

# Tahoma

Mount Rainier National Park

Activity and Program Guide

July 1 - September 11, 1993

## 24 HOUR INFORMATION

For information on Mount Rainier National Park, tune your AM radio to 1610KHz, near Nisqually Entrance. Dial (206) 569-2211 for up-to-date information on park roads, trails, facilities and weather, 24 hours a day.

## GOLDEN PASSPORTS



Three Golden Passports are available to park visitors. The Golden Eagle Passport costs \$25 and entitles the holder and all persons in the same vehicle to unlimited entrance to federal fee areas throughout the calendar year. Golden Eagle Passports are sold at the park's entrance stations. The Golden Age Passport is issued to U.S. residents 62 years or older; the Golden Access Passport is for those with physical disability. Both are lifetime passes providing free entrance to the national parks for you and all persons in your vehicle, plus a 50% reduction in camping fees. Golden Age and Golden Access passports are available free at all visitor centers, the Carbon River Ranger Station, and park headquarters.

## Naturalists Enrich Your Visit

Headed for Paradise or Sunrise? There's more!! Take a moment to explore all the possibilities in enjoying the Northwest's greatest mountain. With so much to see and do and so little time to do it in, how will you plan your time at Mount Rainier?

There is no "best way" to visit the park. It depends on your time and interests.

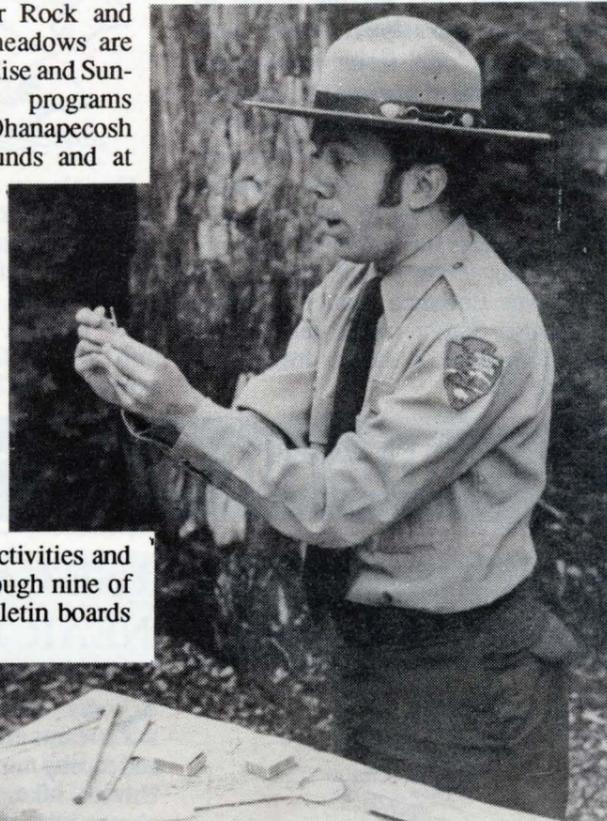
Plan to stop early at one of the park visitor centers for detailed information and assistance in making the most of your time. You will find helpful rangers willing to answer questions on wildlife, flower blooms, glaciers, human history and other features of the park. They also provide current information on roads, weather, trails, camping and local attractions. Ask about a schedule of activities to enhance your personal interest.

Backpackers may get wilderness permits at the Longmire or White River Hiker Centers or at any ranger station.

Park Naturalists offer walks and hikes to provide you the opportunity to better understand and appreciate the many different aspects of the mountain environment. Short guided walks are offered to waterfalls and magnificent old-growth

forests at Longmire/Cougar Rock and Ohanapeosh. Sub-alpine meadows are featured in programs at Paradise and Sunrise. Illustrated campfire programs presented at Cougar Rock, Ohanapeosh and Ipsut Creek Campgrounds and at Paradise Inn, focus on significant resources of the park. Old-fashioned talks around the campfire are held at White River Campground. The programs vary each evening and feature topics such as, birds, mammals, glaciers, wildflowers, human history, mountain climbing, powers of nature or the volcanic origins of the Mount Rainier landscape.

Refer to the schedule of activities and programs on pages four through nine of this guide or check park bulletin boards for specific details.



## Bridge Replacements / Travel Delays / Road Closures

### LAUGHINGWATER BRIDGE REPAIR

Laughingwater Creek Bridge on Highway 123 north of Ohanapeosh has deteriorated to poor condition. The bridge will be replaced with a new structure adjacent to the old one. During construction, expected to take two summer seasons, the existing bridge will continue to be used. Through the summer and autumn seasons expect temporary travel delays near the construction zone as the Federal Highway Administration works to provide a new, safer bridge.

### DEADWOOD CK. BRIDGE REPAIR

Expect travel delays on SR 410 between the White River road junction and Cayuse Pass this summer. Contractors for the Federal Highway Administration will be constructing a new bridge spanning Deadwood Creek. Flaggers, signs and signals will inform travellers of hazards and reduced speeds near the construction zone. Demolition of the old bridge and construction of a temporary bypass bridge took place this spring. A new, safer bridge will be completed in the fall of 1995.

### WESTSIDE ROAD PARTIALLY OPEN

Only the first three miles of this roadway into the scenic western side of the park will be open for the 1993 season. Foot and bicycle travel only will be allowed beyond Dry Creek due to glacier

outburst flooding and damage brought on by early winter torrential rains in past years on Tahoma Creek. The National Park Service is pursuing options to stabilize the roadway for use in future years.

### DEBRIS FLOWS WREAK HAVOC



Debris flows may be the greatest danger in stream crossings. Debris flows begin when great quantities of water pick up loose rock and soil and rush down the mountainside in a flood of mud. Sometimes debris flows result from heavy rain or intense melting of snow and ice on the mountain. Occasionally debris flows start from Jokulhlaups. Jokulhlaups - an Icelandic word pronounced "yo-kul-h-loips" - are flash floods of water that burst from glaciers. At Mount Rainier, debris flows leave us a legacy of twisted trails and highway bridges amid boulder-strewn streambeds. They can affect human activity where trails or roads cross the stream valleys. This happened at Kautz Creek where a flood buried the roadway under twenty feet of mud and rock in 1947. Debris flows have obliterated the

Tahoma Creek Trail and caused partial closure of the Westside Road.

People who have witnessed debris flows at Mount Rainier say that the flood waves arrive with local winds and the smell of freshly killed vegetation. The floods sound like freight trains as they travel down valley at speeds of 9 feet per second or more.

Most debris flows occur during summer or fall, and in late afternoon or evening. If you intend to observe flood damage at Tahoma Creek or Kautz Creek, be alert. If you hear the onrush of the flow, see the dust cloud up valley, or feel a sudden change in valley winds, move up hill away from the stream instead of up or down stream. Don't be caught near the streambed. Please heed park regulations regarding travel near flood-prone areas.

### BEWARE OF ROADWAY HAZARDS



While driving, remember that mountain roads are narrow and winding, with short sight distances. Park speed limits are lower for these and other reasons. Wild animals and park visitors often dart out into vehicle paths. Rocks and trees seem to "jump out" onto roadways at every curve. Snow and rain cause

slippery road conditions at any time of year. Drivers sometimes pay closer attention to the scenery than to road conditions. For your safety and the protection of park animals and trees - please slow down and park in pullouts to enjoy the scenery. At a slower pace, you just might enjoy the park more. Now, isn't that what you came for?

# Hiking & Backpacking

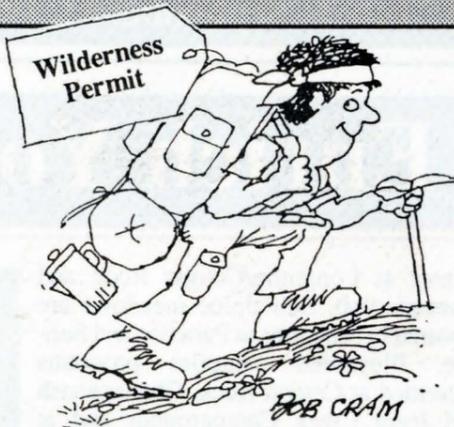


## OVERNIGHT HIKES

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 wilderness 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 Camps Muir and Schurman is available on a first-come, first-served basis. For additional information, write: Backcountry Desk, Mount Rainier National Park, Tahoma Woods, Star Route, Ashford, WA 98304, or call (206) 569-2211, extension 3317.

## 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 cardiac distress. 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 as having Lyme disease, and you believe that you were bitten at Mount Rainier, have your doctor contact the park at (206) 569-2211.

## PROTECT YOUR VALUABLES



Chief Ranger John Jensen says, "Don't be a victim." Vacationers generally are in a relaxed frame of mind, and don't practice the same precautions against thievery as they might at home. Unfortunately, thieves visit Mount Rainier along with the good folks and find purses, wallets, and cameras to be easy prizes. Lock valuables in the car's trunk, or put them out of sight, and lock all doors and windows. Never leave money in vehicles.

# Trouble on the Trail

## DRINK ONLY TREATED WATER



The gushing mountain streams and springs of Mount Rainier may be beautiful to look at and delicious to drink from, but too often the waterways are home for some nasty little creatures that can give you less than pleasant memories. Unfortunately, micro-organisms like Giardia have been brought to Mount Rainier by humans. These organisms remain here harbored in native animal populations. Contrary to historic claims, Longmire Mineral and Ohanapecosh hot spring waters are NOT safe to drink. Rather than "curing what ails you," water from these springs could cause severe intestinal upsets. Please drink water only from treated, piped water systems. In the backcountry, treat your water.

## USE CAUTION NEAR THE EDGE

Spray near waterfalls and rushing streams makes for wet, slippery rocks and mushy moss growth on stream banks. Unwary hikers and waders may slip and plunge into rivers. Swift, cold water carries away even strong swimmers. Parents please keep children with you and stay on constructed trails near streams, waterfalls, cliffs and at Box Canyon. Be Alert!



