local and global marine and near-shore issues by connecting students and communities with technology. Building on students' capacity for compassion, creativity, and current level of applied technological understanding, incorporating technology in environmental education supports the facilitation of project-based collaboration using an active, problem-centered approach.

WEDNESDAY ♦ AUGUST 14 ♦ 11:30 am-11:45 am
♦ Concurrent Session G ♦

Promoting Ocean Literacy Through NMEA

Jennifer Magnusson, National Marine Educators Association
(Schoolhouse, School Room D)

NMEA is the local chapter of NMEA (National Marine Educators Association.) Come to this session to learn about some of NMEA's recent initiatives and for a quick introduction to the Ocean Literacy education resources on NMEA's website.

Seaquaria Ocean Education – Bringing the Ocean into Schools

Maia Carolsfeld, World Fisheries Trust
(Schoolhouse, School Room H)

Seaquaria Ocean Education is an educational initiative of World Fisheries Trust, a Canadian non-profit organization dedicated to the equitable and sustainable use and conservation of aquatic biodiversity. The central component of the Seaquaria program is a network of saltwater aquaria that are set up in local (and not so local) schools and community centres, stocked with local marine life. With these aquaria and associated hands-on educational programming, Seaquaria Ocean Education promotes science education and social responsibility through emotional learning. This presentation will delve into the best practices used by Seaquaria educators and the remarkable impacts of this unique initiative.

WEDNESDAY ♦ AUGUST 14 ♦ 1:45 pm-2:30 pm
♦ Concurrent Session H ♦

Scientific Sleuthing: Using Deductive Reasoning to Learn about Local Ecology

Kristina Tirman and Janet Clarke, Sitka Sound Science Center
(Schoolhouse, School Room D)

The Sitka Sound Science Center will be sharing the strategies and format of our unique "Eco-Discovery" program, where youth and their families solve environmental mysteries while participating in hands-on activities that explore local ecology. The presentation will overview the general format of Eco-Discovery and then feature a few of our most notable cases including "The Case of the Lost Baby Sea Urchin", "What's in a Wetland?" and "The Chiropteran Culprit". The format used in this program can be adapted to fit a variety of different topics, ecosystems, and age ranges. Program materials will be provided.

Interacting with Inverts

Ali Redman and Marley Loomis, Port Townsend Marine Science Center
(Schoolhouse, School Room H)

Interacting with live animals can form powerful connections for students. The husbandry and education duo of the PTMSC's small aquarium will talk about their experiences creating memorable education experiences for formal and informal groups in the exhibit space. 1) using a focal animal in a presentation 2) interacting with inverts and 3) using observation in inquiry based learning.

WEDNESDAY ♦ AUGUST 14 ♦ 3:00 pm-4:30 pm
♦ Concurrent Session I ♦

Fund Your Project: Dissecting Grant Proposals

Jennifer Dumlao, Viriditas Consulting

Jacqueline Laverdure, Pacific Northwest BWET Program, Olympic Coast National Marine Sanctuary
(Schoolhouse, School Room D)

Learn how to prepare for writing a grant, craft a competitive proposal, and catch the eye of grantors. Sit in the funder's seat during a hands-on exercise to score sample proposals. This session includes an intro to NOAA's Bay Watershed Education and Training (B-WET) Program and funding for meaningful watershed educational experiences.

Making Plaster Scrimshaw Medallions with your Kids

Rob Coats, Portland Public Schools

(Schoolhouse, School Room H)

Learn a bit about the history of whaling, and the subsequent advent of the scrimshaw art form. Then create a design that you can etch into a lacquered plaster medallion, and then fill your lines with lampblack. This activity goes well with studies of whaling and marine mammals, and naturally leads into the need for their protection.

THURSDAY ♦ AUGUST 15 ♦ 10:45 am-11:30 am
♦ Concurrent Session J ♦

Thinking Clearly About Climate Change Causes, Effects, and Solutions

Susan Wood and Chandler Colahan, Padilla Bay National Estuarine Research Reserve
(Schoolhouse, School Room D)

Most people know about the effects of Climate Change, especially on a global scale. How do you help students understand the causes – because that's the understanding that can lead to solutions. We'll try out an activity designed to clarify the links between burning fossil fuels and global/ local climate change effects, and then explore achievable, effective solutions.

The Evolution of an Environmental Tall Ship: Adventuress' People and Programs

Amy Kovacs and Jenny Huntley, Sound Experience

Julie Masura, Sound Experience and UW Tacoma
(Schoolhouse, School Room H)

The iconic and now fully restored 1913 National Historic Landmark schooner Adventuress is a powerful platform for the next generation of on-the-water education programs. Operated by the nonprofit Sound Experience for the past thirty years, Adventuress' environmental mission remains vibrant. As a dedicated learning organization, we are committed to evolving our programs for increasing relevance to today's youth. The journey is intentional and guided by values such as respect, inclusion and community. Join us as we discuss opportunities, challenges and practices we are implementing to inspire environmental awareness, encourage maritime sustainability and empower leadership.