THE LAND: A Richness of Its Own

At Beach No. 4 uplifted rock strata offers proof that the land rose from the sea. But even as the land continues to rise, the relentless surf grinds it down in a game of give and take. Off-shore islets called "sea stacks" were once part of the mainland until wave action severed their terrestial ties. Now they stand alone-roost to a wintering bald eagle or nesting ground to a thousand sea birds.

Fog-shrouded in summer and rain-drenched in winter, the coastal forest is dense and rapid-growing. Elderberry, salal, salmonberry, ferns and other understory plants are so thick that off-trail travel is nearly impossible.

When exposed to wind-driven salt spray, Sitka spruce unexplainably develops large swellings called "burls." Back in the protected woods, majestic and aromatic Western red cedar dominates a forest which includes Western hemlock and Douglas fir. This ideal growing climate has produced one of the world's largest cedar trees; it grows just off Highway 101, 5 miles (8 km.) north of Kalaloch.

Forest wildlife seems at home on the beach, Blacktail deer feed on jodine-rich seaweed. Eagles and black bears scavenge dead fish, skunks and raccoons raid tidepools.

THE PEOPLE: Sea-Dependent and Shipwrecked

Harpooning whales from dugout canoes and netting smelt and salmon, the Quinault, Makah, and Quileute Indians lived from the sea. At Wedding Rock, south of Cape Alava, petroglyphs carved into wave-battered rocks record this ocean-oriented life. Just north of the Cape, an Ozette Indian village was buried by a mud slide 300-500 years ago. Washington State University is excavating cedar plank lodges at the site. Of particular interest is the near-perfect preservation of wood and plant artifacts found in the lodges. Visitors are invited to attend free guided tours.

Spanish and English claimed to have explored this coast. But lack of good ports along the rocky shore prevented any permanent settlement. The US Coast Guard lighthouse on Destruction Island now warns approaching boats of the same rocks that shipwreck modern crafts as easily as they did those of European explorers. The Norwegian (1903) and Chilean Memorials (1920) mark sites where virtually entire crews lost their lives.



WHILE YOU ARE HERE

The National Park Service maintains developed campgrounds at Mora (91 sites) and Kalaloch (180 sites). Digging for razor clams, smelting with dip nets, and surf fishing are popular activities at Kalaloch. A license is required for razor clams. Check limits and seasons. A short walk along any of the beaches can be a rewarding experience for beachcomber and bird enthusiast alike.

PARK NATURALISTS present free tidepool walks and beach campfire programs during summer. The programs are designed to help you enjoy and learn more about your park. Consult bulletin boards for schedules.

HAVE A QUESTION ? ASK A RANGER

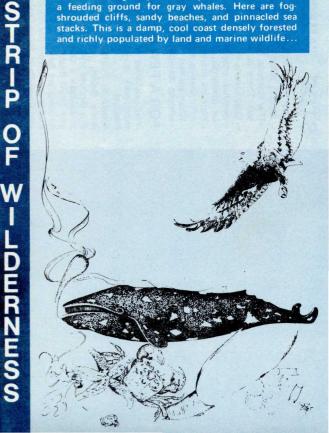


This seashore could have been easily covered with hotels and condominiums.

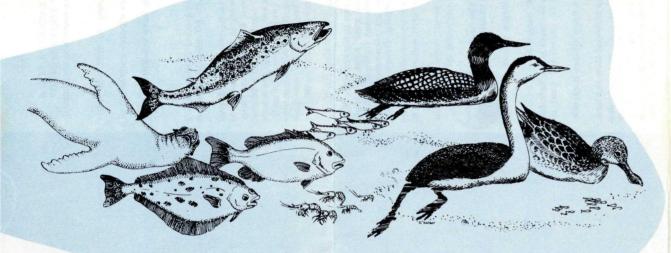
With the privilege of enjoying this natural area, good own personal responsibility for

Text and arrangement by Craig Blencowe, Park Naturalist. Artwork by Carole Kahler. Published by Olympic branch of the Pacific Northwest National Parks Association.

The PACIFIC COAST of OLYMPIC NATIONAL PARK is the graveyard of shipwrecked sailors and a feeding ground for gray whales. Here are fogshrouded cliffs, sandy beaches, and pinnacled sea stacks. This is a damp, cool coast densely forested and richly populated by land and marine wildlife...



The Olympic Coast remains unchanged through thousands of years. To preserve this wilderness, the National Park Service has protected it since 1953... so that each of us will have the chance to walk virgin shores and view a wild bald eagle. We hope that you will take time to discover why the Olympic coast is a special place... and care for it as a treasure that need show no sign of your passing.



