Almost a century ago, citizens nationwide recognized the spectacular beauty of the Puget Sound region, and later Congress established Mount Rainier, North Cascades and Olympic National Parks.

Preserved as national treasures, these parks draw millions of visitors from all over the world and offer a personalized connection to nature. Their very popularity has placed these parks in jeopardy. These three national parks struggle with increasingly tight budgets, as Congress faces conflicting funding priorities.

Many Americans have had a love affair with the national parks since Yellowstone - our first national park - was created in 1872. Today, the National Park Service is officially entrusted with preserving more than 350 national parks in the United States. But thousands of individual citizens, citizens who want to ensure that the best of America will be protected, assist the Park Service by volunteering their time and talents.

These men, women and youngsters who work side-by-side with National Park Service employees are called Volunteers in Parks, or VIPs. They are truly, Very Important People, and you can join their ranks. VIPs care about the parks - their past, present, and future - and care about the people who come to enjoy the parks.

VIPs work in almost every park in the National Park System helping the National Park Service in its challenging mission: To conserve the park's priceless natural and historical resources and to provide for their enjoyment in a way that will leave them unimpaired for future generations.

Their generous gifts of time and effort are invaluable. Volunteers patrol and help maintain trails. They rove subalpine meadows, monitor wilderness impacts and assist with water ecology studies. They work on revegetation projects, aid in controlling the spread of exotic plants and staff the park greenhouse. Volunteers supply resources and personnel for search and rescue responses. They staff visitor and hiker information centers and serve as campground hosts. Overall, volunteers provide a cornucopia of services and furnish needed labor to complete projects that would go unfinished without their help.

To apply for a VIP position at Mount Rainier National Park, or to receive more information on the VIP program, contact a park ranger at any visitor center or ranger station; or write Clay & Dixie Gatchel, Lead VIP Coordinator, P.O. Box 1344, Renton, WA, 98057-1344.

The National Park Service will be conducting visitor surveys during the summer of 1995 to gather information on how visitors use and experience the park. The information will be used to assist the park in developing management actions for the park's General Management Plan.

Two separate surveys will be conducted. The Visitor Enjoyment Survey involves requesting your participation by responding to a questionnaire. The Visitor Distribution Study involves surveyors located throughout the park, observing and recording visitor use patterns at selected park facilities and in the wilderness. Similar studies have been conducted at Grand Canyon and Arches National Parks and Independence Hall to incorporate visitor experiences into the NPS general management planning process and to help address management alternatives that affect visitor circulation throughout the park.
Mount Rainier is the highest mountain in Washington and boasts the largest glacial system in the 48 contiguous states. On its slopes are spectacular meadows of subalpine flowers and a skirt of old-growth Douglas-fir forest found in few other places. Mount Rainier is the majestic center of our nation’s fifth oldest national park.

National parks are fundamentally different from other recreation areas including city and state parks, WA Dept. of Natural Resources lands, or National Forests. In his book, Battling for the National Parks, former National Park Service Director George B. Hartzog, Jr. wrote that national parks provide...

"a sense of place in which to discover 'Whom am I', a place that is as constant as love, as never-changing as the cycle of the seasons, as joyous as the shriek of a child on Christmas morning, as exhilarating and re-creating as freedom itself...These parklands are more than physical resources. They are the delicate strands of nature and culture that bond generation to generation. They are...the benchmarks of our heritage..."

Mount Rainier National Park represents a profound expression of our national character. As a unit of the national park system, it is able to communicate, educate and renew in us the values we share in America’s unsurpassed natural beauty, unique history and cultural richness. As we look toward the park centennial on March 2, 1999, and move beyond that benchmark anniversary into the 21st Century, Mount Rainier National Park managers and staff are embracing a role of proactive leadership within the park. Strategic plans have been developed to enhance protection and stewardship of park resources, improve access for a diverse public, increase user enjoyment through education, and develop sustained and integrated programs of natural, cultural and social science resource management. These strategic management plans are now being put into action. Building on over 90 years of park history and experience, we are ready to meet the challenges of the next millennium with enthusiasm.

REGULATIONS

The rules and regulations in national parks help protect their special qualities. Please honor these rules even though they may differ from the ones you are accustomed to following at other outdoor recreation areas and city parks. For example:

- Collecting any plant materials, such as ferns, fungi, trees and bear grass, is prohibited.
- Collecting of berries for personal consumption is allowed in very small quantities (one liter per day). Commercial collecting is prohibited.
- Natural features (such as rocks) are to be left where they are, for all future generations to enjoy.
- Mount Rainier is famous for its wildflowers; do not pick them. Leave them for everyone to enjoy.

DON'T FEED THE WILDLIFE

Seeing wild animals is an important part of a visit to Mount Rainier National Park. As national parks are preserved for their natural values and processes we ask that you observe but do not feed the wildlife. Both birds and mammals are affected in many ways by well-meaning handouts. Birds are sensitive to the availability of food because they must eat about the equivalent of their body weight each day.

Small mammals such as chipmunks and golden-mantled ground squirrels all pass the winter hibernating. These animals require specific foods to fatten themselves for their long sleep. Our food does not supply the right fats and protein for these animals. Rodents do bite and may carry rabies and bubonic plague.

Bears quickly learn to associate people with food when offered handouts. Leaving food out or intentionally feeding bears can lead them to damage tents and vehicles, and to injure people.

The animals in the park are wild and should remain that way. We must be content to observe and appreciate them, rather than trying to intrude in their natural lives.

ENTRANCE FEES

Park entrance stations will be changing to an "honor system" for payment of entrance fees during periods when the entrance is not staffed by a park ranger. While in effect, visitors will place entrance fees in an envelope and deposit the envelope in a canister. Compliance checks will be conducted by law enforcement rangers.
**SERVICES & FACILITIES**

**Visitor Centers**
- Longmire Museum: 9 AM - 5:30 PM—daily.
- Paradise - Henry M. Jackson Memorial Visitor Center: 9 AM - 7 PM—daily.
- Ohanapecosh: 9 AM - 6:30 PM—daily through July 31
  - then 9 AM - 6 PM—daily through September 10.
- Sunrise: 9 AM - 6 PM—Sunday through Friday
  - 9 AM - 7 PM—Saturday.
- Carbon River Ranger Station: 9 AM - 5 PM—daily.

