

Lesson: Forest Friends

Topic/Essential Questions: How do forest animals use trees for food and homes?

Unit: "Why Are Trees Terrific?" Kindergarten Environmental Literacy



Content Standards:

- NGSS K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.
- NGSS K-ESS3-1. Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
- SL.K.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.
- Foundation for EL Standards 2.0 Interaction of Earth's Systems, 3.0 Flow of Matter and Energy, and 4.0 Populations, Communities, and Ecosystems.

Length of Lesson: 30 minutes *(This lesson is split into two 15-minute activities that are taught simultaneously. The group splits in half for the lesson and swaps after their first activity.)*

Student Outcome: The student will describe how forest animals use trees for food and homes.

Knowledge of the Learner:

- Prerequisite Knowledge, skills and processes: trees and animals are living things with basic needs; listening, observing, following instructions
- Student needs, interests, previous learning: These will vary among students.
- Conceptual difficulties: observing taxidermy animals to understand what living things do
- Differentiated: The instructor may pace the lesson according to the responses and participation of the students.

Knowledge of Content:

- Content knowledge for instructor: Provided in the text of the lesson.
- Vocabulary: Forest, habitat, home, den, nest, hollow, hibernate, tracks
- Resources:

Taxidermy animals:

Beaver

Tree frog

Deer head, skin

Black snake

Rabbit

Toad

Raccoon

Box turtle

Gray fox

Squirrel

Animal picture cards

Trail rules poster

Tracks poster

Tracks booklets

Track stamps

Crayons

Ink pads

Deer stand

Animal Tracks by A.

Dorros

Pre-Assessment: During the opening at the beginning of the field trip, Camp Woodlands staff will invite students to share what they have learned at school about trees including trees as living things, trees as plants, parts of a tree, and what is a forest.

Activity A: Trail Walk

Set Up Before Students Arrive:

1. Before the students arrive, the instructor should place the animals on the trail. **Please handle the animals with extreme care. They are very fragile and cannot be easily replaced.**
2. The beaver should remain on the table for a demonstration of how students may touch the animals. The raccoon should be hung on the pine tree to the right of the trail. All other animals should be placed on the trail in the order that they come up in the lesson (*See Supplement A Animal Rhymes and Information sheet.*)

Motivation/Warm-up:

1. Welcome students to the activity and introduce yourself.
2. Ask students to observe their surroundings. Ask them what type of place this is (*a forest; land covered with many trees*). Explain that the forest is a habitat (*place to live*) for many different animals. The animals find food and homes here.
3. Inform the students that they are going to go on a trail walk to find forest animals and learn how they use trees for food and homes.
4. Introduce the *Trail Rules* poster to the students:
 - Look and listen carefully.
 - No running. Watch for tree roots.
 - Touch the animal's back only. Do not touch the face, ears, feet or tail!
 - Leave living things in place.
 - Never touch a wild animal.

Procedure:

1. Explain that students will take turns being the line leader. Ask students to raise their hands silently when they see an animal but not to call out. In this way, everyone in the group will have the opportunity to search for and discover the animal. Also, each student will need a partner on the trail to share answers with.
2. Before going out to find the animals read the poem about the next animal the boys and girls are to look for. Beginning with the beaver at the table. Read the poem about the beaver (supplement A) the boys and girls should say the name of the animal at the end of each poem. Show students how to pet the beaver gently only on his back. Allow students to pet the beaver.
3. Next read the poem about the raccoon. After the boys and girls have heard and answered the poem walk the trail with the students searching for the raccoon. Remind them to walk

quietly so that they have a better chance of seeing live animals. Do the same thing with the remaining animals.

4. When an animal mount is found the students should gather around the animal for a short discussion of how the animal depends on the trees in the forest for food and/or a home. (See supplement A)
5. After each animal, choose a new line leader and continue on the trail.
6. Be sure to point out any live animals or tracks observed.

Assessment: Return to the table. Ask students, “What are two important things that trees provide for forest animals?” *Food and homes*. If time permits, ask students to tell you (or a partner) what animal they liked best and why.

Activity B: Animal Tracks

Set Up Before Students Arrive:

1. Place ink pads, track stamps, crayons, tracks poster, and picture book at lesson site.
2. Obtain animals tracks booklets from the teacher when the group arrives.

Motivation/Warm-up:

1. Welcome students to the activity and introduce yourself.
2. Show students the animal tracks poster. Ask students what animal tracks are (*animal footprints*). Point out on the poster any animals that might live at Camp Woodlands (squirrel, deer, raccoon, skunk, opossum, rabbit, beaver, and fox).
3. Inform students that they will use animal track stamps to make a record of the animals they have seen (or might see) in the forest.

Procedure:

1. Give each student an animal tracks booklet. Have students write their names on their booklets.
2. Show the beaver track. Ask the students what animal they think would make this track. Allow students time to predict what animal track you are holding.
3. Assist students in matching the animal tracks to the correct animal pictures. Using the ink pads and a “hand over hand” technique, assist the students in stamping the track next to the beaver picture. Students may also color the animal pictures.
4. Repeat steps 2 and 3 with each track picking them up in a random order.
5. When students have finished stamping all the pages, read *Animal Tracks* by Arthur Dorros.
6. Collect the booklets to give to the teacher at the end of the day.

Assessment: Ask students what habitat these animals live in. *A forest*. Ask students to name some forest animals.

