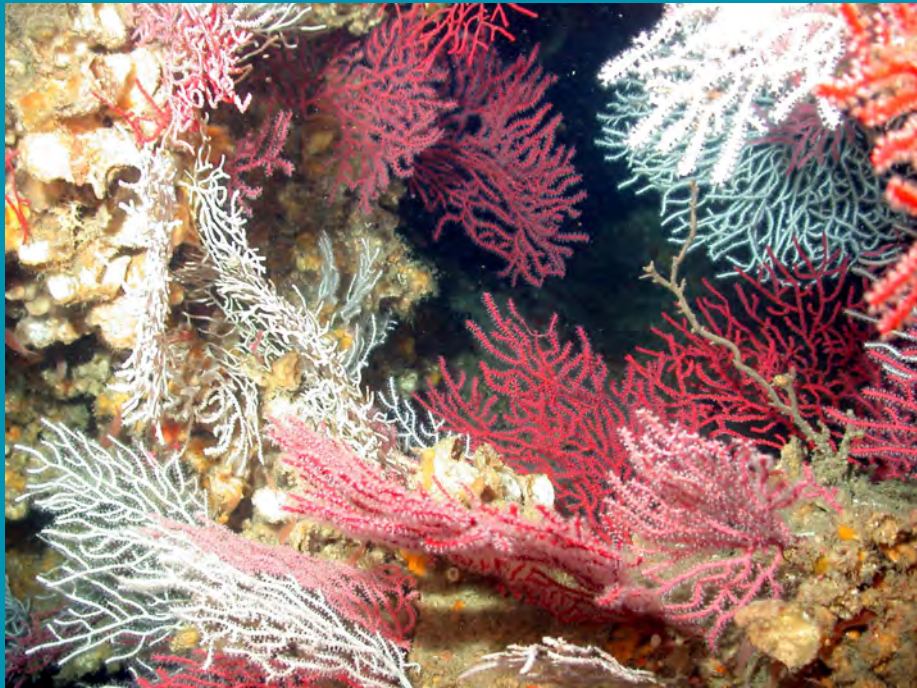


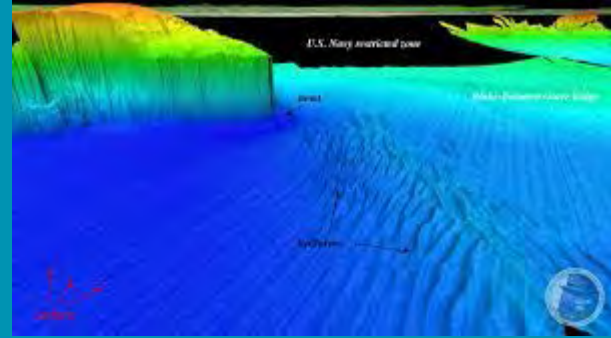
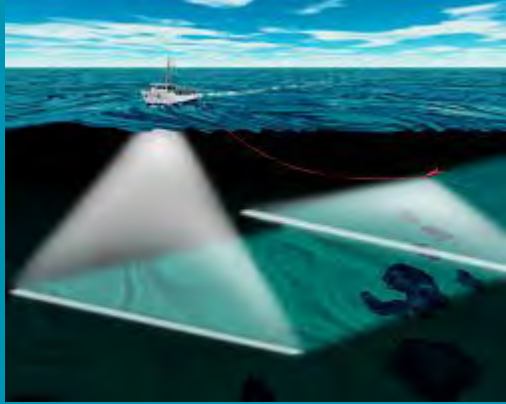


