To PRESERVE...

By Susan Schultz, Park Historian

"...to conserve the scenery and the natural and historic objects and the wildlife..."

When Captain George Vancouver explored and charted the waters surrounding the Olympic Peninsula for Britain, nearly two hundred years ago, he noted the slopes of the peninsula rising from the beaches, "entirely covered with trees... until the forest reached a range of high craggy mountains, which seemed to arise from the woodland country in a very abrupt manner... their summits covered with snow."

Almost one hundred years later Washington's Territorial Governor Eugene Semple remarked that the Olympic Mountains remained unexplored and unknown, "as though nature had designed to shut up this spot for her safe retreat forever." In December 1889 the Press sponsored one of the first and certainly the best publicized expedition into the Olympic Mountains. The Press Expedition entered the Elwha Valley during one of the snowiest winters in the peninsula's history and emerged thin and dishevelled from the Quinault Valley almost six months later (see related article page 2).

A few months later, July through September 1890, Army Lt. Joseph P. O'Neil led a group of enlisted men, three scientists from the Oregon Alpine Club, and a pack train of eleven mules on an east-to-west reconnaissance across the peninsula from Hood Canal to the Pacific. O'Neil recommended that the interior of the Olympic Peninsula would "serve admirably for a national park. There are numerous elk — that noble animal so fast disappearing from this country that should be protected."

In 1897 most of the forested land on the peninsula was included in the Olympic Forest Reserve (later Olympic National Forest). During the early 1900s Washington State Congressmen introduced various bills to establish a national park or an elk reserve on the Olympic Peninsula, but none was successful. Then in 1909 President Theodore Roosevelt, for whom the Roosevelt elk was named, issued a proclamation establishing Mount Olympus National Monument, within the national forest, to protect the summer range and breeding grounds of the Roosevelt elk. On June 29, 1938, President Franklin D. Roosevelt signed the legislation establishing Olympic National Park.

The fundamental purpose of a national park is "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." — from 1916 act establishing the National Park Service.

Parks attempt to allow ecological relationships to persist within their boundaries as nearly as possible to the conditions that prevailed when an area was first visited by people from western cultures. A wilderness park such as Olympic thus represents "a vignette of primitive America."

The rocky western wilderness coast presents the same wild aspect now as when Captain George Vancouver observed it from the deck of his ship Discovery. Some of the same towering trees are still standing. Herds of noble elk that Lt. O'Neil sought to protect are today thriving within the park. Blazes axed into trees by the Press Expedition and cabins of peninsula pioneers can still be found along the Elwha Valley trail.

Olympic National Park joins Washington State in celebrating its Centennial and preserving America's heritage.
WHERE MAN IS A VISITOR
By Ruth Scott and Martha Dearstyne, Resource Management

"A wilderness," Congress stated 25 years ago, "is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

In 1974, when wilderness was officially proposed within Olympic National Park, man was only a visitor, but one who had already had great impact on the resource. Increasing numbers of hikers are visiting the Olympic high country since the 1960s. When they wander off the main trails and crisscross fragile heather and huckleberry meadows, they unintentionally create a maze of unplanned trails. Their campsites ring pristine lakes with large dusty tracts of barren mineral soil. This destroys the protective layer of plants and shallow organic topsoil, leaving areas vulnerable to erosive rain, snow, wind, and hikers' boots.

"...unveiling the mystery which wraps the landscape encircled by the snow capped Olympic range."

James Christie, a self-described frontiersman "tried in all the vicissitudes of mountain, forest and plain life," volunteered to organize an expedition that the Press would finance. Christie got together a troop of six men, with an "abundance of grit and manly vim," four dogs, two mules, and about 1500 pounds of supplies. On December 8, 1889, the party left Seattle by steamer, "causing a good deal of remarks...on account of our show of arms and dogs" on our way to the wharf.

The explorers planned to follow the Elwha River into the heart of the Olympic Mountains. They camped near the river and cut timber for a 30-foot flat-bottomed boat to transport their supplies upriver. The boat, christened Gertie, was launched December 31, and immediately "she began to take in water like a thirsty fish." But after 12 days of poling, pushing, and towing the awkward craft upstream through rapids and logjams, sometimes wading chin-deep in the icy water, the explorers abandoned Gertie.

