WINTER

A Winter's Meal

Materials

- Animals In Winter by Henrietta Bancroft
- apron and chef's hat
- large soup pot
- wooden spoon
- trays, one for each small group of children
- samples of plants, animals, and insects found in your area throughout the year (samples can be real, artificial, or images). This could include flowers, leaves, twigs, berries, green grass, insects (rubber or plastic), rubber mice, bark, acorns, butternuts, etc.
 Make sure to include items that would be found in your natural habitat.
- a photo, puppet, or stuffed animal representing:
 - rabbit
 - chipmunk
 - songbird
 - woodchuck

You can also use the "Winter Animal Cards (Appendix, p.225).

Enduring Understandings

- All things change, and can adapt to change.
- Animals react to the change in season in different ways: some are active, some are dormant, some migrate, and others hibernate.

Objectives

Interdependence

Community

- Children role-play animals in winter.
- Children show interest and curiosity in how local animals adapt to the winter.
- Children demonstrate an understanding of why and how animals adapt to winter.

Directions

SET-UP: Prepare trays with a variety of the samples of plants, insects, and animals distributed amongst them. Set up your cooking workspace with a soup pot and a wooden spoon. Place your animal puppets, photos, or cards around the room. (Place the woodchuck—a hibernator—in a quiet, dark, out-of-the-way place, where it cannot be easily found.)

- 1. Read *Animals In Winter* by Henrietta Bancroft. Discuss the book with your students.
- 2. Dress yourself up as chef and gather students around your cooking workspace. Explain that as the chef, your job is to cook for the animals who are active in winter. Really ham it up! (One of our educators likes to become "Fifi the French Chef"—complete with accent.) Tell the children that you need their help to determine what foods are available outside at this time of year for wild animals to eat.





With your students, sort a tray of animal food into two piles: what's found outside in winter, and what's not.



- 3. Divide the class into smaller groups and give each group a tray. Each group divides the objects on their tray into two piles:
 - Found outside in winter
 - Not found outside in winter.
- 4. After the groups have divided the the objects, ask for volunteers to bring the "food" to your pot. As each group presents their selections, ask the rest of the children to confirm whether or not each item can be found outside in winter. If the answer is yes, it goes into your soup pot. Once all the possible options have been placed in the pot and are "simmering," tell the children that it's time to call out to the wild animals, "Soup is on! Come and get it!" But only animals who enjoy the foods in the soup can visit your kitchen. Tell the children that these animals are placed around the room.
- Ask one child to find an animal and approach the soup pot. Identify the animal and invite the child to assume the role of the animal. (Give the child hints if needed).
- 6. Depending on which animal the child chooses, follow the "active," "migrating" or "dormant" scenario below. Repeat steps 5 and 6 with different children for each scenario.
 - If the child chooses the **active** rabbit, have the child hop around looking for food to keep her energy up. Ask, "Can rabbit eat from our soup?" Explain that winter can be hard for herbivores (plant-eating animals), like the rabbit, since there is no green grass, dandelions or garden vegetables growing. Explain that the rabbit has adapted to winter by eating the stems and buds of woody plants like blackberry, raspberry, maple, oak and sumac plants. Ask the children if any of these buds or stems are in the soup. Invite rabbit to eat from the soup pot and then transform back into a child.
 - If the child chooses a **migrating** songbird, have her fly into the soup kitchen, very anxiously looking for berries and insects to eat. Ask the children if there are any fresh, juicy berries or insects in the soup pot. Since there are not, suggest that the bird get moving and fly to a place that is warmer and where juicy berries are growing and insects are alive. Explain that some animals migrate to warmer areas in the winter.
 - If the child chooses a **dormant** chipmunk, have the child act somewhat sleepy, trying to decide if it should crawl from its burrow in the ground to come to the soup kitchen. Explain that as an omnivore (an animal who eats both plants and animals),

Active in Winter?

Animals use various strategies to cope with winter's challenges: cold temperatures and food scarcity.

- Active: An animal can find enough food to support staying active and warm. (bobcat, coyote, deer, fox, rabbit, squirrel)
- **Dormant*:** An animal minimizes activity. It slows its breathing and heart rate to conserve energy for extended periods. (black bear, chipmunk, raccoon, skunk)
- **Hibernating*:** An animal minimizes activity. It slows its breathing and heart rate, and lowers its body temperature to conserve energy for extended periods. (bat, jumping mouse, woodchuck)
- **Migrating:** A complete population of animals travels to another area for more reliable food supply, temperatures, or breeding purposes. (many birds: warblers, loons,)

*Most animals that are dormant or that hibernate will periodically roust themselves to forage for the limited food that is available. This uses a LOT of energy, and is risky for the animal.

Extensions

- Create a class list of animals that you see when outside for recess or on neighborhood walks. Try to discover what food these animals eat and how they can survive.
- Keep a class calendar in the winter months where you record "special" animal or bird spottings.
- the chipmunk's diet consists of grains, nuts, seeds, insects, and salamanders. The chipmunk has stored nuts and seeds to eat over the winter in its burrow. Explain that some animals are dormant, or very sleepy in the winter—they roust themselves only occasionally to get food. Tell the children that it's a beautiful day, and the chipmunk is outside. Ask if your soup has any nuts and seeds in it. Invite the chipmunk to try some of your delicious soup before it scurries back to its burrow to sleep for most of the winter, waking occasionally to eat its stored food or run out into the cold sunshine.
- 7. Let the children know that there is still one more animal in the room. Can anyone find it? Choose a child to go find this last animal. Explain that this animal, a **hibernating** groundhog, is in a deep sleep for the winter and will not be moving. Tell the children you notice it is hardly breathing, its heartbeat is very slow and it feels quite cold. Encourage the children to ask why? Tell the children to think about what a groundhog eats. If they do not know, explain that you have seen this groundhog eating green grass and stealing fresh vegetables from your garden. Ask the children if these food are in your soup pot. Ask, "Are green grass, fresh vegetable outside in the winter?" No, of course not. Explain that since his or her food is not available, this groundhog adapts by sleeping through the winter, and wakes up in the spring when her food becomes available again.
- Use the animal cards to review the ways animals adapt to winter. Show some animals that haven't been discussed yet and ask the children whether they think this animal hibernates, migrates, is dormant, or is active in the winter. Use the box on the previous page to help you. As you describe each behavior, ask the children to act out that behavior.

Discussion Questions

- What's happening with animals in winter in our community?
- What different kinds of behaviors do they have? Do you know of any other animals that have similar behaviors? Remind the children that these behaviors are adaptations. Ask, "Can you think of ways these animals might behave in the summer?"