## WATCH YOUR STEP



Park trails are steep and full of rocks and other hazards. Slips and falls from small rocks can mar a vacation just as quickly as a flying leap over a 1000 foot cliff. Hikers should take care crossing snow-covered streams; snow bridges weaken in warm weather. Proper foot gear

(hiking boots that are broken in) provides for traction, ankle support and protection from rocks. Use moleskin on chaffed skin to prevent blisters. Good boots will prevent problems on trails, which may still be snow-covered and slippery even in mid-summer.

## WHAT IS FALLING ON YOUR HEAD?

Beware of rocks, snow avalanches and debris falling on trails and rolling onto roadways. In steep terrain, refrain from throwing rocks over cliffs. Someone below could be injured by the falling rock. People short-cutting switchbacks not only cause erosional damage but dislodge rocks that may fall on unsuspecting hikers below. Animals, rain and frost often loosen rocks and boulders that roll down mountainsides. Climbers wear hardhats for safety. All of us should keep a sharp watch for what is dropping on us from overhead. Don't let gravity spoil your vacation - or someone else's!



# RECYCLE... "But I'm On Vacation"

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 bin.

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.

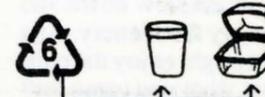
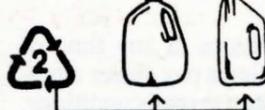


## Use Park Recycling Bins For:

### PLASTICS:



Look for recycling code here



### GLASS:



### METAL CANS:



## Use Trash Cans For:

- Food
- Paper Items
- Bottle Caps
- Other Wastes

## Field Seminars Offer Challenge

If you want more depth than the short term ranger-led activities can offer, join Pacific Northwest Field Seminars. Seminars offer exciting opportunities to explore a variety of topics at Mount Rainier.

Immerse yourself in the intricacies of the old-growth forest, explore glaciers, geology and volcanoes; let your creative spirit soar through nature writing and photography, delve into the beauty of wildflowers and butterflies, attune yourself to birds and elk.

Seminars include backpacking, family camping, hiking, sketching, painting, astronomy, listening, nature studies, and

several day-long seminars for the physically handicapped. Broaden the horizons of your outdoor knowledge and skills under the guidance of experts on these one to three day outdoor learning experiences.

The Pacific Northwest Field Seminars is a non-profit program sponsored by the Northwest Interpretive Association in cooperation with the National Park Service and U.S. Forest Service.

For information on seminar subjects, dates, and to register please call Jean Tobin at (206) 553-2636; ask a ranger at any visitor center; or write Pacific Northwest Field Seminars, 83 South King Street, Suite 212, Seattle, WA, 98104.



## Northwest Interpretive Association Provides Books, Maps and "Tahoma"

Books and maps are available for sale at the Longmire Museum, the Hiker Information Centers at Longmire and White River, the Henry M. Jackson Memorial Visitor Center at Paradise, and the Ohanapecosh and Sunrise Visitor Centers. 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.

"Mount Rainier, The Story Behind the Scenery," is a beautiful full color book with well written text telling the background of Mount Rainier's beauty. A recent addition to this popular book series is "Mount Rainier in Pictures the Continuing Story." Dramatic, full-color photography highlights the mountain's grandeur and insightful text deepens your understanding of this magnificent volcano.



Use the book "50 Hikes in Mount Rainier" to help plan your walks away from the road, the lodge or the campground. This



booklet will lead you to quiet places of the park where you'll have time to feel the majesty of the park.

To help you remember your visit, consider the new, award winning videos from the Readers Digest series on America's great national parks: "Mount Rainier" and "Mount Rainier and Olympic" - both excellent stories of the sculpting of the mountain by volcanic fire and glacial ice.

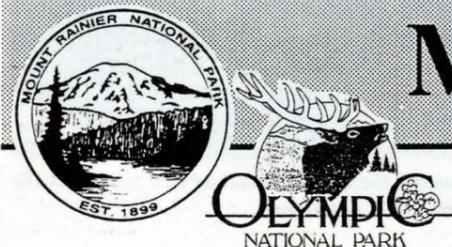
Look for "The Traveler's Companion" at all visitor centers, museum, hiker information centers, entrance stations, and book sales displays. Use it as a trip planner to schedule features you want to visit, use it as a road guide to the Mount Rainier story, or use it as a keepsake to help you remember your visit.

The Northwest Interpretive Association is a non-profit organization benefiting the research, conservation and educational 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. To learn about the advantages of membership inquire at any visitor center. Ask for a complete catalog of publications, maps, and audiovisual aids where books are sold or contact Mount Rainier Branch, Northwest Interpretive Association, Longmire, WA, 98397 or phone (206) 569-2211 x3320.



TEXT BY ROBERT STEELQUIST • PHOTOGRAPHY BY PAT O'HARA



## Mount Rainier & Olympic Fund

### The Resource

Western Washington and Puget Sound are blessed with abundant natural resources, a rich cultural heritage, and a multitude of recreational opportunities. Alpine glow on Mount Rainier, and the rugged outline of the Olympics, frame Puget Sound. Outstanding quality of the natural environment consistently scores high among factors that attract residents and visitors alike.

### The Challenge

Integral components in the natural landscape, and unique to the world, Mount Rainier and Olympic National Parks embody the spirit of northwest diversity. Park managers now look to the future and see the ever-increasing popularity of these parks as a double-edged sword. The challenge of retaining what makes Mount Rainier and the Olympics special, will be ever greater in coming years.

### The Vision

As we approach the 21st Century Mount Rainier and Olympic National Parks are combining their efforts to manage both parks for the benefit of future generations. In the future, we envision Mount Rainier and Olympic National Parks as places where:

- Ecological processes operate with minimal human influence.
- Cultural history and natural resources are valued and preserved.
- People engage in diverse recreation supported by quality visitor services.
- Management programs perpetuate ecological processes.
- Management actions foster biological diversity.
- Management is accomplished by a diversified, highly professional workforce.

- Partnerships with individuals and groups of public or private affiliation compliment park management.

### Vision Into Reality

Only the efforts of dedicated people will transform the Vision into reality. Incorporated in the State of Washington as an independent, private, non-profit, tax-exempt organization, the Mount Rainier and Olympic Fund is not a membership organization, nor does it engage in political activity or other advocacy. Through private support, the fund extends the capability of the two parks to provide specific programs and projects to enhance park values. Areas of particular interest for the Fund include:

- Wilderness preservation and restoration
- Endangered species and wildlife conservation
- Restoration of scenic areas and historic structures

- Scientific research
- Expansion of cultural programs
- Preservation of archaeological sites
- Acquisition of artifacts and historic materials
- Exhibit and museum renovation
- Removal of obsolete facilities
- Volunteers-In-Parks

### How You Can Help

Through the Mount Rainier and Olympic Fund, your support will assist the National Park Service to maintain the environment and resources of these parks; and provide visitor services of the highest quality. **Your participation will make a difference.** For detailed information on how you can help, contact: The Mount Rainier and Olympic Fund, Tahoma Woods, Star Route, Ashford, WA, 98304, or call (206) 569-2211 ext. 2301.

## Inter-Denominational Christian Services

Sponsored by: A Christian Ministry in the National Parks

### Sunday:

- 9:00 a.m. & 7:00 p.m. - Cougar Rock Campground Amphitheater
- 8:30 a.m. & 7:30 p.m. - Paradise Inn
- 9:00 a.m. & 7:00 p.m. - Ohanapecosh Campground Amphitheater
- 9:00 a.m. & 7:00 p.m. - White River Campground Campfire Circle

Services In Nearby Communities

### Sunday:

- 10:00 a.m. - Eastern Orthodox Liturgy - Wilkeson - Holy Trinity
  - 10:00 a.m. - Roman Catholic Mass - Eatonville - Our Lady of Good Counsel
  - 10:45 a.m. - Roman Catholic Mass - Morton - Sacred Heart
  - 9:00 a.m. - Roman Catholic Mass - Wilkeson - Our Lady of Lourdes
- Saturday:
- 5:00 p.m. - Roman Catholic Mass - Packwood - at Presbyterian Church



# Historic Longmire

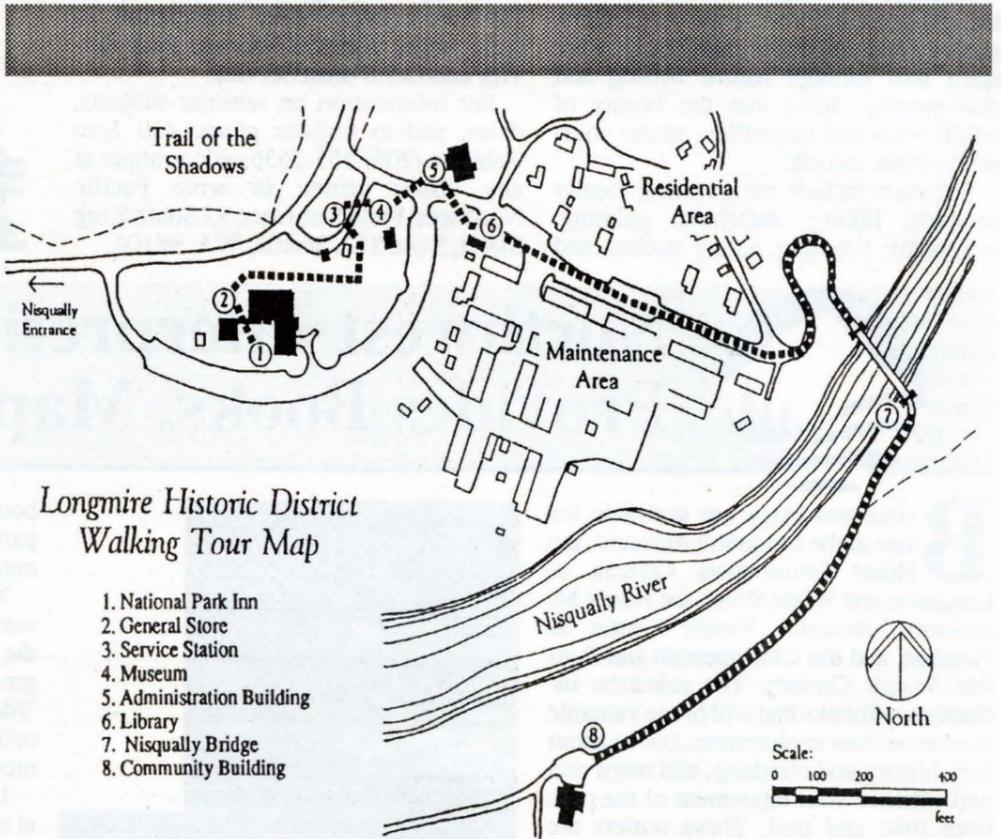
## Historic District Walking Tour

**Discover Historic Buildings!**  
**Stroll Among Towering Evergreen Forests!**  
**Walk On A Suspension Bridge Over The Rushing Nisqually River!**

