

Forest Trails Nature Walk

There are a large variety of plants and animals that make their home at the WNSC. The nature walk will highlight some of the plants and animals that live in our forest. Keep your ears and eyes open as you walk!

Start at the Russ Bowen Picnic Shelter and follow the 3 km Forest Trails.

Look for yellow tent pegs with white pegs #1-15.

Please look and enjoy but do not disturb the items identified or the stakes.



Grade 1,2 and 3 curriculum all discuss animal life. Bring a bucket or small yogurt container with you to see what type of insects you can find in the wet areas. White bottom containers are easier to see. Slowly dip water and return water to where you found it. We encourage you not to kill any of the insects you find. Bring along the insect identification chart posted on the website.

Please do not touch insects (except mosquitoes) with your hands.

1. Top of the hill - by the snowshoe trail sign. Plants need space to grow and sunlight. What has happened to the spruce here? They grow tall and skinny reaching for light. Keep an eye out for the difference in trees with lots of space.
2. Plants need water to grow, but the trees are dying here because of too much water. Grade 1 Science: Plants need air, light, suitable temperature, water, growing medium, and space to grow.
3. Rotten log. Can you tell what is happening to the logs over time? What insects make this their home? What do insects need? Can you figure out what they are using for food? shelter? protection? You can also see fungi growing on the log.

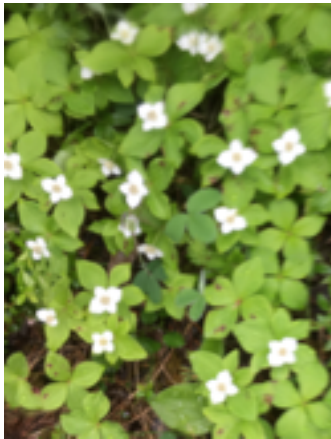
All along the trail in this area you will see the wild rose, provincial flower of Alberta.



4. There are many sources of food for small mammals, big mammals and people. Can you identify at least three in this area?



A - Blueberry



B - Bunchberry



C- Strawberry

The blueberries ripen later in the summer. Bunchberries are edible but they don't taste good! Strawberries are the first to ripen. There are also bog cranberry and bear berry in this area.

5. There are 3 main type of coniferous trees at WNSC. Coniferous trees have needles. From this spot you can see pine, spruce and tamarack. The tamarack are trees that lose their needles in the fall. Can you figure out the difference between the spruce cones and the pine cones?



