

Keeping the Park Open is "Snow" Easy Task

What were you doing at 4:00 am this morning? If you were a member of the Crater Lake roads crew, you might have been reporting for duty!

Trying to keep Highway 62 and the road to Rim Village open year-round is no easy task. Each day, the park's heavy equipment operators work from 4:00 am to 8:00 pm, in two different shifts, clearing snow and sanding roads. During heavy storms, snow removal can become a 24-hour operation, with crews working 12 hours at a time.

"It can be a hazardous job," reports one operator, "especially when it's dark and white-out conditions are occurring. On a winding mountain road, you never know what's around the next corner. It could be a tree across the road at windshield level, a car stuck in the snow, or an avalanche."

Snow plows were first used at Crater Lake in 1930. Prior to that, crews used shovels and dynamite to clear the roads each spring. Today, the park employs 6 operators and 2 mechanics who use both push plows and rotary plows. The rotary plows are equipped with a fan that can shoot snow 75 to 80 feet (24 meters) into the air. To control where the snow lands, the operator can vary the angle and volume of output.

The amount of snow moved each winter by the park's roads crew is astounding. (continued on back page)

One Lake, Many Moods

Crater Lake is unpredictable. No matter how many times you've seen it before, you can never be sure exactly what to expect on your next visit to the rim. The lake's appearance is ever-changing and often surprising. This is especially true in the winter—perhaps the best time of year to witness Crater Lake at its most wild and beautiful.

The lake's character depends partly on the wind. On many winter days, strong winds whip across the water. The strongest gusts materialize as whitecaps and can be seen marching, like angry armies, across the width of the lake. Calm days in the winter are few and far between, but, when they occur, the scene is entirely different. The lake becomes a mirror and reflects the sky in perfect symmetry; the air is so quiet you can hear a pine needle drop.

The lake's appearance (and frequent disappearance) also depends on cloud cover. Nearly 50% of the time in the winter and early spring, storms completely hide the lake from view. While disappointing for visitors who have driven hours to get here, it's during these periods of rain and snow that the lake is replenished. Crater Lake wouldn't be America's deepest lake without such wet winters, which dump an average of 43 feet (13 meters) of snow at Park Headquarters.

Clouds also create scenes of stunning drama. When storms end, the lake's features slowly reveal themselves to fortunate onlookers. And once every few years, some lucky visitors reach the rim to find a "smoking cauldron"—the crater filled with fog, under a blue sky (see photo on back page). This occurs when cold, moist air becomes trapped in the caldera during a temperature inversion.

Sometimes, too, Crater Lake is masked by ice. It forms along the shore during cold snaps. Seeing the lake entirely frozen over, however, is a once-in-a-lifetime experience (the lake's tremendous depth makes its surface freezeresistant). In 1949, the last time the lake became ice-bound, it froze for 2½ months and a thick layer of snow accumulated on top. Typically, though, seeing bergs of snow and ice in the water is simply an indication that an avalanche has recently occurred on the inner walls of the caldera.

With so many variables (and we haven't even mentioned the color of the water, which can vary from bright blue to slate gray, with hues of red, orange, and purple at sunrise and sunset), Crater Lake is never the same lake twice. And thank goodness! Its unpredictability is one of its finest attributes, one that makes visiting (and re-visiting) the park such a delightful and rewarding activity.



Snowshoe with a Park Ranger

Ranger-led snowshoe walks are a fun way to experience the winter wonderland of Crater Lake National Park. This winter, if staffing and snow conditions allow, they will take place on Saturdays, Sundays, and holidays from November 23 through April 26. Walks will also likely be offered daily from December 21 through January 5 (except on Christmas Day) and from March 20 through March 29. Snowshoes are provided free of charge and no previous snowshoeing experience is necessary.

The walks start at 1:00 pm, last 2 hours, and cover 1 to 2 miles (1.6–3.2 km) of hilly terrain. The route is up to the ranger, but most walks begin at Rim Village and explore the forests and meadows along the rim of the caldera. Along the way, participants discover how winter affects Crater Lake and the park's plants and animals.

Space on each tour is limited, and advance reservations are recommended. You can sign up at the Steel Visitor Center or by calling 541-594-3100. Participants must be at least 8 years old, healthy enough for a moderate-to-strenuous hike, and have warm clothing and water-resistant footwear.

Scout troops, hiking clubs, and other organized groups of 10 or more people may be able to arrange for their own ranger-led walk (staff permitting). Group walks are available on weekdays as well as on weekends.



Park Profile

Crater Lake National Park protects the deepest lake in the United States. Fed by rain and snow (but no rivers or streams), the lake is considered to be the cleanest and clearest large body of water in the world.

