BOWMAN GRADE ONE NATURE WALKS

Grade One Nature Walks are based on:

1. **Developing Environmental Awareness.**
   - Sensory exploration / Sense of wonder
   - Discovery / Joy of learning
   - Sharing the excitement
   - Experiencing nature's rhythms and cycles

2. **Developing attitudes of respect toward:**
   - Birds and other animals living near Bowman
   - Each other
   - Themselves as learners

3. **Exploring and discovering in the schoolyard and woods.**
   - Identifying what all animals need to live and grow
   - Discovering the variety of birds and other animals living in their schoolyard
   - Exploring different habitats at Bowman
   - Understanding how seasonal changes affect wildlife
   - Discovering how wildlife cope with seasonal changes
   - Understanding simple food chains

By this time the children should be able to focus and effectively explore, observe, and share verbally with others what they are discovering as well as listen and appreciate other children's discoveries. They should be able to make connections as they compare seasonal changes and learning should be carrying over into the classroom.

Remember, first graders are still learning how to behave on a Nature Walk, how to focus, observe, wonder, and thereby enjoy exploring, discovering, learning, and sharing.

The excitement generated by making and sharing their discoveries will lead to the desire to explore, discover, and continue learning.

Communicate with the teacher how the Walk went, as well as exciting discoveries. The teacher needs to know so children's outdoor experiences and excitement can be integrated with classroom learning. And because children's observations are listened to and have value, children develop confidence in themselves as learners.

BOWMAN GRADE ONE FALL NATURE WALK
Animals and What They Need to Survive

OBJECTIVES:

- Learn what animals need to live and grow.
- Explore how different habitats meet these needs.
- Compare fall resources with summer food sources and shelter.
- Observe birds and other common animals living near Bowman school.
- Optonal: ID some common birds.

PREPARATION:

Room Parent

- **Logistics:**
  - **Time:** Allow 45 minutes to an hour for the Walk so each group can visit both habitats.
  - **When:** Plan to go out in mid-September to mid October. Plan Nature Walks early in the morning when birds are most active and before children are on the playground.
  - **Groups:** 4-5
  - **Sites/habitats:** 1) : **Edge of schoolyard** for up to 2 groups, 2) **woods** across bridge at back of schoolyard **or** 3) **woods** across bridge at side of staff parking lot
  - Schedule parents. Copies of walks available in storeroom.
- Ensure no overlaps with other Grade 1 classes by checking the schedule outside the BBB office. Update BBB schedule with class time by writing Time/Grade/Teacher in correct date.
- Decide with teacher whether or not to include bird identification. Notify parents of decision.

Teacher

Inform the nurse about the date and time of the walk
Complete "Pre-Walk activities"
Complete the "Post Walk curriculum integration choices"

PTA Coordinator

Check closet for 4 sets of tongue depressors labeled: Food, Water, Air, Warmth, Shelter, Protection.
Make copies of:

- Animals/Birds in Fall Observation Worksheet 1/group.
- Fall Supplement copies 1/group
- Optional: Looking at Birds, Pictures of Common Birds and Bird Silhouettes, see attached. 1/group.

Questions/Comments?

Questions: Contact PTA Coordinator(s)

MATERIALS:

- Bug box (one per group).
- Hand lenses (one per child).
- Tongue depressors labeled: *food, water, warmth, air, shelter.*
- Clipboard, pencil.
- Observation Worksheet 1 per group.
- Optional: Fall Supplement (bird ID's and food of animals) 1 per group

ACTIVITIES:

- Observe and listen for animals.
- Discuss what animals need to live and grow.
- Explore two different habitats: edge of schoolyard and woods habitats
- Record all food sources, shelter, and all animals and animal signs in each habitat.
- Big Backyard walk leader fills out Observation Worksheet during walk.
- Compare foods and shelter in summer to those of fall.
- Optional: ID common birds.

Remember, the children are still learning how to behave on a Nature Walk--how to focus, observe, wonder, and thereby enjoy exploring, discovering, learning, and sharing.

