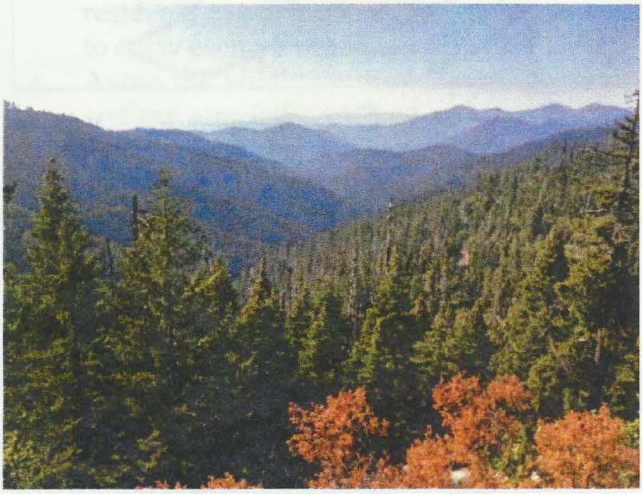
Cliff Nature Trail

A Hiking Guide for the Curious

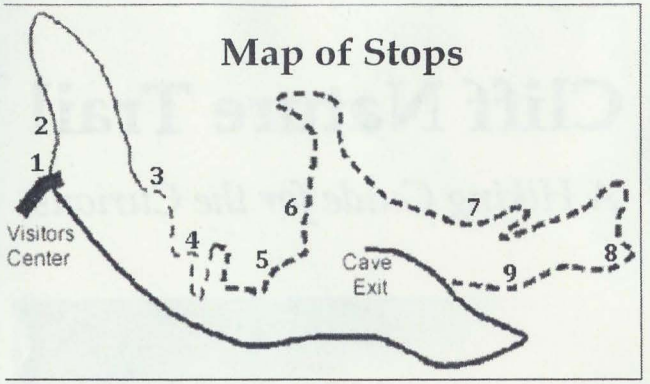


After winding your way through the dark tunnels of the caves, continue your adventure on the surface to explore the environment outside the cave!

Distance: 1 mile (1.6 km) loop

Estimated time: 45 - 60 minutes

Elevation gain: 371 feet



Stops

1. Visitor Center

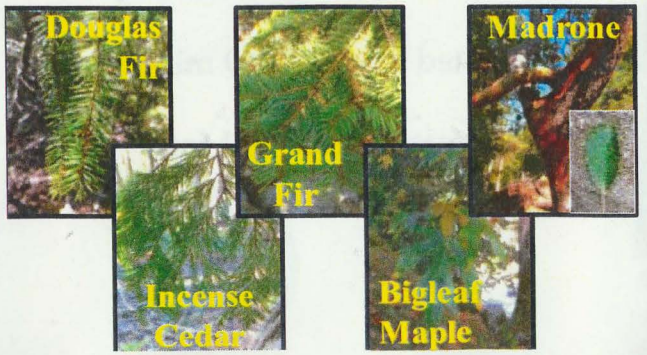
Starting up the trail, you might immediately notice large trees. Do you know what they are? You have several options: Douglas Fir, Madrone, Grand Fir, Bigleaf Maple, and Red Cedar. Use your detective skills to figure out what you see! By the end of the trail you will see all 5 types.

Evergreen (stays green year-round)

- **Douglas Fir:** needles that completely surround the branch. Cones have a 3-pointed protrusion between the scales.
- **Grand Fir:** flat yellow-green needles
- **Incense cedar:** scale-like needles that overlap like shingles
- **Madrone:** reddish-brown peeling bark. Leaves are green, and can be smooth or finely serrated.

Deciduous (sheds leaves annually)

- **Bigleaf Maple:** large leaf with 5 deeply incised lobes



2. Resource Management Building

This building was built in the early days of the monument, around the same time as the Visitor Center and current road. Its original purpose was visitor lodging. It was later converted into offices for NPS staff. This building is the only one remaining of the monument's original cabins.

3. "Bridge Over Time" sign

First, read the sign. Time is a fundamental component of all natural systems. Five million years ago, the Siskiyou Mountains had eroded into a flat plain. They have since risen again into the mountains you see today. Each piece of the ecosystem has taken thousands of years to develop to its current state. If you came back in a million years, the landscape would be further changed. How do you think the landscape might look?