NATIONAL MARINE
SANCTUARIES

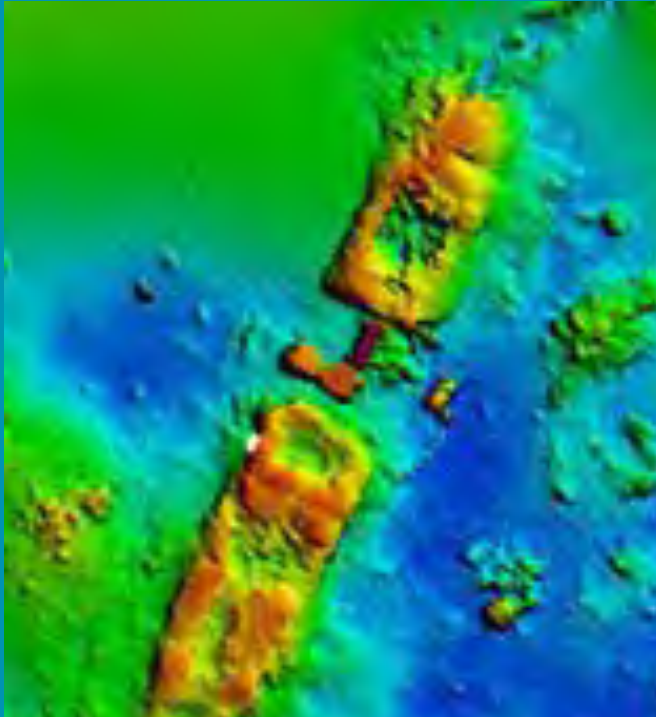
Ocean and Great Lakes Exploration



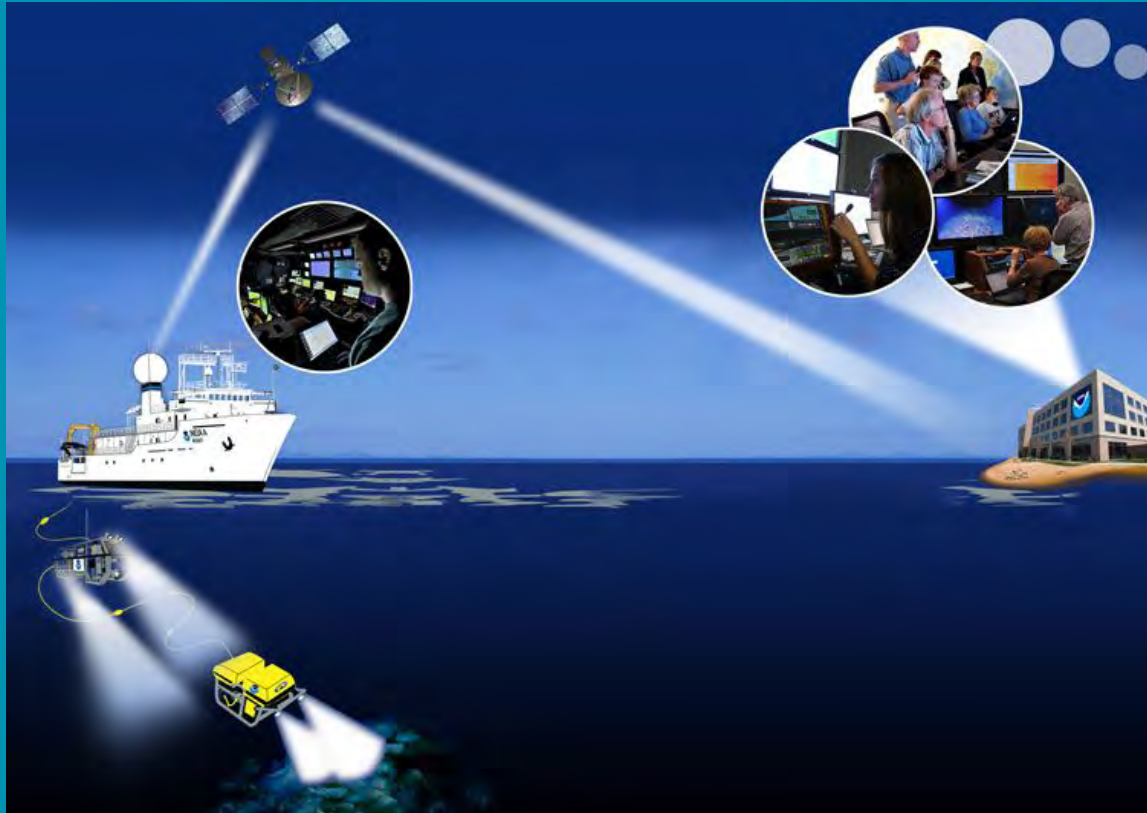
Ocean and Great Lakes Exploration



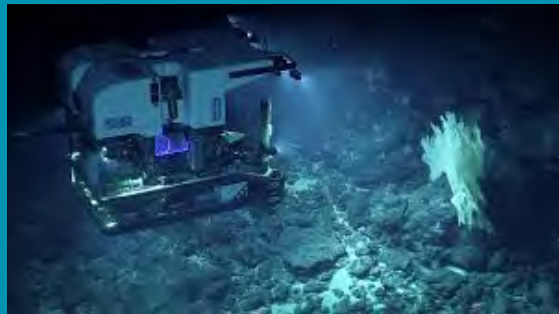
Ocean and Great Lakes Exploration



What is telepresence?