**Hiker Information Centers**
- Longmire: 8 AM - 6 PM—Sunday through Thursday
  - 8 AM - 7 PM—Friday
  - 7 AM - 7 PM—Saturday.
  - Permits available for overnight trips. The Center is located in the lobby of the large log and stone building behind the flagpole.
- White River: 8 AM - 4:30 PM—Sunday through Thursday
  - 7 AM - 9 PM—Friday
  - 7 AM - 7 PM—Saturday
  - then 8 AM - 4:30 PM—daily, September 5 through September 10. Obtain backcountry permits for overnight trips and hiking information in the ranger station at the White River Entrance.

**Food & Lodging**
- Longmire National Park Inn: Lodging desk 7 AM - 10 PM—daily. Dining room hours 7 AM - 8 PM—daily. For reservations call Mount Rainier Guest Services at (360) 569-2275.
- Longmire General Store: Open 8 AM - 8 PM—daily. Located near the National Park Inn.
- Paradise - Henry M. Jackson Memorial Visitor Center: 10 AM - 7 PM—daily. Food services, showers, and gifts.
- Paradise Inn: Hotel front desk open 24 hours—daily. Dining room 7 AM - 9 AM for breakfast
  - 12 nurong - 2 PM for lunch
  - 5:30 PM - 8:30 PM for dinner
  - Sunday Brunch 11 AM - 2:30 PM
  - Glacier Lounge 12 noon - 11 PM
  - Snack Bar open 9 AM - 8 PM—daily
  - Gift Shop (in lobby) 8 AM - 9 PM—daily. For reservations call Mount Rainier Guest Services at (360) 569-2275.
- Sunrise Lodge: Dining 10 AM - 7 PM—daily
  - then 10 AM-5 PM—Sunday, September 10. Food service and gift shop. No overnight lodging is available. Provided by Mount Rainier Guest Services.

**Showers**
- Paradise - Henry M. Jackson Memorial Visitor Center: 10 AM - 7 PM—daily. Located on lower level. Showers are also available outside the park in Ashford, Packwood and Eatonville.

**Gasoline**
- GASOLINE IS NOT AVAILABLE IN THE PARK. Service stations are located in the nearby communities of Ashford, Elbe, Packwood, Greenwater and American River. Be prepared - check your gauge.

**Firewood**
- Concrete Campground: 10 PM - 9 PM—daily
- then 10 AM - 5 PM—daily, September 5-17.
- Ohanapecosh Campground: 5 PM - 9 PM—Friday, Saturday and holidays.
- White River Campground: 5 PM - 9 PM—Friday, Saturday and holidays.

**GATHERING OF FIREWOOD IS NOT PERMITTED.**

**Campgrounds**
- Sunshine Point: Open year round. 18 sites. Located 6 miles west of Longmire and .25 mile east of the Nisqually Entrance. Site fee is $6 per night on a first-come, first-served basis. No group sites available.
- Ohanapecosh Parking Area: 200 campsites for tents and trailers, 5 group sites. Located 2.5 miles from Longmire on the Paradise Road. Site fee is $6 per night on a first-come, first-served basis. Only group sites can be reserved and cost $3 per night per person. Group Rock Campground is open until mid-October.
- Ohanapecosh: 205 sites, no group sites. Site fee is $10 per night on a first-come, first-served basis. The Ohanapecosh Campground is open until late October.
- White River: 117 sites, no group sites. Site fee is $8 per night; on a first-come, first-served basis. Campground is open through mid-September.
- Ipsut Creek: 29 sites, 2 group sites. Located at the end of the Carbon River Road. Site fee is $6 per night, on a first-come, first-served basis. Only group sites are available, and $3 per person per night. After September 4, there is no fee and no treated water. See page 12 for road closure information.

**Picnic Areas**
- Sunshine Point: Located 6 miles west of Longmire and .25 mile east of the Nisqually Entrance.
- Ohanapecosh: Located across the road from Ohanapecosh Campground. The picnic area is open until mid-October.
- Paradise: Located .25 mile below the Jackson Visitor Center. Picnicking is NOT allowed on the fragile meadows shown at Paradise.
- Tipsoo Lake: Located near Chinook Pass on Highway 410, 17 miles north of Ohanapecosh, and 11 miles south of the White River Entrance arch.
- Box Canyon: Located between Ohanapecosh & Paradise on Stevens Canyon Road.
- Sunrise: Tables located behind the Sunrise Visitor Center in a subpine setting.
- Carbon River: Picnic tables are located both at Falls Creek, 2 miles from the entrance, and in Ipsut Creek Campground.

**Post Offices**
- Paradise Inn: Open 8:30 AM - 9 PM—Monday - Friday
  - 8:30 AM - 12 noon—Saturday.
- Longmire National Park Inn: Open 8:30 AM - 5 PM—Monday - Friday
  - 8:30 AM - 12 noon—Saturday.

**Services of Worship**
- Interdenominational services of worship are conducted in the park during the summer. Worship services for major denominations also take place in the local communities. Check at visitor centers, bulletin boards and museum for information and schedules.

**ALL FACILITIES IN THE PARK ARE SMOKE FREE.**

**ACCESSIBILITY**
- Most COMFORT STATIONS and BUILDINGS are accessible or accessible with help.
- Accessible OVERNIGHT AC COMMODATIONS are available at Longmire National Park and Paradise Inns. Phone (360)569-2275 for reservations.
- PICNIC AREAS and CAMPGROUNDS (except Sunshine Point) in the park have accessible sites and toilets.

The first half of the Trail of the Shadows, around Longmire meadow, is WHEEL CHAIR ACCESSIBLE TO the Longmire cabin on a compacted dirt trail. A short, ACCESSIBLE boardwalk at Kautz Creek leads to an overlook of the 1947 debris flow and a view of the mountain. For more information or assistance, contact a park ranger at any visitor center or phone (360) 569-2211.
**Paradise**

### Audio-Visual Shows
**Daily**
10 AM - 6 PM
Twenty minute slide programs or movies are shown on the hour and half hour. Jackson Visitor Center Auditorium.

