

Girl Scout Brownie and Junior Nature Activity Guide: Animals in their Snuggies



Activity I Talking and discovery hike (30 minutes)

Find a patch of woods and head out for a walk. Look for signs of animals preparing for winter.

There are three mammals in New England that are true hibernators; the woodchuck (groundhog), the little brown bat and the jumping mouse. True hibernators appear to be dead. They are not sleeping. They are in a deep state of unconsciousness. For instance, the woodchuck's body temperature drops to 37 degrees from 98.6, its heartbeat drops to 4 or 5 beats from over 80 per minute and its breathing almost stops. Over the winter it will lose half of its body weight. The other hibernators, like the chipmunk, are called Nappers & Snackers since they wake up and have periods of activity and feeding during the winter season, then drop off to sleep again. Can you think of others?

Some animals cannot survive the cold New England winter so they choose to leave. This is called migration. Many birds are migratory. Can you name a few? Even whales migrate. What insect do you know that migrates? Where do you think they all go?

There are animals that stay active all winter. What will they need to survive? What can insulate them from the cold? What will they eat? Will their diet change? Where will they find shelter? Look for holes in the ground or in trees and hollow logs. Who do you think would like to live there? Think of animals that you see in winter. Do they look fatter? Mammals grow thick undercoats and birds fluff-up their feathers both to trap air for insulation. Grey squirrels use their fluffy tail for insulation as well as communication and balance. They also grow little white tufts of hair behind their ears. They usually leave their summer drey (ball shaped nest of leaves in a tree) for a nice snug tree hole stuffed with leaves. They can remember where they buried their acorns and can dig them out even under a foot of snow!

Activity II Will You Stay or Will You Go?

Label three cards:

- Migrate
- Hibernate
- Stay Active

Set them in three separate locations in a room or a clearing outside. Call out the names of various critters and have the girls go to the appropriate signs. Sometimes they won't be sure about the answer. Ask them questions about diet or activity or if you've even seen them in winter. Play until you run out of critters or energy.

MIGRATE: Hawks, Monarch Butterfly, Green Darner, Whales, Robins (short distances – Maine to Mass, Mass to NJ), most bats

HIBERATE: True –Little Brown Bat, Jumping Mouse, Woodchuck. Nappers & Snackers-Chipmunks, Raccoons, Skunks, Wooley Bear Caterpillar (logs & leaf debris),

Turtles, Salamanders, Frogs & Toads (mud below the frost line and/or the bottom of the pond)

ADAPT/STAY ACTIVE: Deer, Rabbits, Fox, Bobcat, Porcupine, Opossum, Beaver, Muskrat, Coyote, Fisher, Mice, Meadow Voles, Shrew, Weasels

Honey Bees stay active inside the hive. They create a living ball of insulation where individuals change position, outside to in.

Snakes form together in a ball too but they hibernate

Activity III The Migration Game (35 minutes)

Many birds, as well as some other animals (Monarch butterflies, whales, sea turtles, etc.), migrate twice a year. In the case of birds, they may fly south from their summer homes to places where the weather is warmer and as a result there is more food available for them to eat. Exactly how birds find their way is still not known. Some researchers believe that they find their way by the stars, others say it is by landmarks and still others say it is instinctive. In any case, the seasonal migration can be thousands of miles, and most birds must be able to eat and rest along the way.

There are many hazards and dangers that can prevent a bird from reaching its destination. These include: lack of food, lack of drinking water, and lack of sufficient place to stop and rest. This is one of the reasons it is so important to protect coastal wetlands. Millions of migrating birds use wetlands as resting and feeding sites during migration. Birds are sometimes disoriented and confused by bright city lights and transmission towers, and have been known to crash into them. Pollution, such as oil spills, floating plastic trash and other debris can also be responsible for the death of migrating water fowl. Finally, habitat destruction may prevent birds from finding an adequate place to live during the winter season (or the summer in the north).

The purpose of this activity is to familiarize the girls with many of the hazards of bird migration in a fun and active way.

Objective: Girls will be able to identify several of the hazards and difficulties that birds may encounter during their annual migration. Girls will run off some energy and keep warm!

Materials:

- Four bandanas or other items to mark off bases.

(The first part of this may be done indoors if the weather is very cold)

Discuss with the girls what migration is and why many birds do it. Ask them what they think some of the hazards might be, encouraging them to think about food, water, shelter and other things that might prevent the birds from reaching their destination.

Outside, mark off the playing area in a large rectangle. All the girls should be able to fit shoulder to shoulder at one of the shorter ends. They should be able to RUN from one end to the other in a few seconds. These are the bases. One girl is chosen as IT. She stands in the middle of the playing area, ready to tag as many girls as she can when they run across the play area for each "seasonal migration". At a given signal, the "birds" fly from one end to the other, safely reaching the other base. Any girl who is tagged has to remain exactly where she was caught. In the following rounds of play, she is a "hazard" and can help IT tag other girls (but she cannot move her feet!). Girls may not run outside of the boundary lines. If they do, they must become "hazards", too. Continue playing until only one bird is left to maneuver her way through the many hazards to reach safety. She may then become the next IT.

