

# Wonders of the Salish Sea 2025

## Schedule of Events

March 31, April 7, 14, & 28 7:00 to 9:00 pm, PDT  
Register with Transition Salt Spring [here](#).

Photo by Niamh Burns

### March 31 Introducing the Salish Sea

7:00 - 7:55 pm

***From Estuaries to Ice Ages, Tide Flats to Tafoni: The Geological Intrigues of the Salish Sea Region***  
**Dr. Bob Turner, geoscientist, author, and filmmaker**

Geologically, the Salish Sea region has it all: glacier-carved fjords, towering volcanoes, the rumble of earthquakes, an island-strewn sea, honeycomb-weathered sandstone, ancient exotic terranes, and ecologically-rich estuaries to name just a few. This talk pulls the curtain back on the stories behind these geological intrigues.

*Dr. Bob Turner is a long-time resident of Nex̄wlélexwem /Bowen Island, its former mayor, a retired federal geoscientist, and author of several books on the geology of the Vancouver and Sea to Sky region (e.g. Vancouver, City on the Edge: Living with a Dynamic Geological Landscape, 2005). He is also a filmmaker with over 45 short movies about wildlife and wild places around the Salish Sea that are posted on his Bob Turner YouTube channel and website (OurSalishSea.ca). He was part of the team that achieved a UNESCO Biosphere Region designation for Átl'ka7tsem/Howe Sound in 2021 and currently leads the Bowen Island Conservancy's biodiversity conservation initiative.*

8:05 to 9:00 pm

***Plankton in the Salish Sea: the tiny world below***

**Chandler Colahan, Education Coordinator, Padilla Bay National Estuarine Research Reserve**

Though we all love the colorful sea stars and frolicking otters, it's the tiny world below that keeps our Salish Sea ticking. Learn about the hidden majority of life that flourishes in our local waters and beyond. In this session, we explore the secret world of plankton and look at how these microscopic organisms play vital roles in the ecosystems of the Salish Sea.

*Chandler Colahan is the education coordinator at Padilla Bay National Estuarine Research Reserve in Bayview, WA. She has been an environmental and marine educator for more than twenty-five years. Chandler has a BA degree in Ocean Science, Education, and Creative Expression from Western Washington University, Fairhaven College. She also spent many years researching plankton and jellyfish at Shannon Point Marine Center. When she is not exploring the mudflats with students, you can often find Chandler exploring the waters of the Salish Sea looking for wildlife.*

## April 7 Ecosystems: Deep to Shallow

7:00 - 7:55 pm

### ***Underwater Amazon of Puget Sound***

**Dr. Parker McCready, Professor of Oceanography, University of Washington**

Have you ever wondered why the water in Puget Sound is so salty and cold, even in Olympia, the farthest point away from the Pacific Ocean? Why don't our many large rivers fill up the Sound with fresh water? The answer is surprising and of great consequence for living things in the Sound. The interaction of tides, rivers and ocean gives rise to a vast, persistent deep current of ocean water flowing into the Sound. The transport of the "river" of ocean water is twenty times greater than the sum of all our freshwater rivers. More importantly, it brings with it most of the nutrients that fuel phytoplankton growth in the Sound, feeding all our fish and marine mammals. This talk will give you a new appreciation for the invisible pattern of currents beneath the surface of the Sound.

*Dr. Parker MacCready is the Leo Maddox Endowed Professor of Oceanography at the University of Washington School of Oceanography. His group studies the circulation of the Salish Sea and its effect on biology and chemistry, using realistic computer models. You can see some information about our LiveOcean project here: [faculty.washington.edu/pmacc/LO/LiveOcean.html](http://faculty.washington.edu/pmacc/LO/LiveOcean.html)*

