

ICE CAVES

Trail Guide



Mount Rainier National Park

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Trail Guide

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GENERAL INFORMATION

This is it. The Ice Caves Trail. From Myrtle Falls just follow the trail signs.

Take me along. I'll make your trip more fun. Stop at the numbered posts, and I'll tell you about the country you'll see along the trail, and how it got that way. You'll find sketches of commonly seen wildflowers and animals in my margins.

Is it stormy or after 4 p.m.?

Take me back to camp. I'll tell you about it tomorrow. Meantime, check your pack for the things that will make your trip more fun and worthwhile. Who wants to come back blistered, cold, hungry, or snowblind?

- Stout shoes
- Sun glasses
- Sun cream
- Windbreaker
- Sweater
- Hat or cap

- Lunch or snack*
 - Insect repellent
 - Flashlight
 - Camera
 - Tripod
- * Carry out the wrappers

Let's Go! But Remember . . .

- You'll walk 5.6 miles round trip, partly over snow.
- You'll climb 1,000 feet on a steep rocky trail.
- Allow four hours.
- Sign the trail register.
- Leave pets at car or home.
- Leave flowers for others to enjoy.
- Stay On The Trail





SUBALPINE
LUPINE

Now look a few feet below the trail. That granodiorite has been smoothed and scratched by the glacier as it flowed from the basin behind you.

5. Notice how the tree trunks curve? When they are young, the snow bends them as it creeps downslope. Then they grow upright in the summer.



CURVED TREE TRUNKS



PIKA

Listen for the pikas calling in the rock talus ahead. Then try to spot them.

6. Born in the snowbanks above you, this clear, cold stream joins others in Paradise Valley to become the Paradise River.



RED
MOUNTAINHEATH



WATER OUZEL

7. From the Paradise River bridge, you can see fragments of rock that fell from the cliff above. They form a talus, lying on a slope of 30 degrees.



HOARY MARMOT

To the left of the talus, the stream has built an alluvial fan, carrying rocks downhill and dropping them on a slope of about 20 degrees.

Why the ten degree difference in slope? See if you can figure it out.

8. Stay on the main trail as it zigzags. Cutting straight up or downhill opens the hillside to running water that will soon dig a gully.



BLUE GROUSE

9. Congratulations! You've just climbed Mazama Ridge — a Mount Rainier lava flow. Explore some of these other trails next trip.



MAGENTA
PAINTEDCUP

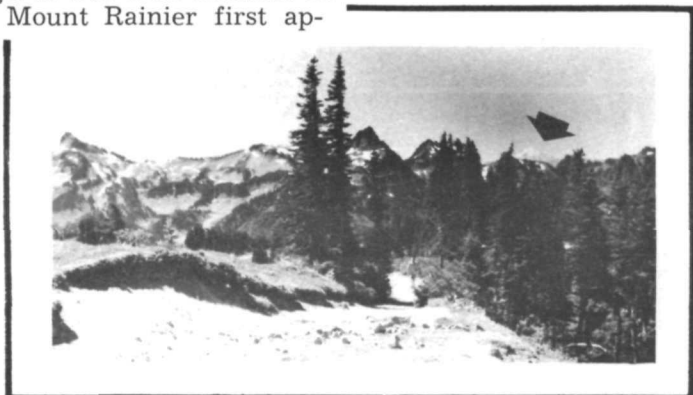
10. A glacier polished the Mount Rainier lava flow here, and left the stones and sandy soil on the slope below. The bright orange veneer is ash erupted from Mount Mazama 250 miles south in Oregon 6,600 years ago. That eruption spread ash clear to Alberta. Then Mount Mazama collapsed to form the basin of Crater Lake.