Activity IV 'S No Problem (15 minutes)

Snow serves as a vital winter habitat for many animals that depend on it for food and shelter. This activity encourages children to think about how this is possible. Some animals use the snow to tunnel through for protection others use snow's insulating properties to keep them from freezing. Deep snow allows some animals to reach higher up for twigs and bark. Melting snow in the spring supplies vital drinking water sources for most animals and for breeding in some amphibian species.

Objectives: Girls should be able to identify and explain ways in which snow can often be very helpful for wildlife.

Materials:

- Newsprint or blackboard
- Markers or chalk
- Animal Cards (see below)

Have the girls brainstorm their ideas of how snow can be helpful to animals, and list them on a blackboard or newsprint. Then divide into groups and give each group an Animal Card with a name/picture on one side and food/shelter clues on the back. Possibilities include:

- Snow hare: whiteness helps conceal the hare; deep snow raises level they can reach for food.
- Ermine (weasel): whiteness helps camouflage the weasel; tunnels through snow for food.
- White-footed mouse: shelter from the cold; place to hide seeds.
- Shrew: protection from the cold.
- Mole: protection from the cold - helps keep the soil from freezing very far down so food sources, such as earthworms and insect larvae are available
- Red squirrel: shelter; place to store seeds; can tunnel under or through it.
- Ruffed grouse: dives in leaving no tracks. Snow doesn't transmit scent so bird is protected from the cold and predators.
- Meadow vole: shelter from the cold; can store seeds under it.

Each team should act out its animal and how snow affects its life for the other groups to guess.

* This activity comes from Hands On Nature, by Jenepher Linglebach, Vermont Institute of Natural Science, 1986. A wonderful resource!

Activity V Winter Stories (15 minutes)

This part of the Animals in their Snuggies program is a time to share some good children's literature that is related to winter and/or animals in winter. Be sure to include the girls in a discussion of the books.

- What do the animals in the stories really do in the winter?
- Could this really happen?
- Do the girls have their own favorite winter stories?

There are many wonderful storybooks that are appropriate for this activity. Here are a few suggestions:

- *Brett, Jan, *The Mitten*. G.P Putnams, New York:1989
 - Butterworth, Nick. *One Snowy Night*. Little, Brown and Co., Boston: 1989
 - Delton, Judy. *A Walk on a Snowy Night*. Harper and Row, New York: 1982
 - Parnall, Peter. *Winter Barn*. Macmillan Publishing, New York: 1986
 - *Yolen, Jane. *Owl Moon*. Philomel Books, New York: 1987
- *Highly recommended

Activity VI Winter Birds Of New England / Bird Valentines (35 minutes)



Birds are common all year round in New England, but the ones we see in the winter are not always the same as those seen in summer. Many birds migrate south for the winter and head for warmer climates so that they may find sufficient food. But many birds that spend the summers north of here, come south to New England for the winter. And many birds are at home here all year long. It is fairly common for people to feed birds, particularly in the winter when it is more difficult for them to find food naturally. Birds need lots of food in the winter because their bodies are so small, it is difficult for them to store enough food to keep warm. And although their feathers are good insulation against the cold, birds are never able to put on coats and hats!

Some people feed birds simply because they like to look at them. Many people feed birds because it is a wonderful way to learn about them. By putting out bird feeders, and keeping them

filled, you can learn to identify many different kinds of birds, watch their behavior and maybe even learn some of their calls and songs!

Here are some of the more commonly seen birds in this area:

- Chickadee
- Cardinal
- Junco
- blue jay
- white- throated sparrow
- mourning dove
- goldfinch
- downy woodpecker
- nuthatch

Not all birds eat the same thing, nor do they all eat the same way. Some birds like to eat on the ground. Some birds prefer to perch in a tree or on a hanging feeder. Some birds eat upside-down! Some of the more common seeds people feed them are: sunflower seeds (like the kind people eat), cracked corn (spread on the ground), millet (tiny, pale, round seeds) and thistle (tiny black seeds). Many people also feed bird's peanut butter or suet because of the high fat content. This gives the birds lots of energy to help keep them warm.

Objectives: Girls should be able to identify several different birds which are commonly seen at feeders in the winter, and the types of seed they like to eat.

Girls should be able to give a few reasons why people feed birds in the winter.

Materials:

- Photographs of common birds
- samples of a few different seed types
- pictures of different feeders (or samples of feeders)

Discuss the above information with the girls, finding out first what they already know. Give them time to make a Bird Valentine (see below) to take home and hang in a nearby tree.

Bird Valentines:

Materials:

- bread
- egg whites
- bird seed
- stiff cardboard hearts
- scissors
- paint or pastry brushes
- red ribbon
- Markers
- plastic baggie
- Optional: Large, heart shaped cookie cutters which work quite well for pressing out heart shaped pieces of bread.

Have each girl trace a heart onto a slice of bread, and cut it out. Poke a hole in the top of the heart and tie a long ribbon through it. Brush the bread with egg white and sprinkle with bird seed. The seed will stick to the bread. Put the hearts in baggies to transport home.