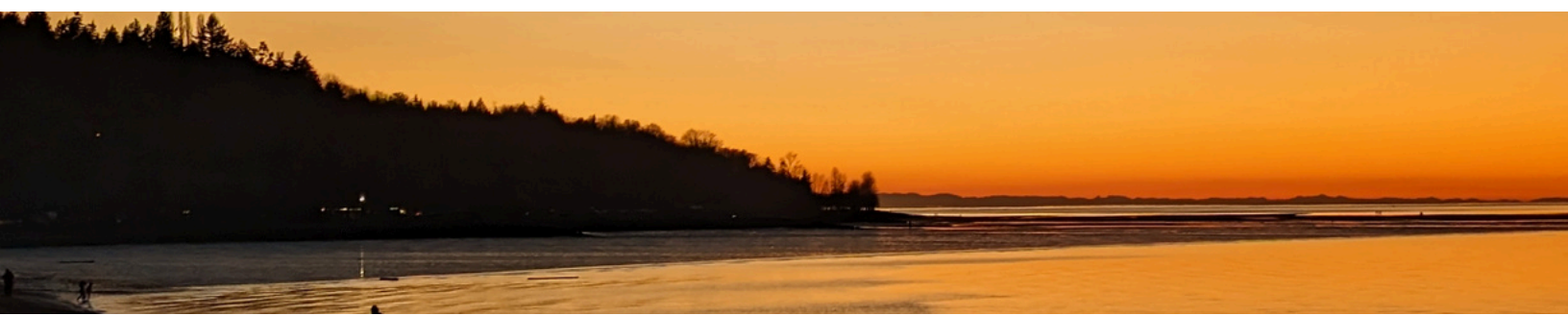
8:05 to 9:00 pm

### ***Living on the edge: how life thrives in the intertidal***

**Rebecca Hansen, Researcher, Friday Harbor Labs and University of British Columbia**

Imagine spending half your time underwater, and the other half on land. What would you need to survive in these two very different environments? Well intertidal organisms in the Salish Sea have got that figured out! In this talk, you'll meet plants, animals, and algae that have made the intertidal their home, and learn what special skills help them thrive right where the land meets the sea.

*Rebecca Hansen is a marine ecologist and a lifelong resident of the Salish Sea. Growing up on Vancouver Island, she fell in love with temperate oceans at a young age, and began working as a marine educator in her teens. Rebecca went on to complete both a Bachelor's and a Master's degree in marine biology, with her Master's research examining the effects of climate change on the intertidal communities of Juan de Fuca Strait. Most recently she has worked as a scientific diver and researcher at Friday Harbor Laboratories, where she studied bull kelp and the challenges facing kelp forests in this region.*



## **April 14 Continually Swimming: Hope and Sharks**

7:00 pm

***What's so funny about fish, love and understanding?***

**Bob Friel, Producer of "Salish Sea Wild" video series**

Conservation issues unfortunately tend towards doom and gloom. It's easy for a barrage of bad stories to leave folks feeling hopeless, which makes them tune out and disengage, which in turn promotes the downward spiral of environmental health.

Salish Sea Wild! is the SeaDoc Society's science-adventure show that presents the work of top researchers in our region. For example, we do a lot of work with critically endangered Southern Resident killer whales, a population with a bleak prognosis. But that doesn't mean it's off limits to make fun of our fascination with orca poop... a byproduct we call "endangered feces." We cover serious subjects and we bust our butts to get the science right. But we also strongly believe that people pay attention more and learn more (and subsequently care more) when we can use humor and clever wordplay instead of pathos to present our stories.

Salish Sea Wild's writer/producer Bob Friel will discuss the power of entertainment to promote engagement with conservation issues. He'll talk about the process of digging through mountains of data to find gems to polish into video bits that translate dry science into entertaining episodes that help make a difference.

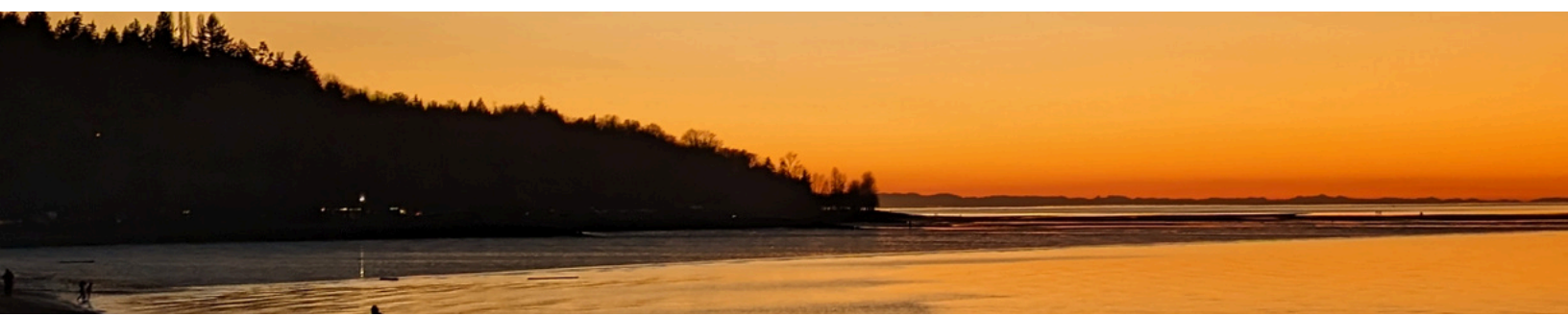
*Bob Friel has spent a significant portion of his life below the sea as an underwater photographer, naturalist, shark wrangler and champion bubble blower. He's known for using humor in his award-winning magazine writing and documentary filmmaking as well as his bestselling authoring (including The Barefoot Bandit/The True Tale of Colton Harris-Moore, New American Outlaw). He lives in the San Juan Islands.*

