A Winter Wonderland

But for How Much Longer?

Straddling the crest of the Cascade Mountain Range, Crater Lake National Park is one of the snowiest inhabited places in America. Storms from the Pacific Ocean dump an annual average of 42 feet of snow at Park Headquarters and more than 50 feet at Rim Village. Since 1931, however, when rangers began keeping track, totals have been trending downward. Snowfall at Park Headquarters has been below average for 9 of the past 10 years.

At first glance, milder winters might seem to be good news, since deep snow tends to make life difficult. Snow forces many animals, including deer and elk, to leave the park in order to survive. Snow makes it hard for park staff to keep roads plowed and facilities functioning. And, for park visitors, storms often lead to disappointment, hiding Crater Lake from view.

But consider the benefits that blizzards bring. A thick blanket of snow provides protection and warmth for "subnivean" mammals such as shrews, voles, and pikas. It serves as a water reservoir for the park's old-growth forests, insulating trees from drought and fire. It provides us with opportunities to ski, sled, snowshoe, and marvel at winter's beauty. And, since it eventually melts to feed the Rogue, Umpqua, and Klamath rivers, snow at Crater Lake is good news for downstream farmers, ranchers, cities, and wildlife.

Unfortunately, declining snowfall in the winter is having negative consequences in the summer. It's leading to longer and more severe fire seasons, a rise in insect epidemics and invasive species, and hardship for native plants and animals, as they struggle to survive in a climate to which they're not adapted. So, despite the hardships imposed on the park, they are ultimately a cause for gratitude, delight, and celebration. Let it snow—please!

Average Annual Snowfall, by Decade, at Park Headquarters:

<table>
<thead>
<tr>
<th>Decade</th>
<th>Snowfall (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930s</td>
<td>614</td>
</tr>
<tr>
<td>1940s</td>
<td>623</td>
</tr>
<tr>
<td>1950s – 572</td>
<td></td>
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<tr>
<td>1960s – 507</td>
<td></td>
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<tr>
<td>1970s – 495</td>
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<td>1980s – 475</td>
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<tr>
<td>1990s – 493</td>
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<tr>
<td>2000s – 455</td>
<td></td>
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<td>2010s – 395</td>
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Rangers use a giant ruler—21 feet tall—to measure snow depth at Park Headquarters. They have measured snow depth, snowfall, and precipitation at this location since 1931.

While the amount of precipitation the park receives hasn't changed much over time, the type of precipitation has. Warmer weather is causing a larger proportion of it to fall as rain. Snowfall has declined.
**Emergencies**

Dial 911 to report any emergency, 24 hours a day. First aid is available at Rim Village at Park Headquarters (8 am–4 pm). When the road to Rim Village is closed, drinking water is not available, except at the location of the visitor centers.

**Services & Facilities**

- **Restrooms & Drinking Water**
  - Public restrooms and drinking fountains are available at the Visitor Center at Park Headquarters (closed from 10 am to 2 pm, except Sundays and holidays) at Park Headquarters, and at the Rim Village. The most popular spot is open mid-march to mid-Oct on the south side of Crater Lake Lodge.

- **Food & Gifts**
  - The Rim Cafe & Gift Shop serves light meals, snacks, and beverages. A large gift shop offers a wide selection of souvenirs, as well as snowshoe rentals (next page). An observation room on the top floor provides partial views of Crater Lake, weather permitting, and a weather Cam view of the lake. During storms, however, the view is usually closed due to clouds. The lake is completely "invitable" about 50% of the time, in winter and early spring. To avoid disappointment, check the weather forecast (www.weather.gov) and the Rim Village webcam (go.nps.gov/wlri) before you leave home.

- **Post Office**
  - Post office services are available at the Rim Village.

- **Gasoline**
  - The park’s gas station is closed from mid-October to mid-April. Gas is available on a limited basis from 7 am to 9 pm, at the Union Peak (4 miles south of the park). It is open year-round.