Supplement A

Animal Rhymes and Information

What forest animal is this?	Rhyme	Food	Home
Beaver	I have large teeth and I work after dark. I cut down trees and I eat the bark. I can carry heavy logs. I am quite a heaver. I have a flat tail. I am a _____. (Beaver)	<ul style="list-style-type: none"> Look at the beaver's large front teeth. He uses them? To cut down trees and eat bark from the branches Show "beaver branch" with bark eaten by beaver; teeth marks. 	<ul style="list-style-type: none"> A beaver's home is called a lodge. <i>Show picture of lodge.</i> What is the lodge made of? Trees trunks that the beaver has cut down. Slaps tail on water to warn other beavers of danger.
Raccoon	I live in a hollow a tree and sleep through noon. I come out at night. I am a _____.(Raccoon)	<ul style="list-style-type: none"> The raccoon is a very good tree climber. Why do you think he likes to climb trees? To find food. <i>Show pictures of forest fruits and eggs.</i> 	<ul style="list-style-type: none"> He also climbs to makes a leaf nest in a large, hollow tree. <i>Show picture of raccoon in tree.</i>
Squirrel	I eat nuts and bury some before it starts to snow. If forget to dig them up, they will start to grow. We can be seen in the yards of all the boys and girls. We are gray with fluffy tails. We are _____. (Squirrel)	<ul style="list-style-type: none"> Squirrels are good tree climbers too. They climb to get these foods from trees. <i>Show pictures of tree nuts, flowers and fruit.</i> Bury nuts to save them for winter, but don't find them all, so lots of trees get planted. 	<ul style="list-style-type: none"> They also climb to makes leaf nests up in the branches or in holes in trees. <i>Show picture of squirrel nest.</i>
Rabbit	My long ears listen, and my eyes look all around. When I hide in a thicket, I don't make a sound. I jump all over, that is my habit. I have a fluffy white tail. I am a _____.(Rabbit)	<ul style="list-style-type: none"> In summer, they eat grass, clover, and dandelions. In winter, they eat bark, twigs, and buds from small trees and bushes. 	<ul style="list-style-type: none"> Hides in thicket or hedge on the edge of the forest next to fields. <i>Show picture of thicket.</i>
Gray Fox	I can climb like a cat, but I look like a dog. My cozy home might be in a hollow log. I am agile and able to climb up on rocks. I am a hunter. I am a _____. (Fox)	<ul style="list-style-type: none"> The gray fox has a nickname: tree fox. He can climb trees! <i>Show picture of fox in tree.</i> He may climb to escape predator, live in a tree hole or to hunt. The fox is a hunter. He hunts and eats small forest animals like mice, squirrels, rabbits and birds. 	<ul style="list-style-type: none"> A mommy fox may dig a den (<i>hole or small cave</i>) under the roots of a tree. <i>Show picture of fox in den.</i>

Deer	I eat leaves on branches and acorns that fall down. I can hide in the forest because my fur is brown. I live at Woodlands all months of the year. I can run very fast. I am a _____. (Deer)	<ul style="list-style-type: none"> • <i>Invite students to handle acorns in a tray.</i> • Acorns are a favorite food of deer. What are they? Oak tree seeds. Deer eat acorns that fall on the ground. • Also eats leaves and buds from trees. 	<ul style="list-style-type: none"> • A deer doesn't build a home but hides in the forest. Sleeps on the ground. • <i>Show picture of fawn.</i> A fawn (baby deer) has little or no odor so it's hard for a predator to find. • Bucks (boy deer) use their antlers to fight. <i>Invite students to rattle antlers together.</i>
Black snake	I can climb a tree when I want to eat some eggs. That's a big surprise since I have no arms or legs. I like to sleep all winter, but when it gets warm I wake. I love to slither. I am a _____. (Snake)	<ul style="list-style-type: none"> • Does the snake have arms or legs or sharp claws? Do you think he can climb trees? <i>Show picture of snake climbing tree.</i> • Uses scales on belly to climb. • Climbs trees to eat birds and eggs. • Also hunts and eats other forest animals like mice and squirrels. 	<ul style="list-style-type: none"> • Sleeps in hollow log, hole in tree, under a tree stump or in a pile of leaves.
Tree frog	I have sticky toes that help me climb a tree. My skin is green so I am hard to see. You can find me in a swamp or bog. I like to croak. I am a tree _____. (Frog)	<ul style="list-style-type: none"> • Why do you think this is called a tree frog? Because he can climb trees. Not all frogs can climb trees. They sticky toe pads for climbing. • They climb into bushes and small trees to catch insects like flies and mosquitoes. 	<ul style="list-style-type: none"> • Lives in the forest near water. • Sleeps during the day stuck to the underside of large leaves. • Hibernates (sleeps) underground in winter
Toad	I live on the forest floor and find bugs to eat. Please look very carefully! Don't squish me with your feet. I have to be careful to stay off the busy road. I look a little like a frog, but I am a _____. (Toad)	<ul style="list-style-type: none"> • Toad lives on the ground. He is camouflaged. He matches the color of the dirt and leaves. • Eats ants, sow bugs and other small animals on the ground. <i>Show pictures ant and sow bugs.</i> • Not a frog. Toads have dry, bumpy skin. Frogs have wet, smooth skin. 	<ul style="list-style-type: none"> • Lives in forests near damp places. • If they get too hot, they will dig into the soft ground in the forest. • Hibernates (sleeps) underground in winter
Box turtle	Since I walk really slow, long distances are a hurdle. I can hide in my shell for I am a box _____. (Turtle)	<ul style="list-style-type: none"> • Does a box turtle live on the ground where he finds earthworms and berries to eat. <i>Show pictures of turtle foods.</i> • To protect himself? He pulls his head and legs inside his shell and closes up tight. 	<ul style="list-style-type: none"> • Digs into the soft ground of the forest to hibernate (sleep) during the winter. • Can live for 100 years.