

# oregon caves

## THE “MARBLE HALLS OF OREGON”

For all a man's plotting and planning, there is nothing like coincidence to put his name down in history. So it was for Elijah Davidson, an Oregonian who was deer hunting on the slopes of the Siskiyou Mountains one fine day in the late fall of 1874. Davidson had successfully bagged a buck when his dog picked up the scent of a bear. He listened with satisfaction as the dog, Bruno, bayed at the quarry. Everything seemed perfect—until the bear disappeared within a dark, mossy-green hole high on a mountainside.

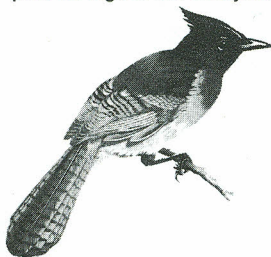
Bruno followed the bear into the hole, and Davidson, concerned for the dog's safety, also entered the mossy opening. He struck a sulfur match and found himself in a narrow passageway. Drawn by Bruno's howls, he crept farther and farther among gray and cream-colored corridors, using up match after match. When all his matches were gone, Davidson found himself stranded in total darkness in an unknown cave.

Following an underground stream and groping his way anxiously along the wet stone corridors, the subdued hunter eventually emerged into daylight. Bruno soon followed. The bear, evidently less concerned about darkness than about his pursuers, stayed in the cave until the next day. The incident could have been disastrous; instead, it led to the discovery of the beautiful Oregon Caves.

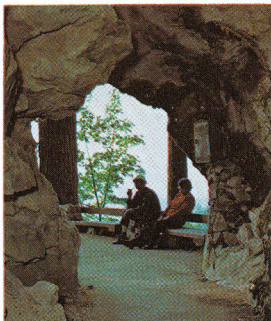
In succeeding years, adventurers explored the cave several times, returning home to tell of its great beauty and mystery. During the late 1890s, developers “opened” the cave, but the area was too remote to offer much commercial return. Then, in 1907, a party of influential men, including Joaquin Miller, “Poet of the Sierra,” visited the cave. Enraptured, Miller dubbed the cave “The Marble Halls of Oregon.” The publicity generated by the visit alerted Federal officials to the need for preserving this natural treasure for the enjoyment of all Americans. In 1909, President Taft proclaimed a tract of 195 hectares (480 acres) as Oregon Caves National Monument. Although only a single cave has been found, the area has since been known as Oregon Caves.



The ivory, bell-like flowers and green leaves on manzanita suggest the lush plant-life in this cool, temperate park set high in the Siskiyoues.



The Steller's jay is frequently seen at Oregon Caves.



Visitors rest a few minutes outside the cave exit (above). At Inspiration Point on the Cliff Nature Trail are magnificent views of the Siskiyou Mountains (cover photo).



## WATER AND CRUSTAL MOVEMENT CREATE A CAVE

The cave's geologic story is a play in three acts, and great time was taken in its writing.

**Act One—The Formation of Fractured Marble—**begins on a seabed about 200 million years ago. Accumulation of deposits on the seabed over millions of years gradually compressed layers of lava, mud, and lime into solid rock. Thick deposits of seashells were hardened into a rock type called limestone.

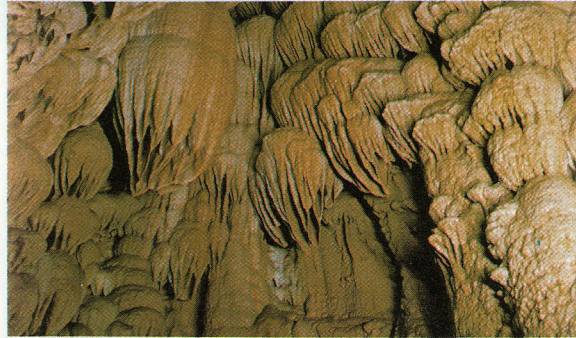
Later, earth forces mashed, crumpled, and up-lifted the rock layers. Pressure and heat generated by these forces smudged out all traces of seashells in the limestone and caused it to recrystallize. In this way the limestone was converted to a new, harder rock called marble. It was probably these same intense forces that fractured the marble, leaving it shot through with thin cracks. Examples of fractured marble can be seen throughout the cave system.

Now the stage was set for **Act Two—The Formation of Underground Passageways.** Through vast periods of time repeated uplifts of the land allowed erosion to strip away the rock layers overlying the Oregon Caves marble layer. As the overlying rocks became thinner and thinner, water, charged with weak carbonic acid from the soil, seeped down into the fractured marble layer. The weakly acidic water reacted chemically with the marble rock, dissolving it along the fractures and enlarging them into crevices, corridors, and rooms. During this period the passageways were filled with groundwater and the walls lacked mineral decorations. The Passageway of the Whale shows smooth walls and crevices that illustrate this stage of cave formation.