### Wildflower Walk
**Daily**
130 PM
1 hour — 1 mile. Explore the subalpine flower fields on this easy walk along trails through Paradise meadow. Meet at the Jackson Visitor Center flagpole.

### Nisqually Vista Walk
**Daily**
3 PM
1.5 hours — 1.25 miles. Discover the geology and glaci­ers of Mount Rainier on this easy walk to an excellent view of the Nisqually Glacier. Meet at the Jackson Visitor Center flagpole.

### Longmire

#### Carter Falls Walk
**Daily**
10 AM
2 hours — 2 miles. Experience the low­land forest along the Paradise River en route to Carter Falls. Meet at the bulletin board by the Ranger Station at Cougar Rock Campground.

**Ohanapecosh Campground Amphitheater**

#### Ohanapecosh Campground Campfire Circle
**Daily**
9 PM
7/1 to 7/31
8/1 to 9/10
45 minutes. Join a park naturalist each evening to explore Mount Rainier's natural or human history. Titles are posted on campground and visitor center bulletin boards.

#### Silver Falls Walk
**Monday, Thursday & Saturday 10 AM**
2 hours — 3 miles. Explore the forest prairie en­route to this breathtaking waterfall. Linger at the falls and return at your own pace. Meet at the Ohanapecosh Visitor Center flagpole.

#### Ancient Forest Walk
**Tuesday, Wednesday**
1030 AM
1.5 hours — 2 miles. Walk along the Ohanapecosh River to the Grove of the Patriarchs. Parking is limited. Meet at the trailhead on Stevens Canyon Road.

#### Ohana Meanders
**Tuesday & Friday**
2 PM
1 hour — 1 mile. Join a park naturalist for this short walk and discover something of interest about Mount Rainier. Meet at the Ohanapecosh Visitor Center flagpole.

### Sunrise—White River

#### Sunrise Sampler
**Monday through Wednesday 11 AM & 3 PM**
Thursday through Sunday 2 PM & 3 PM
30 minutes — 5 mile. Each walk explores a different subject. Meet at Sunrise Visitor Center.

#### White River Campground Campfire Circle
**Thursday through Saturday**
7/1 to 7/31
8 PM
8/1 to 9/10
730 PM
45 minutes. Explore the ecology, geology or history of Mount Rainier at a campfire program presented by a park naturalist. Titles are posted on campground and Sunrise Visitor Center bulletin boards.

#### Goat Watch
**Friday & Saturday**
7/1 to 7/31
630 PM
8/1 to 9/10
6 PM
1 hour — 1.5 miles. Join a park naturalist to discover the habits and haunts of our native mountain goats. Meet at Sourdough Ridge Trailhead, at Sun­rise.

#### Junior Rangers
**Saturday**
10 AM
1.5 hours. Children 6-11 years old are invited to join a park naturalist for a fun nature hike. Meet at the White River Campfire Circle.

#### Emmons Glacier
**Saturday**
130 AM
3 hours — 3.5 miles. Walk to a closeup view of the largest glacier in the contiguous United States. Bring water and a sack lunch. Meet at the Glacier Basin Trailhead in White River Campground.

#### Flower Powers
**Sunday**
10 AM
2 hours — 3 miles. Meet the native wildflowers of Yakima Meadows. Meet at the Sunrise Visitor Center flagpole.

### Pinnacle Peak Hike
**Friday**
10 AM
3 hours — 2.5 miles. Elevation gain 1050 feet. Bring lunch, water and proper clothing for possible sudden weather changes. Meet at Trailhead (west end of parking area at Reflection Lake.)

### Junior Rangers
**Saturday**
11 AM
45 minutes. Nature activities for 6-11 year olds may be held inside or outside depending on weather. Meet at the Jackson Visitor Center flagpole.

### Comet Falls Hike
**Tuesday & Thursday**
9 AM
3 hours — 3 miles. Elevation gain 900 feet. View a 320 foot waterfall and enjoy the forest and stream along Van Trump Canyon. Bring lunch, water and proper clothing for possible sudden weather changes. Meet at the Trailhead.

### Longmire Meadow Mosey
**Wednesday & Friday**
730 PM
1 hour — .5 mile. This walk focuses on the natural and human history of the Longmire area. Meet at the flagpole in front of the Longmire Hiker Informa­tion Center.

### Ohanapecosh Junior Rangers
**Saturday**
Ages 6 to 8
130 PM
Saturday
Ages 9 to 11
330 PM
1.5 hours. Children 6-11 years old are invited to a variety of nature activities with a park naturalist. Space is limited. Register early on Saturday (the day of the program) at the Ohanapecosh Visitor Center. Meet at the Ohanapecosh Amphitheater.

### Kid's Walk
**Sunday**
10 AM
1.5 hours. Children 6-11 explore Ohanapecosh with a park naturalist. Space is limited. Register on Saturday or Sunday (the weekend of the program) at the Ohanapecosh Visitor Center. Meet at the Ohanapecosh Visitor Center flagpole.

### Shapemakers
**Sunday**
1 PM
2 hours — 2 miles. Join a park naturalist and learn how the forces of fire and ice have affected Mount Rainier. Meet at Sunrise Visitor Center.

### Carbon River

#### Ipsut Creek Campground Campfire Circle
**45 minutes**
Join a park naturalist for a program in the campfire circle. Program titles and time are posted on the campground bulletin board and at Carbon River Entrance Station.

### Additional Programs
Titles and times are posted on the campground bulletin board and at Carbon River Entrance Station.
**SHADOWS OF THE PAST ~ LIVING HISTORY**

Imagine! You’re walking a moonlit trail around a lush meadow surrounded by towering trees. Tall grass blowing in a cool evening breeze and a star filled sky add to the tranquility of the moment. Suddenly, from the dark you hear a sound...a voice from the past.

This unique opportunity to witness "Shadows of the Past" can be yours this summer. Join a park ranger on a walk back through time and meet historical persons who, lured by the awesome grandeur of Mount Rainier, came to the volcano’s slopes and helped shape the park’s rich historical record.

