



Olympic National Park

Coast to Glaciers



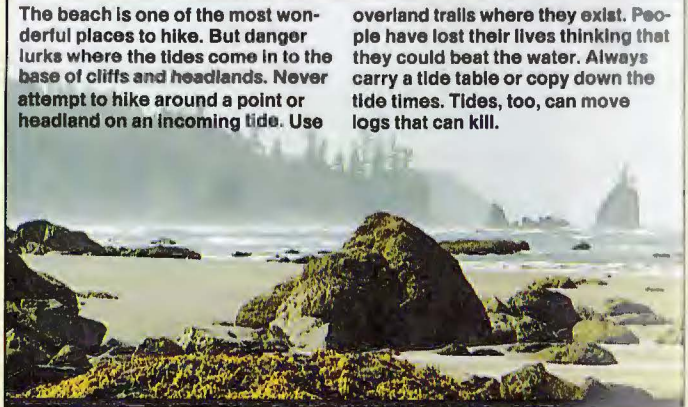
THE COAST

Some 57 miles of Pacific Ocean coastline form a vital component of Olympic National Park. This coastline has remained little changed over time except for the impact of the pounding surf and storms upon the mainland. The coastline looks much as it did when early Indians built their first villages upon these shores, thousands of years before European explorers arrived.

The coast is where the land meets the sea, vibrating with life and energy. Drift logs cast high on the beach; sculptured arches and sea stacks; the roar of crashing waves; the calls of gulls, bald eagles, and black oystercatchers; three-dimensional clouds; dramatic sunsets; the sheer vastness of the ocean and a myriad of other elements impress themselves upon you.

Scooping up a handful of sand, you discover that it is virtually impossible for you to count the shades of colors or to classify shapes, so varied are the grains. At low tide you can walk toward the surf stopping at tidepools along the way. If you squat down and spend some time just looking, you will be amazed at what you see as your eyes start ferreting out objects that look like rocks, but which in fact are small sea animals. Slowly extending your horizon, you may see some raccoons feeding on shellfish that are reachable now that the tide is out and the danger of the surf is withdrawn. You are likely to find the footprints of shore birds all over the beach, but you will also find those of bear, deer, raccoons, river otters, and a host of other creatures.

Beware of Tides and Logs



The sheer quantity of flotsam and jetsam cast upon the beach is astonishing. Probably the most exotic are the glass floats that Japanese fishermen use to support their nets. It takes the ocean currents about one year to carry the floats across the Pacific to the Washington coast. Among the debris cast upon the shores are huge trees felled from inland stream bank sites by rushing rivers and washed out to sea. They are repeatedly thrown and banged against sand and rock. Limbs are removed and trunks are sanded smooth by the action of the waves. Finally a great storm may toss them high on the beach to join many others.

The Olympic coast is a wild place, a place for endless exploration.



FORESTS

Superlatives about the trees abound, for several specimens reach record sizes. In some locations, the forest canopy is so thick that falling snow is caught in the trees and never reaches the ground.

There are four basic types of forests on the Olympic peninsula: Temperate rain forest, lowland, montane, and subalpine. Temperate rain forest is found at low elevations along the Pacific Ocean coast and in the western-facing valleys of the peninsula where lots of rain, moderate temperatures, and summer fogs exist. Sitka spruce is the dominant tree, but trees typical of the lowland forest also grow here, including western redcedar.

Lying above the temperate rain forest along the coast and in the western-facing valleys and growing from the lowest elevations inland from the coast is the lowland forest. You will not find Sitka spruce here, but may see grand fir. Western hemlock will probably be the most common tree, although stands of Douglas-fir may prevail where fire or drier conditions caused by the rain shadow give them an advantage. Western redcedar is never an abundant tree, but its gradual disappearance is a true indicator that the upper limits of this zone have been reached.

Gradually the lowland forest gives way to the montane forest. Unless you are an expert you may have difficulty recognizing when the change occurs. If silver fir is present you know that you have moved into the montane zone, but in drier parts of the park, the montane zone may look much like the lowland forest, with the exception that the western redcedar will no longer be present.

As elevation increases, temperatures cool and more moisture falls as snow; growing seasons get shorter and the subalpine zone takes over. Silver fir grows here as well as in the montane zone, and in the western portion of the park may be prevalent. The presence of subalpine fir, mountain hemlock, or Alaska cedar groves assure you that this is the subalpine zone. The lower portion of the subalpine zone consists of continuous forest, but in the upper part of this zone the forest thins out. Delightful alpine meadows graced with wildflowers and glacial lakes often intermingle with stands of firs. Subalpine fir is especially well adapted to the heavy snows and cold temperatures experienced here. Its spire-like shape sheds snow. It also extends its lower branches under the snow, often putting down roots from them where they touch the ground. When the snow melts the trees may be surrounded by skirt-like arrangements of longer, lower branches.