7:30 pm

**Salish Sea Successes and Tips for Staying Hopeful**

**Ginny Broadhurst, Director of the Salish Sea Institute**

Over the last century, the Salish Sea region has experienced declines and outright losses of species; degradation and loss of critical wildlife habitat; contamination of lands and waters; and climate change-related problems.



We tend to hear a lot about the problems, and less about how countless organizations, Tribes, agencies, First Nations, and community groups are making a difference to recover species, improve habitat conditions, uphold treaty rights and mitigate impacts of climate. This talk will provide a sample of important restoration and protection work occurring in the region. It will also provide some tips to feel more hopeful about the Salish Sea and the planet.

*Ginny Broadhurst is a leader, policy-wonk and advocate for the Salish Sea. As the founding Director of the Salish Sea Institute at WWU since 2017, she has led the publication of the first ever State of the Salish Sea report, and initiated Salish Sea Fellows, Hope for the Salish Sea and Salish Sea Studies Minor. Prior to her current position, she achieved a BS in Environmental Conservation from U of New Hampshire, a Master's in Marine Affairs from U of Washington, and was Director of the Northwest Straits Commission as well as staff position with the Puget Sound Action Team. Her career has included a focus on wetlands, nearshore and marine protected area policies, strategies to mitigate ocean acidification, climate change, shoreline homeowner education and derelict fishing gear removal. She lives on Lummi Island, WA.*

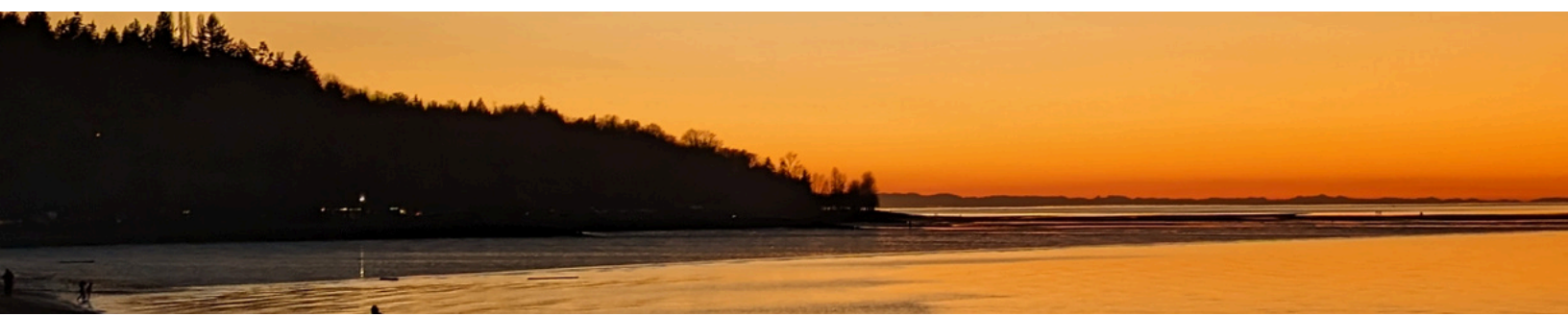
8:05 to 9:00 pm

### ***Sharks and Ecosystem Interconnectivity***

**Cara Poulsen, Aquatic Ecologist and Ocean Bridge Ambassador**

Sharks are rather elusive in the Salish Sea, and not often talked about. Where do they live? What do they eat? What roles do they play in the ocean ecosystem? This talk will answer these questions with species specific examples such as the spiny dogfish and bluntnose sixgill as well as examine their habitats and connect these beautiful creatures back to their environment as a whole. Along the way, the role sharks play and their importance in the Salish Sea ecosystem will be emphasized while discussing some of the conservation challenges they face, the progress that's already been made and what we can do in our everyday lives to help sharks thrive in these waters.