PRE-WALK ACTIVITIES: TO BE LED BY THE TEACHER

1. Have children list all the animals they can think of that might live near the school. Children often think only of mammals when the word "animal" is used. But scientists mean **all** animals -- spiders and hawks, bees and, turtles, as well as dogs and squirrels. Encourage children to draw on their own knowledge to make a long list. Accept any reasonable guess, i.e. tigers and crocodiles are out, but coyotes and deer are possible. And don't forget people! It's fun to think of all the animals that might share the schoolyard.

   Look at the list they have made. Have children help you to check animals they have actually seen near the school. (Birds, insects and spiders, squirrels, perhaps a rabbit.) Ask: *Why don't we see all the animals on the list? When are big animals like deer, foxes and skunks likely to be out looking for food?* (At dusk, night, or early in the morning.)

2. Ask: *Why do you think birds and other animals would choose to live in the school's Big Backyard? What do animals find here that makes them want to stay? What do all animals (birds, people, butterflies, rabbits, dogs, caterpillars) need to live and grow?* Have children in small groups brainstorm for a few minutes and write down their ideas. Then make a class list including:

   Food
   Water
   Air
   Warmth
   Shelter

   (Sometimes children add sleep, a means of protection, or other needs, and this is fine, but the five listed above are the critical ones.)

   Scientists use the word **habitat** to describe the place where plants and animals live. A habitat provides everything an animal or a plant needs to live and grow. Ask: *What habitats are there near the school?* (The woods, the grassy fields, the playground, edge areas and the ditch at the front of the school.) This year first graders are going to be scientists studying the birds and other animals that live near the school. Ask: *What are the best places to look for wildlife in the school's Big Backyard? Why*?

   Sometimes animals are not seen in their habitats because they are resting or hiding. Then we can look for <u>signs</u> of animals, food sources, and places to shelter. Scientist usually record what they discover, so they write down not only the names of any animals they see, but all the food sources, shelters, and signs of animal activity in each of the habitats. On the walk, the children will report what they discover to the Big Backyard leader who will write it down.

3. Ask: *How should you behave when they are on a Nature Walk*? Suggest making a class list of appropriate behaviors and post these. For example: Stay together as a group; Move slowly so we don't scare animals; talk quietly; share your discoveries with others; lsten to nature and to each other; cooperate with walk leaders.

NATURE WALK: TO BE LED BY BIG BACKYARD VOLUNTEER

1. Observing and listening.

- While walking across the schoolyard ask: *What animals do you think you will find living near the school?* (Accept any answers) . Ask: *How should you behave if you want to see some animals?* (Walk slowly and quietly.) Ask*: Are the schoolyard and woods areas <u>our</u> homes or the <u>animals'</u> homes?* Remind the children that we are really just visiting, and we need to be careful not to harm any animals' homes that we find.

- Ask: *When are larger animals (deer, fox, rabbits, coyotes, skunks, opossums) active?* (Early in the morning and in the evening.) *Do you think you will see any big animals during the middle of the day?* (Probably not.) *What animals are active during the day?* (Birds, squirrels, mice, insects, spiders.) Remind children that they can look for signs of the bigger animals, even though they probably won't see the animals themselves.

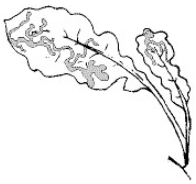
- Ask: *Where would be a good place to look for birds or other animals? Why? What do animals need to find in their habitat?* Use tongue depressors to help children list what birds and other animals need to live and grow: **<u>Food</u>, <u>water</u>, <u>shelter</u>, <u>air</u>, <u>warmth</u>.** As a child mentions a need, give him/her a stick to hold up.

- Ask: *Do you see and/or hear any birds*? Look and listen as you walk to the edge of the schoolyard near the woods path Once there, have children close their eyes. Ask: *How many different birds and other animal sounds can you hear?*

2. Looking for and recording animals, food sources and shelter.

- Bring out the clipboard and begin to record all children's discoveries. Talk about the importance of walking slowly and exploring as a group so they can share and you can write down their discoveries. Don't forget to look up at the sky. Ask children to note what the animals are doing. Help children to realize that birds and most animals may be frightened of them and remain hidden. (Means of protection). It's OK if they don't see many birds or other animals. Scientists learn a lot by exploring habitats and looking for food, shelter, and signs of animal activity. Show the children the tongue depressors labeled: *food, water, warmth, air, shelter.* Use them to remind the children that they are looking for these things.