Increasing elevation causes even more severe climatic conditions. Trees become fewer, shorter, and more misshapen. Trees may be mere shadows of their cousins living lower down the mountain. Here a 100-year-old tree may be only three feet tall. Eventually timberline is reached, beyond which trees do not grow, but a profusion of wildflowers often rewards your eye in a vivid display that is an effective foil to the scenery below, now visible because the trees no longer block the view.

From seashore to mountaintop Olympic is blessed with an incredibly rich plant community created by varying environments.

Olympic National Park welcomes you to a diverse and stunning world—a fog-shrouded coast with booming surf and wave-manicured beaches, spectacular alpine country dotted with sparkling lakes, lush meadows, glaciers, and North America's finest temperate rain forest. People have lived here for thousands of years, but the earliest inhabitants lived primarily along the coast taking food from the sea and berries, roots, and meat from the land. From the nearby forests they cut cedars that provided hulls for their canoes, building materials for their lodges, and many of the miscellaneous items of



Temperate rain forests are rare. They can be found only in New Zealand, southern Chile, and here on the northwest coast of the United States in the valleys of the Quinault, Queets, and Hoh rivers. What defines a rain forest quite simply is rain—lots of it. On the Olympic coast precipitation averages 145 inches, more than 12 feet, every year. The mountains to the east also protect the coastal areas from severe weather extremes. Seldom does the temperature drop below freezing in the rain forest and summertime highs rarely exceed 80°F. The dominant species in the rain forest are Sitka spruce (1) and western hemlock; some grow to tremendous

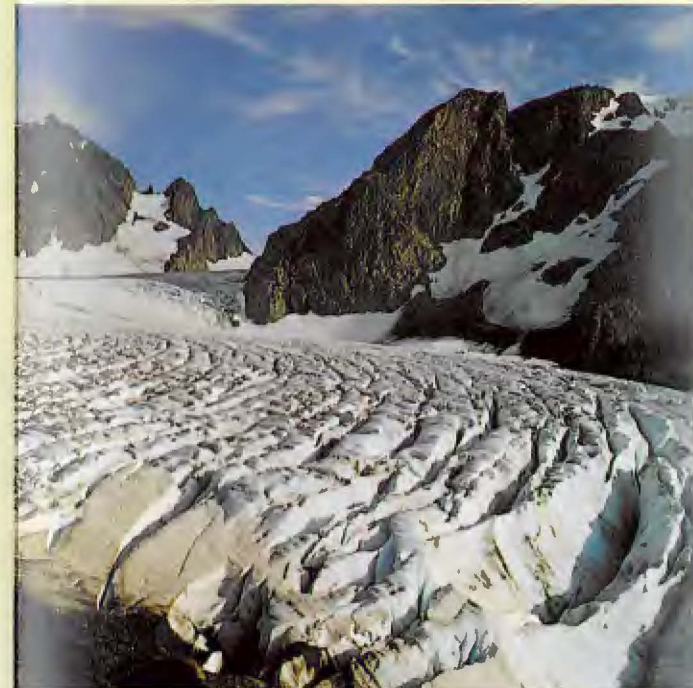
everyday life. By any standard the Indians of the Olympic Peninsula lived a sophisticated, well-ordered life in 1592, when the first European—Juan de Fuca—may have come to these shores. Reliable evidence of European penetration is not available until 1774, when Juan Perez sailed along this coast. In the next 25 years a bevy of British, American, and Spanish explorers visited the area. The most enduring work was done by Robert Gray, an American, and George Vancouver, an Englishman. Both men explored the area thoroughly, establishing rival claims to this land for their own countries. Not until 1885 was any real attempt made to explore the interior of the Olympic Peninsula. That year Lt. Joseph P. O'Neil led the first documented expedi-



Photographs: Roosevelt elk by Tom and Pat Leeson; Salmonberry by Pat O'Hara; remainder by Russell Lamb

