

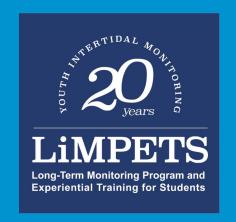
OCEAN EDUCATION IN THE REGION

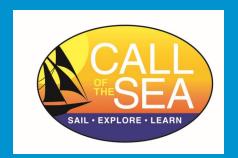
Featuring resources from:













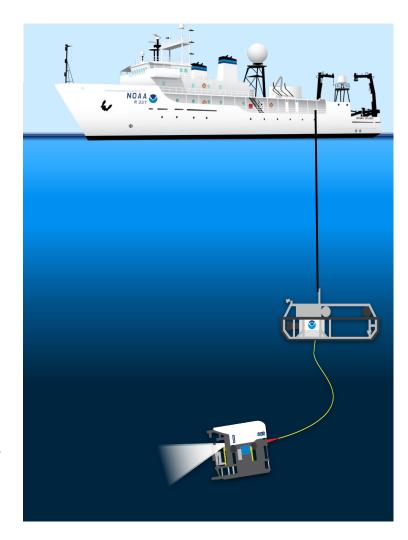
NOAA Ocean Exploration

Our Mission:

NOAA Ocean Exploration is dedicated to exploring the unknown ocean, unlocking its potential through scientific discovery, technological advancements, and data delivery.

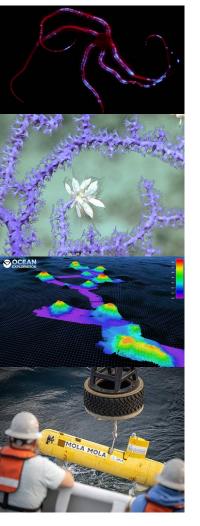
Location:

- Headquartered in Silver Spring, MD
- Exploration operations organized in multi-year, regional campaigns. Next location: Central Pacific.
 - NOAA Ship Okeanos Explorer will be moving out to Hawaii and other central Pacific Islands beginning in April 2024 and will operate in the region for the next 3+ years!





Educational Resources



Explore Materials By Theme:

- Bioluminescence
- Cold Seeps
- Deep-Sea Corals
- Seafloor Mapping
- Seamounts
- Underwater Robots
- Vents and Volcanoes



Types of Resources:

- Lessons/Activities
- Print-friendly fact sheets
- Ocean Facts
- Video and Image Galleries





Featured Resources

Seafloor
Mapping
Fact Sheets





Underwater Robots Resources





Deep-Sea Dialogues Videos





Deep Ocean Education Project







Opportunities to Explore With Us!

Follow Along in Real Time





Attend a Professional Development





Apply for an Internship or Fellowship







Local National Marine Sanctuaries

Our Mission: We protect treasured places in the ocean and Great Lakes.

Your ocean backyard is full or rich phenomena for student investigation.

Topics: Biodiversity, ocean habitats, migration, carbon cycle, nature solutions/climate, cultural value, maritime history, animals, plants/algae, invertebrates, exploration, ocean features

<u>www.farallones.noaa.gov</u>, <u>www.cordellbank.noaa.gov</u> <u>www.montereybay.noaa.gov</u>



Sanctuary Visitor Center San Francisco

Our Mission: Greater Farallones and Cordell Bank National Marine Sanctuaries Visitor Center features the ocean ecosystem outside the Golden Gate.



Location: Crissy Field, San Francisco





At your School Programs



Crab Cab (K-3)

Seabird Shuttle (3-5)

Sharkmobile (4-6)

Otters and Ocean Germs (5th-7th)

Ocean Acidification: A Sea of Change (7th-12th)

Fisherman in the Classroom (7th-12th)

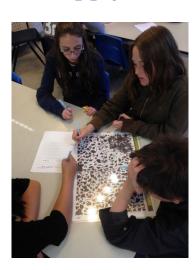
Deep Sea Corals (9th-12th)

Winged Ambassadors (8th-12th)

Contact Peter Winch

(pwinch@farallones.org) or 415 530 5352

Fees apply, Scholarships Available



Winged Ambassadors: Students analyze an albatross bolus



Fisherman in the classroom



Sanctuary Education Resources

Sanctuary Resource Collections bring together NOAA videos, lesson plans, webinars, web stories, virtual reality and photos for

educators.

