CRATER LAKE NATIONAL PARK

CRATER LAKE NATURAL HISTORY ASSOCIATION

VOLUME 11, SUMMER 1986

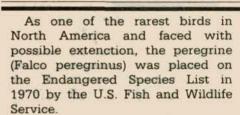


Welcome

Welcome to Crater Lake!

We expect 1986 to be an exceptional year. With the 1986 World Exposition nearby, gas prices down and fewer people travelling abroad, far more people will be travelling in the United States. The park rangers and concessionaire will do their utmost to help you have a safe and enjoyable visit through a variety of services, programs and information. Budget cuts, unfortunately, have forced us to reduce services and programs available this year. Please stop by the Rim Village Visitor Center for information and assistance in planning your stay at Crater Lake.

Bob Benton, Superintendent



Peregrine Falcon

In 1979, a pair of nesting falcons and their young were discovered. This was believed to be the only active peregrine falcon nest.

Future egg clutches, however, failed to hatch due to egg shell thinning. This weakening of the shell is an indirect result of pesticides.

In 1981, the National Park Service initiated a program which would take an active role in protecting, researching and manipulating the peregrine falcon to ensure it's long term success at Crater Lake as a nesting species.

This program involves two different procedures. The first entails the swapping of eggs from the nest with chicks that were hatched in captivity. The second method is initiated in years when the first cannot be employed Three fledglings (called eyas) previously raised in captivity are released in a method known as hacking.

These steps are an effort to increase the number of peregrine falcons in the wild and improve their chances for nesting successfully in the future.

This is one of many resource management projects with which the National Park Service is involved to help perpetuate wildlife and protect the environment.

A Volcano Shaped Crater Lake

The process which shaped Crater Lake began long ago. For nearly halfa-million years layer upon layer of erupted material built Mt. Mazama, the mountain that collapsed and formed the caldera containing Crater Lake.

Glaciers periodically covered the flanks of the multi-peaked mountain. Climactic eruptions occurred, according to geologists, 6,845 years ago, after the ice had melted. Pumice and ash blanketed the land, covering an area extending as far as Saskatchewan and Wyoming.

Communities underneath the ash clouds were shrouded in a dark, gray world. No doubt Native Americans north and east of Mazama were mystified, frightened and some left homeless by Mazama's ash outpouring much as many Washington state people were displaced by the erup-

tions of Mount St. Helens, in 1980.

Although the St. Helens eruptions did not equal the believed size of the Mazama eruption, the same type of destruction has been seen in wide areas surrounding the mountain.

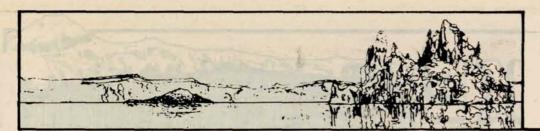
As the eruption painting of Mazama done by Paul Rockwood indicates, the discharge of volcanic material by the two mountains was probably similar. In addition to the ash belched out of Mazama, it is believed heavy masses of ash raced as "glowing avalanches" at speeds of 70 to 80 miles per hour down valleys previously cut by water and glaciers.

After growing for millenniums, Mazama quickly vanished, leaving in its place a huge bowl-shaped caldera 4,000 feet deep. later eruptions created Wizard Island and sealed the caldera floor. The lake filled to a depth of about 2,000 feet when evaporation and seepage equaled the input from rain and snow. Crater Lake, the name given to the water inside the remains of Mazama, is the deepest lake in the United States (1932 feet).

The lake is so blue because in pure water sunlight's longer wave lengths of red, yellow and green are absorbed at depth. Enough blue light is redirected by the water molecules to produce the intense blueness. Heat from the sun, stored in the immense body of water, retards ice formation so well that most winters the lake does not freeze. The last known freezes were in 1949 and 1985.

There is no reason to believe the process that formed and destroyed Mount Mazama and created Crater Lake has stopped. Slowly, gradually, the lake and its surroundings take new form.

Pour les visiteurs de Parc qui ne connaitraient pas l'anglais, une brochure imprimee en francais est disponsible au Centre des Visiteurs. Nous esperons qu'elle contribuera a rendre votre sejour dans le Parc plus interessant et nous vous souhaitons une visite agreable et sans accident a Crater Lake. Fur Besucher aus Deutschland, die nicht englisch sprechen, ist eine Broschure, in deutsch, im Besucherzentrum erhaltlich. Wir hoffen, dass dieses Informationsblatt ihnen zu einem interssanten, sicheren und angenehmen Besuch verhelfen wird. TRIP PLANNING
See page 4 & 5



Enjoy and Preserve

The legislation establishing the National Park Service and individual parks states its primary objective as the protection, preservation and conservation of park resources for use and enjoyment of future generations. Management of Crater Lake National Park is directed toward maintaining and, where necessary, re-establishing native plant and animal life. Please help us as we attempt to understand, maintain and restore natural processes. This can only be accomplished by leaving undisturbed all rocks, plants and animals (including insects) and remnants such as antlers and bones. Collecting any natural features is strictly prohibited. Exceptions are fishing and firewood for camping within the park. The concept of perpetuation of an entire ecosystem or natural environment, as compared with proection of individual features or species is a distinguishing aspect of species, is a distinguishing aspect of the Park Service's management of natural lands. We hope that through this concept of management that future generations will be able to observe and enjoy the same natural beauty that captivated discovers of Crater Lake many years ago.