This special living history program titled "Shadows of the Past" will be on July 29 at 10PM and August 26 at 930 PM, and lasts 75 minutes. Meet at the flagpole outside Longmire’s Administration Building. Dress for the weather and see you there!

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**JOIN THE JUNIOR RANGERS**

Welcome to the Mount Rainier National Park "Junior Ranger" program. This program helps children to develop an understanding and appreciation for national parks, with special emphasis on Mount Rainier National Park. Children completing the program will earn a "Junior Ranger" certificate, and may purchase a "Junior Ranger" patch.

There are two ways for children to take part in the "Junior Ranger" program. Children may attend the guided activities at Jackson Memorial Visitor Center, Cougar Rock, Ohanapecosh, White River, or Ispat Creek campgrounds, or complete the "Do-it-Yourself" activities printed in booklets available in park visitor centers.

Join a naturalist for a guided Junior Ranger program, July 1 through September 4 at:
- 2 PM, Monday and Friday at the Cougar Rock Campground
- 130 PM (6-8 year olds) & 330PM (9-11 year olds), Saturday at the Ohanapecosh Campground
- 330PM (6-8 year olds) & 1030PM (9-11 year olds), Saturday at the Longmire Visitor Center
- 10AM, Saturday at the White River Campground
- 11AM, Saturday at Paradise.

These 45 minute (At Paradise) or 1.5 hour (other areas) programs are for children 6-11 years old. There is a limit of 25 children at each program. See page 4 for detailed information on program schedules and reservations. Children should be able to participate in the program without parents, but parents are welcome to attend. Children will receive a "Junior Ranger" certificate at the end of each program.

The Do-it-Yourself activities are printed in booklets available at Longmire, Paradise, Ohanapecosh, Sunrise, and Ispat Creek areas. Children need to complete activities and questions for only a single area, not all five. Answer as many questions as possible. If you need help, ask a park naturalist. Young children may need assistance from an adult or older child. Children will receive a "Junior Ranger" certificate when they present their completed booklets to a naturalist at one of the five information centers: Longmire Museum, Henry M. Jackson Visitor Center, Paradise Ispat Creek Visitor Center, Sunrise Visitor Center and the Carbon River Ranger Station.

A "Junior Ranger" cloth patch may be purchased by persons with a "Junior Ranger" certificate for a small cost at any of the five Northwest Interpretive Association bookstores located at Longmire, Paradise, Ohanapecosh, Sunrise or Carbon River.

Come explore the hidden beauty and discover the story of Mount Rainier National Park.

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**PARTNERSHIP IN PARKS**

One day programs include up to 6 hours with a Mount Rainier National Park Naturalist. Call (360) 569-2211 x3313 for registration or inquire at any park visitor center or museum. Cost is $12 per person. Sponsored by Mount Rainier National Park and Metropolitan Park District of Tacoma.

These programs offer a more in depth study of the park's resources than is possible during the regularly scheduled Naturalist programs.

Programs include roadside stops and/or short walks. Bring your lunch, water and dress for the weather.

**Old-Growth Forest of Mount Rainier**
Saturday, July 8  10 AM to 3 PM
Walk through ancient Northwest forests and learn the story of 1000 year old trees.

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**NORTHWEST INTERPRETIVE ASSOCIATION**

Books and maps are available for sale at all park visitor centers as well as the Hiker Information Centers, Longmire Museum, and Carbon River Entrance Station. The selection includes handbooks that will prove valuable in your outdoor explorations, books about park history and climbing, and maps that will enhance your enjoyment of the park from road and trail.

These outlets are operated by the Mount Rainier Branch of the Northwest Interpretive Association, a non-profit organization benefitting the naturalist programs in the national parks and forests of the Pacific Northwest. This paper is an example of these benefits. We invite you to become a member of the Association. For a catalog of publications and to learn about the advantages of membership inquire at any visitor center, or write to the Northwest Interpretive Association, 909 First Avenue, Suite 630, Seattle, WA, 98104-1060, or phone (206) 220-4140.

Look for "The Traveler's Companion" at all visitor centers, museum, hiker information centers, and book sales displays. Use it as a trip planner to schedule features you want to visit, use it as a road guide to the Mount Rainier story, or use it as a keepsake to help you remember your visit.
In 1883, while on a climbing trip to Mount Rainier, James Longmire happened upon the meadow and mineral springs that now bear his name. Enchanted by the beauty of the area, he and his family returned the following year to found "Longmire's Medical Springs." Soon, venturesome travelers were coming to Mount Rainier to partake of the healthful qualities in the mountain air and mineral water. In 1890, James Longmire built the Longmire Springs Hotel, which provided visitors with a place to rest and a base from which to explore the mountain. Upon request, the Longmires guided their guests to areas around the mountain, including the Paradise flower meadows, and even to the summit!

With the establishment of Mount Rainier National Park in 1899, Longmire became the early center of park activity. The Longmire Museum, one of the oldest national park museums, offers exhibits on geology, mammals, birds, Pacific Northwest Native Americans and early Euro-American exploration of the Pacific Northwest.

The Longmire area offers an excellent opportunity to become better acquainted with plants and animals that comprise an old-growth forest ecosystem. Douglas-fir, western redcedar, and western hemlock soar more than 200 feet above mossy, fern-draped forest floors. Here and there, the forest opens into lush green meadows.
Mount Rainier reaches into the atmosphere to disturb great tides of moist maritime air flowing eastward from the Pacific Ocean. The resulting encounter between moisture-laden air and the mountain creates spectacular cloud halos, wrings out the air, and produces fantastic snowfalls. Paradise, located at 5,400 feet on the mountain's south slope, averages 630 inches of snow each winter and often receives much more than that. Record snowfalls have occurred several times, the most recent being the winter of 1971-72 with a total snowfall of 1,122 inches (93.5 feet). Even at summer's end about 34 square miles of snow and ice cover the mountain - more than on all of the other Cascade volcanoes combined. While the upper slopes of the mountain remain in the grip of winter much of the year, there is a brief period in late July when snow-free slopes burst forth with subalpine flowers. Avalanche lilies, glacier lilies and western anemones bloom early, before the winter's snow has completely melted from the meadows.