**I**nterested? If so, then the Longmire Historic District Walking Tour is a must during your visit to Mount Rainier National Park. The self-guiding tour covers 1 1/4 miles of gentle ups and downs and takes about an hour to complete. Just follow the Longmire Historic District map printed on this page and read the accompanying text posted in front of each historic structure. You will witness firsthand some of the park's most architecturally significant structures, each with an exciting historical legacy to discover. Don't miss it !!!

During your walk through the Longmire Historic District, you will see other structures not included on the walking tour. These are park staff residences and work areas. Please respect the privacy of the residents. Visit only those structures designated on the walking tour. Your cooperation will be appreciated.

**EXTRA!** If you want to learn more about historic Longmire, make sure to walk the .75 mile Trail of the Shadows. Stroll around the Longmire Meadow and see the former site of the Longmire's Medical Springs Hotel and a restoration of early pioneer Elcaine Longmire's log cabin.

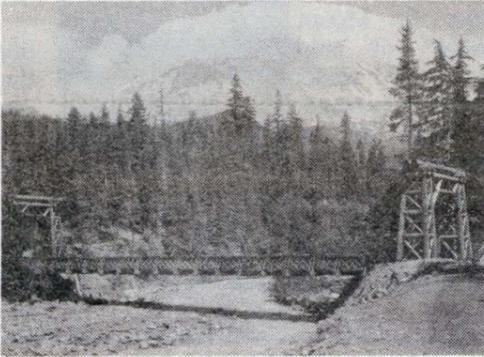


## WHAT IS RUSTIC STYLE ARCHITECTURE?

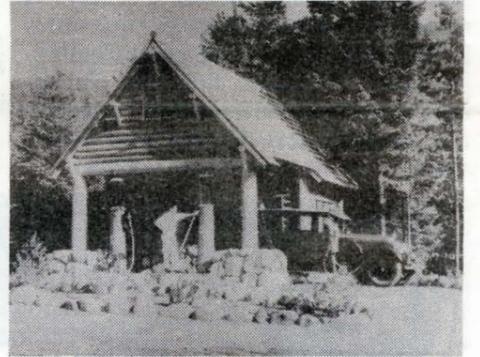
**D**uring the 1920's and 1930's, the predominant architectural expression used by the National Park Service in western national parks was the Rustic Style. This style promoted the concept that structures should harmonize with their natural surroundings.

The Rustic Style was implemented at Mount Rainier National Park by incorporating natural raw materials and color schemes found in the native landscape into the design of structures. Log framing, rough wood siding, cedar shake or shingle roofs, glacial boulder foundations and stone chimneys aesthetically tied structures to the awesome glacial and forest landscape.

The collection of historically and architecturally significant structures at Longmire was recognized as a historic district and listed in the National Register of Historic Places in 1991. Three buildings within the historic district were designated in 1987 by the U.S. Secretary of the Interior as National Historic Landmarks because of their distinct architectural qualities reflecting the Rustic Style. These are the Longmire Administration Building, Community Building and Service Station. National Historic Landmark status is the highest designation a structure can receive and assures that the buildings will be maintained so that they will retain their historic character. Four additional structures located at Paradise and Sunrise are also designated as National Historic Landmarks.



Walk across the oldest suspension bridge in the park for a grand view of the Nisqually River and Mount Rainier.



Examine the oldest rustic service station in the National Park System.



The Inn and Annex served the public until 1926, when fire completely destroyed the Inn. The Annex was saved, and was renamed the National Park Inn. Recently renovated, the Inn still provides meals and lodging year round.



## SHADOWS OF THE PAST

**I**magine! 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 sound like a voice from the past.

This rare 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 24 at 10:00 p.m., August 7 and September 4 at 9:30 p.m.**, and will last approximately 75 minutes. Meet at the flagpole outside Longmire's Administration Building. Dress for the weather and see you there!



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 in the healthful qualities of 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, the Longmire area 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 Euroamerican exploration of the area.

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.

One of the best ways of becoming familiar with the forest is to stretch your legs on a hiking trail. The Longmire area offers a wide variety of hiking opportunities. People can relax while walking a gentle path through old-growth forest and open meadows, or challenge themselves on a steeper trail that climbs mountain ridge tops with command-

ing vistas of Mount Rainier, surrounding peaks, and forest cloaked valleys.

No matter the difficulty of trail you choose, your reward will be a feeling of seclusion and solitude, a sense of wilderness, a feeling often difficult to capture during the routine of everyday life. Park Rangers will be happy to help you plan your exploration of the Longmire area.

## INFORMATION & SERVICES

### LONGMIRE MUSEUM

**Information & Books:** 9 a.m. - 5:30 p.m., daily. See historic exhibits on geology, natural history, Northwest Indians and early park exploration. The Northwest Interpretive Association offers books and maps for sale.

**"Trail of the Shadows" Self-guiding Trail:** 30 minutes, .7 mile. Walk around Longmire meadow and see the natural environment and the former site of the Longmire Medical Springs operation.

### LONGMIRE HIKER INFORMATION CENTER

**Permits:** 8 a.m. - 6 p.m., Sunday through Thursday; 8 a.m. - 7 p.m., Friday; 7 a.m. - 7 p.m., Saturday. Backpackers can obtain permits for overnight trips and hiking information. The Center is located in the lobby of the large log and stone building behind the flagpole.

### NATIONAL PARK INN

**Lodging & Restaurant:** Hotel front desk hours 7 a.m. - 10 p.m., daily. Dining room hours 7 a.m. - 8 p.m., daily. For reservations call: Mount Rainier Guest Services at (206) 569-2275.

**Post Office:** Open 8:30 a.m. - noon & 1 p.m.-5 p.m., Monday - Friday; closed Saturday, Sunday & holidays.

**General Store:** Open 8 a.m. - 8 p.m., daily. Located near the National Park Inn.

**Gas Station:** Open 9 a.m. - 7 p.m., daily. Located near the National Park Inn. Mount Rainier Guest Services.

**Firewood Sales:** Cougar Rock Campground 4 p.m.-9 p.m., daily, then Friday, Saturday and Sunday only, September 7-19. Longmire Gas Station 9 a.m.-7 p.m., daily, then 9 a.m.-5 p.m., daily, September 7-19.

**Sunshine Point Campground and Picnic Area:** Located 6 miles west of Longmire and .25 mile east of the Nisqually Entrance. Sunshine Point has 18 sites for tents and trailers. Individual campsite fee is \$5 per night on a first-come, first-served basis. No group sites available.

**Cougar Rock Campground:** Located 2.5 miles from Longmire on the Paradise Road. Cougar Rock has 200 campsites for tents and trailers, and 5 group sites. Only group sites can be reserved. Individual campsite fee is \$6 per night on a first-come, first-served basis. Group sites cost \$2 per night, per person. Cougar Rock Campground is open until mid-October.

**Cougar Rock Picnic Area:** Located across the road from Cougar Rock Campground. The picnic area is open until mid-October.

## NATURALIST WALKS & PROGRAMS

### Program Description

**Carter Falls Walk:** 2 hours, 2 miles. Explore the lowland forest along the beautiful, cool Paradise River enroute to Carter Falls. Meet at the bulletin board by the Ranger Station at Cougar Rock Campground.

**Children's Activity:** 2 hours. Children 6 to 11 years old are invited to join a Park Naturalist for a short walk and nature activities. Fun Guaranteed! Meet at the Cougar Rock Campground Amphitheater.

**Evening Stroll:** 1 hour, .5 mile. Enjoy a short evening stroll with a Park Naturalist and watch for beaver while discovering the history of the Longmire area. Meet at the flagpole in front of the Longmire Hiker Information Center.

**Campfire Program:** 45 minutes. Enjoy Mount Rainier through a slide program presented each evening by a Park Naturalist at the Cougar Rock Campground Amphitheater. Program titles are posted on the campground bulletin board.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Carter Falls Walk	10 AM						
Children's Activity			2 PM		2 PM	2 PM	
Evening Stroll	7:30 PM				7:30 PM	7:30 PM	
Campfire Program	7/1-8/2 9 PM						
	8/3-9/5 8:30 PM						

## EXPLORER HIKES

**Explorer Hike:** Visit backcountry areas beyond Longmire on moderately strenuous hikes. Bring lunch, water, sturdy foot gear and proper clothing for weather changes to all hikes.