The lake rests inside a caldera formed 7,700 years ago when a 12,000-foot-tall (3,600-meter) volcano collapsed following a major eruption. The eruption may have been the largest in North America in the past 640,000 years. Later eruptions formed Wizard Island, a cinder cone near the southwest shore.

The park is central to the cultural traditions of local American Indian tribes, whose ancestors witnessed the lake's formation.

Today, old-growth forests blanket the volcano's outer slopes, harboring more than 700 native plant species and a wide variety of animals, including several that are rare or endangered.

- Park established: 1902
- Size: 183,000 acres (74,060 hectares)
- Annual visitation: 700,000 people
- Lake depth: 1,943 feet (592 meters)Lake width: 4.5 to 6 miles (7 to 10 km)
- Lake volume: 5 trillion gallons (19 tr. liters)Last time the lake froze over: 1949

Watch the Park Film

Curious to learn more about Crater Lake? Stop by the Steel Visitor Center to watch the park's 22-minute introductory film, shown every half hour. It explores the park's significance and the wonder that Crater Lake has inspired for generations. The film, entitled *Crater Lake: Into the Deep*, includes dramatic underwater footage along with state-of-the-art animation that depicts the lake's violent, volcanic past.





Crater Lake Visitor Guide Winter/Spring 2019-2020

This is the official trip-planner and newspaper of Crater Lake National Park. It is published twice a year and funded by the Crater Lake Natural History Association through sales made in the visitor center bookstore.

Park Mailing Address:

Crater Lake National Park PO Box 7 Crater Lake, OR 97604

Phone: 541-594-3000 Website: www.nps.gov/crla Email: craterlake@nps.gov

Accessibility

The Steel Visitor Center and Rim Village Café & Gift Shop are accessible to people with mobility impairments. Weather permitting, partial views of Crater Lake can be enjoyed from the top floor of the gift shop, accessible via elevator.

Drinking Water

There is a drinking fountain and bottlefilling station inside the Steel Visitor Center.

Drones

The operation of remotecontrolled aircraft in the park is prohibited. Please report violators to the nearest park employee.

Emergencies

Dial 911 to report any emergency, 24 hours a day. An emergency phone is located outside the "snow tunnel" entrance to the administration building at Park Headquarters. First aid is available at the Steel Visitor Center or nearby Ranger Station.

Entrance Fee

In the winter (November 1 through May 21), the park's entrance fee is \$15 per car, good for 7 days. You can pay by cash or credit card. Your fees are put to work improving services and facilities. Thank you for supporting your national parks!

Gasoline

Gasoline is not available in the park in the winter. Gas is available in the nearby communities of Chiloquin, Prospect, and Diamond Lake. Charging stations for electric vehicles may be visitor center.

Lodging & Camping

There are no lodges or campgrounds open in the park in the winter. Overnight camping in pullouts and parking lots is prohibited. Overnight backpacking is allowed, with a permit (see info at right). Ask at the

visitor center for a list of accommodations outside the park.

Lost & Found

Report lost & found items to the Steel Visitor Center or call the park's lost & found office at 541-594-3060.

Park Features

Leave rocks, plants, animals and artifacts undisturbed for others to enjoy. It is prohibited to collect, deface, disturb, or destroy natural or cultural features.

Pets

Pets on a leash (or otherwise physically restrained) are allowed in the park, provided they stay within 50 feet (15 meters) of plowed roads and parking lots. Dogs on a leash are also allowed on the Pacific Crest Ski Trail, but not on other trails, or off-trail. Pets are not allowed in park buildings. Solid waste must be picked up immediately and disposed of properly, in a trash can or toilet.

Phones

Cell phone reception in the park is unreliable. You may have luck at Rim Village. There is a 24-hour emergency landline outside the "snow tunnel" entrance to the administration building at Park Headquarters.

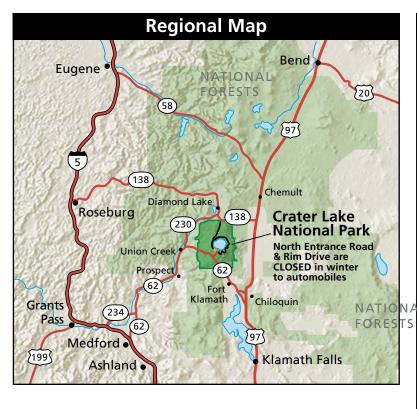
Post Office

A U.S. Post Office is open Monday through Saturday in the visitor center. Winter hours are 10:00 am-2:00 pm.