Examples of the old growth forest seen by settlers in the Pacific Northwest are few in number today. But the Ohanapecosh River Valley is one place where old growth forest remains. Here you can walk back in time among stately Douglas-fir, western hemlock and western redcedar, 500 to 1,200 years old. The self-guiding nature trail in the Grove of the Patriarchs is an excellent place to experience the sublime qualities of the ancient forests.

The sparkling clear water of the Ohanapecosh River stands in stark contrast to the brown, milky streams originating from active glaciers. Flowing from an inactive glacier and snowfields, the Ohanapecosh River reflects the green of the forest and the blue of the sky. Only a mile from Ohanapecosh to Ohanapecosh Campground, the river cascades as beautiful Silver Falls.

SUNRISE

Situated at 6,400 feet in the northeastern part of Mount Rainier National Park is the area called Sunrise. Sunrise is a place of breathtaking vistas and the intriguing beauty of fragile subalpine vegetation. From Sunrise Point, the massive, four and one-half mile long Emmons Glacier and the summit crater rim can be seen, along with the Goat Rocks Wilderness Area and Mount Adams to the south and Mount Baker in the distance to the north. As you turn the corner at Sunrise Point and drive through subalpine meadows toward Sunrise, Mount Rainier's full size and mass take on their true perspective.

Sunrise is in the "rain shadow" of Mount Rainier. The 14,411 foot mountain forms an effective barrier to moisture-laden air coming from the Pacific Ocean. The flow of air is disrupted by the mountain, causing it to pile up in the form of clouds and lose the bulk of its moisture over the mountain's south and west slopes. Reduced moisture levels at Sunrise complement the fertile, but fragile, volcanic soil to produce flower meadows different from those at Paradise. Be sure to stop at the rustic log Visitor Center to learn about these differences and gain an excellent introduction to the special world of Sunrise. Please stay on constructed trails.

CARBON RIVER~MOWICH LAKE

Do you like to discover special, out-of-the-way places? Carbon River is such a place in Mount Rainier National Park.

Carbon River lies in the Northwest corner of the park. Even a brief visit will take a day and require travel via state and local roads that wind through the surrounding countryside. Only 2.5 miles of road in the Carbon River Valley is paved. The remainder of the road to Ipsut Creek Campground and the road to Mowich Lake are gravel surfaced.

The Northwest part of the park is well worth the effort required to get there. The abundant moisture and mild climate of the deep Carbon River Valley combine to produce the only true inland rain forest in the park. The self-guiding "Carbon River Rain Forest Trail" at Carbon River Entrance helps you to understand this unique environment. A 3.5 mile trail from the Ipsut Creek Campground to the snout of the Carbon Glacier provides one of the park's closest views of an active glacier.

If you visit Carbon Glacier, please view it from a safe distance. Rocks falling from the glacier's surface make a close approach very dangerous.

The road to beautiful Mowich Lake takes you to outstanding views of the "other side of the mountain." Mowich Lake lies at the trailhead for a number of special wilderness destinations. Spray Falls provides a bonus for day hikers on their way to Spray Park, with its glorious wildflower displays. Panoramic views await the ardent hikers who reach Emnace Lake and Tolmie Peak. These fragile areas require special care. See the article "Help Save Mount Rainier's Meadows" on page 9.

PLEASE CONSULT THE ARTICLE ON PAGE 12, AS BRIDGE REPAIRS WILL RESTRICT ACCESS TO THESE AREAS.
Permits for Overnights & Climbing

If you are planning a backpacking trip, be sure to stop at the Hiker Center at Longmire. Located in the log and stone building beside the flagpole, the Center features a relief map of Mount Rainier and information on minimum impact camping.

Rangers on duty will be happy to answer your questions, assist with trip planning, and issue free backcountry permits. The main purpose of the permits is to control the number of people in one place at one time and thereby limit the impact from litter, human waste, and trampling of the ground.

A second Hiker Information Center offering similar services is located at the White River Entrance Station. Carbon River Ranger Station issues permits and offers information on the northwest section of the Park.

• Camping at all trailside camps as well as Camp Muir and Schurman is available on a first-come, first-served basis.

Mountaineering Cost Recovery Program

On July 1 the park is initiating a "Mountaineering Cost Recovery Program." This program will require climbers climbing above 10,000 feet to pay a "user fee." The fee is $15/person/climb or a $25/person annual fee. These fees must be paid when climbers register for a climb.

The fees will be used exclusively to support the climbing program at Mount Rainier National Park. The fees will support: SAFETY AND EDUCATION

Safety First

- One of the best ways to experience Mount Rainier is by taking a walk or hike. Use your common sense to avoid accidents and injuries, wear sturdy footgear and always bring your own drinking water.
- Stop by a visitor or hiker information center to get current trail and weather conditions.
- Be prepared for the unexpected: carry extra food and water, rain gear and emergency items including flashlight and first-aid supplies.

Hiking, Camping & Climbing

- Anyone intending to go above the high camps at Camp Muir or Camp Schurman, or to travel on the glaciers, must obtain a climbing card in lieu of a wilderness permit.

For additional information, write: Backcountry Desk, Mount Rainier National Park, Tahoma Woods, Start Route, Ashford, WA 98304, or call (360) 569-2211, extension 3317.

Self-guiding Trails

Longmire—Historic District Tour: 1 hour — 1.25 miles. Witness firsthand some of the park's most architecturally significant structures. Tour maps available at Longmire Museum.

Longmire—Trail of the Shadows: 30 minutes ~ .7 mile. Experience the natural environment and see the former site of the Longmire Medical Springs Resort on this walk around Longmire meadow.

Paradise—Nisqually Vista: 1 hour ~ 1.2 miles. Walk where the clouds go and see how weather shapes the landscape, plants, and animals of these high-country meadows. Excellent views of Mount Rainier and the Nisqually Glacier may be enjoyed on this easy walk.

Ohanapecohsh—Life Systems: 30 minutes ~ .5 mile. Explore the forest and hot springs of Ohanapecohsh on this walk. Start at the visitor center.

Ohanapecohsh—Grove of the Patriarchs: 1.5 hours ~ 2.4 miles. Walk among 1,000 year old tree giants of the old-growth forest. See these ancient trees on an island in the Ohanapecohsh River.