During this winter of record snowfall, three feet of snow fell in the Elwha Valley on February 4, with snowflakes "as large as an after-dinner coffee cup." Consequently, the explorers spent most of the first four months of the Elwha Valley, not reaching the high county until the end of April.

By the time the men climbed into the mountains at the head of the Elwha, they were quite ragged.

By November 16, 1888, when President Reagan signed into law a bill designating 95% of Olympic National Park as wilderness, the imprint of man was ubiquitous. The agency must carry out the National Park Service mandate to conserve and provide enjoyment yet leave the areas "unimpaired for the enjoyment of future generations" and the Wilderness Act mandate to protect and manage the land "so as to preserve its natural conditions."

In the 1970s the park began to restore native plants and prevent further erosion of fragile subalpine areas. In 1988, monies collected from park entrance fees boosted these efforts into a long-term parkwide wilderness revegetation program to preserve and restore damaged areas.

The project brings together resource managers, rangers, trail crew members and volunteers. Individuals prepare transplanting sites by breaking up compacted soil and replacing lost soil components. They collect seeds and cuttings from areas targeted for recovery, and propagate them in the park's greenhouse. After a summer's growth, they transport starts to the recovery sites, plant and water them. Workers also sow seeds directly onto damaged areas.

Volunteers are needed spring through autumn to sow seeds, report starts, prepare backcountry sites and transplant plant material. To offer assistance, please contact Ruth Scott, Natural Resource Specialist, Olympic National Park (206) 452-4501.

Olympic National Park's wilderness is a priceless heritage, set aside for our delight and our wise stewardship. We must continue to protect and restore the unique features that make this park worthy of national park and wilderness designation.

A PRESSING EXPEDITION -- ONE HUNDRED YEARS AGO
By Susan Schultz, Park Historian

A few weeks before Washington became a state, the Seattle Press newspaper interviewed Elisha Ferry, the territorial governor, who "expressed himself very forcibly about the advisability of having the area between the Olympic Mountains and the Pacific Ocean explored." The Press called for "hardy citizens...to acquire fame by..."

"Tougher looking tramps never bummed along the roadside than the once well-dressed Press Exploring Expedition..."

"A piece of blanket served for a stockin'...of our boots there is little left but the soles...So much the less to pack over the mountains. At this rate, if we reach Grays Harbor with our ammunition belt we will be doing well. They were also hungry. They hadn't seen any game since reaching the high country, and had been surviving on flour soup for a week because their dogs had stolen the last of the bacon. Once across Low Divide, between the Elwha and Quinault watersheds, the group followed the Quinault River southwest. On May 18 they built a raft and floated the remaining distance down the river. After traveling only a mile and a half, the raft was thrust by the rapid current into a pile of drift logs, throwing some of the party and their remaining gear into the water. Their packs, equipment, and scientific specimens were lost. Fortunately, their journals, charts, and camera film were saved.

Finally on May 20, 1890, after nearly six months in the Olympic Wilderness, the Press Expedition reached the Pacific Ocean at the mouth of the Quinault. Theirs was the first expedition to cross the Olympic Peninsula from north to south and keep records and maps of the area.

During their journey, the party named many geographical features now located within the park. These names -- such as Mount Christie, the Bailey Range (after the publisher of the Seattle Press), Press Valley, Geyser Valley (for low rumbling sounds of geysers, now thought to have been the drumming of ruffed grouse, as no geysers exist in the valley) -- are still in use on this hundredth anniversary of the expedition. The Press Party's set six blazes along the Elwha Valley trail. The route the expedition blazed is today a hiking trail through Olympic National Park.
SEEING THE OLD GROWTH FOREST THROUGH THE TREES
By Scott Mills and Richard Fredrickson, Natural Science Studies

One hundred years have passed since Washington became a state, less than half the time needed for a forest to become old growth. Large live trees, large standing dead trees, multiple-layered canopies and large amounts of downed and decaying logs are unique old growth qualities which provide critical habitats for a rich variety of plants and animals.