What is telepresence?



Ship-to-Shore Programs



Poll Question

What are the benefits of telepresence?

- More experts can partake in exploration
- Data can be publically available
- General public can tune in
- All of the above

Telepresence Exploration Award



NAUTILUSLIVE.ORG
OCEAN EXPLORATION TRUST

Woods Hole
Oceanographic
INSTITUTION



GLOBAL FOUNDATION
FOR OCEAN EXPLORATION



Poll Question

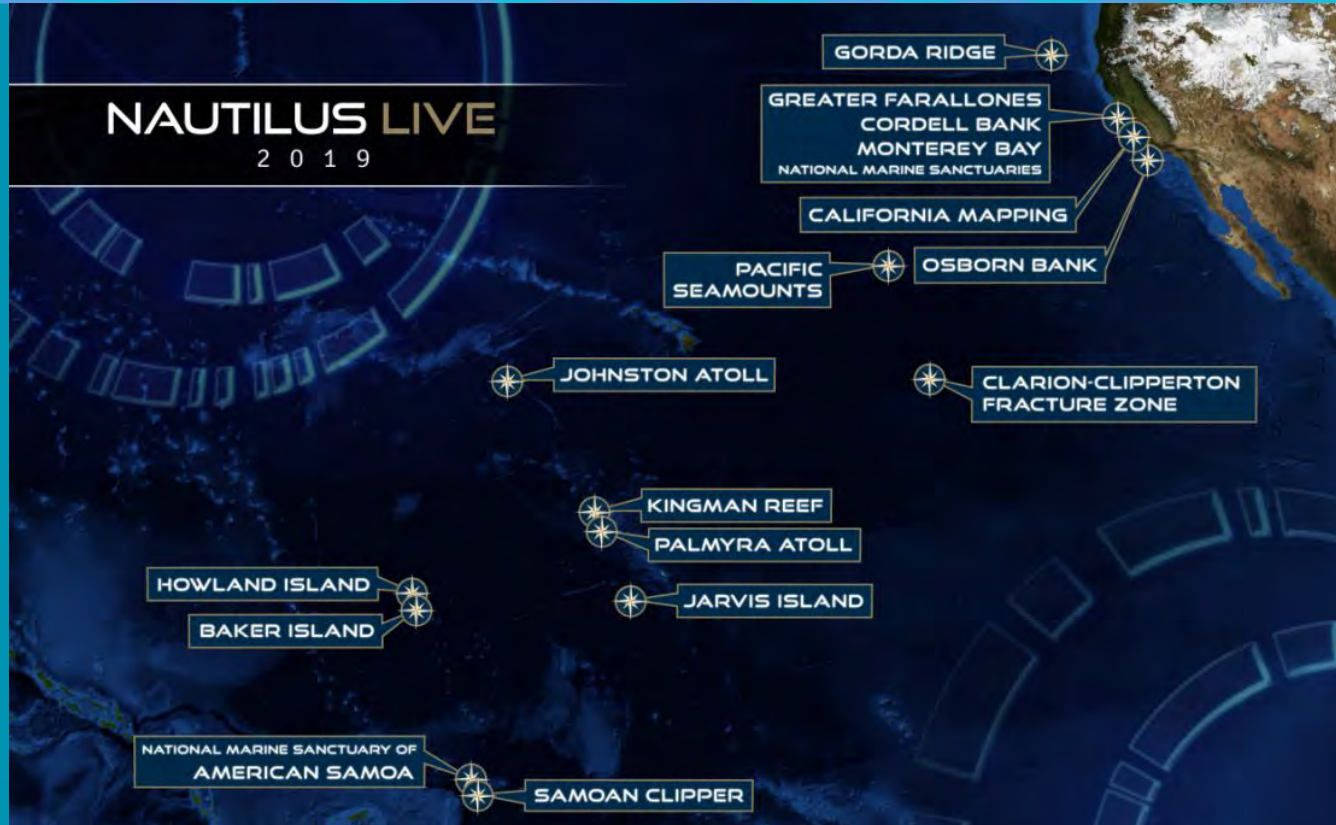
If you could explore national marine sanctuaries which region would you explore?

