

WHAT IS A NATIONAL MARINE SANCTUARY?

The Olympic Coast National Marine Sanctuary is our nation's fourteenth marine sanctuary. Its protected status complements the area's other designations, which include a National Wildlife Refuge, National Park, Washington Island Wilderness, Biosphere Reserve and World Heritage Site.

Twice the size of Yosemite National Park, the Olympic Coast National Marine Sanctuary covers an area of approximately 3,300 square miles (8,575 square kilometers) and contains some of the richest fishing and shellfishing grounds on our planet. Olympic Coast National Marine Sanctuary supports one of the world's most diverse kelp communities and is visited by 29 species of whales, dolphins and porpoises. The sanctuary contains some of the largest colonies of seabirds in the continental United States. Its coastline is home to one of the largest populations of bald eagles in the lower 48 states.

Marine sanctuaries are part of our collective riches as a nation. They are treasures that belong to all of us as citizens, that we have the right to enjoy and the responsibility to protect for future generations. The National Oceanic and Atmospheric Administration (NOAA) in the U.S. Department of Commerce manages the Olympic Coast National Marine Sanctuary and other National Marine Sanctuaries to maintain their natural beauty and diversity. The goals of the National Marine Sanctuary Program are to protect the marine resources through education and research and by encouraging compatible uses.

Writer: David George Gordon & Associates, Inc. Designer: Vicki Loe.
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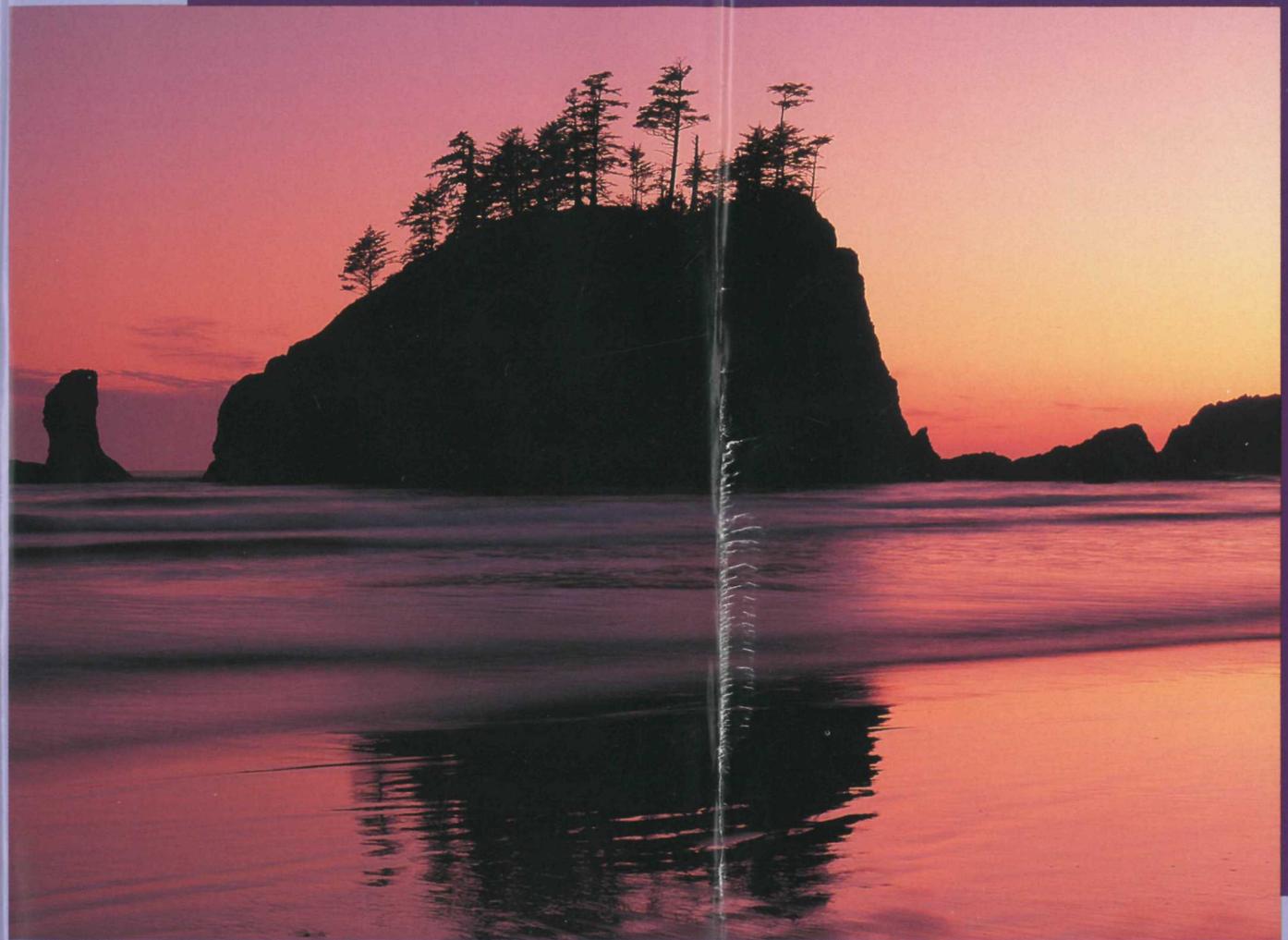
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National Oceanic and Atmospheric Administration
Sanctuaries and Reserves Division
1305 East-West Highway, SSMC-4
Silver Spring, Maryland 20910