Less than 20% of the old growth forest which was present in the Pacific Northwest when European settlers arrived remains today. Olympic National Park has some of the finest examples of this unique and biologically diverse ecosystem.

Special old growth forest characteristics begin on the forest floor. Their soils maintain over 200 invertebrate species per square foot, a richness exceeding that of clearcuts tenfold. These invertebrates assist microbial organisms in breaking down logs that provide cover, nesting materials, and food for forest reptiles, amphibians, and small mammals.

Rotting logs benefit trees as well. Most coniferous trees cannot absorb adequate nutrients from the soil without the assistance of fungi that live in their roots. These fungi are dispersed by voles and mice, which in turn depend on rotting logs for food and protection.

Downed logs benefit tree seedlings, where they are ten times more likely to germinate than on the forest floor. On the logs, seedlings receive more protection from leaf litter, animal grazing, snow and material moving downslope.

Large logs are vital to streams in old growth forests. They provide food, feeding platforms and refuges from predators for hundreds of species of aquatic invertebrates, which are a rich food source for fish. Logs and other woody debris also increase fish populations by providing cover, storing important sediments and nutrients, and stabilizing channels from the high stream flows which often jeopardize fish habitats in winter. A recent study of Olympic Peninsula rivers found that side channels with woody debris supported eight times more juvenile coho salmon than side channels without woody debris. When salmon die, woody debris traps the carcasses, providing food for invertebrates and for the fish that eat these tiny animals.

Tree snags are standing equivalents of rotting logs, and are important to the richness of old growth forests. Snags are generally larger and more decayed in old growth, allowing easier excavation of cavities and contributing to the greater variety and number of birds wintering here than in younger forests.

Studies have found several bird species to be markedly more abundant in old growth forests, and some species to be dependent on them for survival. Chestnut-backed chickadees, red-breasted nuthatch, brown creepers, and red crossbills are all more common in old growth. Vaux's swifts and marbled murrelets most likely depend on old growth forests for life-giving food and shelter.

The northern spotted owl is the bird most commonly associated with old growth forests. Olympic Park has been involved in spotted owl inventory since 1985. In the last two years the focus has been on specific characteristics of old growth forest most important to spotted owls. The park is a unique study area with its diverse unharvested forests. Estimates on the amount of old growth within the park boundary range from 35% to 45% of the total acreage. Steep mountains, a strong precipitation gradient, and fires contribute to the variety of tree species, tree and snag size, canopy structure and log cover.

In 1988, researchers established transects along more than 70 miles of the park's trails and roads to sample owls and vegetation. At least 13 spotted owls responded to simulated calls. Early indications of this research suggest that the value of a multi-layered canopy for hunting prey and regulating body temperature, plus the value of large snags for nesting, roosting and as sources of flying squirrels (a preferred spotted owl prey), are old growth characteristics which may be of special importance to spotted owls in Olympic National Park.

Researchers believe that the park contains on the order of 40 to 50 spotted owl pairs. The density of this population is small compared to spotted owls in more southern old growth areas, and the park population is inadequate to ensure the long-term survival of the spotted owl on the Olympic Peninsula. Rather, the survival of the spotted owl, as well as many other species, depends on the complex web of life in old growth forests. This wildlife will require the continued maintenance of old growth ecosystems both within and outside the park.
**LAKE CRESCENT**

A windswept ridge high above the deep glacial lake for 11 miles. Facilities include Log Cabin Resort, East Beach Picnic Area, Lake Crescent Lodge, and Potlatch General Store, and some shuttle service.

**KALALOCH**

A small area in the Ozette area at Rialto Beach is a wheelchair accessible trail for viewing the surf.

**HURRICANE RIDGE**

The 17-mile road from Port Angeles to Hurricane Ridge brings you sea level by the subalpine meadows of the Olympic high country in 30 minutes. At an elevation of 3,230 feet, Hurricane Ridge (a.k.a. Deer Camp) offers sweeping views of Mount Olympus and the park's rugged coastline to the south, as well as panoramas of the Strait of Juan de Fuca and British Columbian coast.