Themes:

Seabirds	Marine Debris
Coral Reef Ecosystems	Ocean Acidification
Climate Change	Ocean Sound and Impact of Noise
Dolphins, Whales	Sea Turtles, Sharks
Kelp Forests	Shipwrecks













NOAA Ocean Guardian Schools

What does it mean to be a NOAA Ocean Guardian School?

A NOAA Ocean Guardian School (OGS) makes a commitment to the protection and conservation of its local watersheds, the world's ocean, and special ocean areas, like national marine sanctuaries. The school makes this commitment by proposing and then implementing a school- or community-based conservation project.

Location: Nationwide! We currently have 72 schools across 14 states and 3 U.S. Territories participating in the NOAA Ocean Guardian School Program.

- Up to \$4,000 available to schools who propose & implement a conservation project (annually).
- Applications for 2024 2025 open April 1, 2024 on the NOAA Ocean Guardian School website. The deadline to apply is June 1, 2024.
 - Selected schools are notified by mid-Summer 2024.





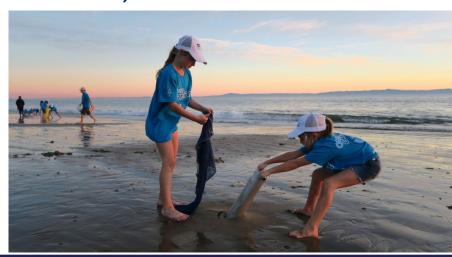




BWET

Our Mission: The CA B-WET Program provides competitive funding to support locally relevant, authentic experiential learning for K-12 audiences. Funded projects focus on "meaningful watershed educational experiences".

Location: Counties of San Mateo, Santa Cruz, Santa Clara, Monterey, San Benito, and San Luis Obispo, Marin, San Francisco, Alameda, Contra Costa, Sonoma, Mendocino, Humboldt, Del Norte, Trinity, Napa and Santa Rosa, Santa Barbara and Ventura















Statewide Community Science Program that aims to inspire the next generation of ocean stewards by fostering a sense of belonging in coastal ecosystems and empowering them to be scientists.

LiMPETS

Long-Term Monitoring Program and Experiential Training for Students









www.limpets.org



Limpers Long-term Monitoring Program and Experiential Training for Students

Programming = 90 min Virtual Protocol Training + 2.5 hour data collating field trip

Sandy Beach Monitoring

Grades 6th - College

Focus: Sand Crab Populations, Environmental Observations



Rocky Intertidal Monitoring

Grades 9th - College

Focus: Biodiversity, Sea Stars, Anemones, Zonation



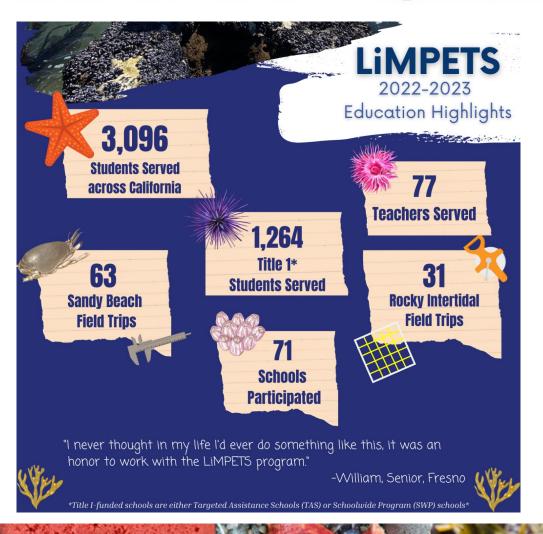








Limpers Long-term Monitoring Program and Experiential Training for Students



Teacher Requirements & Resources

- **Attend 1 Training Workshop (every 3 years)**
 - Sandy Beach, annually Fall
 - **Rocky Intertidal, annually Winter**