Cara Poulsen (she/her) is an aquatic ecologist and Ocean Bridge Ambassador who has been living on the traditional and ancestral territory of the Coast Salish Peoples since 2022. Cara has harboured a lifelong interest and passion in sharks and the connections they share within the marine environment. In 2024 Cara wrote and illustrated an educational colouring book called 'Sharks of BC.' Through funding received from Ocean Wise, she was able to give these books out for free, increasing access to science education and helping to spread awareness about the incredible shark species that share our home.



## **April 28 - Webs of Life**

7:00 - 7:55 pm

### **Herring**

**Dr. Briony Penn, author and artist**

### **Juvenile Salmon**

**Dr. Will Duguid, Senior Biologist, Pacific Salmon Foundation**

Briony will tell the amazing story of local herring populations, what happened to them over the last 200 years and how we can renew these local herring populations and the multitude of food webs that rely on them.

Forage fish play a critical role in growth and survival of Strait of Georgia salmon. Studying salmon diets not only reveals this role, but also provides insights into the ecology of the forage fish themselves. This talk will discuss historical, recent and ongoing research on salmon diets in the Strait of Georgia, with a focus on the key role played by herring throughout their lifecycle.

*Dr. Briony Penn is a fifth-generation Salt Spring Islander who has witnessed the extirpation of resident herring spawns from overfishing in her home harbour of Fulford. She is known for her work as a naturalist on the coast, an educator in both university and community classrooms, and as author/illustrator of award-winning books about the coast.*

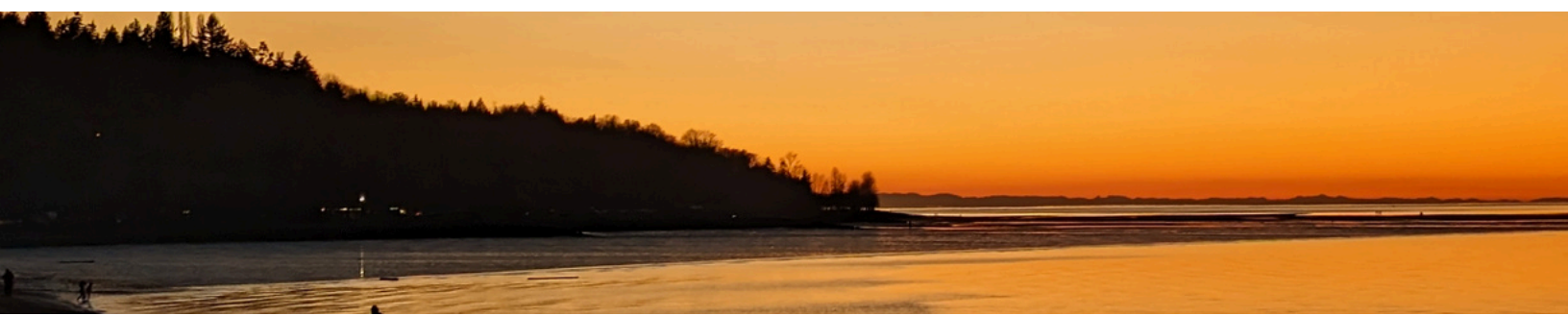
*Dr. Will Duguid is a biologist with the Pacific Salmon Foundation and affiliate of the Juanes Lab at the University of Victoria. He is fascinated by salmon, the waters they live in, and the species that support them.*

8:05 to 9:00 pm

### **Life on the Rocks**

**Kendra Luckow, Eco-guardian, Race Rocks Ecological Reserve, and Registered Veterinary Technologist**

*Race Rocks Ecological Reserve marks the southernmost point of Canada's west coast and serves as a hub of incredible biodiversity. From seals to orcas to eagles—and with at least one Ecoguardian present at all times—this reserve hosts a vast array of life. Imagine waking up to an elephant seal on your doorstep, chopping wood while a sea lion snuffles the sawdust behind you, or being*



dive-bombed by gulls protecting their nests as you walk between buildings—that’s just another day in the life of an Ecoguardian. The wildlife at Race Rocks shifts with the seasons, and each one is as extraordinary as the last. While this presentation will highlight the reserve’s biodiversity as a whole, the primary focus will be on marine mammals, their use of the reserve, and the unique lifestyle and responsibilities of Race Rocks' sole human resident.

*Kendra Luckow is a registered veterinary technologist. She has been working in marine mammal rescue since 2018. Her career has taken her across diverse fields of animal care, from penguins and elephants to shark research and sea turtle rehabilitation. When she is not working, she can be found at Race Rocks (also working) or hiking on the North Shore with her dog Gary, looking for whale spouts from any viewpoint they come across!*

***Field Trips - more information to come!***