SPREADING
PHLOX

11. Another glacial basin, or cirque, lies below you on your right.

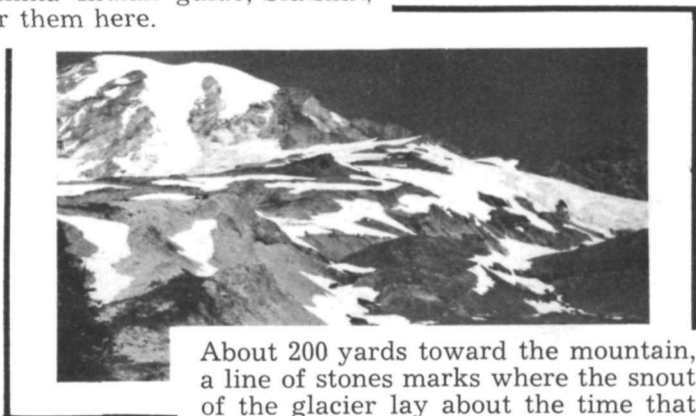
That sawtooth range back of you is the Tatoosh Range. It was here millions of years before Mount Rainier first appeared.



12. Now look back over the Tatoosh. If it's clear, you'll see Mt. St. Helens, (9,677 feet) forty miles southwest. Its smooth sides have not been deeply gouged by glaciers like Mount Rainier's, because Mount St. Helens formed entirely since the last Ice Age, and is only a few thousand years old.

The gritty sand under foot was erupted from Mount St. Helens about 3,000 years ago.

13. August 17-18, 1870, Hazard Stevens and Philemon Van Trump climbed Mount Rainier from a camp at this point. Their Yakima Indian guide, Sluiskin, waited for them here.



About 200 yards toward the mountain, a line of stones marks where the snout of the glacier lay about the time that Stevens and Van Trump climbed the mountain.



MARSH-
MARIGOLD

14. You are on a moraine, a ridge of rocks dumped by a glacier about 11,000 years ago.

Look ahead to the next ridge of grey rock debris that lies across the trail.

15. The glacier left this moraine about 2,500 years ago. A Mount Rainier pumice that was erupted 2,000 years ago lies on top of it.

16. Look back. Now you can see the Goat Rocks and Mount Adams, (12,037 feet) to the southeast and south, and Mount St. Helens to the southwest.



17. You are standing at 6,150 feet on a moraine that was formed about 1850.

Notice that the trees nearby are smaller than the ones at lower elevations. You are nearing the limit of tree growth.



SUBALPINE FIR

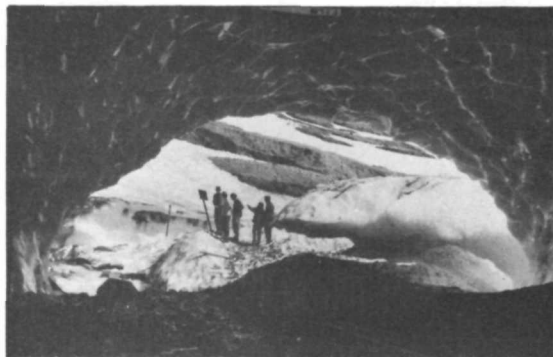


GRAY-CROWNED
ROSY FINCH

18. As much as 80 feet of snow has fallen here in one winter. Above about 6,900 feet, more snow falls each winter than melts each summer. So glaciers grow. The body of ice that contains the ice caves is no longer moving. It is slowly melting away.

BEFORE YOU GO IN . . .

19. The ice caves are melted out by a warm air flowing along a series of streams. The muddy streams flow from Paradise Glacier. Ice and rock grinding over bedrock mills glacial flour that mixes with melt water to form glacier milk.



It will be nearly freezing inside, so put on your jacket.

Stay within the marked area, and watch overhead for great flakes of ice that may fall.

20. Want to take a picture? If you have a flash, use it as usual. But, if your camera can take long exposures, and you want to capture the blue light filtering through the ice, do this:

- (1) Point your camera where the light is blue, either set on a tripod or on your pack.
- (2) Have someone sit or stand in view for scale; still.
- (3) With film speed 25, try three exposures:
 - f/4, 30 seconds
 - f/4, 1 minute
 - f/4, 2 minutes

If these don't work, at least you tried, and they'll give you a base for the next time.



Glad you came along. Stay on the trail
on the way back, so you can come
again. **Don't short cut!**

Did we fail to answer your questions about the ice caves or the way
to them? Cut off the sheet below and tell us.

Stamp

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