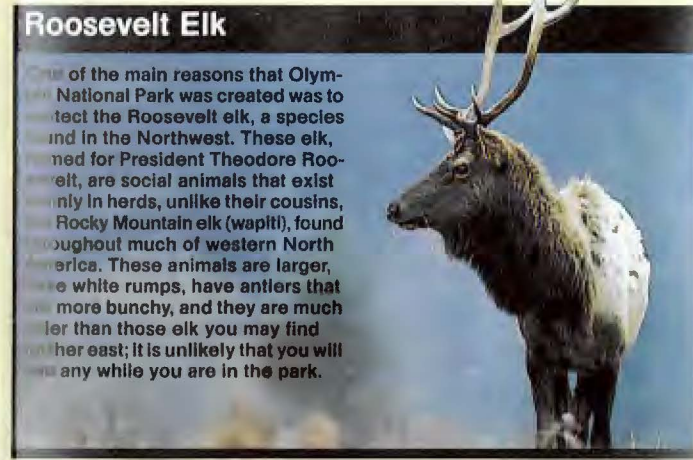
size, reaching 300 feet in height and 23 feet in circumference. Douglas-fir, western redcedar, bigleaf maple (2), red alder, vine maple, and black cottonwood are also found throughout the forest. Nearly every bit of space is taken up with a living plant. Some plants even live on others. These are the epiphytes, plants that do not come into contact with the earth, but also are not parasites. They are partly responsible for giving the rain forest its "jungle" appearance. Mosses (spike moss 3), lichens, and ferns (licorice fern 4 and sword fern 5) cover just about anything else. Sorrel (6) is also a common ground cover. But because of this dense

tion into the interior. In 1889-90 the Press expedition led by James Christie made a north-south crossing in five and one-half months. In 1890 Lt. O'Neil returned and made an east-west crossing. Slowly a movement got underway to set aside some of the peninsula as a national park. In 1897 President Grover Cleveland created the Olympic Forest Reserve, a portion of which President Theodore Roosevelt designated a national monument in 1909. In 1938 President Franklin D. Roosevelt signed legislation creating Olympic National Park, a place for the soul to expand and for the mind to be refreshed with the beauty of life—a place of serendipitous discovery.



MOUNTAINS

The Olympic Mountains are not very high—Mount Olympus, the highest, is just under 8,000 feet—but they rise almost from the water's edge and intercept moisture-rich air masses that move in from the Pacific. As this air is forced over the mountains, it cools and releases moisture in the form of rain or snow. At lower elevations rain nurtures the forests while at higher elevations snow adds to glacial masses that relentlessly carve the landscape. The mountains wring precipitation out of the air so effectively that areas on the northeast corner of the peninsula experience a rain shadow and get very little rain. The town of Sequim gets only 17 inches a year,



while less than 30 miles away Mount Olympus receives some 200 inches falling mostly as snow.

These mountains have arisen from the sea. For eons, wind and rain washed sediments from the land into the ocean. Over time these sediments were compressed into shale and sandstone. Meanwhile, vents and fissures opened upon the ocean floor and lava flowed forth, creating huge underwater mountains and ranges called seamounts. As the plate upon which this portion of the ocean floor was located inched toward North America about 35 million years ago, most of the sea floor went beneath the continental land mass. Some of the sea floor, however, was scraped off and jammed against the mainland, creating the dome that was the forerunner of today's Olympics. Powerful forces fractured, folded, and overturned rock formations, which helps explain the jumbled appearance of the Olympics. Radiating out from the center of the dome, streams, and later a series of glaciers, carved peaks and valleys, creating the beautiful, craggy landscape we know today. Ice age glacial sheets from the north carved out the Strait of Juan de Fuca and Puget Sound, isolating the Olympics from nearby landmasses. Surrounded on three sides by water and still crowned by alpine glaciers, the Olympics retain the distinctive character that developed from their isolation. Several plants and animals are unique to the Olympics—examples of how genetic diversification occurs when geographical isolation exists. The most striking example is the Olympic marmot, with its distinct chromosomal and behavioral patterns. Others include Flett's violet, Piper's bellflower, Olympic mountain daisy, Olympic chipmunk, Olympic snow mole, and Beardslee and Crescenti trout, as well as others.

Visitor Information

Visitor centers are located at Port Angeles and at the Hoh Rain Forest. Both have exhibits, publications, maps, and staff members who can answer your questions. Schedules for campfires, nature walks, and other interpretive programs are posted in the visitor centers and campgrounds.

Accommodations Several motel units, cottages, cabins, and lodge rooms are available within the park. It is advisable to make reservations well in advance. Names, addresses, and telephone numbers are: Kalaloch Lodge, HC 30, Box 100, Forks, WA 98331, 206-962-2271; Log Cabin Resort, 6540 East Beach Road, Port Angeles, WA 98362, 206-928-3245; Lake Crescent Lodge, HC 62, Box 11, Port Angeles, WA 98362, 206-928-3211; Sol Duc Hot Springs Resort (open Memorial Day to mid-September only), P.O. Box 2169, Port Angeles, WA 98362, 206-327-3583. For information about accommodations outside the park write to: Olympic Peninsula Travel Association, P.O. Box 625, Port Angeles, WA 98362; or to the Olympic Peninsula Resort and Hotel Association, Colman Ferry Terminal, Seattle, WA 98104.

Supplies Gasoline and groceries are available at Fairholm General Store and Kalaloch Lodge; groceries only can be bought at Sol Duc Hot Springs. A laundry is at Log Cabin Resort.