NATIONAL
MARINE
SANCTUARY

Olympic Coast



OLYMPIC COAST

Olympic Coast National Marine Sanctuary

138 West First Street
Port Angeles, Washington 98362
(360) 457-6622 Fax (360) 457-8496
ocnms@ocean.nos.noaa.gov



THE WORLD OF THE OLYMPIC COAST: MOUNTAINS, FORESTS AND SEA

Rugged sea stacks, thunderous waves, giant coastal evergreen trees, majestic mountain slopes shrouded in mist—the nearly pristine and fairly isolated environment of Washington's Olympic Peninsula draws worldwide attention for both its splendor and ecological value.

Just as dramatic and valuable, however, are the realms unseen by the casual eye. Submerged volcanoes, deeply carved canyons, the vast, fertile expanse of the continental shelf—these features beneath the sea encourage life to erupt in a myriad of colors and forms. The many millions of fish, invertebrates, birds and marine mammals that feed and breed along the Olympic Coast reflect the richness of the marine environment below.

Supporting such ecologically, economically and culturally important species as the salmon (whose life is spent in fresh water *and* salt water), the Olympic Coast National Marine Sanctuary embraces both peninsular and coastal worlds.

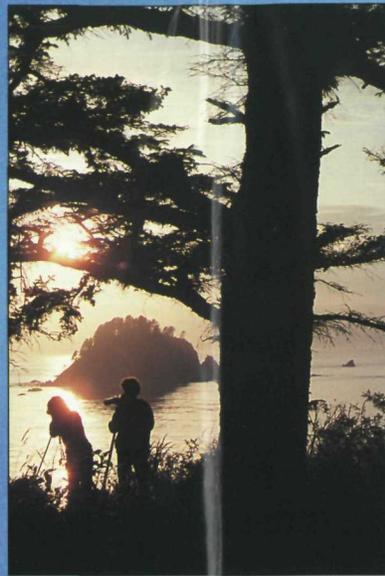


PHOTO CREDITS:

Cover photo: island sunset near La Push, F. Stuart Westmorland. Background photo: Point of the Arches, Keith Lazelle. Rocky, intertidal beach, Point of the Arches, Joel W. Rogers. Coastal forest, Olympic National Park, Joel W. Rogers. Pacific white-sided dolphin, F. Stuart Westmorland.

WITHIN THE BOUNDARIES OF THE OLYMPIC COAST NATIONAL MARINE SANCTUARY are wave-beaten rocky shores, cobbled and sandy beaches, rugged offshore islands and sunken forests of kelp. These diverse habitats provide an ideal laboratory for scientists, fertile grounds for commercial and sport fishers and inspirational sights for shoreline residents and visitors.

PHOTO CREDITS:

Background photo: Cape Flattery, F. Stuart Westmorland. Cobbled beach, Joel W. Rogers. Bull kelp, Joel W. Rogers. Tufted puffin, F. Stuart Westmorland. China rockfish, F. Stuart Westmorland. Sea anemone tentacles, F. Stuart Westmorland. Giant Pacific octopus, F. Stuart Westmorland.



ROCKY SHORES, SANDY AND COBBLED BEACHES

Some of the most resilient plants and animals make their homes on rocky shores. They must endure pounding waves and tolerate extreme weather conditions—both characteristic of the unprotected Washington coast.

Nestled between craggy headlands are pocket beaches, in which razor clams, flounders, sand dollars, Dungeness crabs and other bottom-dwellers abound. To survive in this fairly featureless world, many animals burrow in the sand to make their homes.

Cobbled beaches are among the more life-supporting environments on the Olympic Coast. They offer the best of two habitats—rocky and sandy—to the hardshell clams, red rock crabs and dozens of other harvestable life forms that live here.

OFFSHORE ISLANDS

Although they spend most of the year alone or in small groups, sea birds usually gather in large colonies to nest. These colonies are often on remote islands—away from most predators yet close to the ocean's abundant food supplies. Within the sanctuary lie 870 of these offshore islands, remote rocks and reefs.