To **VAN TRUMP PARK:** 5 hours, 5 miles, 1900 feet elevation gain. Meet at Comet Falls Trailhead. To **TAHOMA CREEK:** 1.5 hours, 1.5 miles. Meet at the parking area, 3 miles up Westside Road.

	900 AM		900 AM		10 AM
	Van Trump Park		Van Trump Park		12 noon
					200 PM Tahoma Creek

# Longmire / Cougar Rock



# Paradise

**M**ount 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 and August 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. Yet their flowering is brief. All the summer weeks after, the seed heads of these early risers wave in the breeze as other plants blossom. Among them are such colorful sub-



alpine delights as the Lewis monkeyflower, Jeffrey shootingstar, magenta paintbrush and mountain bog gentian. This riot of color attracts millions of people from all over the world, and has been increasingly popular

since the area was first explored in the late 1800's by the James Longmire family. In fact, the name Paradise is attributed to members of the Longmire family who felt the area is what "Heavenly Paradise" must be like.

## INFORMATION & SERVICES

### HENRY M. JACKSON MEMORIAL VISITOR CENTER

**Information & Books:** 9 a.m. - 7 p.m., daily. Exhibits are on animals, glaciers, geology, wildflowers, and mountain climbing. A 20-minute audio-visual program is shown on the hour and half-hour, 10 a.m. - 6 p.m., daily. This schedule may be pre-empted for an afternoon program of special interest presented by a Park Naturalist. Consult the activity boards or inquire at the information desk for details. The Northwest Interpretive Association provides books, maps, and slides for sale across the lobby from the information desk.

**Food Services, Showers, and Gifts:** available in the Henry M. Jackson Memorial Visitor Center, 10 a.m. - 7 p.m. daily, then 10 a.m. - 6 p.m., daily, September 12 - October 11. The food service offers quick and quality food.

**"Nisqually Vista" Self-guiding Trail:** 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.

**Paradise Picnic Area:** Located .25 mile below the Jackson Visitor Center. Picnicking is NOT allowed on the fragile meadows at Paradise.

### RAINIER MOUNTAINEERING

**The Guide House at Paradise:** 9 a.m. - 5 p.m., daily. Summit guided climbs, climbing instruction, and equipment rentals are available. For those not experienced on a glaciated peak, RMI offers a 3 day package: 1-day climbing seminars, combined with a 2-day summit climb. For more information call (206) 569-2227.

### PARADISE INN

**Lodging & Restaurant:** Hotel front desk open 24 hours, daily. Dining room 7 a.m. - 9 a.m. for breakfast, 12 noon - 2 p.m. for lunch (except Sunday), Sunday Brunch: 11 a.m. - 2:30 p.m., through September 26, 5:30 p.m. - 8:30 p.m. for dinner, then 6 p.m. - 8 p.m., September 12 - October 3; Glacier Lounge open 12 noon - 11 p.m. daily; snack bar open 9 a.m. - 8 p.m. daily, then 10 a.m. - 7 p.m. daily, September 12 - October 3. For reservations call (206) 569-2275. Provided by Mount Rainier Guest Services.

**Gift Shop:** Located in the Paradise Inn lobby 8 a.m. - 9 p.m., daily, then 8 a.m. - 8 p.m., daily, September 12 - October 3.

**Post Office:** 8:30 a.m. - 5 p.m., Monday - Friday, 8:30 - 12:30 p.m., Saturday.

## NATURALIST WALKS & PROGRAMS

### Program Description

**Alta Vista Walk:** 2 hours, 1.5 miles. Explore the variety of subalpine meadow life on this moderate hike to a knoll overlooking Paradise. Meet at the Jackson Visitor Center flagpole.

**Flower Walk:** 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:** 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.

**Oh, What A Paradise!:** 30 minutes. Slide program in Jackson Visitor Center auditorium. Discover ways park managers and the public can work together for the future of the meadows.

**Evening Stroll:** 1 hour, .5 mile. Explore Paradise's past and present during this stroll with a park naturalist. Meet in the Paradise Inn Lobby.

**Music For Parks:** 1 hour, .5 mile. Poetry, nature writings and the music of the flute are woven throughout this easy, lyrical stroll with a park naturalist. Meet in the Paradise Inn Lobby.

**Evening Program:** 1 hour. Paradise Inn Lobby. Illustrated programs explore a variety of subjects on Mount Rainier. Titles are posted in the Jackson Visitor Center and the Paradise Inn.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Alta Vista Walk	1030 AM						
Flower Walk	130 PM						
Nisqually Vista Walk	230 PM						
Oh, What A Paradise!	300 PM						
Evening Stroll	7/1-8/28 730 PM 8/29-9/11 700 PM	7/1-8/28 730 PM 8/29-9/11 700 PM	7/1-8/28 730 PM 8/29-9/11 700 PM		7/1-8/28 730 PM 8/29-9/11 700 PM	7/1-8/28 730 PM 8/29-9/11 700 PM	7/1-8/28 730 PM 8/29-9/11 700 PM
Music For Parks				7/1-8/28 730 PM 8/29-9/11 700 PM			
Evening Program	9 PM						

## EXPLORER HIKES

**Explorer Hikes:** Explore beautiful lesser-visited areas above or beyond Paradise on these moderate hikes. To **PANORAMA POINT:** 4 hours, 5 miles, 1400 feet elevation gain. Meet at Jackson Visitor Center flagpole. To **PINNACLE PEAK:** 3 hours, 2.5 miles, 1050 feet elevation gain. Meet at Trailhead (west end of parking area at Reflection Lake.) To **SNOW LAKE:** 3 hours, 2.5 miles, 700 foot elevation gain. Meet at Trailhead (parking area 1.5 miles east of Reflection Lake.) Bring lunch, water and proper clothing for possible sudden weather changes for all the hikes.

Wednesday	Friday	Sunday
10 AM Panorama Point	10 AM Snow Lake	10 AM Pinnacle Peak





# JUNIOR RANGERS

Mount Rainier  National Park

**W**elcome to the Mount Rainier National Park "Junior Ranger" program. This program will help children between the ages of 6 to 11 years develop an understanding and appreciation for National Parks, with special interest in Mount Rainier National Park. Children completing the program will earn a "Junior Ranger" certificate, and may purchase a "Junior Ranger" patch.

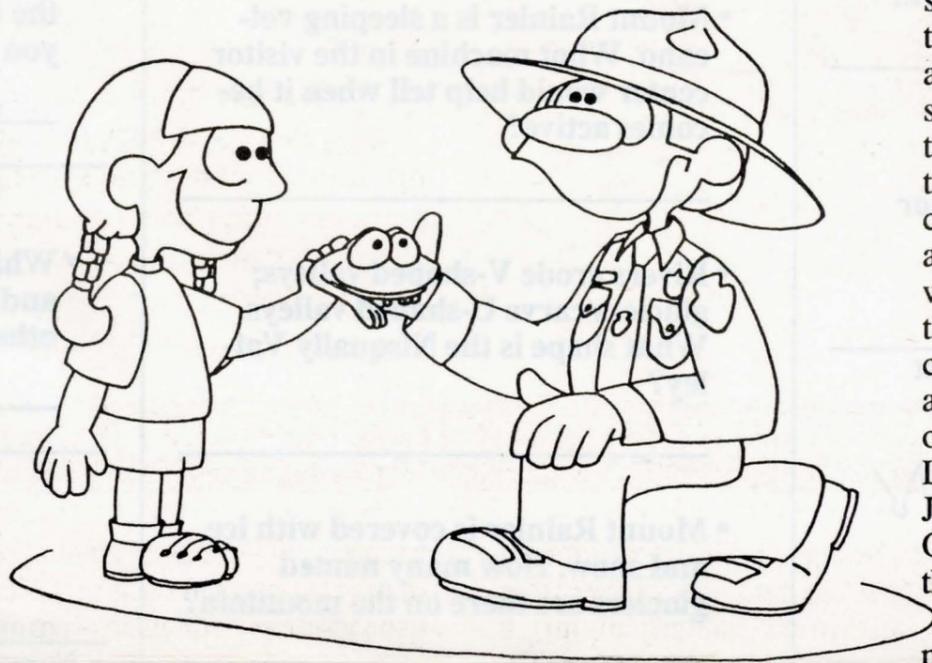
There are two opportunities for children to take part in the "Junior Ranger" program. Children may attend the "guided" activities at either the Cougar Rock or Ohanapecosh Campgrounds, or complete the "do-it-yourself" activities printed in the "Tahoma" newspaper.

The guided activities take place from July 2nd through September 4th. These two-hour ranger/naturalist led programs introduce children to the natural world of Mount Rainier. Meet the park naturalist at the Cougar Rock Campground Amphitheater at 2 PM on Wednesday, Friday or Saturday or at the Ohanapecosh Visitor Center at 10 AM on Saturday. Children need to be able to participate in the program without parents. Children will receive a

"Junior Ranger" certificate at the end of each program.

The do-it-yourself activities are printed in this section of the "Tahoma" newspaper for the Longmire, Paradise, Ohanapecosh, and Sunrise areas. Select one area of the park, then answer the questions and do the activities listed. Children need to complete activities and questions for only a single area. Answer as many questions as possible. If you need help ask a park naturalist. It is not necessary to answer questions or do activities in all four areas of the park to complete the program. Young children may need assistance from an adult or older child. Children will receive a "Junior Ranger" certificate when they present their completed do-it-yourself activities and questions to a naturalist at one of the four information centers: Longmire Museum, Henry M. Jackson Visitor Center at Paradise, Ohanapecosh Visitor Center, and the Sunrise Visitor Center.