- Northeast and Great Lakes Region
- West Coast Region
- Pacific Islands Region
- Southeast Region

Ocean Exploration Trust



Ocean Exploration Trust



Ocean Exploration Trust



Mapping and engineering team control ASV BEN from shore.
Photo: OET/NOAA

R/V Storm tows ASV BEN in Lake Huron. Photo: OET



Ocean Exploration Trust



Whale fall in Monterey Bay National Marine Sanctuary. Photo: OET/NOAA



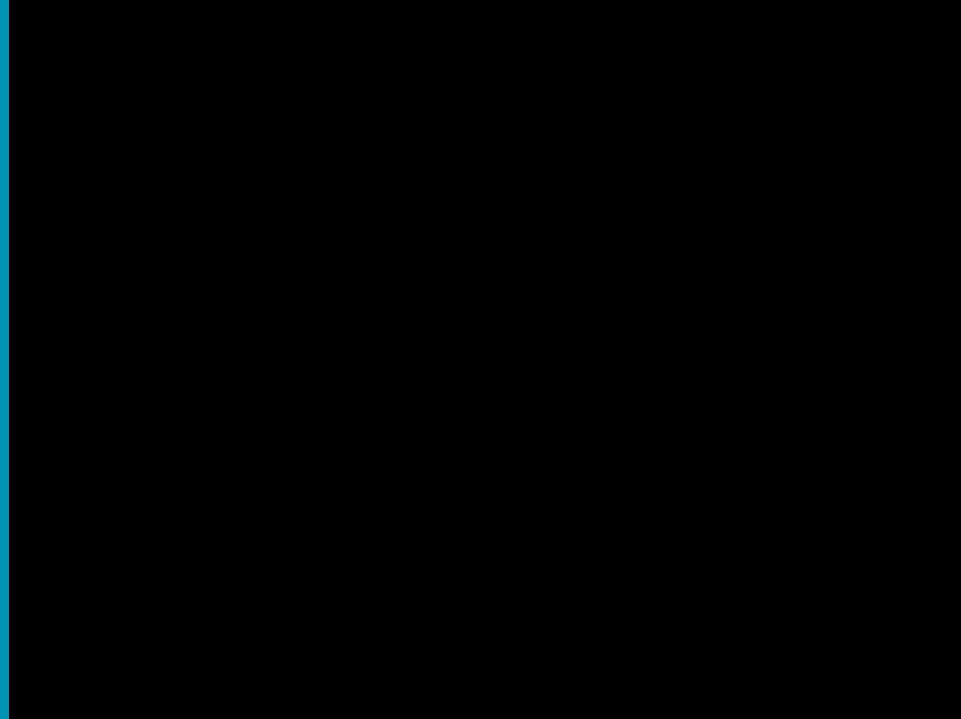
Venus flytrap sea anemone in National Marine Sanctuary of American Samoa. Photo: OET/NOAA