- **Lodging & Camping**
  - There are no accommodations within the park. Visitors can park their vehicles at Crater Lake Lodge in the spring, Crater Lake Trading Post in the summer, and the Crater Lake Lodge in the fall.

- **Float Trip**
  - A guided float trip on the lake is available for $40 per person. The trip starts at the open end of the lake and is appropriate for people of all ages and abilities.

- **Camping**
  - The closest campground to the park is the Prospect Campground, 2 miles north of Crater Lake National Park.

- **Winter Recreation**
  - Winter recreation is available at the Rim Village, Crater Lake Lodge, and the Crater Lake National Park Visitor Center. Winter activities include snowshoeing, skiing, and snowmobiling. For more information, call 541-594-3000.

**Snowshoeing & Cross-Country Skiing**

- **Snowshoeing**
  - Snowshoeing and cross-country skiing are allowed on the main trails and unmarked routes (open to hikers only). Skiers may still cross deep snow drifts (hence the need for a front wheel ski and cross-country skis). The trail is open to snowshoeing and cross-country skiing, but is not maintained during periods of heavy snowfall.

- **Cross-Country Skiing**
  - Cross-country skiing is available on the Ape Canyon-Cove Road and on the Rim Drive. Special conditions apply, and visitors should check the cross-country skiing trail map before heading out.

**Vehicles**

- **Parking**
  - Parking is allowed only in plowed pullouts and parking lots.

**Activities**

- **Rim Village**
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**Rounding**

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**Ask the Ranger**

**How deep is Crater Lake?**
Crater Lake is 1,943 feet deep. It’s the deepest lake in the USA (100 feet deeper than Lake Tahoe, which ranks 2nd). It’s the 9th deepest lake in the world and the deepest in the world formed by volcanic activity.

**Where does the water come from?**
About 83% of the water comes from rain and snow falling directly on the surface. The rest runs off from precipitation landing on the slopes above the lake.

**How clean & clear is the lake?**
How clean: cleaner to happen again for thousands of years; the lake’s native newts toward extinction. Sadly, crayfish are swiftly pushing the lake’s native newts toward extinction.

**How did Crater Lake form?**
When an 8-inch-wide crater once stood 12,000 feet tall, but its summit was a collapse volcano. The volcano had a one-person submarine. In the 1980s, a one-person submarine. Researchers discovered hydrothermal springs and three types of surprising features: 30-foot-tall chimneys of rock precipitated from the upwelling fluids; blue-colored pools of high-density, mineral-rich water; and huge mats of yellow bacteria that survive in the dark by oxidizing iron for energy.

**How far is Crater Lake?**
Crater Lake is 50 miles from Bend, Oregon. It’s the 9th cone—that erupted out of the lake around 7,700 years ago. The eruption was about 100 times the magnitude of the 1980 eruption at Mount St. Helens.

**Support Your Park**

**Volunteer Your Time**
Looking for a hands-on way to help the park? Consider sharing your time and talents at a Crater Lake VIP (Volunteer-In-Parks). Full-time volunteers are needed to help staff visitor centers and presents 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 nonprofit whose members help with special 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 ski and snowshoe trails. For more information, visit www.craterlakeski patrol.com.

**Report Your Wildlife Sightings**
Scientists need your help! If you spot any interesting animals during your visit or 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. Species reported recently include the northern saw-whet owl, police-car moth, pine marten, mountain lion, and gray wolf. To share your sighting, email creatrlake@nps.gov. 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 on (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/dot/dmv for details. Proceeds go into an endowment that funds the operation of the park’s Science and Learning Center, which provides living and working space for visiting scientists, teachers, and artists. The 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 go.nps.gov/slcc.

**Contribute to the Crater Lake Trust**
The nonprofit Crater Lake National Park Trust 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 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, send an email or letter to the park’s Superintendent (see addresses on page 2).

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**Rough-Skinned Newt**
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**Red Fox in Mazama Village.**
Red foxes are a rare sight in Mazama Village. Red foxes are valued by visitors and the community. Kari Bertram spotted this red fox during her visit to the park.

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