How to Identify Trees Without Leaves

Raccoon Creek Explorers Activity #5

Supplies:

- A notebook or pieces of paper
- Pencil, pen, and or crayon
- Appropriate clothes for the weather
- Optional: ODNR Tree Field Guide, https://ohiodnr.gov/static/documents/wildlife/backyard-wildlife/Pub%205509%20Trees%20of%20Ohio%20Field%20Guide.pdf.

Time: 30 minutes - 60 minutes

Vocabulary:

Bark: The most outer layer of the stems and roots of woody plants.

Dormancy: Plants' version of hibernation. Plants slow down their metabolism, energy consumption, and growth in order to strive in cooler temperatures.

Evergreens: Woody plants that keep their leaves during winter and cooler temperatures.

Deciduous: Woody plants that shed their leaves during the winter and cooler temperatures.

Woody Plants: Woody plants are trees and shrubs whose shoots are durable and survive over a period of years.

Background:

Trees are extremely important and helpful. They provide all kinds of services, to list off a few they regulate temperature, filter air pollutants, filter rainwater, stabilize soil, provide food and shelter for living organisms, and improve recreation. With all these benefits of trees, southeastern Ohio has many areas of protected/managed forest. From spring to late summer leaves of trees sway in the breeze. Leaves are a key factor to look at when identifying a tree. It's a bit trickier to identify deciduous trees without leaves.

After and during fall deciduous trees will go into dormancy in order to survive the winter. This is when they drop their leaves. Evergreens as their name suggest, stay green throughout the year. Evergreens can be identified by their specialized leaves throughout seasons because evergreens needle leaves are able to conserve water in the winter. In this activity, we will be focusing on how to identify deciduous trees by their bark.

Let's Get Started:

1.) Dress for the weather! If it is snowing make sure you have boots and a warm coat. Make sure you are not going alone and a parent or guardian is coming with you. Make sure you are not trespassing on someone's land and be aware of it is hunting season.

2.) Explore the area and find your tree! Any tree will do, but it may be easier to start by looking at trees that are not too small.

3.) Observe the trees' bark. Is it smooth, rough, and/or peeling off? Notice the color of the bark as well it may help in identifying the tree.

4.) Compare your tree's bark with examples for the ODNR tree field guide. Does it match any of these examples?

Smooth Bark

American Beech

American Chestnut

Peeling Bark

River Birch

Sycamore

Ridges and Furrows

Oaks

Elms

Sassafras

CucumberTree

Scales and plates

Buckeye

Maples

Shagbark Hickory

5.) If you brought some paper and crayons or pencils you can use it now. Make sure the bark of the tree is dry. Press your paper against the tree. Use your crayon and or pencil the color the whole or most of the page. The result should be that the texture of the tree's bark should be on your page. Pretty neet isn't it!

6.) Try to identify the tree! Use the field guide to help figure out want species of tree it is. Even if it a guess then try to find a tree species that has the most similarities to the tree you picked out. In the spring return to the tree and observe your tree's leaves. Did you identity the tree correctly?

Reflect:

What type of bark did your tree have?

Is your tree alone or is it surrounded by other trees? If it's surrounded by other trees do the surrounding trees have similar bark?

Look around. What type of area is the tree living? Why do you think it's growing there?

Apply:

What type of tree did you picked?

Why do you think the tree's bark has a certain texture?

Have you seen bark like this before on other trees? If so what kinds of area were they in?

Wrap Up:

Bark protects trees from extreme temperatures, the sun's razes, and wind. It works to deter invading insects, bacterial infections, fungal spores, and damage caused by animals. As you observed different tree species can have very unique types of bark. Trees have evolved to adapt to the environment they live in. Some examples of trees' bark being adapted to their environment is that birch trees' bark produces oils that make it waterproof because they live in wet areas. Another example is that trees native to Ohio have thicker bark than trees that grow in tropical areas. This is because trees in Ohio benefit from thicker bark because it helps the trees retain water.

Just like bark we should all protect and help out trees. Trees do so much for us. We should always keep in mind our impact on trees and wooded areas.

Even without leaves trees can still be appreciated for their unique bark and shapes.

T*hanks, everyone for exploring with us! Keep on explorin*g!