Horseback Riding A list of stables and outfitters can be obtained at visitor centers or by writing the superintendent. Check for restrictions or closures to stock in certain sections of the backcountry.

Mountaineering Climbers are asked to register and to show that they have standard climbing gear at the ranger station nearest their route. Never climb alone or attempt technical climbs unless you are with experienced climbers and have proper equipment.

Winter Sports Ski and snowshoe rentals, ski tow, and ski instruction are all offered at Hurricane Ridge.



Backcountry The listing below is a key to some backcountry locations that have water and are shown on the map on the reverse side. Remember that backcountry use permits are required for all overnight stays. The grid coordinates will help you find the site.

- 1 Ericson's Bay B1
- 2 Calawah D5
- 3 Bogachiel E5
- 4 Flapjack E5
- 5 Fiftenteenth E6
- 6 Hyak D6
- 7 Twentynemile D7
- 8 Mink Lake D7
- 9 Sol Duc Falls D7
- 10 Upper Sol Duc D8
- 11 Sol Duc Park D8
- 12 Hoh Lake E8
- 13 Lunch Lake D8
- 14 Round Lake D8
- 15 Deer Lake D7
- 16 Mount Tom Creek E7
- 17 Five Mile Island E7
- 18 Olympus E8
- 19 Elk Lake E8
- 20 Glacier Meadows E8
- 21 Appleton Pass D8
- 22 Boulder Creek D8
- 23 Boulder Lake D8
- 24 Happy Lake C8
- 25 Sourdough C7
- 26 North Fork Sol Duc D8
- 27 Lake Mills D9
- 28 Dodge Point E9
- 29 Lillian D5
- 30 Marys Falls E10
- 31 Canyon Camp E10
- 32 Elwha E10
- 33 Stony Point E10
- 34 Drums E10
- 35 Tipperary F10
- 36 Hayes River F10
- 37 Wilder F10
- 38 Chicago Camp E9
- 39 Happy Hollow F9
- 40 Elwha Basin F9
- 41 Divide G9
- 42 Sixteenmile G9
- 43 Twelvemile G9
- 44 Trapper G9
- 45 Francis Creek G9
- 46 Wolf Bar H9
- 47 Irelly Lake H8
- 48 Three Lakes H8
- 49 Prune G8
- 50 Lake Beauty G9

The Backcountry As a backpacker you may encounter hazards, you might get wet, you could get a blister or two, and you will have to work hard to see all that Olympic National Park has to offer. But if you enter the backcountry as a prepared and informed hiker, you are guaranteed an unforgettable experience. Please help

Fishing Licenses are not required, except that a Washington State special punchcard is necessary when fishing for steelhead and salmon. Seasons are generally the same as for waters outside the park. Regulations are available at visitor centers and ranger stations. Boats can be rented at Fairholm Visitor Service Area, Log Cabin Resort, and Lake Crescent Lodge.

Beach Hiking When hiking along the beach, round the out-lands only on the outgoing tide to avoid being trapped by the incoming tide. Use overland trails where they exist.

Regulations • Stay on the trail: short-cuts cause erosion. • Be prepared for sudden and extreme weather changes. • Put cigarettes out. • Feeding animals is prohibited and is unhealthy for them. • Make sure a wood fire is out before you leave it. • Dogs and cats are prohibited except in designated areas. • Vehicles are not allowed off the park roads.

Administration Olympic National Park is administered by the National Park Service, U.S. Department of the Interior. For more information, write to: Superintendent, 600 East Park Avenue, Port Angeles, WA 98362.

preserve the wilderness by observing the backcountry regulations and by leaving no trace of your stay. Backcountry use permits are required for all overnight stays. They are free and can be obtained at trailheads and ranger stations.

Sanitation Use privies when available, do not dump garbage in them. Otherwise dig a small hole at least 100 feet from a water supply and thoroughly cover when finished. **Campsites** Camp in an established site when one is available. Avoid areas marked for restoration, where jute netting and small plants have been placed to help revegetate damaged soil. On the coast, camp on the beach rather than in the forest. **Fires** The use of stoves is recommended throughout the park. If you make a wood fire build it below timberline in an existing fire ring. On the beach be sure to make your fire away from the piles of driftwood. West of the Elwha and North Fork of the Quinault, only stoves are allowed above 3,500 feet. East of this line only stoves must be used above 4,000 feet. (See map on reverse side.)

Water Even though the water looks cool and refreshing, it can contain organisms that cause giardiasis, a debilitating intestinal disorder. Either pack in your own water, boil stream and lake water vigorously for one full minute, or check with rangers regarding chemical treatment. **Firearms** Firearms are prohibited throughout the park.