Welcome to the NOAA Ocean Explorer Education Highlights email. These monthly emails provide you with quick access to ocean exploration-focused, standards-based tips and tools to bring the excitement and science of ocean exploration into your classroom!

What's the Latest from NOAA Ocean Exploration for Your Classroom?

Glacier Bay National Park Expedition 2016

From March 17-30, 2016, a University of Maine-led team conducted the first-ever deepwater exploration of Glacier Bay National Park using both diver-based surveys and a remotely operated vehicle.

Read this background essay on the native and geological history of the region and the retreat of the glacier since the late 1700s that has uncovered the 65-mile long system of fjords, inlets and coves we see today. This essay also shares the exploration history of the region and its incredible value as a natural research laboratory.

View the full Expedition Education Module, complete with standards-based lessons and theme pages on the Arctic and Deep-sea Corals.
Standards-Based Lesson

**Glaciers to Corals** (Grades 6-8)

NGSS: MS-LS2-5

In this lesson students utilize three different documents to explore and discuss the biodiversity and ecosystem services in Glacier Bay National Park benthic ecosystems and how biodiversity and ecosystem services can be maintained within these systems.

Note: All lessons are written to support the NGSS and the *Ocean Literacy Essential Principles and Fundamental Concepts*.

Upcoming Expeditions!

**2016 Deepwater Exploration of the Marianas**

April 20-July 10, 2016, the NOAA Ship *Okeanos Explorer* will explore the diversity and distribution of deepwater habitats in the Commonwealth of the Northern Marianas Islands and Marianas Trench Marine National Monument. Scientists will focus on hydrothermal vent sites, mud volcanoes, subduction zones, and the organisms found in these areas.

For more information on this exciting expedition, join us for a [Webinar for Educators](#) on April 12!

Image of the Month

A sulfide chimney is colonized by a thick coating of vent barnacles. *Image courtesy of MARUM, University of Bremen and NOAA-Pacific Marine Environmental Laboratory.*
During the first dive of the 2016 Hohonu Moana expedition to explore on the northeast side of Necker Island in the Pacific Ocean, the ROV Deep Discoverer encountered this octopus, which confused several of our shore-based scientists who have never seen anything like it. Upon further review, this ghostlike octopod is almost certainly an undescribed species and may not belong to any yet-described genus!

Read the mission log for a description of this amazing creature by NOAA cephalopod specialist, Dr. Mike Vecchione, and watch the octopus in its natural habitat in this short video.
Teacher at Sea, Mary Cook gets up-close with a nudibranch during the Glacier Bay National Park Expedition. *Image courtesy of NOAA Teacher at Sea.*

**Featured Education Resources**

**Mary Cook's At-Sea Blog**
Glacier Bay National Park Expedition 2016

Meet NOAA Teacher at Sea, Mary Cook, a high school teacher in Scammon Bay, Alaska. Mary just participated in NOAA OER's Glacier Bay National Park expedition. Mary teaches in a Native Yupik Alaskan village situated on the vast tundra bordering the Askinuk Mountains and the Bering Sea and looks forward to sharing her experience exploring the deep waters of the Alaska fjords with her students.

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*We hope that these Exploration Education Highlights will help you focus more of your classroom teaching and learning on the amazing discoveries taking place right here, right now, on our own Planet Ocean! Onward and downward!*