In **Act Three—The Formation of Cave Decorations—**the water level dropped and the passageways emptied. Groundwater, dripping and trickling into the cave, then deposited innumerable thin coatings of a mineral called calcite. Gradually the coatings accumulated into beautiful white, buff, and gray decorations attached to the ceilings, walls, and floors of the cave.

Where water dripped into the cave, decorations called dripstone formed. Pendant decorations on

the ceilings are called stalactites; decorations growing upwards from the floors are called stalagmites. Where stalactites and stalagmites grow and fuse together, columns are formed. Examples of all these dripstone decorations are beautifully displayed in the room called Joaquin Miller's Chapel. In addition, hollow, fragile soda straw stalactites prickle from the vaulting ceiling of the Ghost Room.



**Flowstone embellishes the walls in Paradise Lost (above) and a column (left) stands guard in Joaquin Miller's Chapel.**

In contrast, water that seeped quietly over moist walls and floors deposited graceful calcite decorations called flowstone. One formation, looking like a series of frozen waterfalls, is appropriately named Niagara Falls. Other flowstone takes the shape of rippled or suspended sheets, called draperies. Banded draperies, resembling bacon strips, also occur.

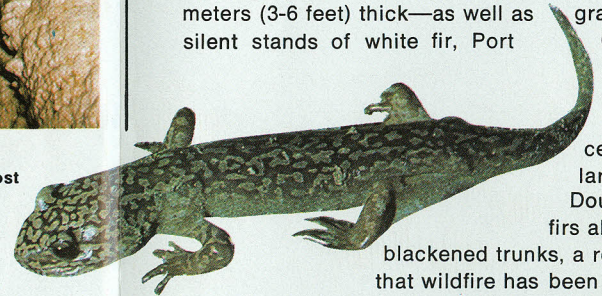
Even now the play goes on. Wherever the cave is moist and "alive," decorations continue to grow. Over vast time new cave decorations will add to the beauty, mystery, and variety already formed in stone.

## TALL TREES AND TRAIL

Although the "Marble Halls of Oregon" are the focus of attention in the park, one can also enjoy beautiful virgin forests and a variety of interesting mammals and birds.

The cave is located within a natural transition between two mountainside forest types. At elevations below about 1,200 meters (4,000 feet) grows a mixed forest of broadleaf and conifer trees. Here tall Douglas-firs and a few pines tower above low broadleaf trees and shrubs. The latter include tanoak, prickly-leaved canyon live oak, orange-barked Pacific madrone, golden chinkapin (named for the mustard-colored undersurfaces of its narrow leaves), and purplish-stemmed shrubs of manzanita. Higher than about 1,200 meters, an all-conifer forest grows. Here one may stand among huge Douglas-firs—many with trunks 1-2 meters (3-6 feet) thick—as well as graceful,

silent stands of white fir, Port Orford-cedar, and incense-cedar. The large old Douglas-firs all bear fire-blackened trunks, a reminder that wildfire has been a natural part of the forest for thousands of years.



**Pacific Giant Salamander**



Common wildflowers include trillium, vanilla-leaf, starflower, redwood violet, modest whipplea, and twinflower. The holly-like leaves of dwarf

## RAILSIDE DISCOVERIES

Oregon grape are also common. Ferns include swordfern and bracken fern. Mosses and alumroot grow profusely around the cave openings and on damp cliffs and rocks along the trails. Lichens, clinging to branches and trunks, give many trees a hairy appearance.

The plantlife provides food and shelter for the park's wildlife. Along the entrance road, watch for black-tailed deer especially during the early morning and evening hours. In the mixed type forest, large western gray squirrels gather acorns among oak branches or from the ground. Upslope, in the white fir and Douglas-fir forest, listen for the chickaree, a chattering, energetic rodent furred in dark olive and orange. Near the cave entrance grayish California ground squirrels scurry into their burrows, while black-and-white striped golden mantled ground squirrels and smaller Townsend chipmunks scamper among the tree trunks and rocks in search of seeds and nuts.

Other rodents include the deer mouse, a very common but nocturnal species rarely seen by park visitors, and the porcupine, a slow-moving eater of herbs and soft tree bark.