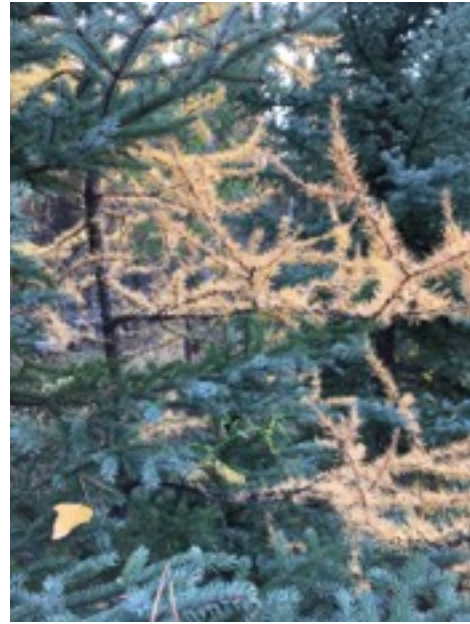
Spruce - shorter needles



Pine - longer needles



Tamarack



Tamarack in fall

Link to Guide to the common native trees and shrubs of Alberta

<https://open.alberta.ca/publications/1711129>

6. Fox Run Sign. Check out the big dead pines on either side of the trail. They have been killed by the pine beetles.

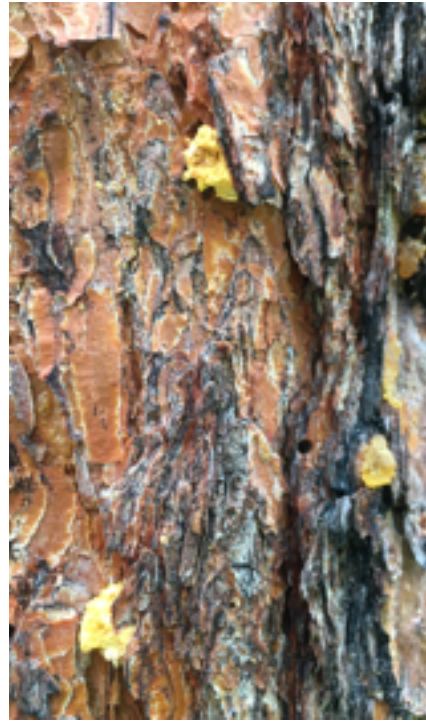
The *Dendroctonus ponderosae* Hopkins is a small bark beetle about 4.0-7.5 mm in length. Commonly known as the mountain pine beetle (MPB), it is the most destructive pest of mature pine forests in North America.

When beetle populations are small, they prefer stressed, mature or over-mature (80+ years) pine. As populations grow, any pine over 12.5 centimetres in diameter can be killed - even healthy trees.

They are capable of attacking and killing all species of pine.

MPB kills pine trees by clogging and destroying the conductive tissue of the tree by introducing a blue-stain fungi when attacking the tree. Its larvae feed in the phloem of the tree. The action of blue-stain fungi and larval feeding can kill the tree within one month of the attack.

If you look at the base of the trees you can see pitch tubes, where the pine tree has tried to 'push' the beetles out with the sap.



For more information about pine beetles:

<https://www.alberta.ca/mountain-pine-beetle-overview.aspx>

7. Look for the area where the multi-use trail crosses the ski trail. See if you can find anymore examples of pitch tubes on the pine trees.
8. Just past number 7, on the left hand side of the trail. Look at the base of the tree. There are ants in the tree and the pileated woodpeckers in the area have been using their sharp beaks to get food. Keep an eye out for more of these along the trail.

<https://cwf-fcf.org/en/resources/encyclopedias/fauna/birds/pileated-woodpecker.html>

9. If you stop at number 9, look ahead on the trail and look up. There is a large poplar. Many years ago a black bear climbed the tree. See if you can see the claw marks?

Creek crossing : There are several places to dip for insects in this area. Be careful around the banks. There are other places to dip for insects if you prefer a flatter entry and still water. Once you get to the t-intersection, you can follow the 5 km trail for a short distance to find a large swampy area on the left. There are usually lots of things to see in the water. Listen closely for frogs and toads. To continue the hike, return to the sign post and follow the 3 km signs. You cross the creek again, with another option to dip for bugs. There are frogs in this area. Remember that frogs use their skin to breathe and that you should not touch them with your hands. Gr 2 and 3: Insects generally have more than one stage in their life cycle. Can you find the stage of some insects that life in the water? Amphibians also have a two stage life cycle. For more information about identifying amphibians see: <https://www.ab-conservation.com/avamp/identification-keys/juvenile-and-adult-amphibians-of-alberta/more-information-amphibians/>

10. Wapiti Lookout Sign If you look around you can see birch trees. Remember not to peel the bark on the trees.
11. (4 km turn off sign) Listen carefully as you walk through the trees. Look for signs of a small mammal eating. There may be piles of left over spruce and pine cones. Who do you think eats this? Can you look in the trees and see any signs of birds? The larger holes in the trees are made by woodpeckers.
12. As you turn right on the trail go straight. There is a single track trail going straight. Look for a tree with #12. As the trees die the roots also die and are not able to hold the trees. In this area there are many trees that have been blown over by the wind with their roots showing.



Labrador Tea - In the wooded areas you will see lots of Labrador Tea. It is found in the wet, shady areas. It can be used to make tea.

13. Squirrel Hotel! Please stay on the trail and do not walk on the squirrel's home. Can you tell where the squirrels live? Eat? Store their food? Look for tunnels under the tree where they burrow.
14. Bike park area. Look and see if you can find some new trees in this area. This area has been fire smarted. New trees are growing in this area as they have sun, soil, water and space.
15. Regrowth - As trees/ plants fall to the forest floor they decompose. This tree trunk has plants growing out of it. (Gr 4 Science) As the trees begin to decompose conks (a form of fungus) grows on the trunks. See if you can find some.

For more information about large mammals, including bear encounters:

<https://www.alberta.ca/living-with-wildlife.aspx>