Sunrise—Sourdough Ridge: 1 hour ~ .5 mile. A moderate walk through flower fields rich in color to a panoramic viewpoint of four volcanic peaks.

Carbon River Forest: 20 minutes ~ 3 mile. Rain forests seldom occur far from coastal areas, so the forest that grows in this valley is special. Explore the only true inland rain forest at Mount Rainier.

Wonderland Trail

The 93-mile Wonderland Trail completely encircles Mount Rainier, passing through all the major life zones in the park, from lowland forests through subalpine meadows to views of glaciers. Hikers can find both company and solitude along the way. As the summit of Mount Rainier is to a climber, so the Wonderland Trail is to a hiker - the experience of a lifetime. You should allow about 10 days to 2 weeks to enjoy the trail. Camping along the trail is allowed only at designated campsites, by permit only. For more detailed information on hiking the Wonderland Trail, inquire at the Longmire Hiker Information Center or the White River Hiker Information Center.

Westside Road

You may drive 3 miles up the road to the parking area at Dry Creek. From there, travel into the scenic west side of the park is accomplished by hiking and bicycle. Bicycles must remain on the roadway and may not be taken on any trail. Hikers may explore the many miles of trail branching off the old roadway into the wilderness. Be sure to obtain your wilderness permit if planning to stay overnight.

Drinking Water

The waterways of Mount Rainier are treated. Treated water is used for drinking and cooking.

- Tripping and falling are common accidents on park walkways and trails, especially in slippery and icy conditions.
- Rock climbing and scrambling continue to be among the leading causes of injury and death to the unprepared and inexperienced. Routes are often more difficult than they appear and even a short fall can cause serious injury or death. Before you scramble or climb on Rainier's rocks or glaciers, provide yourself with proper equipment and training.
- Please remember that dogs and other pets, bicycles and motor vehicles are not allowed on park trails.
- Ticks carry Lyme disease.

Lyme disease is an illness transmitted by ticks. Not all ticks carry the disease, but several cases have been reported in the Pacific Northwest.

- Rock hopping. Rocks near the waters' edge can cause severe intestinal upset. Please drink water only from treated, piped water systems, in the backcountry, treat your water.

Protect Your Valuables

Vacationers generally are in a relaxed frame of mind, and don't practice the same precautions as they might at home. Unfortunately, thieves visit Mount Rainier and find purses, billfolds, and cameras to be easy prizes. Do not leave any valuable in your car, not even in a locked trunk.

Ticks Carry Lyme Disease

Lyme disease is an illness transmitted by ticks. Not all ticks carry the disease, but several cases have been reported in the Pacific Northwest.

- Symptoms can be severe, including arthritis, meningitis, neurological problems and/or cardiae disease. These symptoms can occur a few weeks to over a year after the tick bite. Early signs include a rash around the infected tick bite and flu-like symptoms. Timely treatment can cure or lessen the severity of the disease. If you experience these symptoms and were bitten by a tick, be certain to tell your doctor.

- If you are diagnosed with Lyme disease, you believe that you were bitten at Mount Rainier, have your doctor contact the park at (360) 569-2211.
It was the spectacular wildflower displays which color the meadows during summer that first prompted early settlers and explorers to visit Paradise in the late 1800s. Now, one hundred years later, the wildflower display is still spectacular. Summer visitation to the Paradise meadows has grown from a few hundred people into millions and a closer inspection of the area reveals bareground tracts where vegetation has been trampled and killed, where soils have been compacted and where erosion gullies scar the landscape.

Some of this damage is the result of activities that are no longer permitted at Paradise such as tent camping, horseback riding, golfing and downhill skiing. Unfortunately though, some meadow damage still occurs today. For instance, many people don't realize the impact they have on the meadows when walking off the constructed trails. Each and every off-trail step compacts soil and destroys delicate vegetation.

In 1986, Mount Rainier National Park initiated a large scale restoration program to document and repair human-caused damage in the Paradise meadows. Over the last several years all meadow damage has been documented and prioritized for restoration, a Paradise Meadow Resource Management Plan has been completed, and a restoration program has been implemented. Even though the National Park Service actively attempts to rehabilitate areas damaged by concentrated use and off-trail trampling of fragile vegetation, our ability to repair such damage is limited. To a tremendous extent, the meadows must repair themselves. They need protection from further damage and they need time to stabilize soil in eroded areas and restore plant diversity to the extent of that present in undisturbed areas.

For these reasons, the National Park Service requires all visitors hiking at Paradise, Sunrise and Tipsoo Lake to stay on constructed trails. Show support by staying on the trail. Let others know about meadow protection by wearing a "Don't Be A Meadow Stomper" button. Buttons are available for a 50 cent donation in the visitor centers at Paradise and Sunrise.

Stay On The Trail

Every year, many of the 2+ million people who visit Mount Rainier hike the meadow trails. Imagine the problems created when one person, multiplied by a thousand, leaves the constructed trail. The best possible solution is for all of us to prevent damage from occurring by staying on the constructed trails.

HELPING HANDS

If you visit the lower Paradise Meadows this summer, you may observe a project made possible through the support of the Mount Rainier, North Cascades & Olympic Fund. The Fund was created to restore, enhance and preserve these national parks. (See page 1 for more information on the Fund.)

A number of human-caused impacts just above the parking lot at Paradise were created by off-trail hiking. They will be filled with topsoil and planted with native plants. Volunteer groups will help transport the topsoil and will participate in the planting effort. Through the support and the contributions of volunteers, Mount Rainier's ongoing Meadow Restoration Program will be receiving a much-needed boost.

HUMAN WASTE HAZARDS

In 1994, 9,220 climbers started out for the summit of Mount Rainier with 4,711 of them finally standing on the crater rim. More than ten thousand people day-hiked to Camp Muir at the 10,000 feet elevation. Probably every one of these people used toilets on the upper mountain. Human waste left on the glaciers and Muir Snowfield not only spoils the aesthetic climbing experience, but also poses a serious health hazard for climbers who melt snow for drinking water. Virtually none of this waste will decompose since extreme cold temperatures and strong sunlight combine to discourage microbial action. Putting waste in crevasses or burying it in the snow does not solve the problem, only leaves it for others.