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



## Naturalist-Led Junior Ranger Programs

Join a Naturalist for a guided Junior Ranger Program, July 2nd through September 4th, at 2 PM, Wednesday, Friday and Saturday at the Cougar Rock Campground or at 10 AM, Saturday at the Ohanapecosh Campground. These two hour programs are for children 6-11 years old. Come explore the hidden beauty and discover the story of Mount Rainier National Park. There is a limit of 25 children at each program.



Drawings by Betty C. Grace



# Paradise

## Nisqually Glacier - Subalpine Meadows



The Jackson Visitor Center has exhibits, movies, slide programs, and information. Enjoy the view from the observation deck.

Walk the Nisqually Vista self-guiding trail to gain a good introduction to the subalpine world of Mount Rainier.

### Do-It-Yourself Activities

- Join a naturalist guided walk, and learn first hand about the park.

\_\_\_\_\_  
Name of walk and naturalist

- Attend a program in the visitor center auditorium or at the Paradise Inn.

\_\_\_\_\_  
Name of program and naturalist



- How tall is Mount Rainier?

\_\_\_\_\_

- Each year thousands of people try to climb Mount Rainier. What year was it first climbed?

\_\_\_\_\_

- Mount Rainier makes its own weather. What is the greatest recorded snowfall for one year at Paradise?

\_\_\_\_\_

- Mount Rainier is a sleeping volcano. What machine in the visitor center would help tell when it becomes active?

\_\_\_\_\_

- Rivers erode V-shaped valleys; glaciers carve U-shaped valleys. What shape is the Nisqually Valley?

\_\_\_\_\_

- Mount Rainier is covered with ice and snow. How many named glaciers are there on the mountain?

\_\_\_\_\_



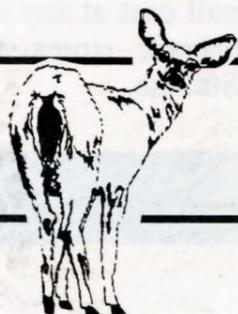
- Can you find flowers blooming in the meadows? Name three flowers you see.

\_\_\_\_\_

- What can you do to keep the Park and flower meadows beautiful for others to enjoy?

\_\_\_\_\_

\_\_\_\_\_ Naturalist



# Longmire

## Trail of the Shadows - Nisqually River

The Longmire Museum is one of the oldest National Park Service museums. Explore the stories of the people, animals, and geology of the park.

Learn the history of the Longmire area on the "Trail of the Shadows" self-guided nature trail.

### Do-It-Yourself Activities

- Join a naturalist guided walk, and learn first hand about the park.

\_\_\_\_\_  
Name of the program and naturalist

- Attend a campfire program and hear the stories of Mount Rainier.

\_\_\_\_\_  
Name of the program and naturalist

- Find the log section display outside the museum. What year did the tree start to grow?

\_\_\_\_\_

- Find the mineral springs. What does it smell like? What color are the springs?

\_\_\_\_\_



- Look for the beaver dams in the meadow. How many can you see?

\_\_\_\_\_

- What year did the Longmire family build the cabin on the Trail of the Shadows?

\_\_\_\_\_

- Find a Douglas-fir and a hemlock cone. Which is larger?

\_\_\_\_\_

- What is the name of the largest mammal on display in the museum?

\_\_\_\_\_

- Who was the first woman to climb Mount Rainier?

\_\_\_\_\_

- What year did Mount Rainier become a national park?

\_\_\_\_\_

\_\_\_\_\_ Naturalist



# Sunrise

## Emmons Glacier - Marmots



**S**unrise is located in the northeast corner of the park. The visitor center is in a large log building.

The Emmons Vista and Sourdough Ridge trails start near the visitor center.

### Do-It-Yourself Activities

- Join a naturalist guided walk, and learn first hand about the park.

\_\_\_\_\_  
Name of the walk and naturalist

- Attend a campfire program at the White River Campground and hear the stories of Mount Rainier.

\_\_\_\_\_  
Name of the program and naturalist

- Sunrise is the highest place in the park you can drive. What is the elevation of Sunrise?

\_\_\_\_\_

- Mount Rainier is covered with ice and snow. Name the largest glacier in the park.

\_\_\_\_\_

- Trees in these meadows grow in island-like clumps. Can you name two of these trees?

\_\_\_\_\_

- The meadow flowers come in many colors. Name a flower that is: white, blue, or red.

\_\_\_\_\_



- Klickitat and Yakima Indians visited this area of the park to hunt. What animals did they hunt?

\_\_\_\_\_

- As you walk the trails around Sunrise, listen for animals. Listen for a loud whistling sound. What animal makes this sound? This is the same animal that likes to sun itself on the rocks.

\_\_\_\_\_

- The flowers and soil of the Sunrise meadows can be damaged by visitor use. How can you help to protect this area?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

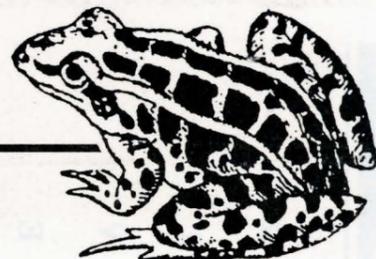
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Naturalist

# Ohanapecosh

## Ohanapecosh River - Old-Growth Forest



**T**he Ohanapecosh Visitor Center is a place to learn about the forest and animals of this area of the park.

Explore the old-growth forest on the Grove of the Patriarchs self-guiding nature trail.

### Do-It-Yourself Activities

- Join a naturalist guided walk, and learn first hand about the park.

\_\_\_\_\_  
Name of the walk and naturalist

- Attend a campfire program and hear the stories of Mount Rainier.

\_\_\_\_\_  
Name of the program and naturalist

- Find the log section displayed outside the visitor center. How old was this giant tree when it was cut?

\_\_\_\_\_

- Not all trees have needles for leaves. Look for trees with broad flat leaves. Can you name one?

\_\_\_\_\_

- The hot springs were the center of a health resort. Name the person who developed the area into a health resort.

\_\_\_\_\_

- Many animals live in the forest. Name two of the mammals that live in this forest.

\_\_\_\_\_

- The Ohanapecosh River is clear most of the year. Why doesn't it look muddy like other rivers in the park?

\_\_\_\_\_



- Birds are hard to see in this forest. Name the three birds in the visitor center exhibit.

\_\_\_\_\_

- Trees are important to animals and humans. Name three trees in this forest.

\_\_\_\_\_

- Name the tree Northwest Indians used the most.

\_\_\_\_\_

\_\_\_\_\_  
Naturalist

## BIODIVERSITY WORD SEARCH

C G E N C E D A R I M R  
 A A H W D C O J L K O I  
 R R G O Y O U X U D F V  
 P T A R M I G A N N E E  
 E E Q M O Y L W E J C R  
 N R B I L U A D O Z V O  
 T S H R E W S J B O K T  
 E N M V X Q F E R N D T  
 R A L O P L I C H E N E  
 A K J U S I R O G D Y R  
 N E W T M S K P H L O X  
 T C B A N A N A S L U G

Mount Rainier is a volcano surrounded by a wilderness of rocky ridges, subalpine meadows and old-growth forest. All of the animals and plants here depend on each other to survive. It is important for Mount Rainier

National Park to have a high BIODIVERSITY (many different species of plants and animals) in order to have a healthy wilderness. How many of the following plants and animals can you find hidden in the letters above?

dogwood	moss	ptarmigan	banana slug	newt	grouse
shrew	river otter	lichen	garter snake	phlox	worm
Douglas fir	carpenter ant	junco	fern	cedar	pika

### Northwest Interpretive Association Mount Rainier National Park Discount Coupon

*15% off the purchase of any book upon the completion of the Junior Ranger Program*

(present Junior Ranger Certificate with coupon)

Valid until September 26, 1993

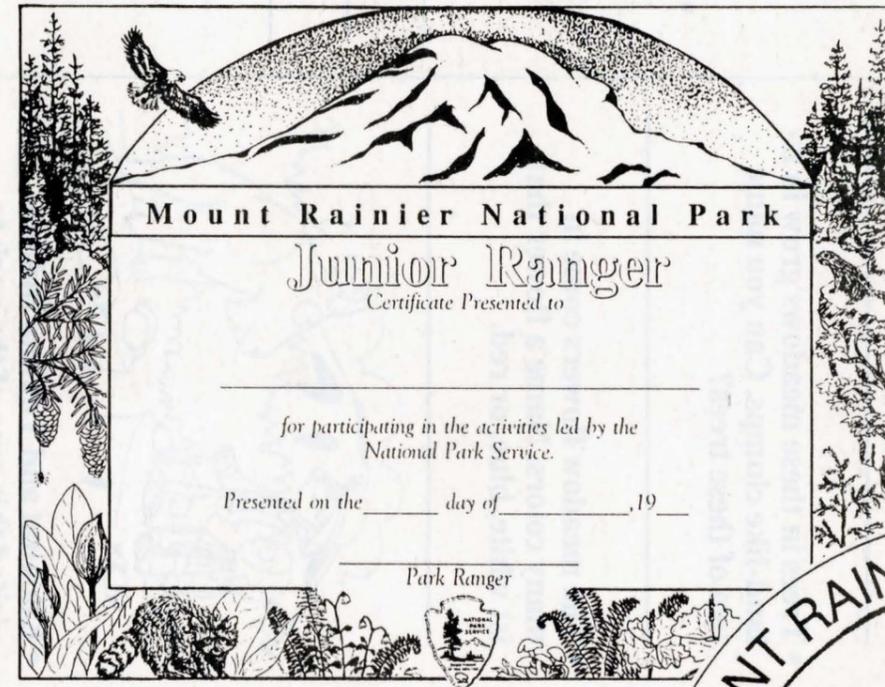
### Northwest Interpretive Association Mount Rainier National Park Discount Coupon

*15% off the purchase of Discovering Mount Rainier*

Valid until September 26, 1993

# Junior Ranger Program

## Mount Rainier National Park



*Be a Junior Ranger!  
Earn a certificate  
and a patch!  
Have lots of Fun!*

*Details Inside*

## DON'T BE A MEADOW STOMPER

**P**aradise - the name seems appropriate for this beautiful area nestled between ice-capped Mount Rainier and the jagged peaks of the Tatoosh Range. Here subalpine meadows extend upward from 5400 feet elevation to near timberline at 7400 feet. Small clumps of trees punctuate the open park-like meadows.