Ocean Exploration Trust



Whale fall in Monterey Bay
National Marine Sanctuary

Ocean Exploration Trust



Octopus Garden in
Monterey Bay National
Marine Sanctuary

Poll Question

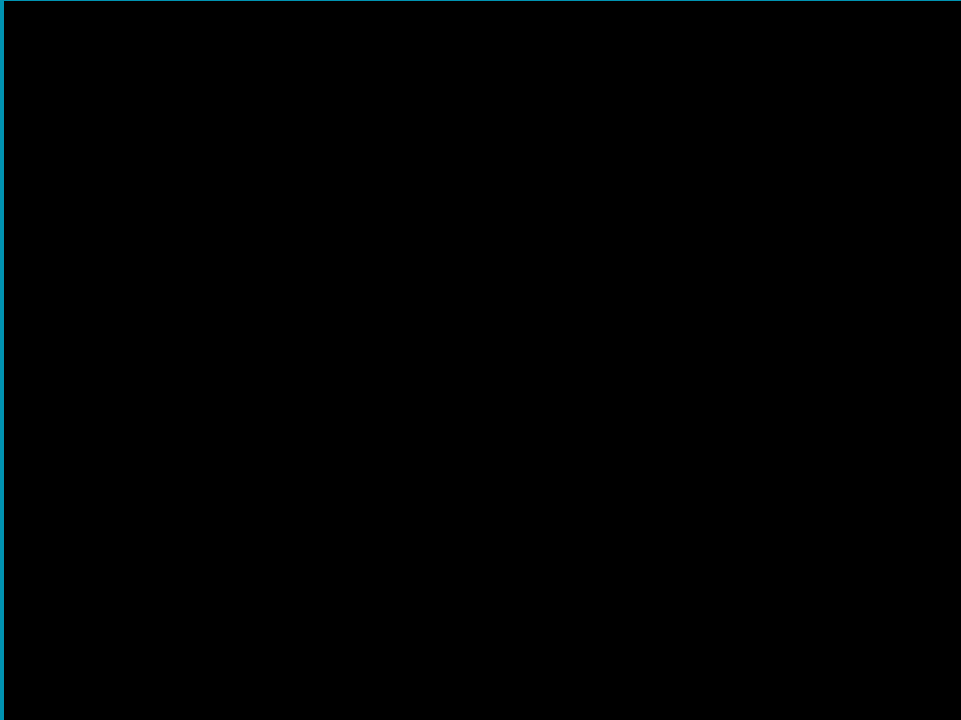
Will you tune into [nautiluslive.org](https://www.nautiluslive.org) in 2020 to be apart of the exploration?

