

## GRADE THREE FALL NATURE WALK Native American Needs

### OBJECTIVES:

- Recognize that Native Americans living in this area long ago knew how to use materials from nature to meet all their needs.
- Understand that elders taught Native American children how to identify plants for food and other needs such as shelter, medicine, tools, and toys, which parts are used, and when the plant was harvested.\*
- Understand that some plants are poisonous and that children should not eat anything outside without an “elder” to confirm identification.
- Learn about the Native tradition of offering thanks when taking a plant for use.

\*Note: The teacher will inform you if any children in your group have tree nut allergies or unusual sensitivity to poison ivy and if any accommodations need to be made in this activity.

### PREPARATION:

- Schedule walk as early as possible, ideally BEFORE Columbus Day weekend. Plants are cold sensitive. The walk will last about 60 minutes.
- Fill out and give teachers upcoming walk announcement flyer (available on Harrington Big Backyard Website) and point to pre/post walk mini-activities from walk guide on website.
- Teachers will conduct pre-walk mini-activity ahead of time.

Before going out:

- **Mark 3 plants** near each plant station with surveyors tape. Write the letter of the station on the tape. ONE of the marked plants is the focus plant. The others nearby should be quite different. The students will use clues to determine which of the three the focus plant is. Tag a plant near, but not on Poison ivy.

Plant	Station	Plant	Station	Plant	Station
Sugar Maple	A	Red Oak	E	Staghorn Sumac	I
Hemlock	B	White Pine	F	Blackberries	J
Crab Apple	C	Poison Ivy	G	Goldenrod	K
Red Cedar	D	Cattails (Optional)	H	Wetu Building	L

- Obtain one 18” long dry stick per group for Wetu activity; Collect Norway Maple leaves to compare to Sugar Maple
- Obtain cattail for a station along walk route (Check with K-5 Coordinator to obtain)

### MATERIALS:

- Clipboard, pencil (supplied by teacher)
- Identification Sheet for Walk Leaders and Identification Sheet for Children.
- At-A-Glance Sheet for each walk leader
- Hand lenses.

### ACTIVITIES:

- Imagine Native American life in this area before the arrival of European settlers
- Identify useful and harmful native plants and identify their uses using observation.
- Find sticks that bend for making a wetu frame.
- Grass whistle activity.

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

[60 minutes]

### *Introduction to the walk*

#### **1. Imagining Native American times before the arrival of Europeans.**

As you walk toward your first station **ask**:

- *What does “Native American” mean? A Native American person is someone who is related to the people who lived here before the Europeans came. There are still Native Americans living in Massachusetts.*
- *What do you think your school’s Big Backyard looked like 500 years ago before people from Europe were here, and when only Native Americans were in Lexington? They would see woods, the stream, and maybe a small clearing for growing crops.*
- *What can you name that was NOT here 500 years ago? The school, houses, telephone poles, streets.*
- *Where did these Native Americans get the things they needed to survive: food, shelter, water? From nature! How did they know what to use? Let’s find out.*

#### **2. Learning with an elder: Identify wild plants that were useful to Native American people.**

**Say:**

- *Native people who lived near Lexington long ago did grow some crops like corn and squash, but they also gathered plants for food and medicine, and materials for building and crafts from the woods and fields. Children helped their family gather these supplies. How would children know which plants they could use for food and other needs? At that time, there were no school buildings or books. Older people called “elders” who knew how to recognize plants and their uses and would teach the children. They would share what they knew about which plants to use by taking children out into the woods and fields. They would also teach children which plants were harmful.*
- *Do you think some of the plants that Native Americans used in those days might still be growing here near the school? (Yes!) We will find and learn about some of these today!*

#### **3. Native Americans respect nature.**

**Say:**

- *Traditional Native people take no more than they need from nature out of respect. They know that they need to care for the natural world because that is where they got all they need in order to live—food, clothing, shelter, and medicine. We depend on nature for these things even today. Often Native people speak of the Earth as a mother that cares for them. For example, if they pick part of a living plant, they try to be sure that there are a number of other plants (at least 7) of the same type left to prevent overuse. Also, Native people often say “**thank you**” to the plant for its help in providing food, or medicine. **We all need to take care of nature.***

#### **4. POISON IVY:**

- **\*\*** The children will learn about many plants that Native Americans in the area used for food or medicine, but today it is a good idea to **NEVER eat a wild plant unless a knowledgeable adult has identified it and knows the area where it is found.** Many plants have look-a-likes. Even if you identify the plant correctly, you never know if some toxic chemical has been sprayed on it or if your neighborhood dog has wet on it. **(This usually stops any thought of eating!)** Many of these plants are no longer used as food or medicine.