- Fall food sources and signs of animals include such things as:



Leaf miner trail

  - Seeds.
  - Chewed leaves.
  - Berries, rose hips, and nuts.
  - Galls, cocoons and insect egg cases.
  - Woodpecker holes.
  - Bark beetle tunnels; leaf miner trails.

Oak gall

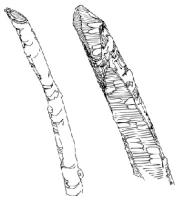
Bark beetle marking

- Rabbit, deer, fox and other scat.
- Meadow mouse tunnels in the tall grass.
- Stems and small branches bitten off by rabbits and deer.
- Nests (birds and squirrels).
- Holes in the ground (chipmunk, rabbit, woodchuck, fox).
- Holes in trees (raccoons, chickadees, wood mice).

Rose hip

- Explore each habitat in turn. Don't forget to keep looking up at the sky. Encourage children to think about how each habitat provides what the animals living there need to survive. Meadow mice don't live in the woods and woodpeckers don't live in the meadow.

3. First habitat: The edge of the schoolyard: Site 1

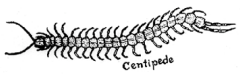


Stems eaten By rabbits

- Explore the long grassy areas on both sides of the bridge.
- Leaves are food for rabbits, mice, caterpillars, grasshoppers and other insects. Look for chewed leaves.
- Wildflower and grass seeds, nuts, and berries provide food for mice, rabbits, chipmunks, deer, squirrels, blue jays, chickadees and other birds. Ask: *Are any of those animals food for other animals?* (For hawks, owls, fox, snakes.)
- Ask*: Do any animals shelter in the tall grasses?* Look for meadow mouse tunnels and molehills.

Galls

- Look for spider webs and leaf miner trails made by a tiny larva that lives between the top and bottom layers of the leaf, eating the green and crawling into the tunnel it creates.
- If you can find one, show children an aspen stem gall with the larva sheltering inside. (A gall is produced when an insect lays an egg plus an irritating chemical on a plant. The plant grows extra plant cells around the egg to protect itself. When the egg hatches, the larva is in a nice cozy waterproof house surrounded by its dinner. It stays there until it is ready to emerge as an adult.) Galls are food for chickadees and woodpeckers.



4. Second habitat: The woods sites (2) or (3)

Woodpecker hole

- At site (2) Cross the bridge into the woods and follow the boardwalk, at site (3) cross the bridge and follow the path walking slowly looking for animal shelters as well as food sources. Encourage children to stop and listen in the woods. Ask: *What do you hear? Why do you think that birds and other animals might like this habitat? Would they feel safe here?*

- Look for chipmunk holes in the dirt or near tree roots and for partly eaten acorns and other nuts. Look for woodpecker holes and evidence of bark beetle activity as well as galls sheltering insect larva and leaves chewed by hungry insects.

- Watch out for poison ivy close to the trail. Humans are the only animasl that are bothered by poison ivy; in fact birds eat the berries!

- Children may discover scat from deer, rabbit, fox, or other animals. Caution children to not touch or smell scat (there are parasites in some scat that are harmful to humans).

Sow bug

- Carefully turn over a rotting log to discover the animals living there. The rotting log is a habitat for the animals living there. Centipedes, millipedes, sow bugs, ants, spiders, and beetles are commonly found. If luck is with you, children may find a slug or a hibernating bee or wasp. Needless to say, do not disturb the bee or wasp; cool fall air will keep them inactive if not disturbed. But do pick up the slug and place it on your hand to warm up. Soon its antennae will emerge from its head as if by magic. Antennae are the "eyes and nose" of a slug. If lightly touched, the antennae will disappear back into the head, only to emerge again. Watching a slug perform will keep even the most active children entranced. These tiny animals cannot stand handling by a number of excited small hands. Putting one in a bug box gives children the opportunity for close observation without harming the animal.

