



## NATURE AT HOME

We hope to inspire kids of all ages to learn about the natural world and discover new connections to nature.



### Enchanted Ravine

View the video at [DishmanHills.org/Nature-At-Home](http://DishmanHills.org/Nature-At-Home)

On a walk to the Enchanted Ravine in the Dishman Hills, look up to where the top of the trees meet the sky. This level of the forest is called the **canopy**.

The tall trees on the right are ponderosa pines. Did you notice that their trunks have no branches or needles except at the very top?

Look up into the canopy again. Do you see any trees with branches that are covered by short needles? Douglas fir trees have branches covered with short, soft needles.

Now, take a look at eye level to see what's in the **understory**. This is where you will find bushes and tree saplings.

Can you tell which saplings are Ponderosa pine? This species of pine has long pointed needles in groups or bundles of three. Now, count the gaps between the groups of branches. Each gap represents a year's growth. Take the number of gaps and add 3. You now have a rough idea of how long the tree has lived.

Look around some more. Do you see any small trees with soft, short needles? These are Douglas firs. Use the same formula as the Ponderosa pine to find the approximate age of these trees. Did you find any the same age? How many different bushes do you see as you walk the trail to the Enchanted Ravine? The bushes are the ones with leaves instead of needles. Look at the shape of the leaves. Are they all the same or can you find any differences?



Finally, look down where your feet meet the ground. This level is the **forest floor**.

What do you see? Are the plants spaced close together or farther apart? Are there grasses, flowers, tree seedling? What else do you see?

There is one forest level that you cannot see. It is the **sub-floor**. This forest level includes everything between the forest floor and bedrock. How can you use everything that you have observed in the other forest layers to help you describe what is in this forest level?

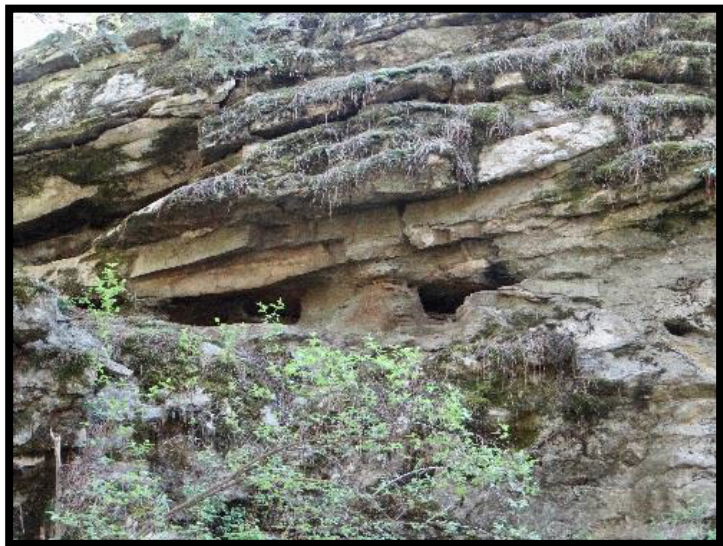


## Page 2 Enchanted Ravine

Walk slowly and quietly down the trail into the Enchanted Ravine. Look around as you move from sun to shade. Take a deep breath. Does the air seem a little cooler and moister? Do your footsteps seem softer? When you reach the bottom of the ravine, begin to look at the east wall of the ravine to your left until you see a smooth layer of eroded rock between two layers of gray rock. The smooth eroded rock is called **Mylonite** and it shouldn't be there for you to see.

Mylonite is formed by faulting under intense pressure deep in the earth's crust, as deep as 10 miles below the surface. It is rarely seen on the surface of the earth and powerful uplifting of the Earth's crust, along with erosion has brought it to your view here.

These fine-layered smooth surfaces are more easily shaped and eroded than the other rocks in the Dishman Hills. You will encounter Mylonite again at the head of the Enchanted Ravine when the trail turns and climbs out of the ravine.



At the head of the Enchanted Ravine is another example of Mylonite. Many years ago, a group of elementary students decided this should be called the "skull." Do you see its forehead, eyes, and chin?

The Enchanted Ravine is full of tall trees. Shrubs like Ocean Spray, Ninebark and Thimbleberry grow in abundance along with many other plants that grow best in a moister, shadier environment. Did you notice how close they grow to each other? Did you notice how quiet it is?

Walk up the narrow path to the right of the Skull. Get ready for some big changes as you leave the cool shade of the ravine.

Outside the ravine is a different environment. See how far the trees are from each other. The Serviceberry and Ninebark are spread apart. The forest floor has many flowering plants like Desert Shooting Stars, Arrowleaf Balsamroot, Lance Leaf Phlox, and Death Camus. This is the difference that direct sunlight makes. The sun dries the moisture out of the air and the soil. This determines the kind of plants we see living there.



When looking and listening in all directions you discover the wonders of the forest. Share your observations and questions at [Education@DishmanHills.org](mailto:Education@DishmanHills.org)