Techniques used by the part to preserve resources include:

 Closure of trails, campsites or other areas to allow soils and vegetation to recover from use.

 Replanting of native seedlings and seeds in impacted areas to assist recovery.

. Rerouting of trails away from impacted areas.

 Utilization of existing fire rings and designated backcountry sites to prevent proliferation of impacted areas.

You can help preserve this beautiful park by visits with a "minimum impact" attitude. Please stay on trails, do not short cut. Respect our efforts to revegetate areas that need a rest.

Information

Weather, Road Conditions, Snow Amounts — Crater Lake National Park Headquarters:

(503) 594-2211 (8 a.m. to 5 p.m. daily, recorded message after hours)

National Park Service — Ranger-Led Programs, Tour Information and Reservations:

(503) 594-2211

For Emergency Only 800-452-5021 If busy: 503-594-2811

Road Construction

You may experience some minor delays along the roadway around the rim of Crater Lake especially at the North Junction area and the roadway between Sun and Kerr Notches. Please bear with us. Because of the amount of snowfall, summer is the only time of year roadwork is possible.

Thank you for understanding.

For Your Safety

Dogs -

Pets frighten wildlife, disturb others and occasionally fall over the rim. Keep pets on a leash, out of all buildings, and only on pavement.

Falls -

Travel within the caldera rim is prohibited except at the Cleetwood Trail. Beware of snow cornices and be especially careful to watch children near crumbling cliff edges.

Altitude -

Rim Village is 7100 feet above sea level. High alti*ude puts extra strain on your heart and lungs. Limit your activities to your personal condition.

Animal Bites -

Feeding wild animals is illegal and is also an invitation to be bitten. Rodents are potential sources of several diseases that can be transmitted to pets and humans. Avoid close contact with rodents and their burrows.

Speed Limits -

Observe posted speed limits and watch for loose rock and wildlife on roadways.

Volcanic Rock -

This is unstable and poorly suited for rock climbing. Travel within the Crater Lake rim is forbidden except at Cleetwood Cove.

Water -

Use caution when drinking water in the backcountry. An intestinal parasite from surface water can cause diarrhea in pets and humans. Chemical treatment is not as reliable as boiling the water for 5 minutes to prevent water borne disease. Tap water is safe. If you're backcountry camping, boil water at mealtimes for next day use.

Reflections

The Crater Lake Reflections is published for park visitors by the Crater Lake Natural History Association in cooperation with the National Park Service. The Crater Lake Natural History Association is a non-profit organization working with the National Park Service to provide programs of interpretation, education and research in Crater Lake National Park.

To help Crater Lake visitors to better understand, appreciate and protect the park, Association sales outlets at the visitor center and park head-quarters offer selected publications and maps. To become a member write to: Crater Lake Natural History Association, P.O. Box 56, Crater Lake, OR 97604.

Squirrels & Chipmunks

Many visitors, especially children, are intrigued by the approachability of the golden-mantled ground squirrel. This is the lively and attractive cousin of the chipmunk. It is distinguished from the chipmunk by its larger size and lack of eyestripes. The head and front legs are golden yellow and each side of the body has a horizontal white stripe, surrounded by two black stripes.

Children frequently succumb to the temptation to feed these wild animals, but adults should discourage this practice. Squirrels and chipmunks carry fleas, ticks and mites, and have the potential to transmit several diseases, especially plague. Plague is transmitted principally via the bite of infected fleas. To date, plague has not been recorded in Crater Lake National Park, but it has caused several deaths in Southern Oregon in recent years.

These squirrels become quite bold

and are literally known to "Bite the hand that feeds." They will go so far as to climb onto visitors to check for handouts! This can lead to odd situations - like the visitor that a ground squirrel bit on the ear!

Feeding squirrels and chipmunks can also

lead to an abnormally high population. At Rim Village, densities as high as 23 squirrels per acre have been observed. Under normal conditions, the density would be about 5 squirrels per acre. Population densities this high make it extremely difficult to exclude them from food service



buildings and could lead to foodborne disease outbreaks.

Enjoy your visit to Crater Lake, but while you are here, please remember why feeding squirrels and chipmunks is not a good idea!

Use Theft Repellent

Don't let your vacation be spoiled by having valuable property stolen while you are at Crater Lake. Campgrounds and trailheads are prime targets.

- Mark your property with your driver's license number; record serial numbers and keep your gear out of sight. Get to know your neighbors. Watch their camp and ask them to watch yours.
- Reduce the opportunities by taking valuable items with you when hiking, when away from camp



and when sleeping in your tent. Locked cars and trunks are not completely safe. The first place checked by a thief is under the passenger seat for a ladies purse.

 Report to a ranger immediately if you observe a crime being committed or any suspicious activity.
 Do not intervene, but write down any license numbers or information that will help. Crime prevention is everyone's responsibility.