Slug

- **At site (2)** walk as far as the open meadow where tall wildflowers and shrubs offer great quantities of both food and shelter to birds. Stand still and listen. Bird calls and crickets singing are often heard here. Ask: *Can you see* a*ny birds feeding there?*

- Note the wide variety of seeds as well as blackberry and dogwood berries. Birds eat the flesh, not the hard seeds inside, as they do with an apple. Ask: *Is there more food available in this open area than in the woods?*

5. **Bird observations and ID (optional).**

- If children do see birds, encourage them to notice things like size, shape, and color. As appropriate, use **Common Birds**, **Silhouettes** and **Looking at Birds** to make some identification. Naming is not as important as observing characteristics.

6. Comparing foods and shelter available in summer and wrap up.

- After exploring the last habitat, walk back to school. Ask: *Is your schoolyard a good habitat for birds and other animals? Why do you think so? What parts of the schoolyard are the best habitat for wildlife? Are these the same habitats that are the best for children to live? Why? Can children and wildlife share this habitat? Do you think birds and other animals feel safe here? Why?*

- Ask: *Who remembers what the schoolyard looked like in summer and the first week of school? Were there food and shelter available then that aren't available now? What about flying and hopping insects? Or flowers rich with nectar? Or worms in the earth or caterpillars munching leaves? Why aren't these animals and flowers around now?* It's getting cold and winter will be coming. Flying insects as well as worms and caterpillars are food for tree swallows, robins, spiders, woodpeckers, skunks, and other animals. Hummingbirds, honey bees, and butterflies feed on nectar from flowers. Ask*: What do you think these animals do when their food sources are no longer around?*

- Ask: *Did you find what you expected to find on your Big Backyard walk? Did you find anything that surprised you?*

- Big Backyard volunteer gives Observation worksheet to teacher, returns materials to Big Backyard room, and fills out Walk Evaluation and leaves it in the Big Backyard room.

POST-WALK CURRICULUM INTEGRATION OPPORTUNITIES: TO BE CHOSEN AND LED BY THE TEACHER

1. Ask groups to share their animal discoveries, especially any birds seen. Add to the class list. Ask: *How can you tell birds apart?* Talk about descriptions of birds they saw, and differences in how birds look or sound. What were the birds doing?

2. Make a class chart of all the food sources they found as well as shelter available in late fall. Make another chart of food and shelter that was available in summer. Keep the charts to compare with discoveries from later Big Backyard walks.

3. Make a class mural to show one or more of the habitats they explored. The mural should show food sources (they might use real seeds or berries) and shelter. Children can draw birds and other animals to paste on the mural. Think about what makes a good habitat. Is everything the birds need to live right in this habitat? Alternatively, have each child draw a picture of one of the habitats they explored.

4. Ask: *Which animals can live here in cold weather? Do you think the tree swallow that eats mosquitoes and other flying insects can find food here this winter? Why or why not? What about chickadees and sparrows that eat seeds? What happens to the animals that can't find food and shelter in winter?* (Record possibilities: move away (migrate), die, sleep (hibernate)—these will be discussed further during the winter walk).

Observation Worksheet for Walk Leaders–Animals/Birds in Fall

ANIMALS SEEN (including birds)/ACTIVITIES OF ANIMALS:

SIGNS OF ANIMALS

HABITAT: FOOD SOURCES:

HABITAT: SHELTER:

Things that interested children and questions they asked:

NATURE WALK EVALUATION

Walk Leader:_____

Grade and Teacher:_____ **Date:**_____

Children in Group:_____

1. **What parts of the walk interested the children the most? (check all that apply)**

Animal tracks	Galls	The woods
Scat	Holes in ground or trees	
Seeds and nuts	Seeing animals	Edge area
Bark beetles	Identifying birds	Nests

Other:_____

2. **What parts were not successful? (check all that apply)**

Animal tracks	Galls	The woods
Scat	Holes in ground or trees	
Seeds and nuts	Seeing animals	Edge area
Bark beetles	Identifying birds	Nests

Other:_____

3. **This walk was: (circle one) TOO LONG JUST RIGHT TOO SHORT**

4. **The children seemed adequately prepared: (circle one) YES NO**

5. **This was a good working group: (circle one) YES NO**

6. **I felt adequately prepared to lead this walk: (circle one) YES NO**

7. **Other comments or suggestions:**