

**BOWMAN KINDERGARTEN SPRING NATURE WALK**  
**Plants and Seasonal Changes**

**OBJECTIVES:**

- Using touch, smell, sight, and sound, observe, describe and compare seasonal changes in the weather and the schoolyard since winter.
- Observe changes in the marked tree buds.
- Discover how wild flowers and trees change in late spring.
- Discover the connection between flowers and seeds.
- Explore plant parts: roots, stems, leaves, flowers, seeds.
- Enjoy exploring and discovering.

**PREPARATION:**

**Room Parent**

- **Logistics:**
  - **Time:** 30 minutes
  - **When:** Schedule this last Nature Walk for late May, or even early June, first thing in the morning before other classes come out for recess.
  - **Groups:** Up to 4.  
**Sites:** 1) white pines/red maple 2) gray birch 3) mystery tree 4) sugar maple 5) pin oak
- Schedule parents. Copies of walk are available in storeroom.
- Ensure no overlaps with other classes by checking the schedule outside the BBB cabinet. Update BBB schedule with class time by writing Time/Grade/Teacher in correct date.

**Teacher**

- Send note to have children dressed appropriately. Notify school nurse so nurse can check on allergies.
- Complete “Pre-Walk” activities.
- Choose and complete “Post Walk curriculum integration opportunities.

**PTA BBB Coordinator**

- Mark appropriate tree sites with surveyor’s tape
- Update map if necessary
- Copies “Signs of Spring” worksheet (1/group)

**Questions/Comments?**

Please contact the current PTA BBB Coordinator(s).

**MATERIALS:**

- Clipboard, Signs of Spring Walk Worksheet, Nature Walk Evaluation, and pencil
- Hand lenses.
- Trowel.

**ACTIVITIES:**

- Observe seasonal changes with eyes open and eyes shut.
- Explore the plants in the grass. Dig up a weed and name the plant parts.
- Closely examine blooming dandelions.
- Explore marked trees for buds, seeds, and flowers.
- Walk leader fills out Signs of Spring Walk Worksheet during walk.

**AFTER THE WALK:**

- Leave Signs of Spring Walk Report with the teacher.
- Fill out Nature Walk Evaluation and leave in BBB room.
- Return all materials to BBB room

**PRE-WALK ACTIVITIES: TO BE LED BY THE TEACHER**

1. Review drawings, charts, or seasonal murals from earlier Big Backyard expeditions with children.  
Ask the class: *What do you see in these drawings or pictures?*
  - a) Fall pictures may have different colored leaves or bare trees.
  - b) Winter pictures may have snow on the tree branches
2. Ask: *What do you think you will find outdoors this time? How has the weather changed? What clothing will you need to wear compared with other trips? Why? What colors and sounds and smells do you think you will find in May in the schoolyard? What will the weather be like?* Remind children that scientists always have a reason when they make a prediction. For example, they might say the snow would be all gone; why do they think so? (There are more hours of sunlight and the air is warmer; snow melts to water when it is warm.) *What other predictions might you make?*
3. What about plants? Ask them to think of the plant parts they explored in the fall and what they observed about plants in winter.  
Ask: *Did you see any flowers in our schoolyard in the winter? (No) Why not? Do you expect to see flowers in the schoolyard today? (yes) Why?*
4. *How do you think the changes in weather will affect plants? Can you predict what will happen to the trees and plants in our schoolyard later in the spring or even summer? Be sure they give reasons.*

**NATURE WALK: TO BE LED BY BIG BACKYARD VOLUNTEER**

**1. Observe changes since winter and compare spring to other seasons.**

- Walk outside to a grassy area. Sit on the grass or stand if it is wet. Ask: *What signs of spring do you see? Have all the trees turned green? What does the sky look like? What animal clues can you find? Are there worm castings and ant hills in the grass? Is it nearly summer?* (Increased warmth, longer hours of sunlight, water, insect activity.) You may see ants and ant hills, grasshoppers, crickets, spiders or spider webs, beetles, ladybugs, as well as bees, butterflies, and other flying insects.
- Have the children close their eyes (20-30 seconds). While their eyes are closed ask:
  - *What do you hear? (Are birds singing? Any insect sounds? Does the schoolyard sound like winter?)*
  - *What do you feel? (Is the sun and air warm? Do you need a warm jacket and a hat? How do plants feel when you touch them?)*
  - *What do you smell? (Soil? Flowers?)*

**2. Explore the grass for wild flowers.**

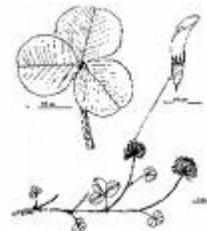
- Have the children look for wild flowers in the grass. Ask: *Why are flowers growing now when they didn't in winter? What has changed?* (Warmer; water is no longer frozen.)
  - Wild flowers may include dandelions, yellow hawkweed, yellow cinquefoil, and clover in bloom.



**Yellow Hawkweed**



**Yellow Cinquefoil**



**White Clover**

- Using the trowel, dig up a weed and name the plant parts (roots, stem, leaves, flowers, seeds). Be sure to replace the clump when you are through.

- Observe how plant parts have changed since winter. (Green leaves, long stems, flowers, seeds.) Ask: *Which plant parts have changed the most? What plant parts do you see that you didn't see in the grassy schoolyard in winter?* Some wildflowers will grow from roots that wintered over under the snow, and some will be brand new plants from seeds.
- Children may find some white bubbles on the stem of a wildflower. This is the home of the "spittle bug", the larva of an insect called a froghopper because of its bulgy eyes. The larva sucks sap from the stem of the wildflower for its food. It also blows sap from an opening near its tail to make bubbles and protect itself from the hot sun and predators. With your finger gently part the bubbles and move the larva onto your hand so children can see it, then carefully return it to its crystal palace. Ask: *What do you think it would be like to live in a house made of bubbles?*

### 3. Explore a dandelion.

- Find dandelions with: open yellow flowers, wilted closed up vertical flower heads, and puffy seed heads.
- Ask: *Can you see a lot of dandelion flowers? If so, we can pick one to learn from.* Pick an open yellow blossom.