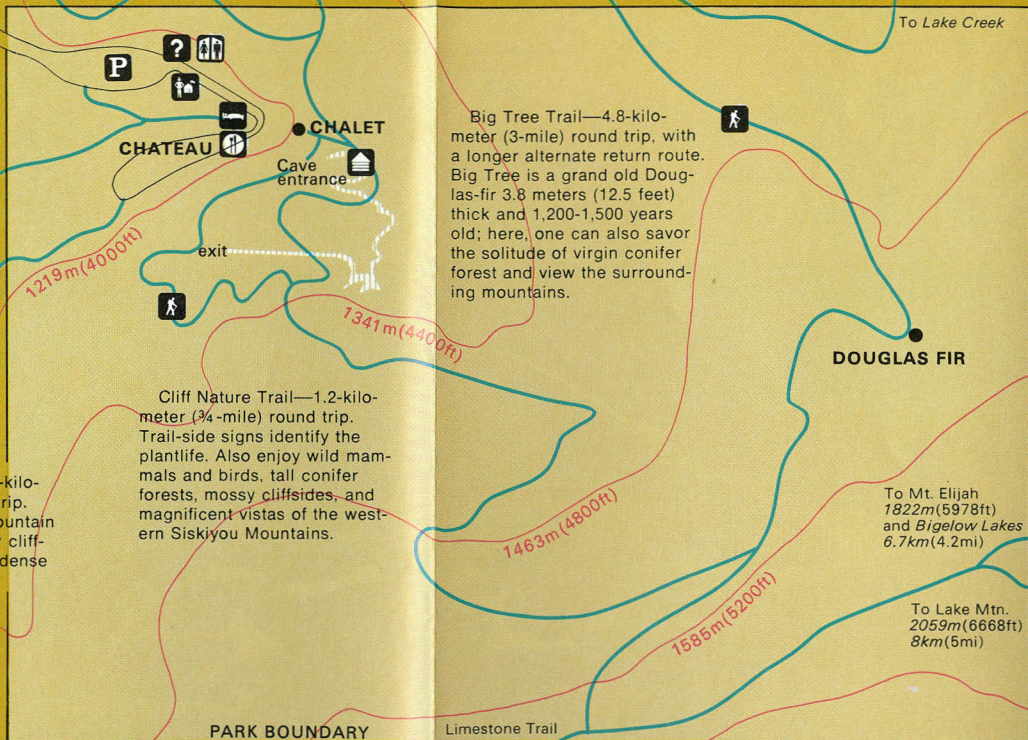
Completing the forest scene is a rich variety of birdlife. Steller's jays, a deep blue with black head crests, squawk and scold, while their quieter cousins, the gray jays, glide from perch to perch on silent, secretive wings. Woodpeckers rap sharp beaks against tall fir trunks, seeking hidden insects. In spring, blue grouse puff up feathery neck pouches to hoot out low booming love notes.

Beyond the green world of the forest, the black depths of the cave are home to eight species of bats. Wood-rats, rabbits, mice, spiders, and moths are sometimes also seen in the semi-lit openings of the cave.

Tread quietly along a forest trail and then relax for awhile by the trailside. Soon the sight and sound of birds and mammals will catch your attention; some wildlife may even move closer to investigate your presence. In wildlife watching, quiet and patience are often rewarded by unusual, exciting discoveries.

46  
To Cave Junction  
32km (20mi)

SISKIYOU NATIONAL FOREST



No Name Trail—1.75-kilometer (1.1-mile) round trip. Leads past tumbling mountain streams, wildlife, mossy cliff-sides, wildflowers, and dense mixed forests.

Cliff Nature Trail—1.2-kilometer (¾-mile) round trip. Trail-side signs identify the plantlife. Also enjoy wild mammals and birds, tall conifer forests, mossy cliffsides, and magnificent vistas of the western Siskiyou Mountains.

**Help Preserve The Park**

Uniformed park rangers are responsible for the management of park resources and for the enforcement of park regulations. Feel free to ask them

for information, direction, or assistance. Help preserve and protect the park by observing the regulations and by keeping the area free of litter.

**Do not feed, touch, tease, or molest any of the park wildlife.**  
**Stay on the marked trails,** both for your safety and for the preservation of the natural environment.

Big Tree Trail—4.8-kilometer (3-mile) round trip, with a longer alternate return route. Big Tree is a grand old Douglas-fir 3.8 meters (12.5 feet) thick and 1,200-1,500 years old; here, one can also savor the solitude of virgin conifer forest and view the surrounding mountains.

To Lake Creek

DOUGLAS FIR

To Mt. Elijah  
1822m (5978ft)  
and Bigelow Lakes  
6.7km (4.2mi)

To Lake Mtn.  
2059m (6668ft)  
8km (5mi)

Limestone Trail

PARK BOUNDARY

**Trails**

A maintained and marked system of trails provides access to the park for day hikers. Connecting trails lead into the adjoining Siskiyou National Forest. Snowshoes are usually required in winter and spring; check trail conditions with park rangers before setting out.