**QUINAULT**

Great beaches for birding and photography. Visit the Quinault Interpretive Center, where you can see live salmon and learn about all aspects of salmon's life cycle.

**STAIRCASE**

Located on the north shore of the Sound, this Ranger Information Station (interna1) will be open most days from 10 a.m. to 5 p.m. Maps, maps, and publications are available. This area offers a delightful walk through the evergreen woods.

**HOODSPORT JOHN V. UPSAL RANGER STATION**

John V. Upsal Road is a two-lane, paved highway leading to the town of Hoodsport. It is located about one mile off Skykomish River Road and is a 20-minute drive from the Skokomish River. It is a beautiful place to stop and enjoy the scenery.

**POINTE RANKENS**

Pointe Rankens is an important place for birders and photographers. It offers a chance to see many different species of birds from a variety of habitats.

**PIONEER MEMORIAL MUSEUM**

Mount Rainier Museum is located at 900 N. 5th St. Port Angeles. Open daily from 9 a.m. to 5 p.m. The park is available to answer questions about campgrounds, trails, and scenic attractions.

**USPS/NPS SOLEIDUCK**

Joint Forest Service/Park Service Ranger Station located at 107110 Rialto Beach Rd. Map, brochures, and publications are available. Open daily 8:30 a.m. to 5:00 p.m. Wheelchair accessible. Phone number: (360) 374-2622.

**SOLEDUCK**

The Soleduck Road is a narrow, winding road that leads to the Soleduck River. It offers beautiful views of the surrounding landscape and is a popular spot for birding and photography.

**PORT ANGELES**

The Port Angeles visitor center is located at 3002 Mt. Angeles Rd. on the south side of Port Angeles. Open daily from 8:00 a.m. to 6:00 p.m. Park staff available to answer questions about campgrounds, trails, and scenic attractions.

**MARA**

Seven miles west of Port Angeles. Take LaPush Rd. just north of Forks. Fourteen miles off Hwy. 101. Tent and trailer camping two miles from Kalaloch Ranger Station. Map, brochures, and publications are available. Assistance may be needed on these trails.

**MORA**

Seven miles west of Port Angeles. Take LaPush Rd. just north of Forks. Fourteen miles off Hwy. 101. Tent and trailer camping two miles from Kalaloch Ranger Station. Map, brochures, and publications are available. Assistance may be needed on these trails.

**FORKS**

The Forks area is a popular place for birding and photography. It offers beautiful views of the surrounding landscape and is a popular spot for birding and photography.

**SUMMARY**

The Olympic National Park offers a variety of activities for visitors of all ages and abilities. From hiking and birding to camping and photography, there is something for everyone. Be sure to check the bulletin boards for information on current events and activities.
BE A JUNIOR RANGER

How would YOU like to become a Junior Ranger this summer? Junior Rangers learn about the park and the plants and animals that live there. They also learn how to be safe and careful visitors to the park. And most of all, Junior Rangers have FUN!

FOLLOW THESE STEPS TO BE JUNIOR RANGER.
1. Complete the activities on these two pages.
2. Collect a bag of litter and bring it to a ranger.
3. Go for a walk on one of the park nature trails with an adult. Be a careful observer of plants and animals along the way.
4. Attend a ranger-led walk, talk or campfire program. Be sure to get the ranger's signature at the end of the activity.

HAVE YOU COMPLETED ALL THE STEPS? CONGRATULATIONS! YOU'RE READY TO BE A JUNIOR RANGER! NOW BRING THIS SHEET WITH YOUR COMPLETED ACTIVITIES TO A RANGER TO GET YOUR JUNIOR RANGER BADGE.

WHAT'S WRONG WITH THIS WILDERNESS COAST PICTURE?
Circle the things that could do harm to you or to Olympic's wilderness coast.

ANSWERS:
- Cutting kelp beds and mussels
- Building a campfire in beach logs
- Swimming in ocean with strong undertow and large drift logs
- Shaping on rock lar
- Collecting lug worms from a tidepool
OLD GROWTH FOREST APARTMENT HOUSE

Animals live in all levels of the old growth forest, from deep within the soil to the tops of broken trees. Some creatures, like spotted owls, depend on this sheltering habitat for survival. Can you draw each animal in its proper home?