Recycling

Aluminum cans and plastic bottles are accepted

Do not feed wildlife, including birds and squirrels. Exposing them to our food alters their behavior, is bad for their health, and can be dangerous for you. Approaching, touching, feeding, and disturbing wildlife are prohibited.



Roads & Travel

The park is open year-round, 24 hours a day. Some roads, trails, and facilities, however, are closed seasonally due to snow.

The North Entrance Road and Rim Drive are closed to cars in the winter. They close for the season on November 1 (or earlier if there is significant snowfall). Crews begin removing snow from these roads in April, but opening dates vary. The North Entrance Road and West Rim Drive tend to open in early June. The East Rim Drive typically opens in early July.

Highway 62 is plowed daily and open year-round, as is the 4-mile road from Highway 62 to Park Headquarters. The 3-mile road from Park Headquarters to Rim

Village is also kept open as much as possible (typically about 80% of the time in the winter), but it's sometimes closed for days or weeks at a time during periods of heavy snow. When the road is open and weather permits, Rim Village offers spectacular views of Crater Lake. For current road and weather conditions, call 541-594-3100.

Even when plowed, park roads can be snow-packed and icy. Drive slowly, be alert for plows, and come prepared with tires that have good traction. Carrying chains is advisable during snow storms. Before visiting, check the weather forecast. For your safety, do not stop or park in the roadway. Parking is allowed only in plowed pullouts and parking lots.



Steel Visitor Center

Winter Closures

Many park facilities are closed in the winter and early spring. Here are some projected operating dates for 2020:

May 15–Oct. 11	Crater Lake Lodge
May 22-Sept. 27	Mazama Village Cabins
May 22-Sept. 27	Annie Creek Restaurant
May 22-Sept. 27	Mazama Village Store
May 22-Oct. 12	Mazama Gas Station
May 22–Sept. 27	Rim Visitor Center
June 12-Sept. 27	Mazama Campground
June 26-Sept. 13	Boat Tours
June 26-Sept. 30	Trolley Tours
June 26-Oct. 31	Sinnott Overlook
July 1–Oct. 12	Lost Creek Campground

An observation room on the top floor of the café provides partial views of Crater Lake (weather

Restrooms

There is a 24-hour restroom at Rim Village. Restrooms can also be found inside the Steel Visitor Center and Rim Village Gift Shop during business hours.

Facilities

Rim Café & Gift Shop

The café & gift shop is open daily except on November 28, December 25, and on days when the road to Rim Village is closed due to snow. Hours of operation:

- ▶ Nov. 4–March 12 10 am–4 pm ► March 13–May 14 10 am–5 pm
- ► May 15–June 4 10 am–6 pm

The café serves quick meals including hot sandwiches, chili, and soup. Beverages include hot chocolate, coffee, juice, and soft drinks. The large gift shop offers a wide selection of souvenirs, as well as winter clothing and snowshoe rentals (see next page).

permitting). It also features a few exhibits and an information desk staffed by volunteers most weekends.

Steel Visitor Center

The Steel Visitor Center at Park Headquarters is open every day of the year except December 25. Winter hours are 10:00 am-4:00 pm, becoming 9:00 am-5:00 pm in mid-April.

Rangers are available to answer questions, provide weather forecasts, recommend trails, and help plan your park visit. Postcards, maps, books, and other educational materials are available for sale (see back page). Kids ages 6 through 12 can earn an official Junior Ranger badge by completing a free activity book.

A 22-minute film, *Into the Deep*, is shown every half hour. The film explores the park's significance and the lake's volcanic past.

Activities

Lake Viewing

When skies are clear, excellent views of Crater Lake can be enjoyed at Rim Village. During storms, however, the lake is typically obscured by clouds. The lake is completely "invisible" about 50% of the time in the winter and early spring! To avoid disappointment, check the weather forecast before you leave home. To check visibility at Rim Village, visit the park's website (www.nps.gov/crla) to view a webcam pointed toward the lake.

A partial view of Crater Lake can usually be obtained from an observation room on the top floor of the Rim Café & Gift Shop. The observation room is accessible via elevator. For a better view of the lake (and when deep snow blocks the view from the observation room), you'll need to climb up a snowbank and take 20 to 30 steps across the snow. A "snow ramp" across from the Rim Village restroom building provides the easiest access to the top of the snow, which can be 10 to 15 feet (3 to 4.6 meters) deep. Be careful—the snow ramp can be icy and slippery, and dangerous snow cornices overhanging the rim of the crater may be difficult to spot. Stay back from the edge!

