## RAIN FOREST OF OLYMPIC NATIONAL PARK

The rain forests are very important environments of Olympic National Park. The park was established in 1938 to protect, without impairment, the rain forests and other priceless environments as well.

There are three interesting rain forest valleys situated on the ocean, facing west side of the park: The Quinault, Queets and Hoh Valleys.

The rain forests have one thing in common: an abundance of moisture. The average precipitation in these valleys is 145 inches a year, with most of the moisture falling from late fall to early spring. In contrast, the summer season is comparatively dry with many days of clear and sunny weather. Linked with the heavy precipitation are moderate temperatures. Winter lows seldom go below freezing, and summer highs rarely exceed 80 degrees F. The overall climate is wet, but quite mild in these low elevation valleys. This temperate situation is indeed reflected in the biological environment.

The rain forest environment is notable for its quantity and quality of vegetation. There is hardly a square inch of soil that is not utilized by plants. Plants here range in size from mosses a half inch in height to giant spruces 300 feet tall. The ground cover is very much part of the overall scene, but it is usually the large forest trees and their manner of growth that attracts attention.

Sitka spruce and western hemlock are the dominant species over Douglas-fir, western redcedar, bigleaf maple, red alder, vine maple and black cottonwood. The bigleaf maple is prime habitat for luxurious growths of <u>epiphytes</u> such as clubmoss and licorice fern. Epiphytes are plants that live their entire life above ground on trees, but do not parasitize the trees. On the ground is a tremendous variety of flowering plants, mosses and ferns too numerous to list here.

The regeneration of the rain forest is a never-ending process. A strong wind-storm might topple shallow-rooted trees, both dead and live specimens. After a number of years, the fallen trees will become nurse logs for spruce and hemlock seedlings. At first, hundreds of young trees grow on the nurse log. Eventually by competition, only a few trees survive to form a colonnade of mature trees. In time, trees of this colonnade will fall to the forest floor and become nurse logs to perpetuate this phenomenon of the rain forest.

Woven into the fabric of the rain forest is a population of animals; all interrelated to each other and to their environment; insects, reptiles, amphibians, birds and mammals. The most prominent animal forms are the birds and mammals. The varied thrush, western robin, winter wren, pileated woodpecker, gray jay, junco and raven are here. The Roosevelt elk, black-tailed deer, cougar, black bear, otter, Douglas squirrel, jumping mouse and shrew are found here also.

The Roosevelt elk, though wary of human presence, is seen much of the year in the rain forests. The elk live in the forest from late fall to spring. With the coming of summer, most of the herds migrate to their summer range in the high county, leaving only a token population in the lowlands.

The Hoh Valley is the most accessible of the tree rain forests. A paved road leads 19 miles in this area from Highway 101. At the end of the road is a visitor center (open daily through the summer), two self-guiding nature trails,

a campground and a picnic area. The Hoh is also the starting point for the upriver hiking trail which terminates in 18 miles at the Blue Glacier on the flanks of Mount Olympus. During the summer, campfire talks on the values of the rain forest and Olympic National Park are presented nightly by naturalists at the Hoh Campground.

The Queets and Quinault rain forests are accessible by gravel roads and each area has a small campground and access to nearby hiking trails.

The National Park Service hopes that you will have many opportunities to explore the rain forest and other environments of the Olympic National park.

by Robert W. Kaune, Jr., Park Naturalist