Rocky Habitat Educational Resources

Compiled 2026, Oregon Coastal Management Program

Coastal communities have a long-term goal for state investment in the development of a marine education curriculum focused on rocky habitat ecosystems that would be incorporated into the science standards for school-age children. Marine educators, local school-age educators, Coastal Tribal educators, and state agencies would contribute to the K–12 education program to teach students about the ecology of marine habitats.

Outside of the classroom, there are many other opportunities for incorporating rocky habitat education into youth programming. Outdoor School, after school programs, day camps and sleep-away camps are all great opportunities to bring young people into the field for hands-on learning experiences.

Education should emphasize proper tidepool etiquette, measures to protect wildlife, and ecology of nearshore and subtidal habitats. Indigenous traditional uses of marine resources, both past and present, is an educational topic that is best informed through involvement of local Tribes. This collaborative effort will help ensure future generations have the knowledge and appreciation of these sites to help maintain and protect them.

Oregon Tidepools Website

A foundational resource for both educators and general visitors. The Oregon Tidepools materials provide basic species identification, ecological context, and trip-preparation guidance useful for **pre-visit briefings**, **on-site visitor interactions**, and **introductory naturalist-led walks**. This resource is especially effective for orienting inexperienced tidepool visitors before they enter sensitive habitat.

Tidepools Are Alive! Brochure (OPRD)

This printable interpretive tool includes tidepool etiquette paired with a species guide. It can be used directly in the field as a **handheld interpretive aid**, helping staff and volunteers reinforce key stewardship messages. Because the map is outdated, it works best when paired with up-to-date safety and access information provided verbally or via signage.

Oregon Coast STEM Hub

With its lending library of microscopes, rain gear, scales, and ROV kits, the STEM Hub supports **hands-on field investigations** and **post-visit analysis**. Equipment access empowers educators to run **tidepool sampling**, **species monitoring**, and **intertidal micro-study stations**, making field excursions more interactive and inquiry-driven.

Oregon Sea Grant K–12 Science Curricula

Resources like *Tidepool Tussle* offer structured lessons for Grades 6–8 that translate well into **field-based problem solving**, such as teaching how organisms compete for resources or respond to environmental pressures. Educators can adapt curriculum lessons to outdoor settings by connecting classroom content with on-site observations during tidepool excursions. The broader Sea Grant website includes additional programs valuable for planning **field trips, educator workshops, and visitor-center-led interpretation**.

Oregon Marine Reserves Community Teams

Oregon Marine Reserves community teams are **local, volunteer-driven groups that support the state's five designated marine reserves through stewardship, education, and community science**. These teams, often working through the Oregon Marine Reserves Partnership, help connect local communities to the research and management of these protected areas.

- **Cape Falcon:** Supported by the North Coast Land Conservancy and local volunteers, focusing on conservation and outreach.
- **Cascade Head:** Involves the Cascade Head Biosphere Collaborative - engaging in local stewardship.
- **Otter Rock:** Supported by the Friends of Otter Rock, which conducts volunteer monitoring and community outreach.
- **Cape Perpetua:** Led by the Cape Perpetua Collaborative, focusing on education, community science, and fostering an "indelible bond to place".
- **Redfish Rocks:** Managed by the Redfish Rocks Community Team (RRCT), which was established in 2009 to promote stewardship through public engagement.

Community Team Core Functions

- **Community Science:** Conducting field monitoring (e.g., sea star surveys, kelp tracking) and enhancing "eyes on the water".

- **Outreach & Education:** Promoting awareness of marine reserves through, for example, the Reserve Inspiration Art Exhibition.
- **Collaboration:** Working with the Oregon Department of Fish and Wildlife (ODFW) to support management and long-term research.

Ocean Literacy Guide

Useful for audiences of all ages, this guide provides thematic frameworks that interpreters can integrate into **guided walks**, **school programs**, or **signage development** to help visitors connect rocky shore concepts to broader ocean-systems thinking.

Charleston Marine Life Center

Provides both online and on-site programming that can complement educator-led field trips. Their content helps prepare groups before entering tidepools and offers **follow-up activities** that reinforce observations made in the field.

Oregon Coast Aquarium Education Programs

These structured programs—ranging from youth camps to marine-education experiences—offer models that field interpreters can adapt for **guided coastal walks**, **day-camp tidepool activities**, or **family education days**. They also provide interpretive materials that support consistent, coastwide messaging.

CoastWatch in the Schools

This program places guest educators directly on the beach with students and trains participants in community science methods. It is particularly applicable to **field monitoring lessons**, **beach surveys**, and **student-led documentation**, providing a robust framework for integrating youth into ongoing coastal stewardship efforts.

Tidepool Unit Study (Teachers Pay Teachers)

Designed by an Oregon educator, this downloadable curriculum can be seamlessly adapted for **field journaling**, **species-observation checklists**, and **habitat mapping** activities during site visits.

Rocky Shores Training 2025

The video recordings and summary of the 2025 training of interpreters, interns, and seasonal staff practical instruction in providing **front-line rocky shore interpretation**. These resources are especially suited for onboarding new field interpreters or reinforcing best practices before peak visitation seasons.

Monitoring and Community Science Resources for Applied Field Learning

USFWS Seabird Nesting Surveys

The long-term nesting data can be incorporated into **interpretive walks focused on seabird ecology**, demonstrating how aerial surveys inform refuge management. Field educators can use this resource to explain monitoring methods, species trends, and conservation challenges visible from coastal viewing areas.

ODFW Pinniped Surveys

Publicly accessible survey dashboards allow interpreters to contextualize observed seals and sea lions during field programs. These data enhance **wildlife-viewing interpretation**, helping visitors understand species behavior, abundance, and habitat sensitivity.

Community Science Opportunities

Links to the Multi-Agency Rocky Intertidal Network (MARINe), Oregon Shores, Oregon Tidepools, and Marine Reserves partnerships offer numerous ways for field programs to connect participants with **hands-on monitoring**, such as species counts, human-use documentation, and habitat condition surveys. These programs are ideal for **citizen-science days**, **school field trips**, and **volunteer training**.

iNaturalist

An excellent tool for **species identification** and the creation of spatial datasets that enrich scientific understanding. Field interpreters can guide visitors in contributing observations, helping them develop species ID skills while supporting ongoing research

efforts. The iNaturalist Oregon State Parks Coastal Species Inventory project provides an especially relevant, active project for visitor participation.

CoastWatch Monitoring

Adopting a mile segment enables deeper, place-based learning and long-term engagement. Field interpreters can integrate CoastWatch protocols into **youth education**, **community science training**, and **public interpretive walks**, offering participants tangible stewardship roles.

Black Oystercatcher Monitoring

Because the species is highly visible and charismatic, this program is well suited for **species-focused interpretation** and **volunteer monitoring tutorials**. Field educators can highlight the bird's conservation status, nesting behaviors, and sensitivity to disturbance as part of stewardship messaging.