- Yes
- Maybe
- No

Woods Hole Oceanographic Institution



Woods Hole Oceanographic Institution



Technology to Explore
Stellwagen Bank National
Marine Sanctuary

Woods Hole Oceanographic Institution



ROV Pixel examining shipwreck. Photo: Marine Imaging Technologies/NOAA

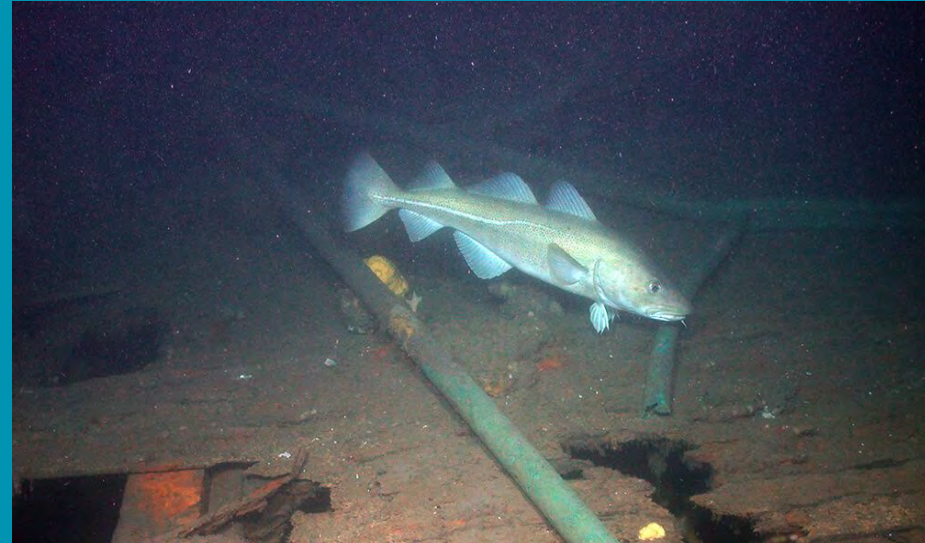


ROV Pixel being launched into SBNMS. Photo: Elizabeth Weinberg/NOAA

Woods Hole Oceanographic Institution



Expedition leads reviewing live ROV footage. Photo: Elizabeth Weinberg/NOAA



Cod near deck of *Portland*. Photo: WHOI

Woods Hole Oceanographic Institution

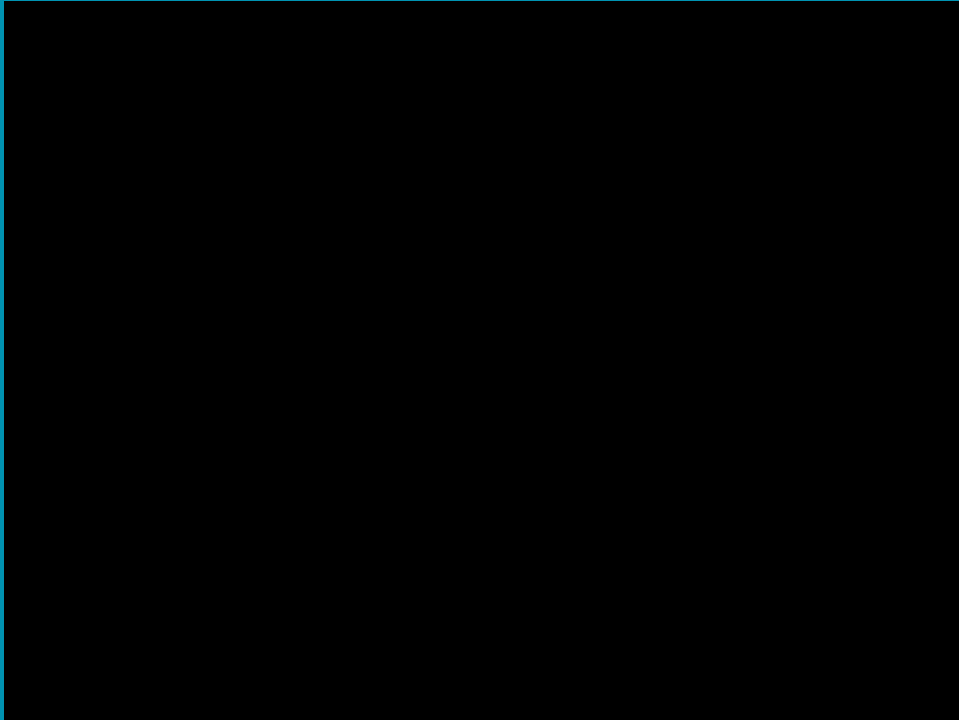


Artifact with shrimp on *Portland*. Photo: WHOI/NOAA



Frilled anemones grow on the *Portland*. Photo: WHOI/NOAA

Woods Hole Oceanographic Institution



Photogrammetry 3D model
of *Portland* in Stellwagen
Bank National Marine
Sanctuary

