



## Late July 2011



Douglas-fir on "Big Tree Trail" (note ranger hat for scale)

David L. Thompson

### This month on the Monument

Free ranger programs will be offered each day. Check the blackboard in the Visitor Center for fascinating topics. Explore the caves in the old style - candlelight tours take place on Friday and Saturday evenings.

Want to get muddy? Make your reservations now for the Off-Trail Adventure tour.

Be sure to stroll through the historic Chateau at the Oregon Caves. Lodging, fine dining, gift gallery, 1930's era coffee shop, a relaxing lobby, and more are just across from the cave entrance. Inquire at The Chateau or visit their website for information about entertainment and events:

<http://www.oregoncaveschateau.com/>

### Big Tree Trail

3.3-mile loop (5.3 km)

*Strenuous, steep climbs and switchbacks*

#### Directions:

Start this hike at the trailhead directly behind the Visitor Center. This loop trail will take you to the Big Tree from either direction, but bear left to take the more direct route to Big Tree, 1.2 miles (1.9 km). Carry plenty of water and a snack. Trail maps are available in the Visitor Center.

**Time:** Allow 2-3 hours  
**Climb:** 1,125 feet (343 m)

Climb through forests containing Canyon Oak, Pacific Madrone, Port-Orford-cedar, Douglas-fir, Sugar Pine, White Fir, and other trees. Stand next to the the largest Douglas-fir tree known to exist in Oregon at over 41 feet in circumference! Rich soil and abundant water near the "Big Tree" likely contributed to its size and survival.

Look for wildflowers blooming in the upper meadow section of this trail throughout the summer.

### *Mycena* fungus

*(Mycena purpureofusca)*



*Mycena* inside Oregon Caves

Marie Landis

Perhaps you have been through the cave and wondered about the fuzzy-stemmed, conical-capped growth on the tree root just beyond the entrance. This is a *Mycena* fungus, one of many fungi that benefit our ecosystems at Oregon Caves.

Fungi differ from plants in that they do not need sunlight; they eat organic matter, which is why they can survive in a cave. A fungus eats by sending out tiny root-like structures called mycelia, which contain enzymes that digest organic matter. Once a healthy food supply is stored up and conditions are right, the fungus will sprout its fruiting body: a mushroom!

Fungi are more than decomposers: they can protect roots from parasitic fungus, aid in water absorption, and exchange nutrients with the tree. They are an essential part of our ecosystem. If you take a walk on the trails at Oregon Caves, keep in mind that even if you can't see them, the mycelia of countless fungi are under your feet and hard at work.

**Douglas-fir**  
(*Pseudotsuga menziesii*)



Douglas-fir cone and needles

NPS

After their neighbors, the Coastal Redwoods, Douglas-firs are the second tallest conifers in the world. This state tree of Oregon often features lichen-covered bark. The Monument's preserve of old growth is comprised of many Douglas-firs, including some hundreds of years old. Look for this tree on all trails, especially Big Tree Trail – named for Oregon's largest known Douglas-fir estimated to be 600-800 years old!

A Douglas-fir is distinguished from a true fir by its distinctive hanging cones. These cones are an important food source for chipmunks, Douglas Squirrel, and other small mammals and birds found on the Monument.

**Port-Orford-cedar**  
(*Chamaecyparis lawsoniana*)

As you wander around the Monument notice the lovely Port-Orford-cedar, which is only found naturally in a small area of Southwest Oregon and Northwest California. This false cedar can grow to 200 feet tall, and is at home among our giant Douglas-firs.

The mature, forest-grown tree has a narrow crown, faintly drooping branches, and deeply fissured brownish-gray bark. The lacy foliage is yellow-green to dark green. On the reverse is a series of small white Xs.

Port-Orford-cedar wood contains an oil which makes it toxic to termites and slow to rot. The Chateau and Chalet are sheathed with Port-Orford-cedar bark, original to the 1930's construction.

Since the mid-1900s a root-rotting fungal parasite (*Phytophthora lateralis*) has become a serious killer of Port-Orford-cedars. Fungal spores can be carried by moving water, animals, shoes, and car tires. **To protect our native trees please stop at the Boot Cleaning Station at the main trailhead before your hike.**



Port-Orford-cedar branches

NPS

**Black Bear**  
(*Ursus Americanus*)

With the arrival of summer, some lucky visitors are catching glimpses of Black Bears on the Monument. But don't expect their coats to be black; bears range in color from blond to dark brown to cinnamon. Mother bears typically give birth in late January or early February, so you



Black Bear and cubs

USDA Forest Service

might spot some bear cubs, too!

Despite their reputation as carnivores, bears are actually omnivores. They eat mostly berries, fruit, nuts, and roots, but will also eat grass, fish, insects, and insect larvae. Bears are scavengers, so they will also eat campsite food and forage in garbage cans. Check with a ranger if you are unsure how to safely store any food you bring.

As you hike the Monument's trails, keep an eye out for scat or tracks, or fur caught on tree bark where bears have rubbed. For safety, hike in a group and make noise as you walk. If you see a bear, remain calm and avoid sudden movements. Give the bear plenty of space, and it will most likely dodge you.

If you spot a bear, please stop at the Visitor Center and fill out a Wildlife Observation form to increase our knowledge about these rarely-seen residents of the Monument.