Snowmobiling

In the winter, the park's North Entrance Road is groomed for snowmobiles, which may travel as far as the rim of Crater Lake. Snowmobiles must stay on the groomed and marked route; they are not allowed on the Rim Drive, and off-route travel is prohibited.

The snowmobile route is open as conditions permit, typically from December through March.

Winter Recr

Llao Rock

Wizard

Island

6940ft 2116m

Rim Village Rim Café & Gift Shop

Discovery

-1788ft -545m

Crat

Elevation 6173ft 1882m

Hemlock Loop

Garfield Peak

of First Climb

Raven Trail

Diamond Lake Resort, 5 miles (8 km) north of the park, has snowmobiles available for rent. Renting a 1- or 2-person snowmobile costs \$175 for 2 hours, \$225 for 3 hours, \$275 for 4 hours, or \$425 for 8 hours, plus the cost of fuel. Significant discounts may be available for overnight guests. For more information, call 541-793-3333 or visit www.diamondlake.net.

Backcountry A Camping

Backpacking is allowed in the park vear-round. Winter offers wellprepared skiers and snowshoers opportunities to experience occasions of unique beauty and solitude. All campers must obtain a free backcountry permit, in person, from the Ranger Station at Park Headquarters. The Ranger Station is located 100 yards (90 meters) south of the Steel Visitor Center and is open every day from 8:00 am to 4:00 pm.

Vehicles must be left overnight at Park Headquarters (not at Rim Village). The most popular overnight trip is up the Raven Trail, out-and-back along the West Rim Drive, then back down the Raven Trail. The most popular extended trip is the 31-mile (50km) circuit around Crater Lake (see box, top right). Snow camping is required; there are no public huts or shelters. Camps must be at least 1 mile (1.6 km) from the nearest plowed road, out of sight of any ski trail or route, and at least 100 feet (30 meters) back from the edge of the caldera. For tripplanning advice and a complete list of regulations, stop by the Ranger Station or call 541-594-3060.





Crater Lake Snowmobile Route

North Junction

Diamond Lake

Wizard

Island

Watchman Overlook

Watchman Peak

Union Peak Overloo

Lightning Springs Trail





The park features a variety of marked trails and unmarked routes for cross-country skiing (see list on right). The trails are not groomed, so skiers will often need to break trail, sometimes through deep snow. Conditions vary greatly, from powder to slush to ice. Ask at the Steel Visitor Center for trail recommendations.

Skiing is prohibited on Highway 62, the road to Rim Village, and in parking lots. Skiing inside the caldera is also strictly prohibited. The park does not rent skis. Ask at the Steel Visitor Center for a list of rental locations outside the park.



There are no designated sled hills or snow-play areas in the park, but many opportunities for sledding can be found. For your safety, sledding, innertubing, and tobogganing are prohibited on Highway 62, the road to Rim Village, and in parking lots. Please select areas that have gentle slopes, are away from trees and other obstructions, and provide a safe, flat runout area. Several such locations exist near Rim Village; a popular spot is the open meadow south of Crater Lake Lodge.



Snowboarding

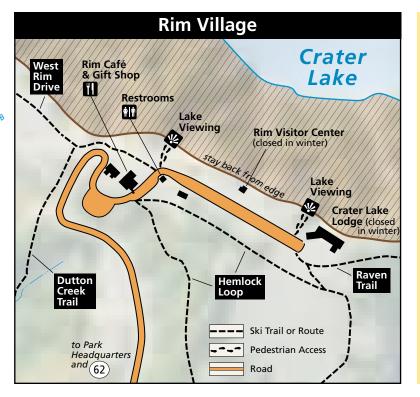
Snowboarding is allowed in the park, but extreme caution should be used. Snowboarders should be experienced in avalanche safety and winter backcountry travel. Snowboarding inside the caldera is strictly prohibited. Snowboarding is also prohibited on roads and parking lots that are open to automobile traffic.

Snowshoeing

Crater Lake National Park is a snowshoer's paradise. To avoid getting lost, first-time visitors are advised to follow one of the park's ski trails. As a courtesy to skiers, please refrain from walking on ski tracks. Snowshoeing is prohibited inside the caldera, on Highway 62, and on the road to Rim Village.

Snowshoe rentals are available at the Rim Village Gift Shop (unless the road to Rim Village is closed). Adult snowshoes cost \$16 per day, kids snowshoes are \$12.50 per day, and hiking poles are \$4 per day. Overnight rentals are allowed; the rental price is good for a 24-hour period. Renting snowshoes is not necessary for the park's ranger-guided walks (see page 1), for which snowshoes are provided free of charge.