During nesting season, the islands become “prime real estate” for birds. Gulls, murres and other birds build nests on open ledges, high above the beating waves, while rhinoceros auklets and tufted puffins lay their eggs at the ends of long tunnels, dug deep into cliffs. Pigeon guillemots nest in the rubble of rocks and driftwood at the water's edge. During each year's migration, the total population of seabirds, waterfowl and shorebirds along the Olympic Coast may exceed a million animals.

KELP FORESTS

Reaching up more than 60 feet from the sea floor, great reddish and olive-brown kelp plants serve many purposes. Their floating portions form dense canopies on the sea's surface, within which fish seek shelter, feed and lay eggs. Long stalks and staunch bases support sponges and other encrusting animals, while sea stars, sea urchins and abalones vie for space on the crowded forest floor.

Kelp beds also serve as resting areas for gulls, herons and sea otters. They act as floating barriers, reducing wave action and slowing currents close to shore. In this way, they limit beach erosion. Without kelp forests, the character of the Olympic Coast and the creatures that live there would be dramatically different.



REEFS, SHOALS AND UNDERSEA CANYONS

Two hundred miles off the Olympic Coast and more than a mile below the ocean's surface lies a chain of volcanoes known as the Juan de Fuca Ridge. Volcanically heated sea water spews from the ridge, often creating castle-like hydrothermal vents up to 150



feet high. Heat and chemicals from these vents support animal communities unlike any on the earth's surface: five-foot-long gutless tube worms, giant clams and bacteria whose genetic structures may be the

most ancient on our planet.

Closer to shore, huge submarine canyons cut through the broad continental shelf. River erosion may have carved the canyons many millions of years ago, when sea levels were lower. Now some of these canyons carry sediment from the coast to the deep ocean.

Seasonally bathed by the California and Davidson currents, reefs and shoals provide numerous nooks and crannies for sea life to occupy. Here reside the world's largest octopus species, more than two dozen kinds of rockfish, many different sea stars and the brilliantly hued fish-eating anemone.

NATIONAL MARINE SANCTUARIES

Your federal tax dollars support sanctuaries like the Olympic Coast National Marine Sanctuary, along the coasts of the continental United States and American Samoa. Such sanctuaries protect nearshore coral reefs, open oceans, subtidal reefs, submarine canyons and submerged shipwrecks. To learn more about the National Marine Sanctuary Program, contact NOAA or visit any of these sanctuaries:

Channel Islands NMS

off southern California near Santa Barbara
(805) 966-7107

Cordell Bank NMS

off northern California near Point Reyes
(415) 556-3509

Fagatele Bay NMS

off Tutuila Island, American Samoa
(684) 633-7354

Florida Keys NMS

off southern Florida
(305) 743-2437

Flower Garden Banks NMS

off Texas southeast of Galveston
(409) 847-9296

Gray's Reef NMS

off Georgia
(912) 598-2345

Gulf of the Farallones NMS

off California northwest of San Francisco
(415) 556-3509

Hawaiian Islands Humpback Whale NMS

(808) 541-3184

Monterey Bay NMS

off central California
(408) 647-4201

Stellwagen Bank NMS

off Massachusetts
(508) 747-1691

USS Monitor NMS

off North Carolina
(804) 878-2973

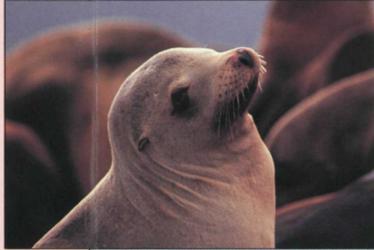
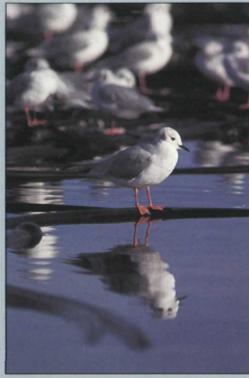
REGULATED ACTIVITIES

The natural environment is a gift everyone can share. To protect the resources within the Olympic Coast National Marine Sanctuary, the following activities are prohibited:

- Exploring for or developing oil or mineral resources
- Moving, removing or injuring historical or cultural sanctuary resources
- Discharging or depositing any material
- Altering the seabed or constructing any structures on the seabed
- Injuring or harassing marine mammals, sea turtles and seabirds
- Flying motorized aircraft (under 2,000 feet) within a mile of the sanctuary's coastal boundaries and offshore wildlife refuges.

For information about specific regulations, contact Sanctuary Manager
Olympic Coast NMS
138 West First Street
Port Angeles, WA 98362
(360) 457-6622

Thank you for protecting the sanctuary's treasures.



Twenty-nine species of marine mammals breed, rest within or migrate through the Olympic Coast National Marine Sanctuary. Some of these animals—harbor seals and gray whales, for example—can be easily spotted from shore. Others live far from shore or are wary of humans, making it difficult to see them, even from a boat.