THE SEA: A Bounty of Life

Near-shore upwelling of cooler water brings life-producing nutrients to the surface. All sea plants need these nutrients-from the microscopic luminescent plants (diatoms) to the 80 foot (25 meter) "floating forests" of kelp. In turn, these plants provide food for smaller fish, shrimp, and other tiny creatures which flow freely with the current called plankton. Schools of cod, halibut, and salmon consume these smaller fish before they themselves become food for a sea lion or other larger animal.

Daily, each gray whale strains several tons of plankton from the sea. Surprisingly, these whales do not eat the larger fish. At Kalaloch, whales can sometimes be seen "blowing" beyond the breakers. This is but a brief pause from their annual 6000 mile (9700 km.) migration from Baja California's winter calving grounds to summer feeding grounds in Alaska.

Abundant food attracts over 75 species of coastal birds, including loons, grebes, cormorants, puffins, murres, shorebirds and diving ducks.

The warm Japanese current holds coastal water temperatures to 45-55 degrees F. all year. The term "warm" can be confusing; these waters are warm enough to guarantee over 330 frost-free days annually, but cool enough to always discourage swimming.

AT THE OCEAN'S EDGE: Tidepools

Along this coast, the moon and sun exert forces that cause two high tides and two low tides every 24 hours and 50 minutes. The ebbing tide finds the shore dotted with tidepoolsisolated water pockets contained among the rocks. To the tidepool creatures, low tide means exposure to drying sun rays; high tide threatens with a pounding surf, but also brings promise of fresh food. There are always the problems of finding food, avoiding enemies, and securing a place to attach one's self in the crowded tidepool.

Get down on your knees and explore a tidepool. See how its curious inhabitants handle the challenges of living in this unique environment that is sometimes land, sometimes water.

The limpet has a flattened shell to reduce the impact of crushing waves. Perwinkle snails and turban snails prevent moisture loss by sealing themselves with small trap doors. Anemones accomplish the same thing by covering their soft bodies with broken shells. Creatures unable to find a vacant rock may attach themselves to other animals. Starfish remove such "freeloaders" by special pincers used to clean their backs.

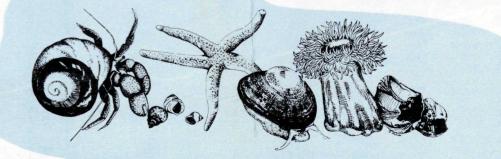
Volcano-like barnacles stand on their heads and strain minute food items from the sea with feathery feet. The hermit crab, living in an old snail shell, scavenges dead material from the tidepool's bottom.

TIDAL TID-BITS

- Waves break on this coast with a force of up to 2 tons per square inch.
- Trees ripped from riverbanks are carried to sea, battered by surf, and tossed up on the beach . . . as driftwood.
- The thin-shelled razor clam can dig into the sand as fast as 12" (30 cm.) per minute.
- The giant kelp can grow a foot per day-it is the world's fastest growing plant.

PLEASE leave tidepool creatures for others to enjoy. Starfish and other animals will NOT live when carried home in a bucket; they shrivel and smell when dry.

> The sea spat out on the Olympic shore logs and weeds and shells galore. It offered from its cool green depths treasures to choose, to love, to be LEFT.





STOP, THINK . . .

WHETHER YOU STROLL FOR AN HOUR OR BACKPACK FOR A WEEK, ARE THE OLYMPIC BEACHES WHAT YOU EXPECTED?

- -Rip currents, cold water, and hidden rocks make swimming very hazard-ous. There are no lifeguards.
 - Logs tossing in the surf can kill.
 - -Weather changes quickly-from warm and sunny to cold and wet-be prepared.
 - -Walk cautiously on beach logs and rocks; they are slippery and can tip or roll, causing a fall.
 - When parked at a trailhead or beach, try not to leave valuables in your vehicle. Avoid rip-offs.

FOR A FEW HOURS: Day Hiking

You can drive to Rialto, First, and Kalaloch Campground Beaches, but a short walk is required to reach most of Olympic's 50 miles (80 km.) of beaches.

Kalaloch: Fairly steep, 5-10 minute trails lead to Beaches No. 1-6 and Ruby Beach. Down on the beach, one can stroll as far as desired in this day-use area, no overnight camping is permitted. **Mora-La Push:** Hole-in-the-Wall is a wave-carved arch 1 mile (1.8 km.) north of Rialto. Second and Third Beach trails both lead about a mile (1.8 km.) through the woods to secluded beaches. Lake Ozette: A 3 mile (5 km.) trail made of cedar planks leads from the Ranger Station to Cape Alava. Strong hikers can hike the Alava-Sand Point-Ozette triangle (9.3 mi.-15 km.) in a day, but most make it an overnight. The WSU Excavation is just north of Cape Alava.