If you plan to hike to Camp Muir or climb higher on the mountain, check with rangers to be sure you know where pit toilets and "Glacier Toilets" are located and how to use blue bags for waste removal. Upper mountain users also need to carry out all the trash they generate while climbing. Putting trash in toilets hinders toilet operation and makes removal of trash and waste much more expensive.

There is no ideal solution to the problem of human waste and trash removal from the upper mountains, but if everyone does their part we will be able to continue to offer the best possible climbing experience for all.
WILDERNESS

Establishment of national parks has been called "the best idea America ever had." The idea of preserving special natural and cultural places in public ownership ran contrary to the prevailing national mood during the 19th century, when most Americans saw nature as something to be subdued and history as what happened in the Old World. But as the wilderness receded and remnants of ancient civilization and revolutionary landmarks were lost, some saw the need to protect outstanding examples of the nation's heritage.

When Mount Rainier and other early national parks were set aside as outstanding examples of our country's natural landscape they were mostly wilder­ness. The intent in establishing these parks was clear: to permanently preserve their natural features and to provide for public use and enjoyment. Since that time it has become evident that the parks' wilderness was more vulnerable than early managers thought. Recreational demands, visitation patterns, and pol­lution have taken their toll in many areas.

To further protect these natural landscapes, on November 16, 1968, 228,400 acres (97%) of Mount Rainier National Park became the "Mount Rainier Wilderness." It is now one of 30 wilderness areas in the state of Washington. Excluded are Camps Schuman and Muir, portions of the water supplies, road systems and roadside developments.

The Mount Rainier Wilderness is managed by the National Park Service. Use of the area is governed according to the goals of the Wilderness Act of 1964. Management techniques include mandatory camp­ping permits, minimum impact education, designated camp­sites, limits on party size and numbers of par­ties, and an impact monitoring and restoration pro­gram supported by a native plant nursery and a cadre of dedicated volunteers.

For more information on the Mount Rainier Wil­derness, contact park staff at any hiker information center, ranger station, or visitor center in the park.

ANCIENT FORESTS

The forests surrounding the base of Mount Rainier become more valuable each year. Sixty percent of Mount Rainier National Park is covered by forest, much of it in the old-growth Douglas-fir community. This forest community is found on the west side of the Cascade Mountains in Washington, Oregon, and Northern California.

The term "old-growth Douglas-fir forest" identi­fies a stand of trees that are at least 250 years old. The lowland forest of Mount Rainier National Park con­tains some of the last "old-growth" in the Pacific Northwest. Here Douglas-fir, western hemlock and western redcedar are 500 to over 1,000 years in age. These trees were old when ships reached the North Pacific coast and wagon trains brought settlers into Puget Sound.

Over ten years of scientific study of the forests of Mount Rainier have identified forest community types, deter­mined the age of the forest, and listed the plants and animals associated with the Douglas-firs. Scientists found differ­ences in temperature, moisture and associated species be­tween old-growth forests in Northern Washington and Northern California.

Many visitors remark on the great size of the trees in the old-growth forest and then begin to note the relative abundance of seemingly dead material in the forest. This characteristic leads to the distinctive features of an old-growth forest: (1) large, live old­growth trees, (2) large standing dead trees (snags), (3) large logs on land, and (4) large logs in streams.

Large, old-growth Douglas-firs are ideal habitats for specialized vertebrates, such as the red tree vole, northern spotted owl and northern flying squirrel, as well as nitrogen-fixing lichens. Large snags provide valuable nesting sites and food sources for a variety of vertebrates and invertebrates and are a future source of logs.

Logs on the forest floor are important habitats for small mammals, including the western red-backed vole and northern flying squirrel, that spread the spores of mycorrhiza-forming fungi. Mycorrhizal (root - fungus relationships) aid the big trees by gathering and transferring water and nutrients into the tree's roots. Logs also are sites for bacterial nitrogen fixation, water and nutrient storage, and provide seed beds for new generations of trees and shrubs. Logs are critical to maintenance of physical and biological stability in headwater streams as they provide a range of habitats for stream organisms.

As scientists began to study the forests they found the northern spotted owl most commonly in the older Douglas-firs. Some scientists suggest that the northern spotted owl lives only in old­growth forests, while others say that the owls can live in younger forests.

Most species found in the old-growth Douglas-fir forest are also found elsewhere but many species find older habitats in old-growth forests. Thus the forest's value should be measured not only by what is found there, but also by the longevity of its forest ecosys­tem. The management of the old-growth Douglas-fir forest in Mount Rainier National Park is aimed at preserving the glaciers and snow capped peak of Mount Rainier.

There are many places in the park where you can experience the old-growth Douglas-fir forest. The Grove of the Patriarchs nature trail, near Ohanapecosh, is an easy 1.5 mile round trip. Several places along the road between Nisqually Entrance and Longmire offer short walks into the old-growth for­est. The Carbon River road in the northwest corner of the park provides a leisurely drive among the old-growth giants and the Carbon River Rainforest nature trail features the species that inhabit this special place. For more information on the forests of Mount Rainier National Park inquire at any park visitor center.

COUGARS

The cougar or mountain lion is a large and potentially dangerous animal that is a natural and rather common (but not often observed) inhabitant of Mount Rainier National Park. The scientific name of the cougar, Felis concolor, means "cat of one color." The animal is identified by its large size, cat-like appear­ance, uniformly gray to reddish-tan body color, and long tail - nearly three feet long and a third of its total length. The muzzle and chest are white and there are black markings on the face, ears and tip of the tail; young kittens have black spots on the body. Adult male cougars can weigh over 150 pounds, females from 90 to 110 pounds, and subadults 40 to 80 pounds. Adult males often have a larger head, neck and shoulders and more husky appearance; females and subadults are often more lean and slender.

Generally, adult cougars are solitary animals and come together only for mating. Kittens stay with their mother for up to two years. Females first breed at 18-24 months of age. The gestation period is 92 days and kittens are born at two-to-three year inter­vals. Kittens are born with blue eyes and a spotted coat. The spots gradually fade and disappear by age two. During late spring and summer, one to two-year old cougars become independent of their mothers. While attempting to find a home range, these young cougars may roam widely in search of unoccupied territory.