Global Foundation for Ocean Exploration

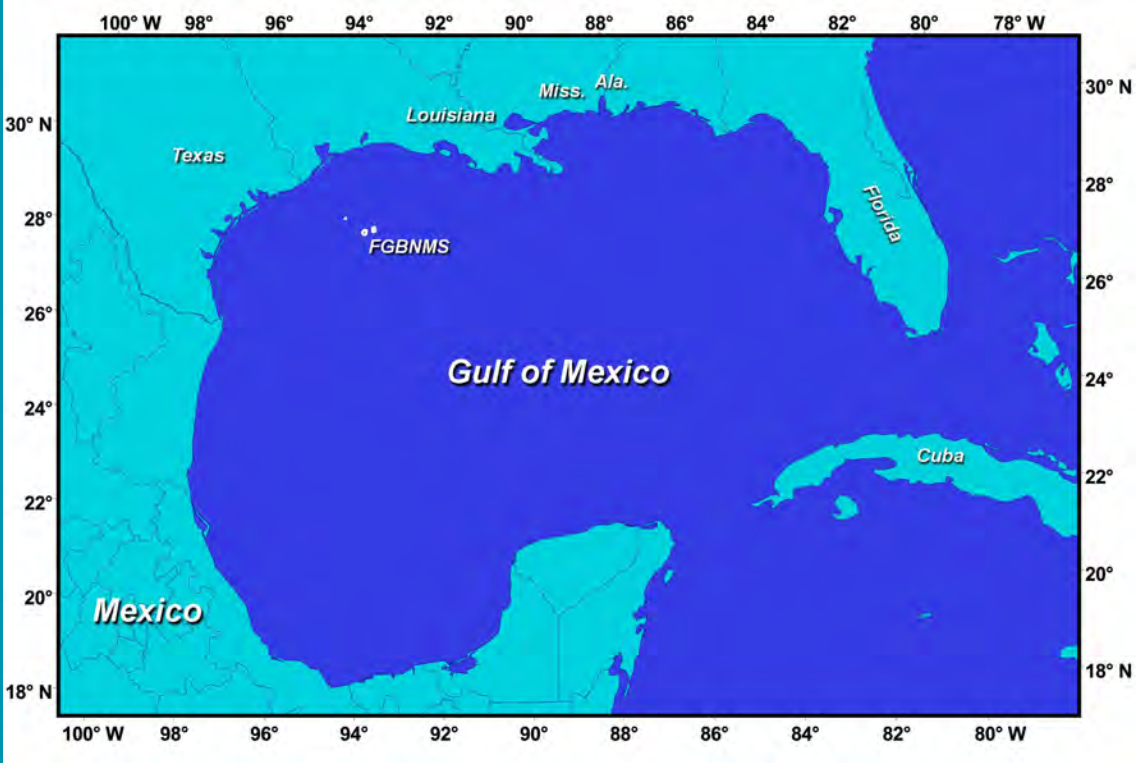


RV Manta in FGBNMS Photo: NOAA



ROV Yogi Photo: GFOE

Global Foundation for Ocean Exploration



Global Foundation for Ocean Exploration



Coral Biodiversity and
Connectivity
in Flower Garden Banks.
Photo: GFOE/NOAA

Global Foundation for Ocean Exploration



Coral in FGBNMS in 2019.
Photo: GFOE/NOAA



Coral spawning in FGBNMS in 2019.
Photo: GFOE/NOAA

2020 Expeditions

EXPEDITIONS

NOAA's Office of National Marine Sanctuaries works with partners to expand our understanding of sanctuaries through deep-water exploration and research. Learn about [past](#), current, and future expeditions to your national marine sanctuaries, and find out how you can tune in to watch science in action.



GLOBAL FOUNDATION FOR OCEAN EXPLORATION

In 2020, NOAA's [Office of National Marine Sanctuaries](#), [National Centers for Coastal Ocean Science \(NCCOS\)](#), and the [state of North Carolina's Office of State Archaeology \(OSA\)](#) will work with the [Global Foundation for Ocean Exploration \(GFOE\)](#) to explore and investigate historic shipwrecks in and surrounding [Monitor National Marine Sanctuary](#).




WOODS HOLE OCEANOGRAPHIC INSTITUTION

This summer, NOAA's Office of National Marine Sanctuaries is teaming up with [Woods Hole Oceanographic Institution](#) to explore [Stellwagen Bank National Marine Sanctuary](#). Archeological and biological assessments will be conducted while working aboard the vessel *Dawn Treader* and Research Vessel (R/V) *Connecticut*.



OCEAN EXPLORATION TRUST

NOAA's Office of National Marine Sanctuaries is teaming up with [Ocean Exploration Trust](#) to explore the marine ecosystems of the West Coast Region. Working aboard the Exploration Vessel (E/V) *Nautilus*, scientists will map and explore sanctuary sites along the Washington and California coasts.

A white beluga sturgeon is swimming in dark water. In the foreground, there is a large, colorful, translucent jellyfish-like organism with purple and yellowish-brown hues. The text is overlaid on the top left of the image.