Park Resources

Fishing

Fish were first introduced to Crater Lake in 1888. Stocking was discontinued in 1941. About 1.6 million German Brown trout, cutthroat trout, steelhead trout, rainbow trout and silver (kokanee) salmon had been planted. It is believed that originally the lake had no fish. Initial stocking efforts were done by William Steel, who was later successful in obtaining National Park status for the lake. Steel hand-carried fish in a bucket from lower elevation streams.

Kokanee salmon, a landlocked form of the sockeye salmon, is the most abundant and apparently best adapted Crater Lake fish species. Rainbow are less common but are a favorite with fishermen because of their large size. Average catches for rainbow trout are about 17 to 21 inches while the largest have been measured between 30 and 35 inches.

A fishing license is NOT required. Successful anglers may possess a limit of 10 fish. Fish under six inches must be immediately released. No more than five fish may be more than 12 inches long. Regulations prohibit the use of live or dead bait or non-preserved eggs. Digging for bait is not allowed. No private boats are permitted on the lake so fishing must be done from shore areas near Cleetwood Cove or Wizard Island, which can be reached by concession-operated tour boats.

Please help the National Park Service by completing a creel census card, available at Cleetwood Cove or Park Headquarters. The information provided will give biologists valuable data on the fish population in Crater Lake.

Clean Air

On a clear day, you can expect to see geographic features over 200 kilometers (125 miles) away. Clean air allows the spectacular views of the surrounding Cascades and the Klamath Basin.

The National Park Service takes an active role in protecting the air over the park from pullutants by monitoring changes in air quality. The park staff monitors the air quality in the park daily by sampling the particles in the air for chemical analysis, measuring the distance geographic features can be seen and photographing specific points on the horizon. This information assists the park in determining if pollutants are entering the park from outside sources.

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Lake Research

Congress passed a law in the autumn of 1982 which established a ten year study of Crater Lake. This legislation is permitting a sustained monitoring program that is accumulating baseline data on chemical, biological and physical features of this spectacular resource. The information should help to establish whether or not any significant long-term changes are taking place in the lake, if there are any manmade changes, corrective action can be taken to arrest the process(es). Changes in the lake that are brought about by natural phenomena such as weather, geothermal heating, etc., would be studied to add to our knowledge of limnological processes. (Limnology is the study of fresh

The principal investigator for this

study is Dr. Gary Larson, a National Park Service aquatic ecologist stationed at Oregon State University, in Corvallis, Oregon. He is coordinating a multi-disciplinary approach to the project and is currently engaged in a statistical analysis of the data gathered to date. This analysis will aid in planning the summer sampling activities for 1986, when the efforts of the park staff will be augmented by researchers from the fields of geology, hydrology, chemistry, oceanography, botany and zoology.

While enjoying the lake from the Sinnott Memorial, Rim Drive or a tour boat, keep an eye out for a pontoon boat or white open-hulled boat. You will be seeing the research team seeking answers to the questions posed by Crater Lake, the deepest lake in the United States!

Park Resource Management Staff are interested in recording your observations of unusual animals seen in the park. Deer, jays, ground squirrels and nutcrackers are commonly seen, their presence is well documented and need not be reported. However, we would like you to report sightings of bear, elk, eagles, hawks, coyotes, wolves, wolverines, falcons, mountain lions or other such animals you may be so lucky as to observe during your visit. Please be specific as to the location, description and whether you are confident in the positive identification. Your observations will help the park in confirming the presence of certain rare animals. We may need to contact you so please include your telephone number and address on the

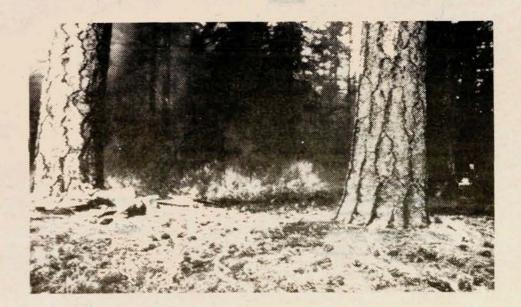
Fire Management

During your visit to Crater Lake this summer, you may see smoke billowing from the forest. This may be from a natural lightning fire being allowed to burn, or a fire deliberately set by the National Park Service.

Since the early 1900's, fire has been excluded from the park. This has created an unnatural fuel buildup on the forest floor and allowed an excessive number of fire sensitive and shade tolerant species to crowd out the native trees. The tall, stately Ponderosa pine is one species which is

very fire resistant, but reproduces poorly in shade. In addition, a series of controlled prescribed fires reduces the fuels to help prevent large, catastrophic fires in the future. Evidence of one of these prescribed fires can be seen along Highway 62 just inside the park's south boundary.

A primary objective of the National Park Service in managing natural areas is the maintenance of ecosystem and processes rather than the preservation of single features or species. Fire is recognized as a necessary process and is managed accordingly.





Start Here!

Rim Visitor Center

For detailed information about Crater Lake and assistance for making the most of your time here, plan to stop early at the Rim Village Visitor Center. It is located at Rim Village, midway between the cafeteria and Crater Lake Lodge, on the Crater Lake rim (see map).