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 the 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 six years all meadow damage has been documented and prioritized for restoration, a Paradise Meadow Resource Management Plan as been completed, and a restoration program has been implemented.

Even though the National Park Service is actively trying 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.



## PARADISE ICE CAVES NO LONGER EXIST

**I**t has been said that the only thing constant in nature is change. The Paradise Glacier is a good example of change at Mount Rainier. An 1896 map of glacier positions showed the terminus of the Paradise Glacier to be about one-half mile from Sluiskin Falls and an easy walk from Paradise. Its ice caves and crevasses were main attractions for visitors of the early 1900s. As the century progressed visitors watched with dismay as the Paradise Glacier retreated upvalley and separated into upper and lower sections. The lower section received much less snowfall during the winters than it had previously and became an isolated stagnant ice mass. As the terminus of the thinning glacier continued its upvalley retreat, the ice caves shrank into smaller unstable crawl spaces. Finally, in the fall of 1991, the ceiling of the last large cave completely collapsed. The icy caverns of blue and purple light as shown in books and on postcards no longer exist. The caves can now be enjoyed only through stories and pictures of those who explored them before us.



## HIGH ALTITUDE WASTE POSES HAZARDS

**I**n 1992, a record 9424 climbers started out for the summit of Mount Rainier with 5508 of them finally standing on the crater rim. Thousands more people day-hiked to Camp Muir at 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.

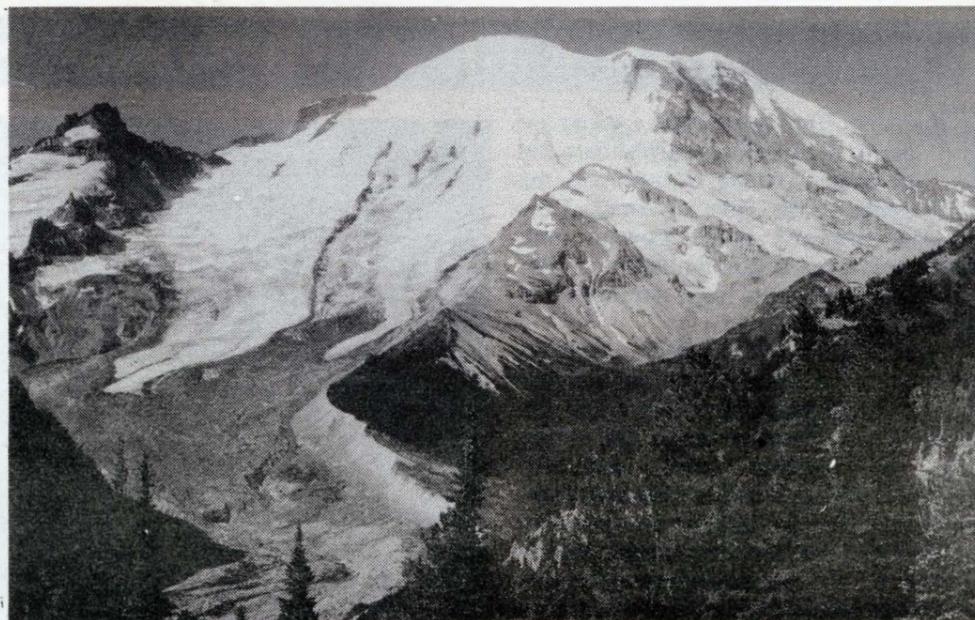


# Paradise

# Sunrise/White River

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 a new perspective.

Sunrise is in the "rain shadow" of Mount Rainier. The 14,410 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 dif-



ferent 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.

## INFORMATION & SERVICES

### SUNRISE VISITOR CENTER

**Information & Books:** 9 a.m. - 6 p.m., Sunday through Friday; 9 a.m. - 7 p.m., Saturday. The center features exhibits on the ecology of the park's subalpine and alpine environments. The Northwest Interpretive Association provides books, maps, and slides for sale.

**Sunrise Picnic Area:** Tables located behind the Sunrise Visitor Center in a subalpine setting.

**"Sourdough Ridge" Self-guiding Trail:** 1 hour, .5 mile. A moderate walk through flower fields rich in color to a panoramic viewpoint of four volcanic peaks.

### SUNRISE LODGE

**Dining:** 10 a.m. - 7 p.m., daily. The lodge provides food service and a gift shop. No overnight lodging is available. Provided by Mount Rainier Guest Services.

### WHITE RIVER HIKER INFORMATION CENTER

**Permits:** 8 a.m. - 4:30 p.m., Sunday - Thursday; 8 a.m. - 9 p.m., Friday; 7 a.m. - 7 p.m., Saturday. Obtain backcountry permits for overnight trips and hiking information in the ranger station at the White River Entrance.

**White River Campground:** 111 sites, no group sites. \$6 per site per night; first-come, first-served basis.

## NATURALIST WALKS & PROGRAMS

### Program Description

**Geologic Walk:** 2 hours, 2 miles. Join a Park Naturalist and see the geologic story of Mount Rainier. Learn how avalanches, glaciers, mudflows and volcanic eruptions have affected the mountain. Meet at Sunrise Visitor Center.

**Sunrise Potpourri:** 30 minutes, .5 mile. Discover Mount Rainier, the Emmons Glacier or the history of Sunrise. Meet a Naturalist at Sunrise Visitor Center. Each walk explores a different subject. Go on one, or stay for the afternoon.

**Campfire Program:** 45 minutes. Explore the beauty, geology or history of Mount Rainier at a campfire program presented by a Park Naturalist at the campfire circle in the White River Campground. Titles are posted on campground and Sunrise Visitor Center bulletin boards.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				10 AM	10 AM	
					130 PM	130 PM
230 PM	230 PM	230 PM	230 PM	230 PM	230 PM	230 PM
330 PM	330 PM			330 PM	330 PM	330 PM
			July 8 PM	July 8 PM	July 8 PM	
			8/1-9/2 730 PM	8/1-9/3 730 PM	8/1-9/4 730 PM	

# Carbon River

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 .25 mile 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 rain forest in the park. The self-guiding "Carbon River Rain Forest Trail" at Carbon River Entrance is a nature trail to help you 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. The road to beautiful Mowich Lake treats you to outstanding views of the "other side of the mountain."



## INFORMATION & SERVICES

**Ipsut Creek Campground:** Located at the end of the Carbon River Road. 29 sites, with 2 group sites. Only the group sites can be reserved. Camping fee for individual sites is \$5 per site per night, on a first-come, first-served basis.

**"Carbon River Rain Forest" Self-guiding Trail:** 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.

**Picnic Tables:** Located at Falls Creek, 2 miles from the entrance, and in Ipsut Creek Campground.

**Carbon River Entrance Station:** Offers books and maps for sale, and issues backcountry permits.

## NATURALIST PROGRAMS

### Program Description

**Campfire Program:** 45 minutes. Join a Park Naturalist for a program in the campfire circle in Ipsut Creek Campground. Program titles and time are posted on the campground bulletin board.

**Explorer Hikes:** Hike locations, times and meeting points will be announced at campfire programs and posted on Ipsut Creek bulletin board.

Friday	Saturday	Sunday
See Bulletin Board	See Bulletin Board	See Bulletin Board



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 1,000 years old. The self-guiding nature trail in the Grove of the Patriarchs is an excellent place to experience the sublime qualities of the old 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 Campground, the river cascades as beautiful Silver Falls.

**PARENTS: Keep children with you and stay on constructed trails. Spray near waterfalls and streams makes for slippery rocks and unstable footing. Hikers and waders may slip and plunge into rivers, which are too cold and swift to swim.**

Early settlers to the Cowlitz Valley were attracted to Ohanapecosh by the hot springs that bubble from the ground. A complete resort with cabins, bathhouses and other facilities was developed around the springs. Today the buildings and baths are gone, but the shallow springs remain. The Hot Springs self-guiding trail, "Life Systems: The Forest and Hot Springs of Ohanapecosh," describes the beauty and history of this area.



# Ohanapecosh

## INFORMATION & SERVICES

### OHANAPECOSH VISITOR CENTER

**Information & Books:** 9 a.m. - 7 p.m., Sunday through Thursday; 9 a.m. - 8 p.m., Friday and Saturday. Exhibits feature animals, old growth forest, and local history. The Northwest Interpretive Association provides books, maps, and slides for sale.

**"Life Systems" Self-guiding Trail:** 30 minutes. .5 mile. Explore the forest and hot springs of Ohanapecosh on this walk, start at the visitor center.



**"Grove of the Patriarchs" Self-guiding Trail:** 1.5 hours, 2 miles. Walk among 1,000 year old tree giants of the old-growth forest. See these ancient trees on an island in the Ohanapecosh River.



**Ohanapecosh Campground:** The campground contains 205 sites, but no group sites. Camping fee \$8 per site per night on a first-come, first-served basis. The Ohanapecosh Campground is open from mid-May until late October.



**Ohanapecosh Picnic Area:** Located across from the Ohanapecosh Visitor Center near the entrance to the Campground.



**Tipsoo Lake Picnic Area:** Located near Chinook Pass on Highway 410, 17 miles north of Ohanapecosh, and 11 miles south of the White River Entrance arch.