Ocean Exploration Trust 2020 Expedition

Exploring the marine ecosystems of the West Coast Region

OCEAN NETWORKS CANADA

OLYMPIC COAST
NATIONAL MARINE SANCTUARY

CASCADIA MARGIN

GREATER FARALLONES
NATIONAL MARINE SANCTUARY

MONTEREY BAY
NATIONAL MARINE SANCTUARY

SANTA LUCIA BANK

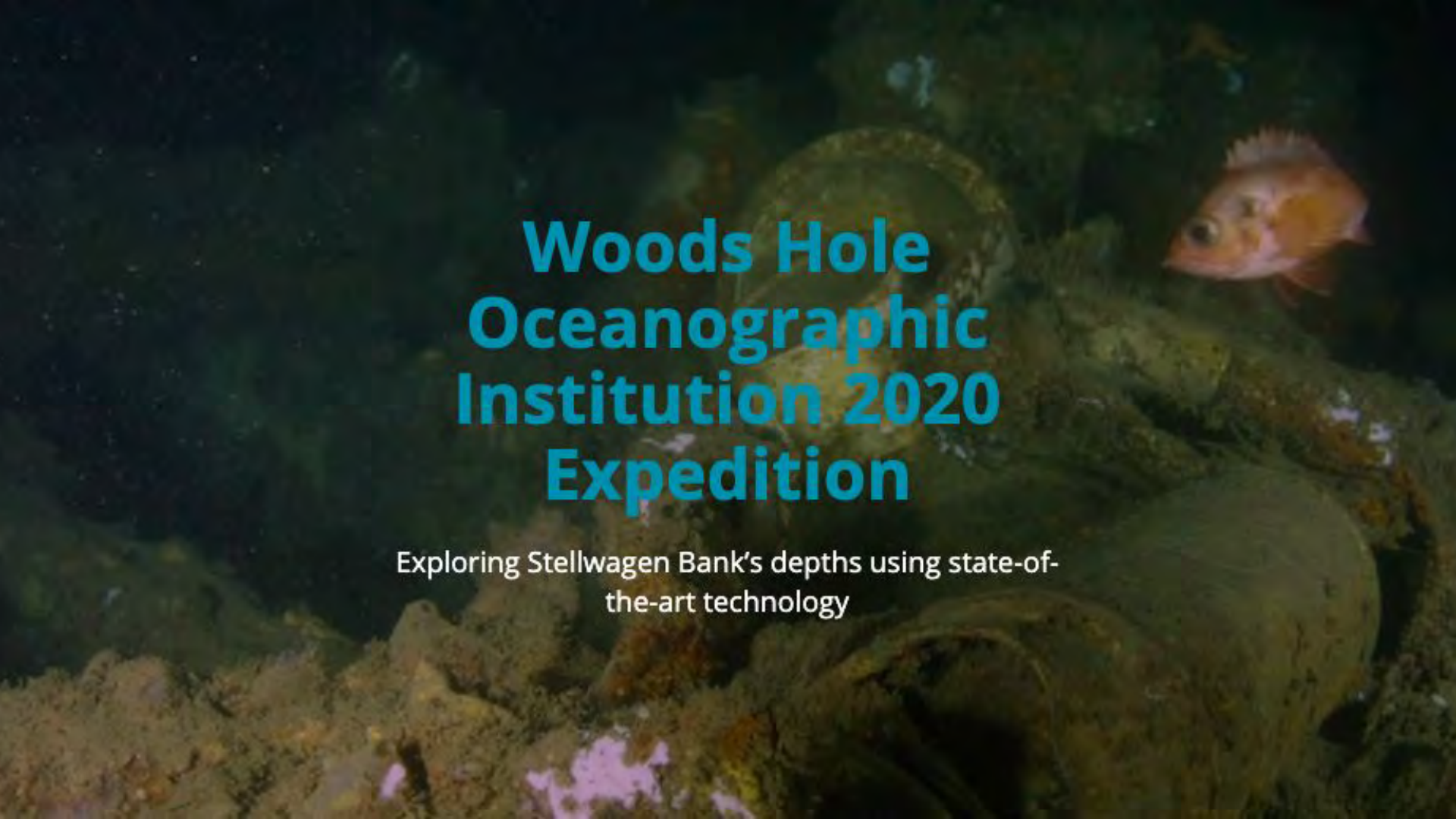
CHANNEL ISLANDS
NATIONAL MARINE SANCTUARY

SOUTHERN CALIFORNIA

OSBORN BANK



NAUTILUSLIVE.ORG
OCEAN EXPLORATION TRUST

An underwater photograph showing a large, textured, light-colored shell or rock formation in the foreground. A small, reddish-orange fish with a white stripe is swimming in the upper right. The background is dark and blurry, suggesting a deep-sea environment.

Woods Hole Oceanographic Institution 2020 Expedition

Exploring Stellwagen Bank's depths using state-of-
the-art technology

Woods Hole Oceanographic Institution 2020



An early glimpse of the mystery coal schooner, an unidentified shipwreck first discovered in 2003. Photo: NOAA/NURC-UConn/The Science Channel

An underwater scene with a deep blue background. Several fish are visible, including a prominent one in the upper center and another in the lower left. The lighting is soft, creating a serene atmosphere.

Global Foundation for Ocean Exploration 2020 Expedition

Valor in the Atlantic: Diving into Maritime History

Valor in the Atlantic Expedition



A diver investigates the wreck of the USS *Monitor*. Photo: Tane Casserley/NOAA

For Educators

- Participate in live programs in 2020
 - <https://sanctuaries.noaa.gov/live/>
- Rewatch a 2019 expedition live program
 - EBSYP Youtube Channel
- Check out featured education resources
 - <https://sanctuaries.noaa.gov/live/2020/who.html>

Poll Question

Are you interested in partaking in exploration of national marine sanctuaries this year?

- Yes
- Maybe
- No



QUESTIONS?