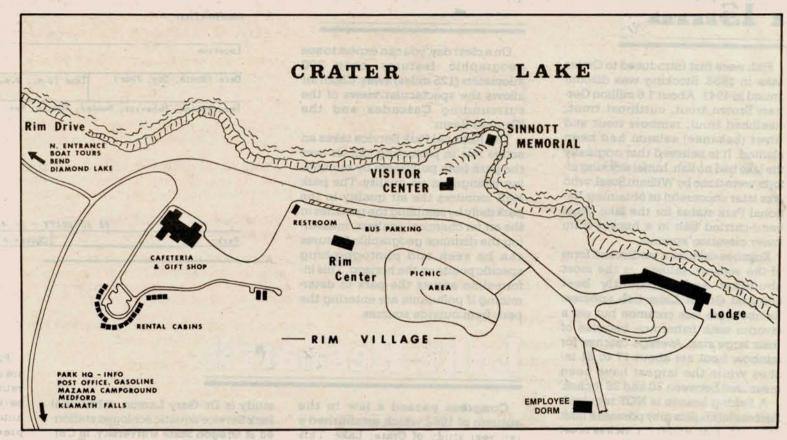
The Center is open daily from 8 a.m. to 7 p.m. June 29 through Sept. 1 and from 8:30 a.m. to 5 p.m. May 24 through June 28 and Sept. 2 through Sept. 30.

- At the Visitor Center you will find:
 •Friendly rangers who will answer
- your questions.

 •Books, maps and posters for purchase.
- Backcountry camping permits and wilderness trip planning help.
- · First aid assistance.

A unique panoramic view of Crater Lake is from the Sinnott Memorial Overlook, perched on the caldera wall. It is accessible from the Visitor Center via a rock stairway and offers exhibits and ranger talks.

Camping Information, Page 6
Planning Your Visit,
Pages 5 and 7



DIAMOND LAKE & MI BIM DELYES! Fost rim drive one-way darkwise Fost rim drive one-way darkwise Fost rim drives one-way fost when mid July until closed by reme duestly ONE-WAY >> BEYOND CLEETWOOD CLEETWOOD COVE TEAL PARK HO OASOLINE VISITOR CENTER LODGE & CAPTERIA PARK HO OASOLINE PRINT AGLE AAMPGROUND PINNACLES OR-Way read open Read open summer only One-way -> BELAMATH FALLS Summer

On Your Own

In addition to the ranger-led programs, you may want to explore the wonders of Crater Lake National Park on your own.

The lake, with its incredibly blue water, is the most spectacular sight awaiting visitors along Rim Drive. A grander sense of the lake's immensity and its environs can be gained from Rim Drive and the many day hiking trails located around the rim. Stay on the trails and take your time. The elevations range from 6,000 to 9,000 feet. Carry water and snacks with you.

Rim Drive is the 33.4 mile loop that encircles Crater Lake. Most visitors begin at Rim Village and proceed clockwise past Discovery Point, the Watchman Overlook and North Junction to the Cleetwood Cove trailhead. Beyond Cleetwood, the road continues one-way past Skell Head, Mount Scott, Cloudcap and Redcloud Cliff to Kerr Notch, where a spur road proceeds 7 miles to the Pinnacles, an area of unusual spirelike formations. Kerr Notch also offers a superb view of the Phantom Ship.

- 1. Watchman Peak Trail .8 mile (one way). One hour. Trailhead: Watchman Overlook. Moderately steep. After the snows melt hike to Watchman Peak, topped by a fire lookout. Wizard Island dominates the view from the Watchman.
- 2. Cleetwood Cove Trail 1. mile (one way). Half-hour to 1 hour. Trailhead: parking area on Rim Drive. Steep. Descent to the surface of Crater Lake for fishing, boat tours and access to Wizard Island.

- 3. Mount Scott Trail 2.5 miles (one way). 2½ to 3 hours. Trailhead: parking area on Rim Drive. Moderately steep to steep. Many small animals and birds can be seen while hiking to the peak. A fire lookout sits on the summit. Spectacular 360 degree view. Gnarled whitebark pines. Avoid snowbanks.
- 4. Garfield Peak Trail 1.7 miles (one way). One hour. Trailhead: Caldera rim east of Crater Lake Lodge. Moderately steep. Hike past beautiful wildflower displays and spectacular lake views to the summit. The panorama of Crater Lake from 1,888 feet above its waters is impressive. Watch for eagles and hawks. Usually open by midJuly. Avoid snowbanks.
- 5. Castle Crest Wildflower Trail .4 mile (loop). Half-hour to hour. Trailhead: half-mile from Park Headquarters. Easy to moderate. A self-guiding trail booklet is available. Spectacular wildflower displays usually begin in mid-July.
- 6. Godfrey Glen Trail One mile (loop). Half-hour to hour. Trailhead: parking area south park road. Easy. Self-guiding trail booklet available. Walk through a forest of mountain hemlocks and Shasta red firs to a steep-sided canyon with pinnacle formations.
- 7. Annie Creek Trail 1.7 miles (loop). 1 to $1\frac{1}{2}$ hours. Trailhead: Mazama Campground amphitheater. Easy to moderately steep. Descend to the bottom of Annie Creek Canyon.





tor Center 8 A.M. to 7 P.M. Daily June 29-Sept. 1 8:30 A.M.-5 P.M. early June & Sept.

