

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, pelt
- Resources:

Taxidermy animals:

Beaver

Raccoon

Gray fox

Deer head, skin

Black snake

Tree frog

Skunk

Animal pelts

Trail rules poster

Animal clue booklet

Animal track cards

Watering can

Rubber track stamps

Deer stand

Deer antlers

Big Tracks, Little Tracks:

Following Animal Prints

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. The instructor should place the animals and any matching pelts on the trail in the order that they appear on Supplement A: Animal Clues and Information. **Please handle the animals with extreme care. They are very fragile and cannot be easily replaced.**
2. Place the Trail Rules poster and squirrel and rabbit pelts on the table. These will be used during the introduction.

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 scavenger hunt to find forest animals and learn how they use trees for food and homes. Introduce the *Trail Rules* poster to the students:
 - Look and listen carefully.
 - No running. Watch for tree roots.
 - Do not touch the animals with fur. Touch the pelt instead.
 - Leave living things in place.
 - Never touch a wild animal.
4. Demonstrate how to pet the pelts gently. Allow students to pet squirrel and rabbit pelts.

Procedure:

1. To begin, read the first animal clue. The students should say the name of the animal at the end of the clue.
2. Walk the trail with the students, searching for the first animal. Remind them to walk quietly so that they have a better chance of seeing live animals.
3. When an animal is found, gather the students around the animal. Show students the picture provided of the animal using a tree. Ask students how the animal depends on the trees in the forest for food and/or a home. Share additional information from Supplement A. Students **may pet the animal pelts but not the animals themselves.**
4. Repeat the process for the other animals.

Assessment: Return to the table. Ask students, "What are two important things that trees provide for forest animals?" *Food and homes*. 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. Uncover the sandbox and prepare the sand by clearing debris, wetting the sand, and raking it smooth.
2. Use the rubber tracks provided to create a trail for each animal. The trails may criss-cross for a more natural look. To create a snake trail, draw a wavy line with a stick.

Motivation/Warm-up:

1. Welcome students to the activity and introduce yourself.
2. Tell students that they will be detectives that look at clues to solve a mystery. Our clues are going to be tracks or footprints.
3. Lead students to the dirt road and ask them if they see any tracks/footprints. Ask them to be detectives and tell what they know by looking at the tracks. *People were here. Some were big and some were small. Direction they were walking. Tire tracks tell us a vehicle was here.*
4. Return to the table. Have students practice being detectives again: Show pictures of **just the tracks** in the book *Big Tracks, Little Tracks*. Ask students to be detectives and try to identify some of the animals that made the tracks.

Procedure:

1. Have each student stand on the outside of the sandbox. Ask them **not to step inside** the sand box so that they don't destroy the clues! Now that they are detectives, ask them to solve this mystery: Which forest animals visited our sandbox?
2. Give each student/pairs of students a picture of a forest animal and its tracks. Have students show their pictures to the group and tell the name of their animal.
3. Give students time to walk around the outside of the sandbox, trying to find the trail that matches their animal footprint. Have students stand by the trail that matches their card. Support students, if necessary, by asking questions that help them find the right trail.
4. Have students take turns sharing out which trail belongs to their animal.

Assessment: Ask students, "What do tracks tell us?" *What kind of forest animal was here. How big or small something is. What it might be. Where it was going. How it moves.*

Optional Additional Activities, if time permits:

1. In the second sand box, have students take turns moving across the sandbox, making different kinds of tracks with their feet (tip toeing, spinning, sliding, jumping, walking backwards, etc.)
2. Have students use their hands or other objects to make prints in the sand.
3. Look for other animal clues in the area: feather on the ground, woodpecker holes in logs and trees, insect holes in logs and trees, chewed nut shells, insect holes in leaves, scat, etc.

Supplement A

Animal Clues and Information

What forest animal is this?	Clue	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 an achiever. 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? Tree trunks that the beaver has cut down. Slaps tail on water to warn other beavers of danger.
Raccoon	I live in a hollow 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 make leaf nests up in the branches or in holes in trees. Show picture of squirrel nest.
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 a predator 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"> 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. <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>

<p>Black snake</p>	<p>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)</p>	<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.
<p>Tree frog</p>	<p>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)</p>	<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 have 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
<p>Skunk</p>	<p>You typically won't see me during the day. If you scare me, I may spray. I like to live in a dead tree trunk. I am black and white. I am a _____. (Skunk)</p>	<ul style="list-style-type: none"> • Skunks eat at night. • In the summer, they eat insects. • In the winter, they will eat small mammals and reptiles 	<ul style="list-style-type: none"> • Makes nest in hollowed logs • Line their burrows with leaves to keep warm in the winter