**Box Canyon Picnic Area:** Located between Ohanapecosh & Paradise on Stevens Canyon Road.

## NATURALIST WALKS & PROGRAMS

### Program Description

**Silver Falls Walk:** 2 hours, 3 miles. Explore the lowland forest along the Ohanapecosh River enroute to the beautiful Silver Falls. Linger at the falls or return with the Park Naturalist. Meet at the bulletin board by the bridge at loop "B" in the Ohanapecosh Campground.

**Grove of the Patriarchs Walk:** 2 hours, 2 miles. Enjoy a quiet walk along the Ohanapecosh River through an ancient forest to the Grove of the Patriarchs. Meet at the Ohanapecosh Visitor Center and carpool to the trailhead (share a ride).

**Children's Program:** 2 hours, .5 mile. Children 6-11 years old are invited to explore the hidden beauty of the Ohanapecosh Campground old-growth forest with a Park Naturalist. Meet at the Ohanapecosh Visitor Center.

**Campfire Program:** 45 minutes. Discover Mount Rainier through a slide program presented by a Park Naturalist at the Ohanapecosh Campground Amphitheater. Program titles are posted on the campground and visitor center bulletin boards.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10 AM					10 AM	
			10 AM			10 AM
					10 AM	
July 9 PM	July 9 PM	July 9 PM				
8/1-9/6 830 PM	8/1-9/7 830 PM	8/1-9/8 830 PM	8/1-9/9 830 PM	8/1-9/10 830 PM	8/1-9/11 830 PM	8/1-9/5 830 PM

## EXPLORER HIKES

**Explorer Hike:** Visit the best of the Ohanapecosh or Tipsoo Lake/Chinook Pass areas with a Park Naturalist. Bring lunch, water, sturdy foot gear, and proper clothing for weather changes to all the hikes. Bring bug repellent and sunscreen for the Tipsoo Lake/Chinook Pass area.

To **SILVER FALLS** and **GROVE OF THE PATRIARCHS:** 5 hours, 6 miles. Meet at bulletin board by the bridge at Loop "B" in Ohanapecosh Campground.

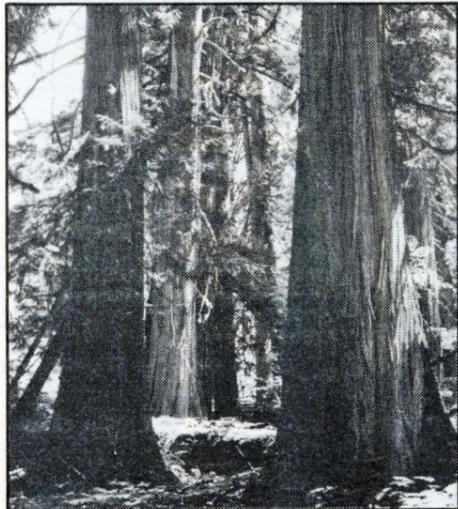
At **TIPSOOLAKE/CHINOOK PASS:** Special activities will be announced at Ohanapecosh Visitor Center and at campfire programs.

			10 AM Silver Falls & Grove of the Patriarchs	
--	--	--	---	--



# Ancient Forests At Mount Rainier

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 is 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.

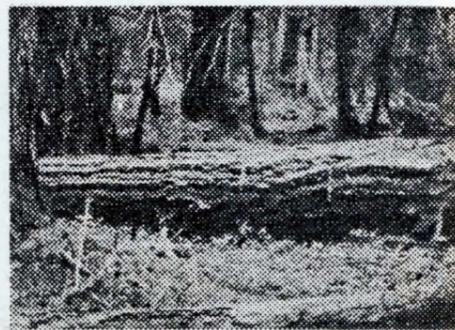
Scientists studying the forests of Mount Rainier for more than ten years, have identified forest community types, determined the age of the forest, and listed the plants and animals associated with the Douglas-firs. Researchers have found differences in temperature, moisture and associated species between old-growth forests in Western 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 old-growth 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. Mycorrhizae (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-fir forests. Some scientists suggest that the northern spotted owl lives only in old-growth 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 optimum

habitats in old-growth forests. 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 of the park is as important today as 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,

*"For a great tree death comes as a gradual transformation ... Alone among living things it retains its character and dignity after death. Even in its final moments, when the massive trunk lies prone and it has moldered into a ridge covered with mosses and fungi, ... It enriches and refreshes the earth. And later, as part of other green and growing things, it rises again."*

Edwin Way Teale

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 lieurely 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.

## Rainier: A Decade Volcano



Mount Rainier, which is the highest volcano in the Cascade range, has been designated as a Decade Volcano. 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 following: 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 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.

## Mount Rainier Wilderness

National parks have been called "the best ideas 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 had 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.

George Catlin, noted painter of the American Indian, first expressed the national park idea. On a trip to the Dakotas in 1832, Catlin became concerned about the westward movement's effects on Indian civilization, wildlife and wilderness. He suggested that they might be preserved "by some great protecting policy of the government...in a magnificent park...A nation's park, containing man and beast, in all the wildness and freshness of their nature's beauty!"

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' wildness 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, 1988, 228,400 acres (97%) of Mount Rainier National Park became the "Mount Rainier Wilderness." Excluded areas are Camps Schurman and Muir, portions of the water supplies, road systems and roadside developments.

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

## Wildlife And Your Lunch

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-meant 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. In addition, 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 damaging tents and vehicles, and injuring 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.

# Care For Your Meadows



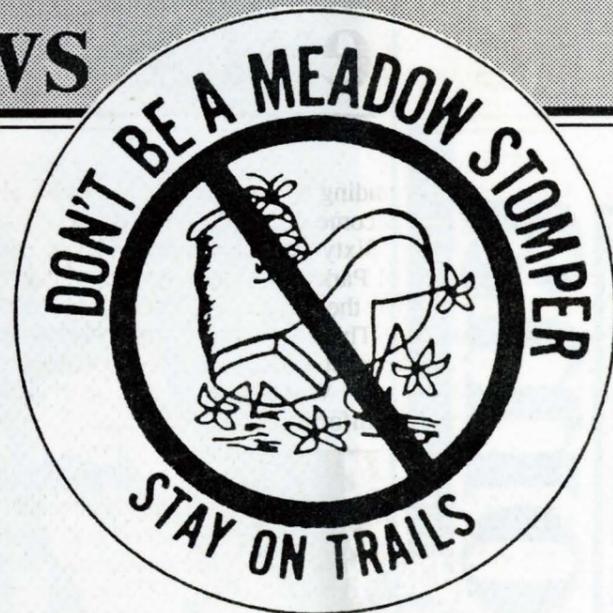
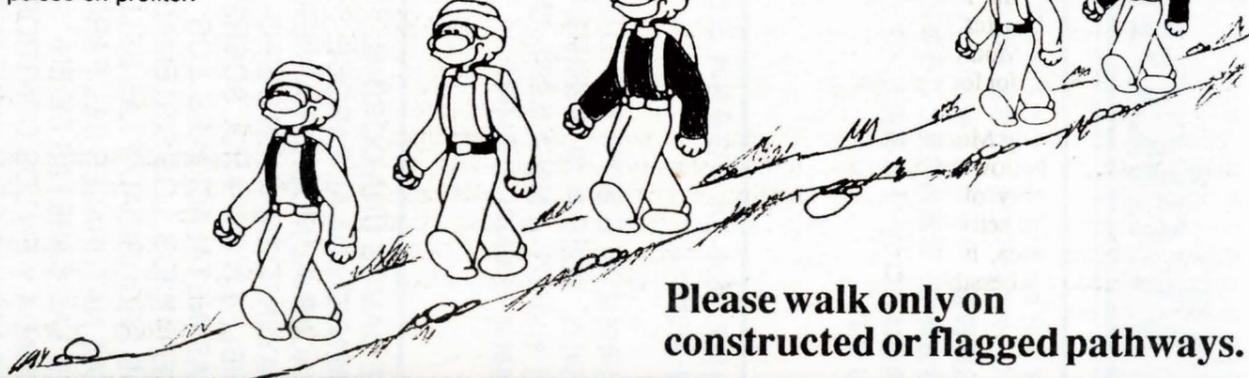
Нам очень дороги луга Пэрадайс и Санрайз. Цветочные луга оттаивают в июле и в начале августа, и когда исчезает снег, они очень красиво расцветают. Пышная растительность этих лугов очень хрупкая, и нуждается в специальном уходе. Пожалуйста, ходите только по проложенным дорожкам. Не срывайте цветы и не топчите растения. Не сходите с дорожек во время фотографирования. Устраивайте пикники только в специально отведённых для этого местах, а не на лугах. Мы хотим сохранить красоту этих лугов, чтобы ими мог любоваться весь мир.

Những cánh đồng cỏ của Paradise và Sunrise thật vô cùng đáng yêu đối với chúng ta. Băng trên các cánh đồng hoa tan dần vào tháng bảy và đầu tháng tám và khi tuyết vừa tan mất thì hoa lại nở rộ ra khoe hương vô cùng đẹp mắt. Các cánh đồng tươi tốt này rất yếu ớt và cần sự chăm sóc đặc biệt. Xin chỉ đi trên các con đường nhỏ đã được xây ra mà thôi. Xin đừng nhổ bất cứ loại hoa nào hoặc giẫm lên bất cứ loại cây nào. Xin đứng trên các đường nhỏ khi chụp hình. Đi chơi và ăn uống ngoài trời tại các chỗ được chỉ định mà thôi - không phải trên các cánh đồng. Chúng tôi muốn các cánh đồng này giữ đẹp mãi để cho tất cả thế giới được nhìn thấy.

