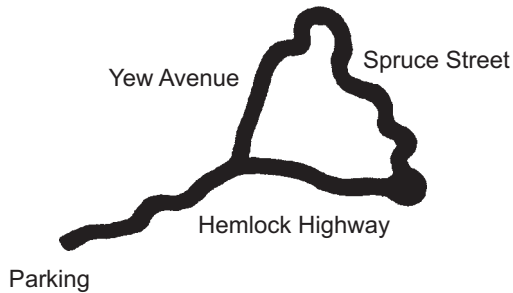


KRAUSE BASIN INTERPRETIVE TRAIL

Welcome to the Krause Basin Interpretive Trail, a quarter-mile loop through an old western hemlock forest and a regenerating clearcut. As you travel the trail, look for the twelve numbered sign posts near the trail. This brochure provides information about what you may hear, see, smell, or feel near each sign.

In the 1960s, the hemlock forest in Krause Basin was logged for wood products and to establish a different kind of forest preferred for making lumber. This grove was set aside as an example of that earlier forest, prior to logging. Travel the trail and discover what makes a western hemlock forest unique. Contrast it with what you find in the younger forest. Learn why some of these trees and plants are important to people that live, work, and play in these forests.



Travel Tip

The first third of the trail has inclines of 5% or less. Stay right at the “Y” and there will be an optional turn-around at the end of this portion of trail known as the Hemlock Highway. If you choose to make the steeper loop, continue up Spruce Street and down Yew Avenue, both of which have frequent resting areas.

1

1. Some like it wet!

This unique grove of western hemlock is here because the site gets more rain and snow than neighboring areas, forming what scientists call a moist microclimate. This extra moisture favors western hemlock, grand fir, and western red cedar trees. As you move along, you'll get a chance to identify these trees and get to know some of the plants, as well.

2. What the devil is that?



Want to know why this plant is called devil's club (*Oplopanax horridus*)? Touch it and find out! It likes the moist shade beneath the big trees.

Devil's club commonly occurs in the wet bottoms of western hemlock forests and is related to medicinal ginseng. Native American's used the plant to treat various ailments.

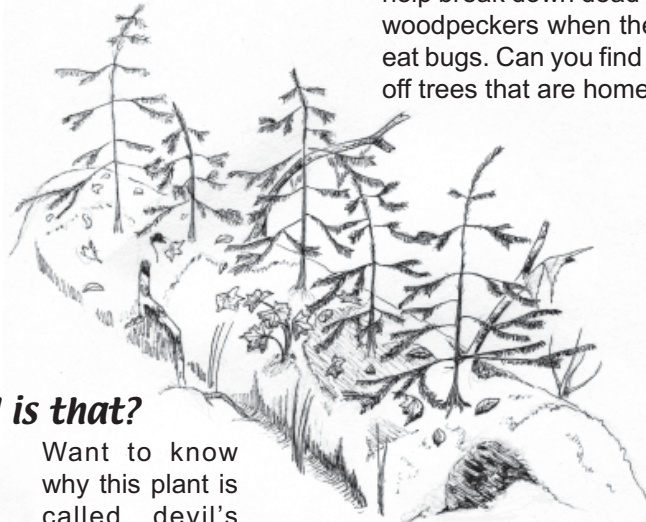
3. This is a stick-up!

This old mountain maple (*Acer glabrum*) is reaching for the sky to find more sunlight. Can you find younger, bushier maple trees as you walk the trail, especially in more open areas?

2

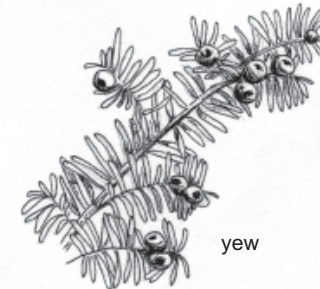
4. You kids line up!

Here you can see how the forest recycles itself. As trees die, rot, and fall to the ground, they return nutrients to the soil and help hold moisture like a sponge. This “nurse log,” with its row of seedlings, provides everything young trees need until their own roots finally reach the ground. The fungus you see help break down the dead wood. Ants and other bugs also help break down dead wood, as do bears and woodpeckers when they tear up the wood to eat bugs. Can you find the crumbling, broken-off trees that are home to these bugs?



5. What's up, Doc?

Many of nature's plants and trees provide medicines used by people both past and present. This Pacific yew (*Taxus brevifolia*) contains a substance in its bark and needles from which the synthetic taxol is derived and used today to treat breast cancer in women.



3

6. Who's who?

This is a good place to identify several kinds of trees as we approach an old logging area. To your left are young western hemlock (*Tsuga heterophylla*). As you turn to your right, there is a young grand fir (*Abies grandis*), then a young Douglas-fir (*Pseudotsuga menziesii*). Looking up the trail ahead, can you see the hemlocks with their droopy tops?

7. How do I log onto this site?

You are now standing on the edge of an area clearcut in the 1960s, a great place to compare old hemlock forest with the younger regenerating forest. You'll find Engelmann spruce and paper birch in the sunnier more open area, but not in the older grove of western hemlock. You may notice noxious weeds like thistle, spotted knapweed, and orange hawkweed where the soil was disturbed during past management activities. Noxious weeds often colonize newly disturbed areas and they can persist without native plant competition.



hawkweed where the soil was disturbed during past management activities. Noxious weeds often colonize newly disturbed areas and they can persist without native plant competition.