Circling the Lake

Each winter, approximately 100 skiers and 75 snowshoers travel all the way around Crater Lake. It's a trip that can be exceptionally rewarding, with unforgettable views. It can also be physically and mentally demanding—a test of endurance and outdoor skills.

When the weather is clear and snow conditions are good, the 31-mile (50-km) loop takes an average of 3 days to complete. Storms, however, force many parties to turn back or spend extra nights. The route is unmarked, hard to follow in places, and crossed by several avalanche paths. Those attempting the trip should be experienced in winter camping, off-trail travel, and avalanche safety. A backcountry permit is required.

Although the loop can typically be done any time between late November and early May, the most popular months are March and April. Spring provides more hours of daylight than the winter months and longer periods of clear weather.

Ski Trails

Crater Lake National Park features many miles of marked ski trails and unmarked routes. The most popular are described here. The trails are not groomed and some may be hard to follow; ask at the Steel Visitor Center for more information.

EASIER TRAILS

Mazama Loop

Distance: 1.7 mi. (2.7 km) loop trail
Recommended for beginning skiers, this
flat trail loops through Mazama Campground and provides views into Annie
Creek Canyon. It is marked with blue
diamonds attached to the trees and, from
December through March, orange snow
poles in the clearings. Trailhead: 4 mi. (6.4
km) south of Park Headquarters, just north
of the summer fee booth and Highway 62.

West Rim Drive

This is the park's most popular ski route, providing spectacular views of Crater Lake and Wizard Island. It follows the West Rim Drive, which is unplowed from November to mid-April. The route is not marked, but the path of the underlying road is generally apparent. The route features gently rolling terrain and is suitable for skiers of all abilities, as long as snow conditions are good. When icy, the route can be treacherous, especially just west of Rim Village. It can also be windy and exposed, but occasional forested areas provide some protection. Trips of varying lengths are possible. Most skiers attempt to reach one of the following destinations before turning back to Rim Village. Trailhead: Snow ramp across from the Rim Village restrooms.

■ Discovery Point

Distance from Rim Village: 1.2 mi. (1.9 km) Discovery Point is a popular summer pull-out on the West Rim Drive. The overlook offers a fine view of Wizard Island and marks the spot where gold prospector John Hillman first set eyes on Crater Lake in 1853. The overlook is not signed but is fairly obvious as a broad, level viewpoint.

■ Wizard Island Overlook

Distance from Rim Village: 2.3 mi. (3.7 km) This small, unmarked viewpoint provides an even better bird's-eye view of Wizard Island. The island is a cinder cone that erupted out of Crater Lake around 7,300 years ago.

■ Union Peak Overlook

Distance from Rim Village: 3.1 mi. (5.0 km) The next road segment is a steady climb, gaining 240 feet (73 meters) in elevation. On a clear day, the ascent is worth the effort: just before the road curves sharply to the right, a small, unmarked viewpoint on the left offers long-distance views of the Cascade Mountains. Union Peak, the core of an old volcano, stands 8 miles (13 km) to the south. To the left of Union Peak is Mt. McLoughlin, 35 miles (56 km) away. The views often extend as far as Mt. Shasta, 100 miles (161 km) distant.

■ Beyond Union Peak Overlook

Distances from Rim Village—Watchman Overlook: 3.9 mi. (6.3 km)
Diamond Lake Overlook: 4.6 mi. (7.4 km)
North Junction: 6.0 mi. (9.7 km)
Exploring further requires caution. Just beyond Union Peak Overlook, the road is cut into a vertical cliff. When this roadcut fills with snow, it may be advisable to leave the road and bypass the cliff higher up on the slope. Next, the road traverses the north face of Watchman Peak, an avalancheprone slope that is sometimes dangerously icy. Do not hesitate to remove your skis

or turn back if conditions warrant. If you continue, possible destinations include Watchman Overlook, Diamond Lake Overlook, and North Junction. Another option, popular with snowshoers, is to attain the summit of Watchman Peak via its western ridge. Atop the peak is a fire lookout, built in 1932 and still used each summer.

INTERMEDIATE TRAILS

Hemlock Loop

Distance: 1.3 mi. (2.1 km) loop trail This enjoyable loop trail offers a lot of variety. It explores a forest of mountain hemlock trees punctuated by meadows that provide distant views to the south and east. It can be skied in either direction, but traveling counterclockwise provides more interesting downhill slopes and turns. In this direction, the trail begins by climbing 45 feet (14 meters) to its high point. It then drops 200 feet (61 meters) in elevation before gaining 155 feet (47 meters) on its return to Rim Village. The trail is marked with blue diamonds in the trees and, from December through March, orange snow poles in the meadows. Trailhead: Snow ramp across from the entrance to the Rim Village Café & Gift Shop. The trail can also be accessed from a snow ramp near Crater Lake Lodge and a roadside pullout approximately 1.5 mi. (2.4 km) south of Rim Village.