One particularly treacherous stretch of the coast bears the nickname "Graveyard of the Giants" after the many large ships that have foundered and sunk there. Among the relics of these wrecks are piles of ballast stones, rusted debris and a pair of small bronze memorials to the crews and passengers of two ships, lost on the rocks in the early 1900s.

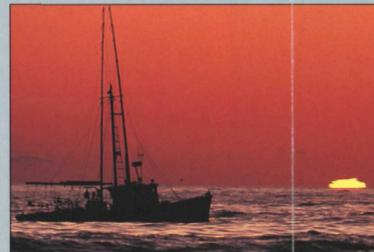
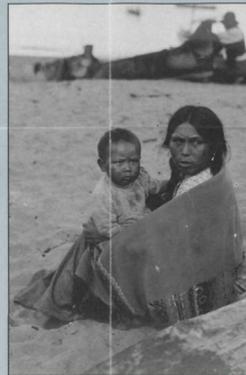


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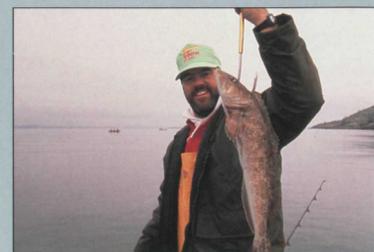
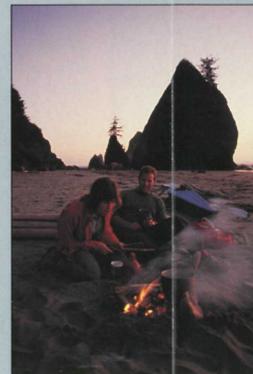
Top left cluster, clockwise: Sea birds, Chris Huss. California sea otter, F. Stuart Westmorland. Sea lion, Chris Huss. Lower left cluster: Shipwreck at sunset, Joel W. Rogers. Northwest shipping, Joel W. Rogers. Top right cluster, clockwise from top: Quinalt girl wearing dentalium shell necklace, headband, c.1912, Edward S. Curtis #246, Special Collections Division, University of Washington Libraries. Wedding Rock, ship petroglyph, Alan Kearney. Makah mother and child, Neah Bay, c. 1894-1900, Thomas W. Prosch #1344, Special Collections Division, University of Washington Libraries. Makah couple landing canoe with fish, Neah Bay, c. 1900, Thomas W. Prosch #1346, Special Collections Division, University of Washington Libraries. Bottom right cluster: Salmon troller, La Push, Joel W. Rogers. On the beach at Point of Arches, Joel W. Rogers. Sportfishing, Michael O'Malley.

Many bird species live year-round on the Olympic Coast. Some are summer or fall visitors, while others are only brief passers-by during spring or fall journeys to feeding and breeding grounds. Instinct leads these birds to follow the same loosely defined route from one year to the next. This route is called the Pacific Flyway. For many bird species, the Pacific Flyway extends from the coastal wetlands of Central America to the Alaskan tundra—a distance of 5,000 miles.

Populations of sea otters, once hunted by fur traders to the point of extinction, have been reestablished along the sanctuary's northern coast. In 1969 and 1970, a total of 59 sea otters were brought from Alaska and released along the coast. With laws that prohibit their capture, the Olympic Coast's sea otter population has grown to more than 300 animals.



Because many of the wilderness beaches on the Olympic Coast are accessible only by foot, they are extremely popular with hikers, campers and beachcombers. Of the estimated 3.5 million visits to Olympic National Park each year, roughly one-third are to its coastal areas. Here, during park-sponsored nature walks and other educational activities, people learn to appreciate the truly natural coastal and nearshore setting.



Five species of salmon, numerous bottomfish (such as halibut, rockfish, flatfish and cod), and crabs and other shellfish are harvested by commercial fishers off the Olympic Coast. Markets for sea urchins and thresher sharks—both largely overlooked in past decades—have grown in recent years.

Sport fishing is an important part of the local economy, with annual catches of over 9 million fish. Although most sport fishing is done from boats, shore fishing from rocky areas can also yield excellent landings of rockfish, lingcod and kelp greenling.



Four Native American tribes—the Hoh, Makah, Quileute and Quinalt—inhabit coastal areas of the Olympic Coast, as they have for thousands of years. The record of their relationship with the sea is carved in the boulders at Wedding Rock (south of Cape Alava) and other coastal locales bordering the Sanctuary.



- Olympic Coast National Marine Sanctuary
- Olympic National Park
- Indian Reservations
- National Wildlife Refuges

Depth in fathoms

The three National Wildlife Refuges on the Olympic Coast encompass all rock, islets, and islands that rise above the mean high tide line in offshore waters. All islands within these refuges, except Destruction Island, are part of the Washington Islands Wilderness.
MAP: Tom Hyde, Center for Marine Conservation, and Blake Feist. (Map is for representational purposes only, not for navigation.)

