

# Deep Bay Marine Field Station Teachers' Professional Development Day

Coastal Connections: Marine and Aquatic Studies in your Classroom

October 23<sup>rd</sup>, 2015

9:00 – 9:30	<b>Arrival &amp; Coffee</b>
9:30 – 10:35	<p><b>Ocean Acidification Activities and Marine Station Tour</b> <i>Claire Vial, Deep Bay Marine Field Station</i></p> <p>Ocean acidification is one of the biggest challenges facing the health of our ocean ecosystems and yet most students do not understand the scientific concepts behind this problem or its consequences. Claire will demonstrate hands-on ocean acidification activities that you can use in your classroom to explain the chemistry of ocean acidification with your students in a fun and engaging way. This workshop will also include a guided tour of Deep Bay Marine Field Station and an introduction to some of our education programs.</p>
10:45 – 12:00	<p><b>Shouting Whales to Ocean Sense: Connecting Coastal Communities with Ocean Science Through Real-Time Data and Indigenous Place-based Knowledge</b> <i>Jessica Brown and Natasha Ewing, Ocean Networks Canada</i></p> <p>Take a dive with Natasha and Jessica beneath the waves to discover innovative ways to incorporate real-time ocean data into your classroom through a plethora of ocean science and technology resources and experiences. Delegates will also explore ONC's newest educational program, Ocean Sense, which encourages students to learn about their local marine environment through hands-on activities and community-based observatories situated on Vancouver Island, Northern BC and the Arctic. In addition to the science content, the program is enhanced through an emphasis on Indigenous and place-based knowledge. ONC is working with coastal Indigenous communities in a collaborative process to include local knowledge, culture, and language in Ocean Sense materials. Through lessons, face-to-face events and the opportunity to connect with students in other regions, Ocean Sense will spark students' curiosity about the field of marine science &amp; tech and highlight the diversity of STEM Careers.</p>
12:00 – 12:35	<b>Lunch</b>

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<p><b>12:35 - 1:50</b></p>	<p><b>Moon Ocean Human: Inter-relationships in a Coast Salish World</b> <i>Carrie Reid, School District 69</i></p> <p>We will explore the interdependence of the moon and the oceans with humans. We can explore tides; moon and hunting; moon and fishing; moon and other living things; and the impact of the moon on living in a traditional way. Carrie will show a variety of moon cycles in various languages and participants will be offered links to moon calendars developed by sd 69. Carrie Reid is the district Aboriginal Resource Teacher at SD 69. She is from Qualicum First nation and has a vast interest in moons; Salish languages; and cultural history.</p>
<p><b>2:00 - 3:30</b></p>	<p><b>Stream to Sea - A Sampling of Fresh and Salt Water Learning FUN from DFO</b> <i>Sarah Casley and Christy Wilson, Department of Fisheries and Oceans.</i></p> <p>DFO Education Coordinators will be giving you a taste of fresh and salt water activities that you can share with your own students. Sarah Casley will be showing her Amazing Aquatics slide show (which she can give to you for later use). This presentation covers diversity of freshwater aquatic invertebrate species, their life cycles, predator-prey interactions and habitat adaptations. She will have supplementary worksheets to share as well. Christy Wilson will dive into ocean food webs and intertidal species ecology with interactive games and a selection of resources to help you explore marine ecosystems in the class and at the beach.</p>