East Rim Drive

The East Rim Drive is a good alternative to the West Rim Drive on windy days. The forested route provides protection from the elements and, upon reaching Sun Notch, a spectacular view of Crater Lake and the Phantom Ship. The route is not marked, but skiers should have no trouble following the path of the underlying road, which is unplowed from November to mid-June. The route is rated "intermediate" because it features longer and steeper climbs than the West Rim Drive and crosses several areas prone to avalanche. Trips of varying lengths are possible. Most skiers attempt to reach one of the following destinations before returning. Trailhead: Roadside pullout 150 yards (137 meters) south of Park Headquarters.

■ Summit of First Climb

Distance from trailhead: 1.8 mi. (2.9 km) The road dips gently for the first half mile (.8 km), losing 70 feet (21 meters) of elevation while passing the park's employee housing area. Then begins a steady climb, which in 1.3 miles (2.1 km) gains 420 feet (128 meters). The climb is popular with skiers looking for a short, invigorating workout. Views from the summit are limited, but on the return trip Crater Lake Lodge is visible on the skyline straight ahead.

■ Vidae Falls

Distance from trailhead: 3.1 mi. (5.0 km) Vidae Falls is a spring-fed cascade that drops 100 feet (30 meters) over a series of ledges on the west side of the road. In the winter, there's usually not much to see: the falls slow to a trickle and become mostly buried under snow. From the summit of the first climb, the road descends gradually to Vidae Falls, losing 190 feet (58 meters) of elevation. Along the way, it traverses a potential avalanche area, which, if conditions warrant, can be avoided by taking the marked Vidae Ridge Avalanche Bypass Trail. (A detailed map of the bypass trail is available at the Steel Visitor Center.)

■ Sun Notch

Distance from trailhead: 4.5 mi. (7.2 km) To view Crater Lake, skiers must continue on to Sun Notch, gaining an additional 505 feet (154 meters) of elevation. Skiers must also cross—or bypass—a second

avalanche zone. (A detailed map of the Applegate Avalanche Bypass Route is available at the Steel Visitor Center.) Sun Notch itself lies .25 miles (.4 km) north of the East Rim Drive. To find it, leave the road at the apex of the sweeping righthand curve; the turnoff is not marked. The view from Sun Notch is dramatic. Nearly 1,000 feet (305 meters) above the water, it directly overlooks a rocky island known as the Phantom Ship. Stay back from the edge of the caldera and its dangerous, overhanging snow cornices.

■ Garfield-Applegate Ridge

Distance from trailhead: 3.2 mi. (5.1 km) Another lake-viewing option for snow-shoers and advanced skiers is to attain the caldera's rim between Garfield Peak and Applegate Peak. This is an unmarked but straightforward ascent through open meadows and groves of trees. Leave the East Rim Drive near the summit of the first climb. The rim is 1.4 miles (2.3 km) due north, with an additional elevation gain of 950 feet (290 meters).

ADVANCED TRAILS

Raven Trail

Distance: 1 mi. (1.6 km) The Raven Trail is a favorite of park rangers after work. It descends steeply from Rim Village to Park Headquarters, dropping 610 feet (186 meters) in elevation. It is typically skied one-way, downhill, which requires two vehicles or a shuttle to the top. Unless there's fresh snow, the trail can be dangerously fast, but it flattens out halfway to Park Headquarters, where it crosses the base of a large avalanche chute then runs parallel to the road. During times of heavy snow, when the road to Rim Village is closed, the trail is also used by snowshoers who hike up it to view the lake. The trail is marked with blue diamonds except along the rim of the lake. Upper Trailhead: Snow ramp near Crater Lake Lodge. Ski east along the rim, looking for blue diamonds at the head of a steep valley. Lower Trailhead: Roadside pullout 150 yards (137 meters) south of Park Headquarters.



Dutton Creek Trail

Distance: 4.6 mi. (7.4 km) This trail is little-used but offers a fun and challenging backcountry experience. It is typically skied from north to south and therefore requires two vehicles or a shuttle. The top section, in places, is steep. It descends through a forest of mountain hemlock and red fir, dropping 1,000 feet (305 meters) in 2.5 miles (4 km) to meet the Pacific Crest Trail. The trail then climbs 250 feet (76 meters) to a junction. The left fork descends to Mazama Village; the right fork continues along the PCT to a trailhead on Highway 62. The trail is marked with blue diamonds and some older orange and red blazes, but skiers should carry a topographic map and a compass or GPS. Trailhead: Snow ramp across from the Rim Village restrooms. Ski west, just past Rim Village, and look for the trailhead sign on the south side of West Rim Drive.