Rangers offer assistance, information, backcountry permits. Publications, maps and posters are available for purchase. Displays help orient visitors.

Ranger Led Activities

Boat Tours

June 28-July 3 - 9, 11, 1 and 3 p.m. July 4-Sept. 1 — Daily on the hour from 9 a.m. to 3 p.m.

Sept. 2-Sept. 6 — 9, 11, 1 and 3.

Leave Cleetwood Cove dock hourly for 2 hour Ranger-narrated tours around Crater Lake. A fee of \$7.25 for adults and \$3.75 for children under age 12, is charged by the Crater Lake Lodge company. Allow at least 1 hour to drive from Rim Village to Cleetwood Cove parking area on Rim Drive and hike down the 1 mile trail. A stop is made at Wizard Island where visitors may return on the same tour or spend time on the Island and return on a later boat (space available).

Bring jackets, drinking water and Restrooms are available near the trailhead. For more information check at Visitors Center or Gift Shop.

NOTE: The trail is very strenuous and is only recommended for those in good physical shape.

Bicycling at

Cycling around the rim of Crater Lake can be a very rewarding experience.

The entire circle is 33 miles and there are no shoulders along the route. There are numerous LONG, STEEP grades. The highest point you will cross is 7,700 feet near the base of Mt. Scott. The road is narrow and two-laned.

Approximately half of Rim Drive is open to one-way traffic only in a clockwise direction from Cleetwood Cove to park headquarters. All park traffic laws for vehicles

must be adhered to by cyclists.

Due to frequent rockfall on the road, heavy traffic and high speeds on the downhill stretches, we strongly recommend that you wear a hhelmet. There is no water along the rim except at Rim Village. Bicycles are not permitted on trails in the national park.

For more information, contact a park ranger at the Visitor Center or Park Headquarters.

Geology Talks 9:30 a.m. - 5:30 p.m. — on the half hour. Begins June 29 — ends Sept. 27.

Rangers present 15 minute geology talks hourly with the panoramic view of Crater Lake as a backdrop. Meet at Sinnott Memorial Overlook at the base of the rock stairway on the lakeside of the Visitor

Evening Program
8 p.m. nightly. Begins June 28 — ends

45-minute illustrated talks on significant features and residents of the park. Topics change nightly and are posted. Held at the Rim Center Building at Rim Village.

Campfire Program

Begins July 1 — 9 p.m. nightly. Starting 8:30 p.m. — August 3. Ends Sept. 1.

45-minute illustrated talks on significant features and residents of the park. Topics change nightly and are posted. Held at Mazama Campground amphitheater, between loops D and E.

Crater Lake Publications Natural History Association

A GUIDE TO CRATER LAKE - THE MOUNTAIN THAT USED TO BE Filled with beautiful color photography, this new book introduces the geologic, natural and human history of Crater Lake. A guide to Rim Drive and popular hikes makes this a useful tool to help organize, enjoy and remember a visit to Crater Lake. 48 pp. Warfield

CRATER LAKE - GEM OF THE CASCADES The in-depth geological story of Crater Lake National Park. 2nd edition. 111pp. Cranson

CRATER LAKE, THE STORY BEHIND THE SCENERY Gives a story of Mount Mazama, formation of Crater Lake, natural and human history of

this scenic wonder. Filled with superb color photographs! 48pp. Warfield, Juillerat & Smith

DISCOVERING NORTHWEST VOLCANOES A fun and informative book for young readers. Field & Machlis

CRATER LAKE NATIONAL PARK TRAILS Introduces the more than 140 miles of trails in the park and gives helpful hints for hikers and backcountry users. We suggest that you use this book along with a topographic map of the park. 48 pp. Toops

USGS TOPOGRAPHIC MAP OF CRATER LAKE NATIONAL PARK 4.00 Scale 1:62,500. Available folded.

CRATER LAKE WINTER POSTER Beautiful color print 22x28 inches. View of Crater Lake with Wizard Island and Llao Rock covered with snow.

35mm Slides Five in a set: Geology, Summer Flowers, Summer Scenes, Winter Scenes

ORDER FORM

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(Listing and Prices subject to change.)



There are two developed campgrounds at Crater Lake. Mazama Campground, with 198 sites, is near Annie Springs Entrance Station. Lost Creek Campground is on the pinnacles spur road from east rim drive. This 12 site campground, for tents only, opens in late July after Rim Drive is plowed free of snow. No fees are charged. The sites fill up in early afternoon during the summer months, so campers should select sites soon after arriving in the park.

Mazama Campground is operated by the Crater Lake Lodge Company. Rates are \$6.00 per site. Sites are available on a first come, first served basis. Reservations are not taken. There are no utility hookups, but fresh water, flush toilets, dump station and telephone are available.