BACKPACKING: A Chance to Sleep With the Surf.

Both the South and North Wilderness Coasts are open to backpackers. You can hike part-way along either coast, then retrace your steps. Through-hikers must arrange their own transportation between trailheads; there is no public transportation. Three or four days are recommended for each hike. Maximum group size is 12 persons for camping. Have a good trip.

Dogs: are not permitted in the backcountry, and are HIKING often an infringement on the rights and experience of fellow hikers.

Terrain: is not all sand; route can be logs, forest, rocks, or cobbles. N Trail Markers: (orange and black) show beginning of of trails at beach and lakeshore.

- Headland Trails: lead over points that can't be rounded. They receive minimal maintenance and are usually steep S and muddy.

Destruction Island

CAUTION

Creeks: must be forded; Hoh and Quilleute Rivers cannot be crossed at beach. Bears, Skunks, Mice, Crows: will get into your food; hang it up.

Drinking Water: "Ice-tea" stain from root tannins in creeks is not harmful, but Giardia organisms can make you ill. Boil or chemically treat all drinking water.

Clams and Mussels: can build up toxic poisons in body tissues at certain times of year; check seasons.

Backcountry Permits: are free and required; obtain at trailhead (overnighters). Backcountry Permits: are free and required; obtain at trailhead (overnighters). Minimize Your Impact: dismantle driftwood shelters; pack out trash; use a camp stove; don't build fire against logs. Be able to answer the question "Will anyone know that I camped here?" with a firm "No." Winter Beach Hiking: during winter storms, very high tides, onshore winds and storm runoff make some routes impassable even at low tide. In this situation, turn back the way you came. Don't risk your life. Strong Winds: can make tides higher than tide table indicates. Tidal Wave: a Coast Guard heliconter will fly over the heach advising you

Tidal Wave: a Coast Guard helicopter will fly over the beach, advising you to leave the beach and giving time tidal wave will strike. Alert other campers nearby; then head inland to higher ground, using the trails if possible. Wait for word from Coast Guard before returning to beach. There may be more than one wave.

NEVER ATTEMPT TO HIKE AROUND A POINT OR HEADLAND ON AN INCOMING TIDE.

Rising water can cut you off from advancing or retreating. This fool-ish act has cost people their lives. Carry a tide table or copy tide times. KNOW when tides occur, DON'T GUESS.

- signifies points or areas that should NEVER be rounded, regardless of the tide. ALWAYS use overland trail. DANGER:
- signifies points or areas that can be rounded at low tide. If no headland trail exists, hiker may have to wait out tide until point can be safely CAUTION: rounded.

"DANGER" and "CAUTION" mentioned above, refer to designated areas on the map.

North Wilderness Coast Hike Ozette to Rialto Bch. via Cape Alava (21.8 mi. - 35 km.)

Cape Alava: Watch for whales off-

- Cape Alava: Watch for whales off-shore. Hang food, Ozette River: wade at low tide. Sand Point: Bear problems-hang food high. Boil drinking water. Yellow Banks: CAUTION-round at low tide. Use rock tunnel at medium tide. Cliffs not feasible to scale.

- to scale. Norwegian Memorial to Cape John-son: Points small. Round at low son: tide
- tide Cape Johnson: CAUTION-round at half tide difficult to climb. Points immediately north and south of Cape are extremely dangerous and cannot be climb-ed, round at low tide. Lots of boulder-bopping Bich tide. of boulder-hopping. Rich tide-
- pools. Rialto Beach: Paved road 13 mi. (21 km.) to Hwy. 101 (No over-night camping So. of Ellen Ck.)

South Wilderness Coast Hike Third Beach trailhead to Oil City (15.8 mi. - 26 km.)

Teahwhit Head: DANGER-can be neither rounded nor climbed. Taylor Point: DANGER-use over-land trail. Scott's Bluff: CAUTION-Round at

- Scott's Bluff: CAUTION-Round at low tide, climb at high. At high tide, next point south may have to be climbed.
 Goodman Creek: DANGER-can't ford creek at mouth-use over-land trail.
 Mosquito Creek to Hoh Head: CAUTION-use beach route at low tide only (still must climb a few points). Overland trail be-gins at creek mouth.
 Hoh Head: DANGER-use overland trail.
- trail.
- trail. Oil City: No oil, no city. One half mile (.8 km.) from beach to parking area. Unpaved road 12 mi. (19.5 km.) to Hwy. 101.

