



Summer in the Forest Lessons and Activities

In this Section	Grade Levels	Objectives
Summer Treasure Hunt, Page 19	PreK-5	Hunt for and identify plants, trees, animals, and insects in the Troy Community Forest and other areas of Troy Gardens.
Comparative Ecosystems Sensory Activity, Page 20	PreK-12	Using senses other than sight, discover the similarities and differences among three ecosystems: maple woodland, prairie, and garden.
Edible Plant Walk, Page 21	PreK-12	Identify and taste edible plants in the herb garden, edible forest, and maple woodland.
Obstacle Course, Page 22	PreK-5	Get to know Troy Gardens through interactive obstacle courses that will introduce you to new objects, places, and tasks.
Nature Writer's Mini-Workshop Activity, Page 23	3-12	Take time for individual reflection. Provide examples of nature writing and invite students to search for inspiration while outside. Write and share.
<i>Suggested Nature Games and Recipes:</i>		
Bat & Moth: See Appendix I, Page 31		
Avoid the Predator!: See Appendix I, Page 31		
Mulberry Mint Sun Tea: See Appendix II, Page 36		

Summer Treasure Hunt

The following activities require advance preparation. Teachers will need to create hunts, checklists, and other appropriate materials.

This activity can be developed for small and large groups. It may be planned in specific areas (e.g. Kids' garden, maple woodland, prairie) or in all areas of Troy Gardens. Using prepared photo cards and a checklist, invite groups of students with accompanying adults to search for the objects on their provided cards. Where did each group find the objects? *Objects* may include plants, trees, animals, and insects. When students find an object they have searched for, ask them to brainstorm and name that plant or animal based on its characteristics.. Encourage creative names like "Shady Green" (Sugar Maple). Students should write the name they create on the back of the laminated photo card with an overhead marker. After marking all of the objects on the checklist (or as many as time allows) meet at the gathering space to share findings and names with other groups. Provide students with the common names of the plants and animals. How did students' descriptive names compare?

Variation:

This activity can be designed for all areas of Troy Gardens, including the Kids' Garden, maple woodland, herb garden, and prairie. Set up the treasure hunt with color-coded areas to encourage investigation throughout the areas and offer direction to where specific plants and animals may be found. Indicate the color code on the checklist, and use bandanas to identify the different areas kids will be hunting.

Variation:

Mark objects to be hunted with bandanas. Invite students to search for plants, trees, animals, and insects included on the checklist. When students find an object, a labeled note card will be provided at the site including the name of the object as well as interesting facts hunters can use to learn more about the object. After students have completed their checklists and made observations, meet at the gathering space to share.

Variation:

Adapt this treasure hunt activity for other seasons.

Grade level: Pre K-5

Wisconsin Model Academic Standards Addressed:

Agricultural Education: E.4.1;
Environmental Education:
A.4.1, A.4.2, A.4.3, A.4.4,
A.8.4, A.8.5, B.4.6, B.8.3,
B.8.8; Science: C.4.1, C.4.2,
C.4.6, F.4.4, F.8.2, F.8.7

Activity Time: 20-30 minutes

Supplies:

- Checklists
- Vis-à-vis* Overhead Markers
- Photo Identification Cards

Variation 1:

- Checklists
- Colored Bandanas

Variation 2:

- Checklists
- Colored Bandanas
- Fact Cards

Vocabulary:

- 1. Insect:** Small, invertebrate animal with a segmented body.
- 2. Mammal:** Warm-blooded vertebrates; have hair and feed young milk produced in mammary glands.
- 3. Reptile:** Cold-blooded vertebrates including, alligators, crocodiles, snakes, turtles, and lizards. These animals have hard scales or plates, claws, and lay tough eggs.
- 4. Amphibian:** Cold-blooded vertebrate including, toads, frogs, and salamanders. These animals lay soft eggs in water, and their young begin life breathing underwater. As adults they have soft skin, and must live near water.

Comparative Ecosystems Sensory Activity

Grade level: PreK-12

Wisconsin Model Academic Standards Addressed:

Environmental Education:
A.4.1, A.4.2, A.4.3, A.4.4,
A.8.4, A.8.5, B.4.4, B.8.1,
B.8.6, B.12.2; Science: C.4.1,
C.4.2, C.4.6, E.12.1, F.4.4

Activity Time:

Supplies:

Sound Map:

- Blank Note Cards, Paper
- Pencils

Vocabulary:

1. Ecosystem: The encompassing environment, plants, and animals that live and grow together.

To explore the similarities and differences among three of Troy Gardens' ecosystems, invite students to participate in the following activities in the Kids' Garden, prairie, and forest.

Sensing Temperature:

In each of the three ecosystems ask students to lie on the ground with eyes closed. What are students feeling? Is the ground warm or cool? Is there shade from the sun or is the sun hot?

Sound Map:

This activity is adapted from Joseph Cornell, Sharing Nature with Children, (Nevada City: DAWN Publications), 1998.