**Interpretive Programs**

The National Park Service provides interpretive services throughout the summer to help visitors gain a greater appreciation of the area. Campfire programs are held each summer evening at dark, Monday through Saturday, for all interested visitors.

- Cave location;
- P** Parking; **?** Information;
- R** Ranger station; **F** Food;
- L** Lodging; **H** Hiking trail;
- RR** Restrooms; **C** Cabins.

**Pets are not permitted in the cave, on trails, or within buildings and must be kept attended and leashed at all times.**

**Camping and fires are not permitted.** Smoking is not permitted on any of the trails or in the cave.

**Hunting, trapping, and/or the possession of firearms is prohibited.**

**We're Joining the Metric World**

The National Park Service is introducing metric measurements in its publications to help Americans become acquainted with the metric system and to make interpretation more meaningful for park visitors from other nations.



The River Styx emerges from the cave below the entrance.

**LODGING AND CAMPING**

The Oregon Caves Company operates a lodge and cabins from approximately the last week in May to the first week in September. For information or reservations, write to the Oregon Caves Co., Oregon Caves, OR 97523.

Camping is not permitted within the park itself. However, the U.S. Forest Service operates two campgrounds in the adjoining Siskiyou National Forest from approximately the end of May to early September.

**Cave Creek Campground** is 6.5 kilometers (4 miles) from the park on Oregon 46. **No trailers are permitted.**

**Grayback Campground** is 13 kilometers (8 miles) down Oregon 46. **Trailers are permitted in the campground.**

Although the campgrounds are rarely filled, campsites are assigned on a first-come, first-served basis. Neither campground is "improved." **There are no showers and no utility connections.**

## FOR YOUR SAFETY—CAVE TOUR INFORMATION AND REGULATIONS

### Cave passageways may be slippery:

Handrailings on stairways should always be used. Low-heeled, walking shoes with non-slip soles should be worn. It is dangerous to wear sandals or shoes with leather or hard composition soles, or with high heels.

**Wear proper clothing, including a jacket and walking shoes.** The cave entrance is at a sometimes-chilly elevation of 1,200 meters (4,000 feet). The cave temperature varies from 3° to 7°C (38° to 45°F).

**The cave tour is not recommended for anyone with heart, breathing, or walking difficulty.** The tour lasts for about 75 minutes and you will walk through 1 kilometer (0.6 mile) of passageways, climbing a vertical distance of 66 meters (218 feet) including 550 stairs. Some of the passageways are low and narrow. The forest trail from the cave exit to your starting point is an additional 0.5 kilometer (0.3 mile) and is steep in places.

**Stay with your guide.** If you become short of breath or have any other difficulty, inform the guide and he will adjust the pace. There is an emergency exit one-third of the way through the cave for those who do not wish to continue the tour.

**Due to the difficulty of the tour, children under 6 years of age are not permitted in the cave.** A child-care (babysitting) service is available at the concession for a fee.

**Do not touch any of the cave walls or formations;** they are very fragile and are stained by touching.

For your safety and the preservation of the cave formations, **canes, crutches, tripods, and sticks are not permitted within the cave.**

**Hand held cameras are permitted.** A flash attachment is needed. Do not delay your party and do not point your flash toward another person.

### Cave Tours

All visitors wishing to see the cave must do so on a guided tour provided by the Oregon Caves Company, a private concessioner, for a fee regulated by the U.S. Department of the Interior.



Traceries of brown clay pulled into lines by molecular attraction are prominent in Neptune's Grotto.

### Tour Registration Hours

Spring: May 1 to May 31,  
9:00 a.m.—5:00 p.m.  
Summer: June 1 to Sept. 10,  
8:00 a.m.—7:00 p.m.  
Fall: Sept. 11 to Oct. 1,  
9:00 a.m.—5:00 p.m.  
Tours enter the cave in these seasons as often as

parties of 16 persons are formed.

Winter: Oct. 1 to May 1,  
9:00 a.m.—5:00 p.m. Winter tour schedule: 10:30 a.m., 12:30, 2:00, 3:30 p.m., and in between as often as parties of 12-16 visitors are formed and as guides are available.

**Note:** Because parking is quite limited, we recommend that during the summer months you arrive at the park during the morning hours. **Parking is extremely limited for trailers.**



Decorations of every size and shape make each cave tour an event filled with interest and fascination.

Paradise Lost—Parachute-like flowstone draperies decorate this dome or chimney.

The Rimstone Room—The rimstone formations resemble waves on the sea.