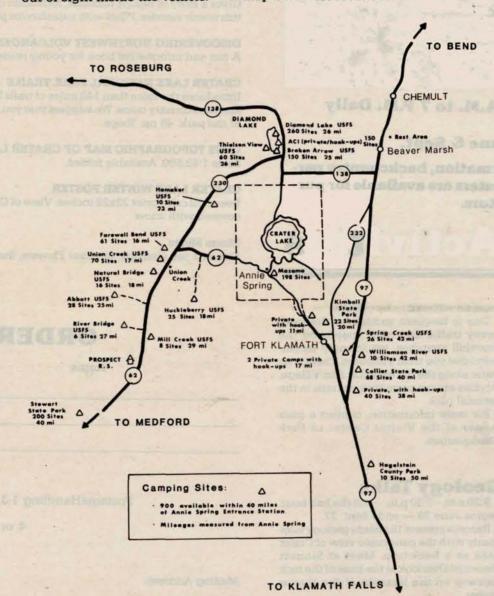
Firewood is available for purchase at the campground entrance. Campers are allowed to collect dead and down firewood. The collection of wood between Rim Drive and the lake is not allowed, to protect the rim's scenic value. Fires are permitted only in fireplaces.

PLEASE REMEMBER:

- · Quiet hours are 10 P.M. to 6 A.M.
- Pets must be kept on leashes at all times when outside of vehicles.
 Pets are not allowed on trails, ranger-led activities or at evening campfire programs.
- Waste water must be collected in closed containers and disposed of at the comfort station or sanitary

- dump in Loop C of Mazama Campground. No trenching for any purpose is allowed.
- · Roadside camping is not allowed.
- There is a 14-day restriction on camping. Sites are limited to six people or one family unit. The park has facilities for group camping.
- Store all food in a vehicle trunk.
 If no trunk is available, keep food and food containers covered and out of sight inside the vehicle.
- Clean dishes and utensils immediately after use.
- Deposit all garbage in the nearest refuse container.
- Do not store food in tents; do not leave food, food containers, cooking utensils or table scraps in the open.

Camping opportunities are also available and more numerous, outside the park at Diamond Lake, Union Creek and Fort Klamath. Check the map below for locations.



Backcountry

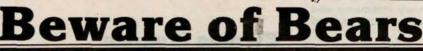
More than 100 miles of maintained trails provide access to Crater Lake's backcountry. Topographic maps and Crater Lake. Trails books are available for sale at park headquarters or the Visitor Center. The trails book suggests many destinations and suitable campsites.

Free backcountry use permits are required for all backcountry overnight stays. Permits are available at park headquarters, the Visitor Center and on the Pacific Crest Trail where it enters the park.

Horses are permitted on backcountry trails except Mt. Scott and between Rim Drive and Crater Lake. Carry and use feed pellets on all overnight stock trips as grazing is not permitted. Obtain other park stock use regulations at park headquarters. A horse camp is located west of the PCT on Bybee Creek. Dogs are allowed on the PCT but not on any other backcountry trail.

Park rangers can offer many suggestions to help you enjoy your experience and to leave as little human impact as possible on the environment. Other hints are posted on the PCT bulletin board at park head-quarters. Preservation and enjoyment of Crater Lake's backcountry depends upon your careful and considerate use.





Every year there are incidents involving bears and visitors — incidents that could lead to the removal or the destruction of the bears.

Bears often make early evening visits to Mazama Campground for one reason — food. Ice chests and food boxes are instantly recognized and smashed open. Bears will even remove car windows to get to visible food.

Campers have a responsibility to prevent bears from becoming a problem. Never consciously or unconsciously store ice chests or food items in the open. Such temptations can cause injuries to campers and bears. Park rangers deal strongly with people who provide food for bears. To protect property, and yourself, follow these rules:

- Store all food in a vehicle trunk. If no trunk is available, keep food and food containers covered and out of sight inside the vehicle.
- Clean dishes and utensils immediately after use.
- Deposit all garbage in the nearest refuse container.
- Do not store food in tents; do not leave vehicles unattended with windows open; do not leave food, food containers, cooking utensils or table scraps in the open.

Bears are a part of Crater Lake National Park's natural systems. Enjoy bears from a distance, don't feed them.





Lodging

The Crater Lake Lodge is located on the Rim and offers views of the lake and surrounding mountains. Construction of the lodge began in 1912 and after three summers the first structure was completed. Additions to the lodge were built between 1923 and 1953. In keeping with the spirit of an earlier time is the massive rock and log construction and the rustic lobby. Since the lodge was built during a bygone era, some of the amenities that we take for granted weren't included. The lodge has no elevators; some rooms don't have baths; and some rooms lack plumbing altogether. The lodge also features a rustic dining room and a 35 seat lounge for T.V. and games. Accommodations available June 7 to September 20. Reservations are suggested (503) 594-2511.

Two types of cabins are available to visitors: cold water and full bath. The cold water cabins are individual structures with cold water sinks only. Restrooms are available in the Cafeteria/Gift Shop building. The full bath, or Ponderosa cottages are two individual quad structures and are the most modern accommodations inthe park. Located behind the Cafeteria/Gift Shop building, the cabins are available from late May to early September. Check-in at the lodge front desk during peak season and at the Employee Dorm building during spring and fall. Reservations are suggested. (503) 594-2511.