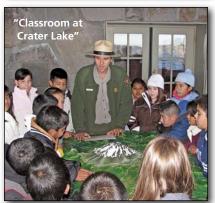
Support Your Park—





Kari Bertram of Coeur d'Alene, Idaho, spotted this red fox in Mazama Village. Most of Crater Lake's red foxes have fur that ranges in color from silver to black.





Volunteer Your Time

Looking for a hands-on way to help the park? Consider sharing your time and talents as a Crater Lake VIP (Volunteer-In-Parks). Full-time volunteers are needed in the summer and winter to help staff visitor centers and present interpretive programs. Opportunities are advertised several times each year at www.volunteer.gov. Volunteers are provided free housing in exchange for 3 months of service. To volunteer periodically, join The Friends of Crater Lake, a non-profit organization whose members help with special projects and events and operate a winter information desk at Rim Village. Learn more at www.friendsofcraterlake.org. Or join the Crater Lake Ski Patrol, whose members assist winter visitors and maintain the park's cross-country ski trails. Identifiable by their bright red parkas, they receive training in wilderness first aid, search and rescue, map and compass use, and avalanche safety in exchange for at least 6 days of service. For more information, visit www.craterlakeskipatrol.weebly.com.

Report Your Wildlife Sightings

Scientists need your help! If you spot any interesting animals during your visit, or if you witness any unusual behavior, please let us know! Your observations will help us learn which animals live in the park and how they use it. In 2018, visitors and employees submitted 112 reports of 43 different species, including the black-backed woodpecker, sage thrasher, short-horned lizard, mountain lion, and gray wolf. To share your sighting, email craterlake@nps.gov or find a ranger at a visitor center. Let us know the date and precise location of your encounter, a detailed description of what you saw, and your name and contact info, in case we have follow-up questions. And if you captured any photos, send them along (ideally with permission for us to use them in reports and publications). Photographic evidence can be very important in confirming the identity of some species. Just remember that approaching, feeding, or disturbing wildlife is strictly prohibited—so please keep your distance. Thanks for your participation!

Buy Crater Lake License Plates

If you live in Oregon, consider choosing Crater Lake license plates for your vehicle. For a one-time charge of \$30, you can outfit your car with these beautiful plates while supporting park projects. You can purchase them at any time, not just when buying a new vehicle or renewing your registration. Visit any DMV office or www.oregon.gov/odot/dmv for details. Proceeds go into an endowment that funds the operation of the park's Science and Learning Center—two historic structures near Park Headquarters (the original Superintendent's Residence and Chief Naturalist's Residence), which now provide living and working space for visiting scientists, teachers, and artists. The Science and Learning Center draws researchers and educators to Crater Lake from around the world, encouraging them to use the park as an outdoor laboratory and classroom. For more information, visit www.nps.gov/rlc/craterlake.

Contribute to the Crater Lake Trust

The Crater Lake National Park Trust is a nonprofit organization that raises private funds to support park projects and connect the park with surrounding communities. Each year, for example, it helps fund field trips to the park for more than 5,000 grade-school students. In a program called "Classroom at Crater Lake," kids engage in hands-on science and learn about wildlife, old-growth forests, and winter ecology. Learn more at www.craterlaketrust.org. Share your love of the park by making a tax-deductible gift.

Share Your Comments

Whether you have a compliment, concern, or suggestion, we'd like to hear from you! This is your park, and we value your input on how best to manage it. To provide feedback, complete a comment form at the visitor center or send an email (or letter) to the park's Superintendent (see addresses on page 2).

Keeping the Park Open is "Snow" Easy Task

(continued from page 1)

With it, you could create a ski trail 3 feet (91 cm) wide, 6 inches (15 cm) deep, and long enough to circle the Earth at the

The most challenging part of the job is "Spring Opening," when the equipment operators turn their attention to opening up the 30-mile (48-km) Rim Drive and 9-mile (14-km) North Entrance Road for the summer. They begin on the West Rim, departing Rim Village around the 3rd week in April. On average, the snow they encounter is 20 to 30 feet (6 to 9 meters) deep. In the vicinity of Watchman Peak, they meet drifts 45 to 50 feet (15 meters)

The crews head slowly north, averaging .25 miles (.4 km) of road cleared per day. In a light snow year, they'll reach the park's North Entrance by mid-May. After a severe winter, it will take until mid-June. The East Rim Drive is their final leg. "If we can get all the way around the lake by the 4th of July," says one operator, "we're happy."

