

6 SENTINELS OF THE SKY CASCADE MOUNTAINS



Mt. Bachelor (elevation 9,065 feet), South Sister (elevation 10,358 feet), Broken Top (elevation 9,175 feet), Middle Sister (elevation 10,047 feet) and North Sister (elevation 10,085 feet). These mountains are part of the Pacific Rim volcanic ring of fire. Many locales in Central Oregon are of interest for geothermal resource development because of the ring of fire.

7 TIMBER CUTTING

Hear the sounds of axes at work and the crashing of trees to the ground. Picture man and horse struggling to move downed logs. These stumps stand as mute evidence to a bygone era, when trees were cut and logs moved without the use of motorized equipment. After this area was logged in 1918, the logging debris was burned, probably charring these stumps. Notice the basin-like depressions in the top of the stumps. Hot embers may have burned them out. Today, these depressions collect water and serve as small watering basins for forest animals.

8 TREES FOR THE FUTURE



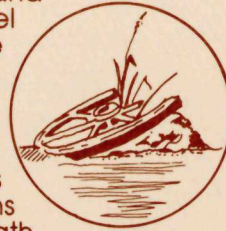
The trees nearest you were planted in 1952. Those around the Visitor Center were planted in 1950. This was the first time that local nursery-grown trees were used to reforest a portion of the Deschutes National Forest. The seedlings were about three years old and were planted in a furrow or narrow trench. Nearly 100 percent of the trees in this plantation have survived so far.

9 A CRY FROM THE PAST

Hear the creaking of wagons? Perhaps it's just an echo from the past. But if you had been standing here 100 years ago, you probably would have heard them.

Lava flows and other land barriers often dictate travel routes. So it was with the Huntington Road on which you are standing. It was constructed by Superintendent of Indian Affairs, J. P. Huntington, in 1867 and was much used to move wagons from The Dalles to Fort Klamath.

Much of this road followed an old Indian trail and it later became the general route of U.S. Highway 97.



10 A VOICE OF THE PINES

As you have been walking this trail, the pines have been "whispering" their story to you. You have had a chance to observe and feel the differences between the exposed surface of the Lava Butte flow and the young forest of ponderosa pine around you. From here it is just a short walk to the parking area and the Visitor Center.

We hope your trip on the TRAIL OF THE WHISPERING PINES has been an enjoyable one. Keep this pamphlet if you wish or place it in the box provided at the end of the trail.

THANK YOU.

TRAIL OF THE WHISPERING PINES



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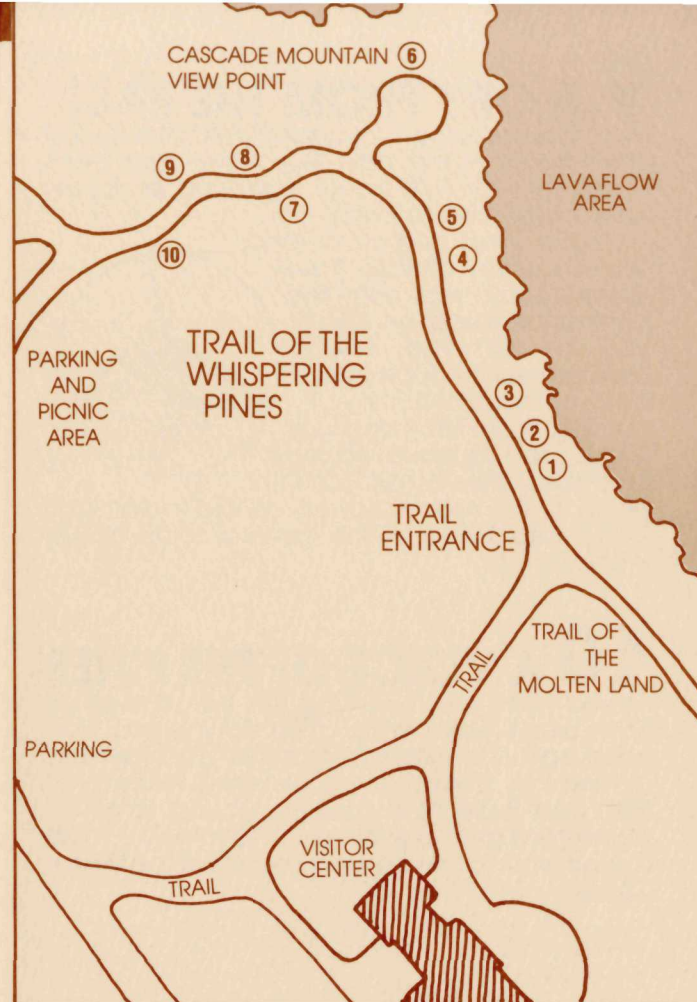
United States
Department of
Agriculture



Forest Service
Pacific Northwest
Region

In this "lava lands" country there is another story! This land also talks in subtle tones and ways. The "Trail of the Whispering Pines" allows you to discover and explore some of the ways the environment acts upon plants and animals here in the high desert country.

The trail is about 1/4 mile long. An easy walk of about 1/2 an hour that can be made by young and old alike. People who find it difficult to get around should feel right at ease since the trail is flat and also paved!