Food and Drink

The CRATER LAKE DINING ROOM offers dining in the rustic atmosphere of the Crater Lake Lodge. Open mid June to early September. Breakfast: 7 A.M. to 9 A.M. featuring trout, omelettes and pancakes. Dinner: 5:30 P.M. to 9 P.M. including steaks and seafood.

CALDERA LOUNGE - in the lodge; open 4 P.M. to 11 P.M.; serves spirits, wine and beer.

CAFETERIA - Adjacent to Gift Shop - Breakfast, Lunch and Dinner - 7 A.M.-8 P.M., 6 P.M. after September 10.

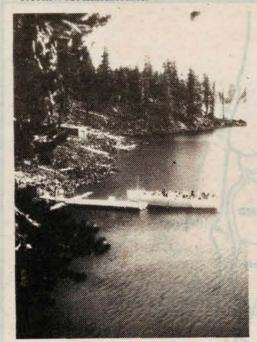
WATCHMAN DELI LOUNGE - located above the Cafeteria - open noon to 11 P.M. informal food and atmosphere. Open June 16-September 7.

MOUNTAIN FOUNTAIN - located in Gift Shop - open 11 A.M. to 7 P.M. during summer. Hamburgers, hotdogs and french fries. Open to 5 P.M. after September 1.

CAMPER STORE - located adjacent to Gift Shop - grocery, camping needs, Oregon food products, and wines.

Gifts & Souvenirs

CRATER LAKE GIFT SHOP - located in Cafeteria/Gift Shop at Rim Village - open year round; summer hours: 8 A.M. to 8 P.M. through September 10. A wide selection of gifts, jewelry, souvenirs and Pacific Northwest handicrafts.



Tours

The Rim Drive bus departs Crater Lake Lodge at 10 A.M. and 2 P.M., weather and road conditions permitting. The two hour tours focus on the geological and natural wonders of the park. Tickets available at Lodge and Gift Shop.

Boat Tours leave hourly 9 A.M. to 3 P.M. from Cleetwood Cove dock for 2 hour tour of Crater Lake (July thru Sept.). See page 5 for more information.

Post Office

Located in park headquarters lobby. Window service June through September - Monday-Friday 9 A.M. to 5 P.M.; Saturday 9 A.M. to noon. Mail slot available 7 days a week 24 hours a day.

Worship Services

Interdenominational worship services are offered on Sundays between June 28 and September 1 by a Christian Ministry in the National Parks. Services are held at the Mazama Campground amphitheater and at the Rim Center building in Rim Village. Check bulletin boards for times. Catholic Mass is provided on Saturdays from June 21 to August 30 at 6:30 P.M. in the Rim Center building.

Telephones

Public phones available at park headquarters, cafeteria, lodge, Rim Village restroom and Mazama Campground.

Lost & Found

Contact a park ranger at the Visitor Center of park headquarters.

First Aid

Stations located at park headquarters or Rim Village Visitor Center or contact any patrol ranger in a marked vehicle. To report emergencies or fires, call 594-2811.

Disabled Visitors

Most viewpoints are accessible for persons in wheelchairs. Ramps are in place at the Visitor Center, Rim Center, Crater Lake Lodge and Rim Village Cafeteria - Gift Shop. Mazama Campground amphitheater has paved walkways. Restrooms at Mazama Campground and Rim Village are accessible for wheelchairs.

Service Station

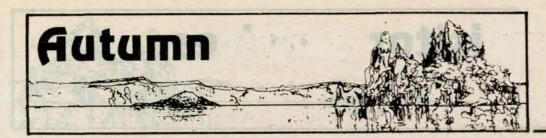
Gasoline, oil and limited automotive needs are available near park headquarters. Open May 24 to September 28. Call (503) 594-2511.

Oregon Caves National Monument

Oregon Caves National Monument, established in 1909, is located 149 miles from Crater Lake on SR 199 in Southwest Oregon. The cave is situated in a marble outcropping, amid the timeless forests of the rugged Siskiyou mountains. The cave interpreters focus on the natural and human history of the cave and the surrounding area. The restoration of the cave, begun in November, 1985, has exposed beautiful long hidden formations, returned rooms and passages to their original size and splendor, and shown us how to better preserve the cave in a near natural state. Outside the cave are trails that take you through one of the oldest temperate climate forests in the world and over mountains that are rich in gold and geological lore. Tours are conducted throughout the year. In summer tours are from 8 A.M. to 7 P.M.

Oregon Caves Chateau offers accommodations from June to September. The Chateau, which was completed in 1934, rises among waterfalls six stories from the floor of a wooded glen. The Chateau lobby attains its unique character from two large marble fireplaces, frequently in use during cool summer evenings, and from the huge fir timbers that frame it. The dining room has been well complimented by the public and the press. The guest rooms are comfortable and include modern facilities. For reservations or information call (503) 592-3400.