The cougar's primary prey is deer. It will also feed on elk, rabbits, beaver, raccoons, grouse and occasion­ally livestock and domestic pets. Cougars are most active at dusk and dawn.

No human injuries have occurred in the park due to a cougar, although sightings and encounters by visitors has increased in recent years. Far more out­door casualties are due to lightning, drowning, bee sting or dog bite. Few of the many thousands of people who travel in the park are likely to see, much less confront, a cougar.

Reporting Observations

Please report all sightings of cougars and other unusual wildlife to the nearest ranger station, visitor center, or park headquarters (Tahoma Woods, Star Route, Ashford, WA 98304; phone (360) 569-2211 x373). Give your name and telephone number, so that a follow-up can occur to obtain further informa­tion if necessary. Information needed includes: date, time, location and brief summary of incident; physi­cal description of the animal; how close you were to it (in feet); and how long (seconds or minutes) it was in view.
VOLCANIC HAZARDS REQUIRE AWARENESS

A visit to Mount Rainier provides outstanding opportunities to observe evidence of past volcanic processes that may have clues to geologic hazards of the future. During the past one million years Mount Rainier produced spectacular eruptions of lava, volcanic ash and hot ash flows that, by 6,000 years ago, had built a cone perhaps 16,000 feet in elevation. Lava flows filled its glacial valleys with hard, erosion-resistant rock that survives today as ridges radiating from the mountain like spokes on a wheel. Volcanic ash and hot ash flows that, by 6,000 years ago, had many new exposures of steep, unstable rock due to recent glacial recession.

The most recent large landslide on Mount Rainier occurred 500 years ago in the Puyallup River valley. Such events have a probability of happening on average every 500 to 1,000 years - frequently enough to concern geologists and public officials about unrestricted growth and the placement of public structures in areas of potential inundation. Scientists at the U.S. Geological Survey are supplying land-use managers with information to help them reduce the risk from debris flows in the valleys around the base of the mountain.

RAINFOIER: A Decade Volcano

Mount Rainier, which is the highest volcano in the Cascade Range, is designated as a Decade Volcano. This does not necessarily mean that the mountain will erupt soon, but rather that scientists will be watching the volcano very closely to help reduce the risk from geologic events when they do occur. In 1989, the International Association of Volcanology and Chemistry of the Earth's Interior established a task group for the International Decade for Natural Disaster Reduction. The task group selected Mount Rainier as one of several volcanoes for focused study during the 1990's.

Criteria for designating Mount Rainier for study include:

- the volcano represents a variety of hazards
- it exhibits recent geologic activity:
- it is located in a populated area:
- it is little researched:
- it is readily accessible and it is well exposed for study.

Mount Rainier is considered to be the most hazardous volcano in the Cascades in terms of its potential for magma-water interaction and sector collapse. Debris flows (in the absence of eruption), and even the potential for eruption, pose significant threats to the region.

In spite of the hazard it poses, Mount Rainier has received relatively little study. Very little is known of such important topics as its petrologic and geochemical character, its development over time, its recent history of eruptions and its susceptibility to major failures. With designation as a Decade Volcano, increased scientific attention is focusing on Mount Rainier to try to answer some of these questions.

The staff of Mount Rainier National Park is working cooperatively with USGS scientists on studies to determine the eruptive history, and eruptive styles and mechanisms for the volcano, as well as the chemical evolution of magma types, structure of the volcanic edifice, and style and location of hydrothermal alteration of the volcano. One of the results of their work will be a revised geologic map of the volcano edifice. Tom Sisson and Dave Zimbelmann are the principal investigators for the study. They are working on the south and west sectors of the volcano, mostly in the area between Sunset Crater and Camp Muir. Other Decade Volcano researchers will be here periodically throughout the next several years. Exhibits installed recently at the Henry M. Jackson Memorial Visitor Center at Paradise highlight some of the findings of this recent geologic research. These exhibits have been developed through a partnership of staff at Mount Rainier National Park and the USGS Cascades Volcano Observatory at Vancouver, WA. Exhibits and publications will be forthcoming as research continues. For example: a new display is being developed for Sunrise Visitor Center which will feature the volcanic processes and hazards which Mount Rainier poses.

RECYCLING

Mount Rainier is proud to offer a recycling program for visitors again this year. With a growing need to protect our natural resources while reducing energy consumption and pollution, your cooperation will help preserve all of our national parks.

After the first full year of operation, Mount Rainier recovered nearly 59 tons of recyclables. Because the park was still forced to landfill over 400 tons of waste, we are looking for ways to improve the recycling program.

In order to collect more recyclables and cut program costs, experiments are now being conducted to test the success of source separation. As a result, some areas of the park have 3-5 separate containers for recyclables, instead of just one bin for all recyclables. Please help our program by sorting your waste into the proper bins.

We encourage you to continue recycling at home, in school, and at work. Of course the best way to reduce your waste is by purchasing reusable products (and reusing them) that have minimal packaging. Also, try to buy recycled products to "close the loop."

Your participation here at Mount Rainier is part of a broad effort sponsored by the National Park Service and The Dow Chemical Company. The partnership has developed similar recycling programs in six other national parks.

Use Park Recycling Bins For:

- PLASTICS:
  - Bottles
  - Jars
  - Jugs
  - Cans

- GLASS:
  - Bottles

- METAL CANS:
  - Cans

Use Trash Cans For:

- Food
- Paper Items
- Bottle Caps
- Other Wastes
State Route 410 Mather Memorial Parkway
Road work located on SR410 north of the park boundary. Expect delays on this road reconstruction to be about 30 minutes.

Henry M. Jackson Memorial Visitor Center
Rehabilitation of the visitor center roof will continue throughout the 1995 season. Expect some minor inconvenience in the building and adjacent area.

Water Upgrades
Contractors will be working throughout the 1995 season to upgrade water treatment capabilities and to correct wastewater collection system deficiencies in the Paradise area. Expect some inconvenience, reduced parking spaces, temporary public restrooms and trail detours.

Mount Rainier National Park
24 Hour Information: (360) 569-2211
TDD: (360)569-2177
Emergencies: 911