The Ghost Room—This is the largest room in the caves—about 75 meters (250 feet) in length. Created by the collapse of subterranean materials, it is technically known as a breakdown chamber.

Joaquin Miller's Chapel—Many formations decorate a chamber named for one of the men responsible for gaining national monument status for the caves.

The Grand Column—A stalactite and stalagmite join to form the largest column in the caves.

Neptune's Grotto—The flowstone formations invite comparisons to an underwater scene.

Niagara Falls—This large flowstone cascade has been partially marred by vandalism and the names and dates of early explorers.

Banana Grove—The flowstone drapery resembles banana clusters.

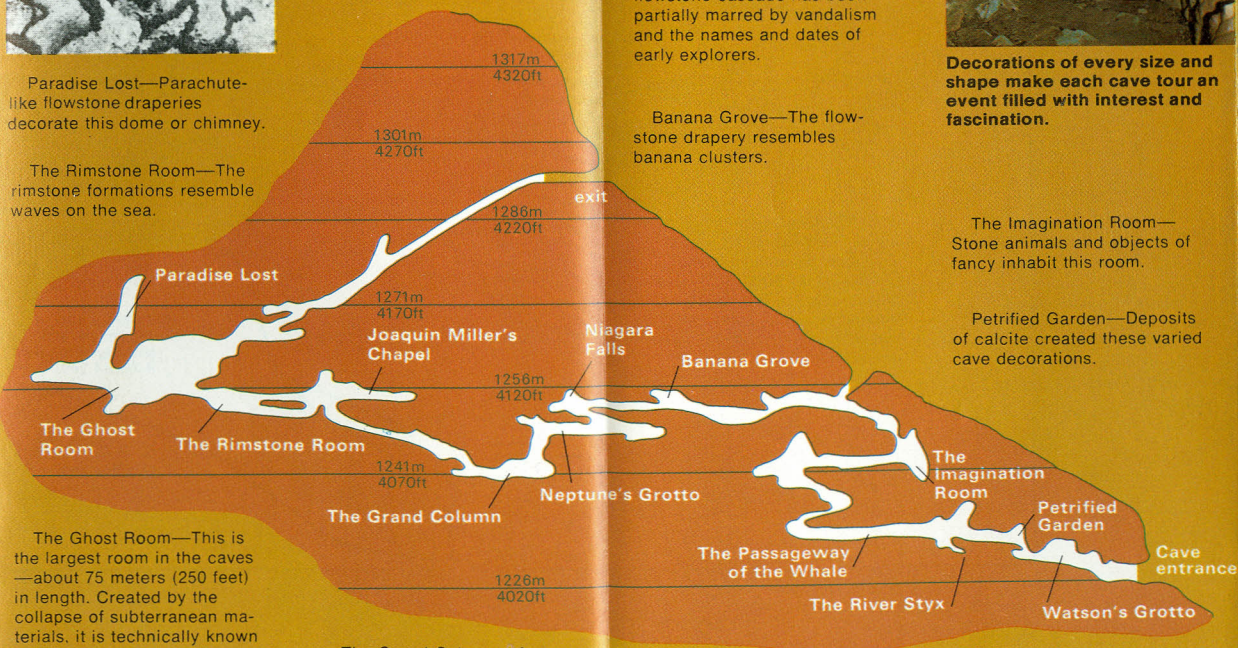
The Imagination Room—Stone animals and objects of fancy inhabit this room.

Petrified Garden—Deposits of calcite created these varied cave decorations.

The Passageway of the Whale—A whale's spine seems to be imprinted on the ceiling, and a few ribs rise along the sides, putting visitors inside an imaginary whale.

The River Styx—This free-running stream is enlarging existing passages.

Watson's Grotto—Evidence is found here of marble dissolved by weakly acidic water.





## OREGON CAVES NATIONAL MONUMENT

The park, located 32 kilometers (20 miles) southeast of Cave Junction on Oregon 46, can be reached by traveling either 80 kilometers (50 miles) south from Grants Pass or 122 kilometers (76 miles) north from Crescent City, on U.S. 199. The last 13 kilometers (8

miles) of Oregon 46 are quite narrow and winding. Towing trailers is not recommended due to narrow roads, infrequent turnarounds, and lack of parking space.

Oregon Caves is administered by the National Park Service, U.S. Department of the Interior. The superintendent's address is 19000 Caves Hwy., Cave Junction, OR 97523.

## ALL PARK ANIMALS ARE WILD. DO NOT FEED OR TOUCH PARK WILDLIFE.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and pro-

viding for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

**National Park Service**  
**U.S. DEPARTMENT of the INTERIOR**