4. Blind Leads

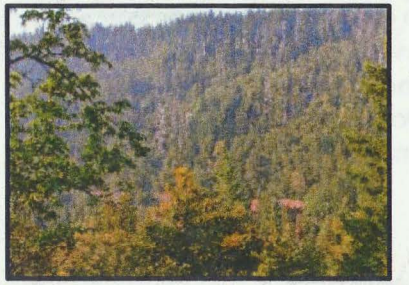
First, read the sign. Water is just as important outside the cave as it is inside the cave. Looking around, you can see evidence of water all over the surface (mosses, small streams, abundant plant life, etc.). What ways can you think of that this water affects the surface ecosystem? *If time permits, please explore! It gets dark towards the back, but this is an area to get up close and personal with marble.*

5. Bench

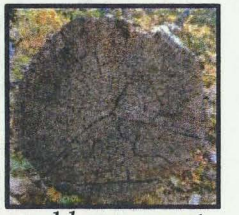
Looking to the left when you are sitting on the bench, you will see a broad-leafed tree with peeling bark. Based on the tree descriptions provided under stop 1, can you identify it? The layers of bark peel off as the tree ages, with the brown bark being the oldest, and the green being the youngest. The fruits of these trees can serve as a raw food source during the winter.

5. Bench (continued)

Looking ahead, you can also see the lower parking lot and historic Chateau built in 1934. Gust Lium, the original architect of the Chateau, intended it to blend in with its surroundings, with the use of the natural landscape and cedar wood siding. Since its construction, this building has been used as a hotel for cave visitors.



6. Tree Cut



Inside the cave, there are spectacular examples of speleothem (cave formation) rings. Unlike tree rings, a speleothem's rings cannot be counted to determine the formation's age, since each ring could represent hundreds or thousands of years. Tree rings, however, identify yearly growth. The width of each tree ring can show how wet the year was, with wider rings representing wetter years. In either case, both ring structures tell scientists a lot about past climatological conditions. How old was this tree before it was cut down?

7. "The Siskiyou Mountains" Sign

First, read the sign. Although isolated, the plant refuges can migrate if put under enough stress. They utilize the valleys to slowly move to places with more favorable growing conditions. How many valleys can you spot which would permit this type of passage? If time permits, there's an activity in the visitor center which clearly identifies the ridges and valleys, making path identification easier.

Safety

- Do not leave the trail! None of the stops require you to go off-trail
- Be careful around steep slopes and on rocky terrane
- Please do not take anything you find with you! We have many visitors and animal residents in our park, and all of them want to enjoy each piece as you are today
- Avoid the wildlife – they are wild animals and can attack if provoked
- Do not vandalize and follow all Leave No Trace practices.

Objectives

- Be able to…
  - Identify common plant species
  - Recognize natural and unnatural formations
  - Relate the importance of time and the creation of the natural world
- Learn about cultural influences in the area and how they helped shape the monument

The Illinois Valley is a very ecologically diverse ecosystem. If we did not have the overlying plant and animal life, the cave would not exist. This guide serves to help you navigate the cliff nature trail and learn about this ecosystem.

Animal Life

Be on the lookout for these critters!

Siskiyou Chipmunk

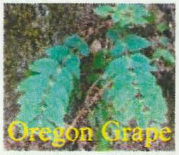
Banana Slug

Stellar's Jay

Black Tailed Deer

8. "Forest and Cave" Sign

Straight ahead from this sign is another new tree. Without leaving the trail, can you identify it? Notice the scaly, interconnected needles. In the understory of the evergreen and deciduous trees, there are many other plants to identify. See if you can spot all the species shown below.



9. "Marble" Sign

Inside the cave, we have algae growing on the marble and calcite formations, which is caused by the artificial lights. Without the lights, this algae would not exist in the natural cave environment. What is growing on the marble out here? Is it natural or unnatural?

Closing Questions

1. What are some important aspects of the forest ecosystem that you saw on your hike?
   All stops applicable!
2. Name some of the tree and animal life that you spotted.
   See stops 1, 3, 6, and the animal life section.
3. How does time play a factor?
   See stops 5, 7, 8, and for instructors section.

For more information, please contact the following agencies:

National Park Service
19000 Caves Highway
Cave Junction, OR 97523
(541) 592-2100

Geoscientists-in-the-Park Program
nps.gov/geoscientistsinparks