## IDENTIFICATION SHEET FOR WALK LEADERS

### STATION A: Sugar Maple

**Clues:**

- Not a shrub or smaller plant; it is a Tree.
- Leaves have a distinct shape with veins spreading like fingers on a hand.
- Leaves are opposite each other on a twig.
- Compare leaves of Norway maple to sugar maple. Open leaf stem see if sap is the same for Norway (milky sap) and Sugar.



**Uses:**

- Native American children would collect the sap in birch bowls in late February. They would boil the water off by putting hot rocks into the bowls over and over again. This took a long time and it was a lot of work to get very little maple syrup.
- Wood used to carve bowls for eating
- Wood used to make bows and handles for spears and stone axes.

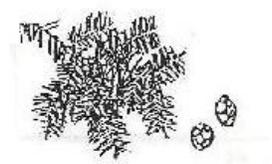
### STATION B: Hemlock

**Clues:**

- It is a tree with green needles and cones.
- The needles have white stripes.

**Uses:**

- Eastern hemlock contains tannins. Inner bark used to make red dyes.
- The bark has astringent activity (good for burns)
- The leaves have high amounts of Vitamin C (teas)



### STATION C: Crabapple

**Clues:**

- A deciduous tree with oval or round leaves with reddish fruit in the fall.
- When fruit is cut in half it contains a five pointed star with seeds not a single pit.

**Uses:**

- Native American children would harvest them and eat these apples as well as dry them for food for the winter. They could mush it and make fruit roll ups.



### STATION D: Red Cedar

**Clues:**

- An evergreen tree with green; leaves are soft and bumpy leaves, not flat.
- Bark has long strips
- Compare to a yew which has flat needles.

**Uses:**

- Made rope from bark and roots. (Used to tie sticks together)
- Bark was woven into mats (used on frame of Wetu)



**STATION H: Cattails—“Supermarket of the Marsh.” (optional – if sample exists)**

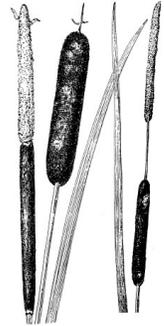
One cattail plant has been dug up and placed in a bucket so children can observe the leaves and size of the rootstock close up once it's been identified.

**Clues:**

- Wetland plant with tall narrow leaves.
- Seed head may look like a velvety brown hot dog or a fuzzy oval.
- Ripe seed heads have lots of white fluffy material attached to tiny seeds.
- Roots are thick.

**Uses:**

- **Leaves:** Sewn into mats to cover wigwams, cover sleeping platforms, to sit on dirt floors, and as baskets. (Break off a cattail leaf and peel back the outer covering. Inside the leaf are many tiny air pockets. The air spaces in the leaves helped them to act as insulators.)
- **Seed head:** The brown part could be dried, soaked in fat, and used as a torch. Women also pulled the brown seed head apart and used the fluff to line leather strips that were used as baby diapers.
- **Many parts used as food sources.**
  - In early spring the *new green shoots* of cattail plants were cooked and eaten as a welcome change from the dried and smoked foods of winter.
  - In early summer the *young yellow-green flower heads*, the top section of the stalk, were eaten raw as a salad or boiled; they tasted like young ears of corn on the cob.

**STATION I: Staghorn Sumac****Clues:**

- A shrub (small tree) with several leaflets on a stem.
- Leaflets have toothed-edge like a saw.
- Twigs are thick and have soft center that can be hollowed out.
- Red berries are found in cone shaped clumps.
- Has fuzz on twigs, leaves and seeds (like a stag's horns in spring).

**Uses:**

- Berries were used to make a cooling drink like lemonade.
- Hollow stems were used to make flutes and spiles (hollow tubes) to tap sugar maple trees.
- Rubbing the leaves on a cut was also helpful in stopping bleeding.

**STATION J: Blackberries****Clues:**

- A small bush whose stems have thorns.
- Underside of leaves is light green. (Raspberry leaves are whitish underneath).
- Dried berries may still be seen; berries ripen in late summer.

**Uses:**

- Collected for food, dried for winter use.
- Used as a medicine for stomach ache and tooth ache.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**PLANT IDENTIFICATION SHEET**



**Red Oak**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



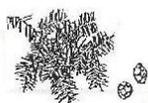
**Golden Rod**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



**Sugar Maple**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



**Hemlock**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



**Cedar**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



White Pine

**Pine**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



**Blackberry**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



**Staghorn Sumac**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts



**Crabapple**

- Food/Drink
- Clothing
- Building
- Medicine
- Crafts