Die Bergwiesen von Paradise und Sunrise liegen uns sehr am Herzen. Die Blumenfelder tauen im Juni ab, und im frühen August, wenn der Schnee verschwindet, erscheint eine wunderbare Blütenpracht. Diese üppigen Bergwiesen sind sehr empfindlich und bedürfen besonderer Pflege. Bitte gehen Sie nur auf den gebauten Wegen und pflücken Sie keine Blumen, und treten Sie bitte nicht auf Pflanzen. Wenn Sie fotografieren, bleiben Sie bitte auf den Wegen. Picknicks können nur in den bezeichneten Bereichen abgehalten werden - nicht auf den Bergwiesen. Wir wollen die Schönheit der Bergwiesen für alle erhalten.

Paradise 와 Sunrise (선라이즈)의 목초지는 우리에게 매우 귀중합니다. 칠월과 팔월 초에 이 꽃들판은 녹아서 눈이 없어짐에 따라 아름다운 꽃들이 피어 납니다. 이 무성한 목초지는 손상되기가 매우 쉬우므로 각별한 주의가 필요합니다. 반드시 축조된 통로로만 다니십시오. 절대로 꽃을 꺾거나 식물을 밟지 마십시오. 사진을 촬영할 때는 통로 안에서 하십시오. 소풍은 - 목초지로 나가지 마시고 - 지정된 장소에서 하십시오. 우리는 이 목초지가 아름답게 남아서 모든 세계가 볼 수 있도록 하고 싶습니다.

Les pâturages de Paradise et de Sunrise nous sont très précieux. La fonte des neiges, en juillet et début août, y cède la place à de superbes champs de fleurs. Ces riches prairies sont pourtant très fragiles et requièrent des soins particuliers. Veillez donc à ne marcher que sur les sentiers renforcés. Ne cueillez aucune fleur et n'en écrasez aucune. Restez bien sur les sentiers pour prendre vos photographies et ne mangez que dans les zones de pique-nique indiquées - pas sur l'herbe des prés. Nous voulons en effet préserver leur beauté pour que tout le monde entier puisse en profiter.



Welcome to Mount Rainier National Park. We value the meadows of Paradise and Sunrise. The flower fields melt out in July and early August and beautiful displays of blossoms spring up as the snow disappears. These lush meadows are very fragile and need special care. Please walk only on the constructed pathways. Do not pick any flowers or trample any plants. Stay on pathways when taking photographs. Picnic only in designated areas - not on the meadows. We want the meadows to remain beautiful for all the world to see.

草原: Paradise (パラダイス)と Sunrise (サンライズ)の草原は私達にとってとても大切なものです。その自然の花畑は7月か8月の始めに顔を出し始め、雪が消えるに従い美しい花々が一齐に咲き始めます。この青々とした草原は非常に傷つきやすく、特別な手入れが必要なので、人工の歩道のみをお使い下さるようお願いいたします。花を摘んだり、植物の上を歩いたりすることは御遠慮下さい。写真撮影の場合も歩道から出ないようにお願いします。ピクニックには指定された場所がありますので、草原でのピクニックは御遠慮ください。世界中の人々に喜んでいただけるように、私達はこの草原をいつまでも美しく保っていきたく願っています。

Paradise (天堂)及 Sunrise (日出)的草原對我們非常寶貴。七月至八月間，花場開始融雪，冰雪一消失，美麗的花朵便會盛開。這些翠綠的草園非常嬌貴，需要特殊的照顧。請只在建築好的小徑上行走。切勿攀摘花朵或踐踏任何植物。拍照請留在小徑上。野餐要到指定的地方---不可在草地上。我們希望這些草原能保持美麗，好讓全世界觀賞。

Las praderas de Paradise y Sunrise despiertan en nosotros un especial cariño. Los campos de flores se deshuelan en julio y comienzos de agosto y, a medida que desaparece la nieve, florecen los campos con un bello despliegue de colorido. Estas frondosas praderas son muy frágiles y requieren de cuidados especiales; por consiguiente, le rogamos caminar únicamente por los senderos especialmente contruidos para tal fin, no cortar las flores ni pisotear las plantas. Permanezca en los senderos al tomar fotografías y haga sus meriendas campestres en las áreas designadas para ello - no en las praderas. Nuestra intención es preservar la belleza de estas praderas para que el mundo entero pueda disfrutar al admirarlas.

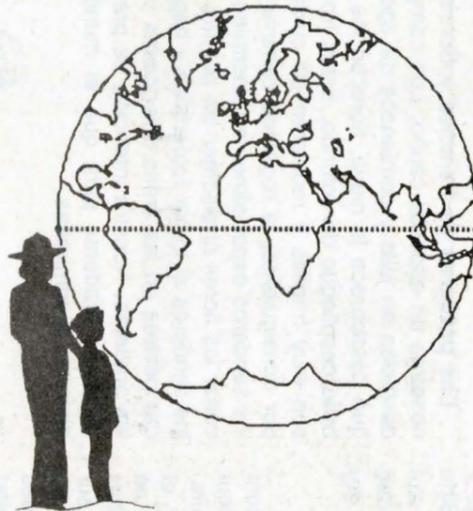
Please walk only on constructed or flagged pathways.

# Welcome To Mt. Rainier

マウント・レイニアー・ナショナル・パークによろこそ。日本語で書かれた公園設備、サービス、安全についての注意事項、公園内の見どころなどの案内書は入口ゲートと案内センターにあります。

마운트 레이니어 국립공원에 오신 것을 환영합니다.

한국어로 된 공원내의 각종 편의시설, 서비스, 안전수칙 및 자연경관등에 관한 안내서가 공원입구 초소와 방문객 센터에 비치되어 있습니다.



Добро пожаловать в Национальный парк горы Рэниер. Информацию на русском языке об удобствах, обслуживании, правилах безопасности и туристских местах парка вы можете получить на станциях смотрителей парка, у входа и в туристских центрах.

CHÀO MỪNG QUI VỊ ĐẾN CÔNG VIÊN QUỐC GIA MOUNT RAINIER. TIN TỨC CÓ SẴN BẰNG TIẾNG VIỆT NAM VỀ CƠ SỞ TIỆN NGHI, DỊCH VỤ, AN TOÀN VÀ CÁC THẮNG CẢNH TRONG CÔNG VIÊN TẠI CÁC TRẠM KIỂM LÂM, TRẠM ĐI VÀO VÀ TRUNG TÂM THĂM VIẾNG.

歡迎光臨 Mount Rainier National Park (維尼亞山國家公園)!

入口亭和接待中心備有關於設施、服務、安全及公園景觀的中文資料。

BIENVENUE AU PARC NATIONAL DE MOUNT RAINIER. VOUS TROUVEREZ DES INFORMATIONS EN FRANÇAIS RELATIVES AUX INSTALLATIONS, AUX SERVICES, À LA SÉCURITÉ ET AUX POINTS D'INTÉRÊT DU PARC, AUX POSTES D'ENTRÉE OU AUX CENTRES DES VISITEURS (VISITOR CENTERS).

WILLKOMMEN IM MOUNT RAINIER NATIONAL PARK. INFORMATIONEN ÜBER EINRICHTUNGEN, SERVICELEISTUNGEN, SICHERHEITSMASSNAHMEN UND SEHENSWÜRDIGKEITEN DES PARKS SIND IN DEUTSCHER SPRACHE BEI DEN RANGERSTATIONEN AN DEN PARK-EINGÄNGEN UND IN DEN BESUCHERZENTREN (VISITOR CENTERS) ERHÄLTlich.

LE DAMOS UNA CORDIAL BIENVENIDA AL PARQUE NACIONAL MOUNT RAINIER. HAY INFORMACION DISPONIBLE EN ESPAÑOL SOBRE LAS INSTALACIONES, LOS SERVICIOS, LOS SISTEMAS DE SEGURIDAD Y LAS BELLEZAS NATURALES DEL PARQUE EN LAS CASETAS DE ENTRADA Y EN LOS CENTROS DE SERVICIOS AL VISITANTE (VISITOR CENTERS).

## Park Accessibility

### For Those with Mobility Impairments:

Most Comfort Stations and Buildings are accessible or accessible with help.

Accessible Overnight Accommodations are available at Longmire (National Park Inn) and Paradise (Paradise Inn). Phone (206)569-2275 for reservations.

Picnic Grounds and Campgrounds

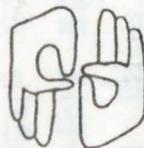
(except Sunshine Point) in the park have accessible sites and toilets. Shower Facilities are only at Paradise in the Henry M. Jackson Memorial Visitor Center.

### For Those with Hearing Impairments:

Written Information and Exhibits are available at Longmire Museum and Hiker Information Center, Jackson Visitor Center at Paradise, Ohanapechosh

Visitor Center, White River Hiker Information Center and Sunrise Visitor Center. Six Self-guiding Nature Trails are available with an interpretive guide booklet or signs. A TDD will be available later this year. Large type scripts of audio/visual programs presented at the Jackson Visitor Center at Paradise and Ohanapechosh Visitor Center are available.

For more information or assistance, contact a park ranger at any visitor center or phone (206) 569-2211.



# Tahoma

Mount Rainier National Park

Activity And Program Guide

July 1 - September 11, 1993



## Inside

- 1 • Planning Your Visit
- 1 • Road Closures and Bridge Repairs
- 2 • Hiking and Backpacking
- 2 • Recycling at Mt. Rainier
- 3 • Northwest Interpretive Association Services
- 3 • Mount Rainier & Olympic Fund
- 10 • Park Resources



## Tahoma

### Naturalist Activities & Visitor Services:

- 4/5 • Longmire/Cougar Rock
- 6/7 • Paradise
- 8 • Sunrise/White River
- 8 • Carbon River
- 9 • Ohanapechosh

Volume 19 No. 2