For your safety, when you encounter a snow plow in the park, please give it a wide berth. Passing a plow on the park's narrow roads can be dangerous. Wait until an intersection or until the plow comes to a stop and the operator waves you by. Until then, assume that the operator can't see you; visibility from inside the plows can be poor. Also, skiers and pedestrians should be careful to keep well away from the dangerous cascade of snow thrown by the rotary plows.

Thanks to the hard work, long hours, and dedication of the park's heavy equipment operators and mechanics, we can access and enjoy Crater Lake National Park every month of the year.



Climate Chart

Crater Lake National Park is one of the snowiest inhabited places in America. Storms from the Pacific Ocean dump an average of 43 feet (13 meters) of snow at Park Headquarters. That's equivalent to 1.4 inches (3.6 cm) of snow every day for an entire year! The park's tremendous snowfall is a result of its position at the crest of the Cascade Mountains.

Since 1931, however, when rangers began keeping track, snowfall has been declining. The total amount of precipitation falling in the park hasn't changed much, but warmer temperatures have been causing a larger proportion of it to fall as rain.

Average Annual Snowfall at Park Headquarters, by Decade:

1930s - 614 inches (1,560 cm) 1940s - 623 inches (1,582 cm) 1950s - 572 inches (1,453 cm) 1960s - 507 inches (1,288 cm) 1970s - 495 inches (1,257 cm) 1980s - 475 inches (1,207 cm) 1990s - 493 inches (1,252 cm) 2000s - 455 inches (1,156 cm) 2010s - 410 inches (1,039 cm)

FAHRENHEIT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Daily High (°F)	34	35	37	42	50	58	69	69	63	52	40	34
Average Daily Low (°F)	18	18	19	23	28	34	41	41	37	31	23	19
Average Snowfall (inches)	100	81	83	45	19	4	0.2	0.1	3	21	61	93
Avg. Snow Depth (inches)	79	101	115	111	76	24	1	0	0	2	16	47

CELSIUS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Daily High (°C)	1	2	3	6	10	15	21	21	17	11	4	1
Average Daily Low (°C)	-8	-8	-7	-5	-2	1	5	5	3	-1	-5	-7
Average Snowfall (cm)	254	206	211	115	49	9	0.5	0.3	7	53	155	237
Avg. Snow Depth (cm)	201	256	292	281	193	60	3	0	1	6	42	120

Data is from Park Headquarters, 1931-2018

Shop in the Visitor Center Bookstore

When you shop in the Steel Visitor Center, all proceeds from your purchase are invested back into the park. The bookstore is operated by the Crater Lake Natural History Association, a nonprofit organization established in 1942 to support the park's educational and scientific programs. The association funds a variety of important projects, including the printing of this visitor guide. Some of the bookstore's offerings are described below. For a complete list of merchandise and to buy items online, visit www.craterlakeoregon.org. You can also order by calling 541-594-3111.

Recommended Reading



Crater Lake: The Story Behind the Scenery Large photos with detailed captions accompany the text of this popular book. 48 pages, \$11.95.



Crater Lake: Gem of the Cascades A comprehensive guide to the park's geologic story, written by a former park ranger. 168 pages, \$15.95



Road Guide to Crater Lake National Park

Consult this guide as you circle the lake for a deeper understanding of the park's features. 48 pages, \$7.95.



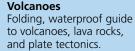
Trails of Crater Lake & Oregon CavesA detailed guide to 24 hikes. 112 pages, \$14.95.

Crater Lake Topo Map Recommended for trips into the park's backcountry. Waterproof and tearproof. 1:55,000 scale. \$14.95.



Plants & Animals of Crater Lake Nat'l Park This folding, waterproof

guide will help you identify the park's most visible species. 11 pages, \$6.95.





11 pages, \$7.95.

Star & Planet Guide
Rotating "planisphere"
for locating stars, planets,
and constellations in the



night sky. \$7.99 small, \$11.99 large. **101 Wildflowers of Crater Lake Nat'l Park** Detailed descriptions and vivid photos of the park's

most common flowers.

Trees To Know

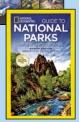
74 pages, \$14.95.

in Oregon
Tree identification is easy and enjoyable with this photo-packed, fact-filled guide. 153 pages, \$18.00.



Crater Lake:
Into the Deep DVD
Own the film shown

Own the film shown at the visitor center. Discover the park's significance and explore the lake's violent past. 22 minutes, \$14.99.



Guide to the National Parks of the United States This best-selling book from National Geographic features 380 stunning photos and 80 color maps. 480 pages, \$28.00.