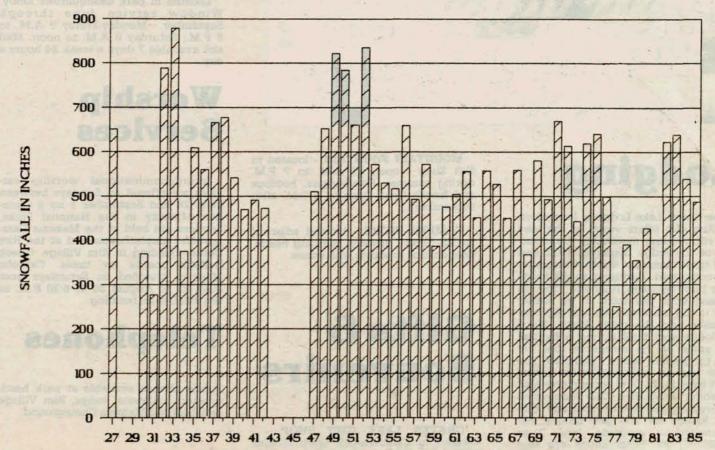
Snow, Snow, Snow

After Labor Day (September 1) the pace of activity slows at Crater Lake. The first heavy snows of the coming winter season will soon descend but September usually is a good time to visit. Days continue to be warm throughout the month, punctuated by occasional light snowstorms. Now that the crowds of summer visitors are gone this is a time to watch birds in their southward migration. Small mammals can be seen scurrying to prepare for winter survival.

Visitor services are cut back after Labor Day, but information and assistance may be obtained from park headquarters, 3 miles south of Rim Village, which is open daily from 8 a.m. to 5 p.m.

After the first heavy snow of the winter, which usually occurs in mid-October, the Visitor Center and Sinnott Memorial close. The cafeteria/gift shop remain open throughout the winter from 9 A.M. - 4 P.M.

Rim Drive and the north entrance will close during stormy periods in the fall and could be reopened intermittently until the first heavy snows. When the Rim Drive is closed, access to Rim Village is via Annie Springs entrance off Oregon Highway 62 from the south or west.

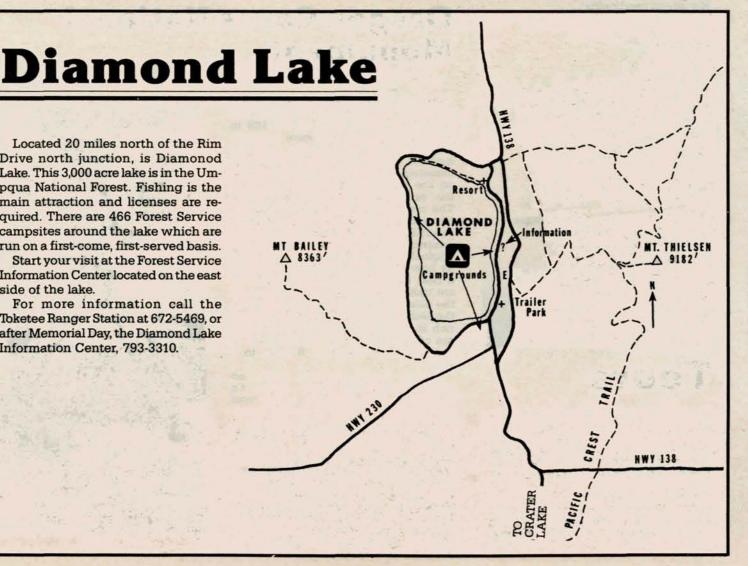


CRATER LAKE NATIONAL PARK Snowfall for the period July 1 - June 30

Located 20 miles north of the Rim Drive north junction, is Diamonod Lake. This 3,000 acre lake is in the Umpqua National Forest. Fishing is the main attraction and licenses are required. There are 466 Forest Service campsites around the lake which are run on a first-come, first-served basis.

Start your visit at the Forest Service Information Center located on the east side of the lake.

For more information call the Toketee Ranger Station at 672-5469, or after Memorial Day, the Diamond Lake Information Center, 793-3310.



Many park visitors are surprised to find so much snow remaining at the park, even in mid-summer. It's not really surprising because the park annually receives about 45 feet of snowfall. Late spring storms often bring many feet of snow delaying road and facility openings. For example Rim Drive from park headquarters to North Entrance usually is plowed open in late June. the drive to Cleetwood Cove is usually opened by July 4, but the Rim Drive beyond Cleetwood Cove to park headquarters may remain closed until late July.

With all the snow, you may wonder whether the lake freezes in winter. Usually it does not. Park records show that the lake has frozen over only four times this century. In 1949 the lake was frozen over for 3 months. In January, 1985, the lake surface had a skim ice cover and remained about 90% frozen over into early February.

Even at this high elevation (6176 feet above sea level) why the lake doesn't freeze is simple - it's too deep. Water below the 328 foot level is a constant 38 F, which is warmer in winter than the surface water. Heat, given off by the warmer water, rises toward the surface and retards ice formation. Because of this depth - 1932 feet, and average 1500 feet - Crater Lake stores a great amount of heat.