- Ask: *How many flowers am I holding?* They will quickly say one. But you are holding fifty or more, as every dandelion petal is a complete flower!
  - Pull off separate petals and let children look at the flower parts with and without a hand lens. Explain that each petal is a flower. (The curly yellow pistil and stamen are clearly visible, along with the white fuzzy filaments at the base of each petal.)
- Pick and open an elongated closed flower head and observe the seeds forming. (Dandelion buds which have not yet flowered are rounder.) The yellow petals will have wilted and the seeds are clearly visible at the base of the long white filaments. The seeds are green at first but then turn dark brown.

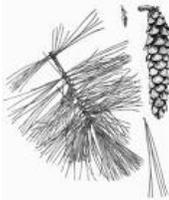


- Find and examine the fuzzy seed head children so love to blow. Find the seed at the base of each white filament. Each petal flower has become a seed. Let children scatter the seeds so new dandelions will grow.

#### 4. Investigate trees.

- Walk to at least 2 of the sites shown on the map and examine the trees for leaves, flowers, and seeds. Ask: *Have all the trees leafed out? Do some trees have baby leaves and some trees full size leaves? What do baby leaves look and feel like?* Look for tree flowers. All deciduous trees and shrubs have flowers. Many children don't realize that trees have flowers!

- **White Pines (site 1)**



- Look at the pine tree buds. In June, the white pines bloom. Conifers do not have flowers, but do have seeds hidden inside their cones. The buds do grow and produce pollen, and seed bearing cones are developed, but technically they do not have flowers.

- **Red Maple (site 1)**

- Red maples are one of the earliest trees to bloom. Delicate red blossoms appear in late March or early April and by late May these will have turned into seeds. *Does it have leaves? What are those funny looking things attached to the branches? Any guesses? (Seeds)*

- **Gray birch: (site 2)**

- The gray birch catkins develop into long drooping flowers in May. Seeds form toward fall. Sometimes birch seeds from last fall can be seen on a birch tree in early spring.



- **Mystery Tree (site 3)**

- Right at the corner of the path leading to the street is a decorative tree. It is a flowering ornamental in the **pear** family, but it may be fun to have children look at it as a mystery tree and make up their own name for it. Encourage children to observe this tree.
- *Has this tree flowered? Does it have leaves? Does it have any fruit or seeds? Do they have a good name for this tree?*

○ **Sugar maple: (site 4)**

- By mid-April sugar maples have flowers. The flowers drop to the ground and are followed by the seeds (often called maple keys). By May or June you will only see seeds.



○ **Pin oak: (site 5)**

- By mid May, the oaks are beginning to flower. The tiny, perfectly shaped oak leaves appear while the flowers are still on the tree.
  - Look for any acorns from last fall that may have begun to sprout. Ask: *Is this a seed? Will it grow? What will it grow into?*
- Compare trees with wildflowers. Ask: *Do trees and wildflowers have the same plant parts?* (Roots, stems, leaves, flowers, and seeds.)

**5. Wrap-up.**

- Walk back to the classroom. This is their last Nature Walk for this year. Encourage the children to continue learning about nature by exploring their yards at home. Remind them that they can return to the school grounds during the summer and look for changes. Exploring outdoors is a good way to learn and have fun at the same time!

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

1. Post Signs of Spring Worksheets and the lists groups made on their Big Backyard walk. Make a Class Chart of what children saw, heard, smelled, and felt in the schoolyard in late spring. Compare with Fall and Winter nature walks.
2. Read the predictions children made before going out. Ask: *What did you actually observe? Did you learn new things by wondering, predicting and then observing?* This is how scientists learn.
3. Either have each child draw a picture of the schoolyard in late spring or do a class mural depicting the schoolyard in late spring. Encourage use of Worksheets and other charts and lists to help children remember.
4. Have children mix up their seasonal drawings and share them with a friend. Can the friend put them in order, fall to winter to spring? How did they decide?
5. Have children list at least three things they like about each season. Chart the children's favorite seasons with a list of reasons.
6. Have each child draw a picture of a wildflower and then of a tree, showing and labeling *roots, stem, leaves, flower, and seed* on each drawing. Ask: *Do trees and wildflowers have the same plant parts?* Compare with the drawings they made in the fall.

**Walk Leaders - Signs of Spring Worksheet**  
**(Please give to teacher after walk.)**

Things the children **SAW**:

Things they **HEARD**:

Things they **FELT**:

Things they **SMELLED**:

Things that interested them and questions they asked:

**NATURE WALK EVALUATION**  
(Please leave in Big Backyard Room)

**Walk Leader:** \_\_\_\_\_

**Grade and Teacher:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Children in Group:** \_\_\_\_\_

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

Closing eyes	Dandelions	Plant parts
	Tree leaves	
Plants in the grass	Tree flowers	
Digging with trowel	Tree seeds	

Other: \_\_\_\_\_

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

Closing eyes	Dandelions	Plant parts
	Tree leaves	
Plants in the grass	Tree flowers	
Digging with trowel	Tree seeds	

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**

**Other comments or suggestions:**

**Grade and Teacher:** \_\_\_\_\_ **Date:** \_\_\_\_\_