1 WINTER'S FURY

"Winter kill" is often found on snowbrush (*Ceanothus velutinus*). Warm weather in midwinter causes the sap to flow. When cold weather returns the sap freezes and expands, breaking the branches. The branches eventually decompose and decay, adding natural fertilizer to the soil composition. In summer and fall snowbrush has a delightful fragrance.



2 ANIMAL INNS

Dead shrubs and trees and fallen logs are a vital part of the forest environment. Birds, animals, and even insects (the ant for one) live within these "Animal Inns." Most important are trees with holes, broken tops, big gnarly limbs, and, of course, old nests. Do your part and leave our friends' "Animal Inns."



3 TWO VOLCANOES MEET

Mt. Mazama, whose eruption formed Crater Lake, produced the light brown pumice ash covering the ground around you. The dark, jagged rock in front of you, Aa lava, was from Lava Butte's last eruption and is younger than the Mazama pumice. How do we know? If you guessed it is on top of the Mazama ash, you're right.

Conditions on Lava Butte's flow present a harsh struggle for the few plants that survive. Compare the lava flow to the pine forest.

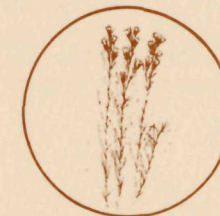
Which has the greater number of plants? More plants grow on the pumice because the fine textured pumice holds more moisture than Lava Butte's jagged lava. Young seedlings are burned by radiated heat from the lava.

4 NATURE'S HANDIWORK

A little natural artistry is unfolding before you. These trees started naturally during the early 1940's from wind-blown seed. Two different species of pine exist: ponderosa pine (*Pinus ponderosa*), two to three sheathed needles, 5"-10" long and lodgepole pine (*Pinus contorta*, var. *latifolia*), two sheathed needles, 2"-3" long. The ponderosa pine surrounding the Visitor Center started as seedlings from the Forest Service's Bend Pine Nursery.

5 FOREST SUPERMARKET

A productive young forest is like a supermarket. Native Americans had many practical uses for shrubs and other plants that make up the supermarket. Squaw Currant (*Ribes cereum*) produces an edible berry frequently used for stomach problems.



Rabbitbrush (*Haplopappus bloomeri*) produces a latex used in chewing gum. The Indians steeped leaves to treat colds, while minutely mashed leaves were put into cavities to treat toothaches.

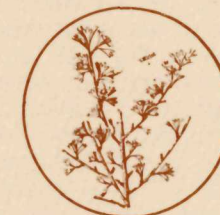


Desert Ocean Spray (*Holodiscus dumosus*) was eaten raw, cooked, or dried. The bark was used for tea. Young shoots were used to make arrow shafts.

Snowbrush (*Ceanothus velutinus*) bark and roots were used to make an astringent and tonic.



Manzanita (*Arctostaphylos patula*) berries were edible and when cooked were made into a wine.



Bitterbrush (*Purshia tridentata*) is also known as the ice cream plant of deer, they love it! Bitterbrush is considered one of the most important browse plants for deer in Central Oregon. Indians used the ripe seedcoats to make a violet dye. Many of the plants and trees manage to survive on the nearby lava. However, they flourish and are more accessible to animals on the flatter pumice soils than on the sharp broken rock of the lava flow.

TRIVIA TREASURES

Walking the Trail of the Whispering Pines has given you opportunities for many learning experiences. These "Trivia Treasures" are your final exam for those learning experiences. See how many YOU can answer. (You may want to walk the trail again or refer to the answers on the reverse side of this sheet.)

1. What two pine trees are found on the Trail of the Whispering Pines?
2. Name three shrubs frequently seen along the trail.
3. What is "Winter Kill"?
How does it affect the soil?
4. What are "Animal Inns"?
Why are they important?
5. Name two volcanic materials found on the Trail of the Whispering Pines.
6. What mountain range seen along the trail is part of the volcanic "Ring of Fire"?
7. What is the average elevation of the mountains seen from the Trail of the Whispering Pines?
8. What industry was a vital part of the history of the past and is still important in Central Oregon?
9. In what year were the trees planted around the visitor center?
10. What was the use of the Huntington Trail?
11. What modern highway follows the same general route as the Huntington Trail?
12. Name two birds and animals frequently seen along the trail.

ANSWERS

1. Ponderosa pine (*Pinus ponderosa*)
Lodgepole pine (*Pinus contorta*):
latifolia.
2. Greenleaf manzanita, antelope
bitterbrush, snowbrush, golden
rabbitbrush, squaw currant.
3. Winter Kill is the weathering
action that causes decay and
decomposition in natural materials.
It adds nutrients to the soil.
4. Animal lns are dead trees
and shrubs and are important for
wildlife habitats.
5. Pumice soil from ash flow,
and Aa Lava rock.
6. The Cascade Mountains.
7. Average elevation is 10,000 ft.
8. Logging
9. Trees were planted around the
visitor center in 1952.
10. A supply trail.
11. Highway 97.
12. Steller's Jays, Clark's Nutcrackers,
chipmunks, Golden-mantled Ground
Squirrels.

We hope you enjoyed your time on the Trail of the Whispering Pines and take some of these "Trivia Treasures" home with you to share with your friends.