- **LiMPETS.org**
- **Curriculum meets NGSS**
- **Teacher Portal**
 - Lessons
 - **Worksheets & Activities**
 - Soon to be added *Bilingual Materials (Spanish)











www.LIMPETS.org



Northern Region

San Francisco Bay Area Sites: Half Moon Bay -Sonoma Coast

Jaclyn Schneider limpets@farallones.or

Central Region

Monterey Bay Area
Sites: Big Sur to Santa
Cruz

Hannah Sarver sarver@pgmuseum

Southern Region

Channel Islands
Sites: Ventura to Santa
Barbara

Keighley Lane keighley.lane@noaa.g

OV









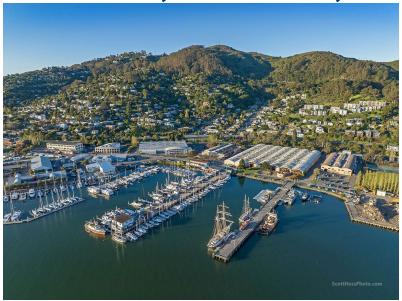
CALL OF THE SEA

Our Mission:

Our mission is to provide inclusive and equitable access to on the water science- based educational programs that foster the connection to watersheds, ocean environments & nautical heritage.

Location: Bay Model Visitor Center, Sausalito, CA









www.Callofthesea.org

CALL OF THE SEA

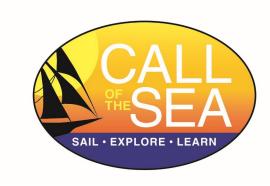
Our Programs:

- 3 hour Bay Exploration on-the-water Field trips
- 4 hour team building seamanship programs
- Full day Farallones Sails
- Week long youth summer camps
- Weekend Community Sails

Our Curriculum:

- Marine Biology and Ecology
- Nautical Science
- Marine Engineering
- Maritime History
- Sustainability









CALL OF THE SEA

Our Ships:

- Schooner Seaward accommodates up to 34 students + 6 chaperones
- Brigantine Matthew Turner accommodates up to 55 students + 10 chaperones



How to schedule a field trip for your students:

- Call us at 415-331-3214
- Email info@callofthesea.org
- Check us out online at <u>www.callofthesea.org</u>
- Join us on an educator's sail, free to teachers and educators
- Learn about pricing and Call of the Sea's scholarship program



Sailing Science Center

Our Mission: To inspire a passion for sailing and science through discovery and play

Location: We come to you via our custom, 16-foot trailer.









Sailing Science Center

Our Programs: The Sailing Science Center provides hands-on, interactive STEAM learning (and play!) experiences through the lens of sailing. Our programs come to you on a scheduled basis for groups up to 105 students (35 students in three sessions).









https://www.sailingscience.org/

Sailing Science Center

Contact Us:

info@sailingscience.org

(510) 390-5727











https://www.sailingscience.org/



Visit Us in Sausalito!

- Open Friday-Monday 10am-4pm
- Free to visit
- Guided tours available



Visit Us at Pier 39!

- Connect with our conservation experts at K-Dock
- The Sea Lion Spot opening summer 2024





School Program Offerings:

- School Tours
 - 4th 12th grade
 - February June





• Online Resources/Curriculum



Growing Up on Ice Education Guide: Grades 6-8



Marine Mammal Monday: Marine Mammal



Hawai'i Virtual Tour 'Ohana Challenge



Life By a Whisker Education Guide: Grades 6-8



Middle School Programs

 Ocean Ambassadors is an award-winning marine science program that provides Bay Area middle school teachers access to Next Generation Science Standard-connected curriculum, resources and professional development throughout the academic year.









• <u>Nā Kōkua o ke Kai</u> is a Hawai'i-focused marine science program that provides middle schools access to curriculum that is connected to Next Generation Science Standards, Nā Hopena A'o (HĀ) Framework, Ocean Literacy Principles, and 'Ōlelo No'eau (Hawaiian proverbs and poetical sayings).



High School Programs:

- Youth Crew
 - Ages 15-18
 - 8 months: animal husbandry and public engagement









Stewardship Saturday

- Free events
- Last Saturday of every month
- Themes: community awareness, restoration and protection, stewardship science



Questions?

NOAA Ocean Exploration: Liz Hoadley (liz.hoadley@noaa.gov)