OLYMPIC'S BE-LEAF IT OR NOT!

Leaves help us identify plants. They also tell a story of each plant's struggle for survival. Bigleaf maple's large leaves have lots of surface area where they collect sunshine to produce food. Spines on devil's club and stinging hairs on nettle keep people and animals away. Sharp needles of Sitka spruce and pointed leaves of Oregon grape spell OUCH! Poison oak gives a rash to most people who touch it.

Draw a line between each leaf and its plant.

BACKCOUNTRY SAFETY

Hiking can bring many unexpected challenges. To protect yourself remember to bring the "ten essentials" on every day and overnight hike. Circle the ten items that could mean SURVIVAL.

Please remember that dogs are not allowed on park trails.
OIL SPILL UPDATE

On December 30 and 31, 1988, bunker oil from a barge accident off the coast of Washington washed ashore on Olympic's pristine beaches. Although more than 10,000 birds died during the 231,000-gallon spill, researchers feel that, due to the inert nature of the oil, there may be a lesser impact to intertidal marine life. However, only long-term research studies will be able to determine the extent of the damage. An intensive clean-up effort occurred this winter, but the South Yellowbanks area and beaches north of Norwegian Memorial are still being cleaned. Visitors to these areas may find pom-poms strung along the beach to soak up excess oil.

ODDS AND ENDS

Mountain goats were introduced to the Olympics in the 1920's, prior to the park's establishment. Today, 1000 non-native mountain goats are damaging subalpine plant communities. The park will continue its live capture and transport removal of goats this summer.

Please do not feed any wildlife in Olympic National Park. It is harmful to the animal and hazardous to you.

Free backcountry permits are required for all over-night travel in the backcountry.

Boil all backcountry water for one minute to avoid infection by Giardia, a microscopic intestinal parasite.

Bring rain gear and warm clothing! Hypothermia (a lowering of body temperature) may result from exposure to wet or chilly weather.

Drift logs are dangerous! Avoid swimming or walking near the water during storms or heavy surf.

Bicyclists beware! Travel around Lake Crescent can be hazardous due to heavy traffic on the narrow road.

Please! Pets are not allowed on park trails or in the backcountry.

Main park visitor-use areas charge a $3 fee for 7 consecutive days use at all entrances. A $25 annual Olympic Pass and free Golden Age Pass (age 62 and older) are available at entrance stations.

While traveling in the Port Angeles, Lake Crescent or Quinault areas, tune your radio to 1610 AM for park information.

NATURAL HISTORY ASSOCIATION

This newspaper is presented to you with the compliments of the Pacific Northwest National Parks and Forests Association, a non-profit organization which supports the informational and educational programs of Olympic National Park.

Many of the interpretive services you enjoy at this and other national parks are benefited by the assistance of cooperating associations. Through the sale of books and other materials, associations are able to make donations directly to the parks' interpretive programs.

PARK CONCESSIONS

A variety of services are available from park concessioners: Hurricane Ridge Lodge at Hurricane Ridge; Lake Crescent Lodge, at Barnes Point on Lake Crescent; Log Cabin Resort on the northeast shore of Lake Crescent; Fairholm General Store along Highway 101 at the western end of Lake Crescent; the Sol Duc Hot Springs Resort in the Sol Duc Valley; and Kalaloch Lodge, along Highway 101 on the coast.

HOW MANY MILES TO...

Olympic National Park contains approximately 900,000 acres and a wide variety of environments. Visiting a park with such size and diversity can require substantial driving. This mileage chart lists travel distances to some of the more frequently visited areas. It takes at least two days to sample the major sites of Olympic National Park. Some highlights are: Hurricane Ridge with spectacular mountain views, temperate rain forest at either the Hoh or Quinault, and coastal beaches at Mora or Kalaloch. To provide additional assistance, information centers are located in Port Angeles, Forks, the Hoh Rain Forest, the Quinault Rain Forest, and at Lake Crescent.

RELIGIOUS SERVICES

A Christian Ministry in the National Parks invites you to attend interdenominational religious services at campgrounds and concession facilities. Check bulletin boards for times and locations.