8. Pushier or bushier?

Out in the sun, bushes tend to be shorter and bushier, like the mountain maple to the left, than in the shade of the older forest where they must push upward for sunlight. Do you know what the red-barked bush straight ahead is? It's the red-osier dogwood (*Cornus sericea*).



4

9. Are you stumped yet?

When the taller, older trees were cut, flat-topped stumps were left behind. How many stumps can you count? The extra sunlight reaching the ground favors trees like the paper birch (*Betula papyrifera*) ahead of you. American Indians and others have used the thinner bark of younger birch for paper and the thicker bark of older birch as a skin for canoes.

10. Date a headache?



willow

The bush in front of you is Scouler's willow (*Salix scouleriana*). It likes sunshine and contains a substance used to treat headaches and to make aspirin. Engelmann spruce (*Picea engelmannii*) is

growing on both sides of the trail here. It smells really good, so give it a sniff and see why people like to get "all spruced up" before they go out on a date--but it's prickly, so watch your nose!

11. Lumber or slumber?

Trees can be hauled away to make wood products like lumber and paper, or they can be left in the woods to live out their life, die, decay, and replenish the soil as part of the forest's natural recycling program. This stump is being recycled as a huckleberry bush (*Vaccinium sp.*) and a new western hemlock tree.



12. Cedar siesta . . .



cedar

Need a short rest beneath this western red cedar tree (*Thuja plicata*)? Cedars are often neighbors to the western hemlock because they also prefer moist sites. As you head back, is it hotter or cooler in the old grove of western hemlock than in the younger forest. Wetter or drier?

On the way back, see if you can spot: pacific yew, mountain maple, grand fir, devil's club, western red cedar, and western hemlock. Thank you for visiting the Krause Basin Interpretive Trail!

Illustrations by Shawn Griffin.

Make like a forest: Recycle!



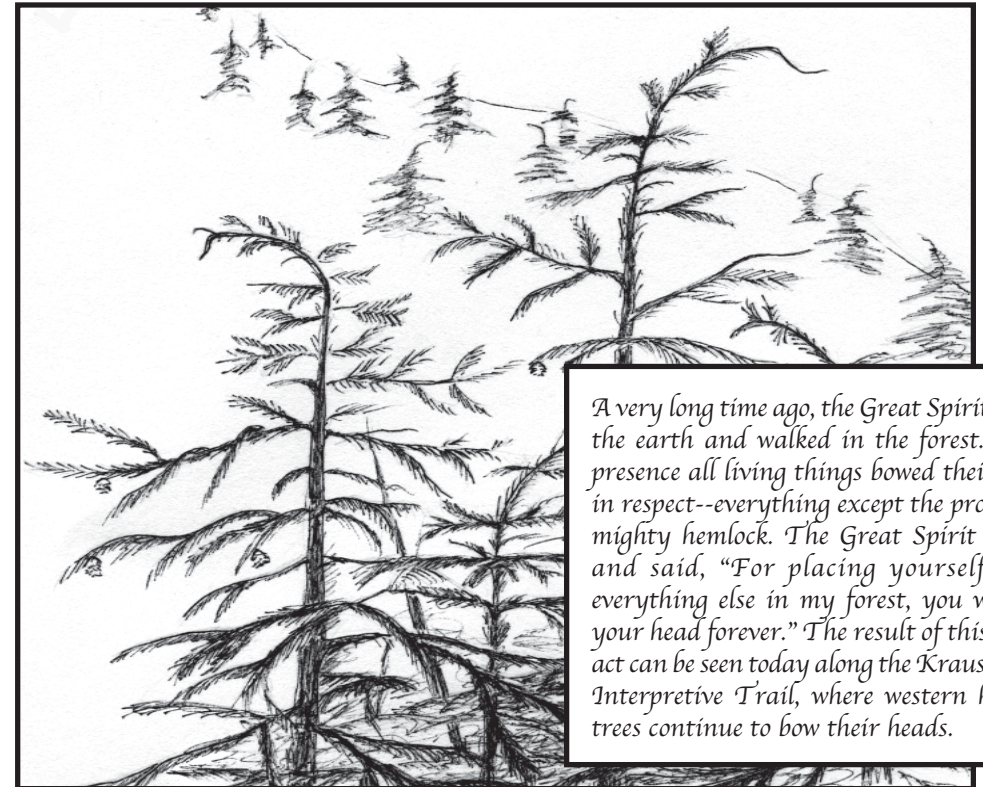
If you'd like, you may keep this brochure. If not, please return it to the brochure box so someone else may use it.

Printed on recycled paper.

KRAUSE BASIN INTERPRETIVE TRAIL

2.8 miles up Strawberry Lake Road #5390 from Foothill Road

This trail is dedicated to the memory of Cal Tassinari (1930 - 2004), retired Swan Lake District Wilderness Ranger, trail pioneer, and accomplished educator in wilderness ethics, outdoor leadership skills, and snow avalanche safety.



A very long time ago, the Great Spirit visited the earth and walked in the forest. In his presence all living things bowed their heads in respect--everything except the proud and mighty hemlock. The Great Spirit noticed and said, "For placing yourself above everything else in my forest, you will bow your head forever." The result of this foolish act can be seen today along the Krause Basin Interpretive Trail, where western hemlock trees continue to bow their heads.

This brochure is produced by the Flathead National Forest in cooperation with Swan View Coalition. This trail is being developed and maintained by Swan View Coalition under a volunteer agreement with Flathead National Forest. For more information, please contact:

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NATURE TRAIL GUIDE

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Bigfork, Montana