In each of the three ecosystems ask students to find their own space to quietly listen to the sounds around them. On a 4X6 note card, invite students to create a map of the sounds they are hearing.

Step 1: Place an X in the center of the card to represent yourself/student.

Step 2: Sketch the sources of the sounds you are hearing around the X. Be sure to sketch the sounds in relation to the X, or your location.



Edible Plant Walk



Prepare for your walk with prior knowledge, research, and field guides. Make sure you have correctly identified each plant or fruit before eating! Plants in the herb garden are labeled.



Visit the **herb garden**. Plants you will find there to smell and taste are: mint (3 kinds), lemon balm, sage and lavender. If you wish, have students make tea bags to take home, adding mint leaves and/or lemon balm leaves to tea bag filters. Please refer to Appendix II, page 34, for a refreshing Mulberry Mint Sun Tea recipe!



Visit the **edible forest**. Snack on mulberries, raspberries, blackberries, and maybe even peaches!



Visit the **maple woodland**. Snack on garlic mustard, wild grapes, and dandelion leaves.



Grade level: PreK-12

Wisconsin Model Academic Standards Addressed:

Agricultural Education: E.4.1;
Environmental Education:
A.4.1, A.4.2, A.4.3, A.4.4,
A.8.5, B.8.3, B.12.2, B.12.7;
Science: C.4.1, C.4.2, C.4.6,
F.12.9

Activity Time: 15-20 minutes

Supplies:

- Field Guides
- Tea Bag Filters

Mulberry Mint Sun Tea:

*Please refer to recipe.

- Sun Tea Jar, or Clear Glass Jar
- Mortar and Pestle
- Water
- Mint Leaves
- Mulberries
- Raspberry Juice Concentrate
- Ice

Vocabulary:

1. Herb: A fragrant or flavorful plant used in perfumes, teas, cooking, or baking, for example.

Helpful & Inspiring

Resources:

1. *Edible Wild Plants: Eastern/Central North America* by Lee Allen Peterson
2. *Tom Brown's Field Guide – Wild Edible and Medicinal Plants* by Tom Brown, Jr.

Grade level: Pre-K-5

Wisconsin Model Academic Standards Addressed:

Agricultural Education: E.4.1;
Environmental Education:
A.4.1, A.4.2, A.4.3, A.4.4,
A.8.4, A.8.5; Science: C.4.1,
C.4.2, C.4.6, F.4.4

Activity Time: 15-30 minutes

Supplies:

- Watering Can
- Ladder
- Baskets or Bags for collecting
- Blindfolds
- Hose
- Hula-Hoops
- Apples
- Jump Ropes
- Bandanas
- Written Clues

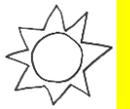
Obstacle Course

Plan an obstacle course(s) throughout Troy Gardens using the following suggestions.

- *Jump over a watering can.
- *Zigzag through scrubby areas.
- *Walk along a ladder on the ground.
- *Walk across a fallen log.
- *Collect certain items along the way (e.g., specific leaves, nuts, twigs, grasses, herbs).
- *Crawl or walk through a pile of leaves.
- *Perform a blindfolded task with the help of a partner.
- *Jump back and forth between a wavy hose on ground.
- *Hula hoop.
- *Bob for apples.
- *Rub lavender, lemon balm, rosemary etc. on wrists (upon return from course, identify smell).
- *Jump rope.
- *Hop about.
- *Perform a garden task: water a plant, pull a weed, and shovel compost.
- *Find and enjoy a snack: fennel, chives, mulberry, and raspberry.
- *Identify plants and animals.
- *Find an object or clue that leads to the next obstacle.
- Color-code each course: each group searches to complete obstacles labeled by bandanas of one color.
- Place clues to next obstacle under or near bandanas.
- Allow clues to be natural objects with attached riddles, poems, or rhymes.

Recommendations:

- >Use the above suggestions to create lists of different course combinations. Begin each individual, pair, or group with a different list, and then trade lists after the first round!
- >Adapt course activities for other seasons throughout the year.



Nature Writer's Mini-Workshop Activity

Provide students with examples of nature poems and passages. Read poems and writings aloud or hand out the examples and have students read silently to themselves.

Supply students with paper or journal and pen/pencil, and give them a period of time to walk alone and find something that inspires them on the land. Depending on the age of the students, invite them to spend more or less time alone on the land (e.g., 10 minutes for 3rd graders and 45 minutes for 12th graders). Encourage them to take written or mental notes as they wander or sit alone observing the natural world around them.

Meet back at the picnic tables or in the prairie grotto and provide students with a limited period of time to write a poem or short story about their experiences.

Share poems and stories.

Note: Provide more or less scaffolding for the group depending on age, grade, and level of writing experience. For example, younger students could be given a poem template to take into the field. Most of all, encourage students to have fun and be creative.

Recommendations:

->Write a haiku. A haiku is a three-lined poem; the first line is five syllables, second is seven syllables, and third is five syllables.

->Create a name poem. Invite each student to write his or her name vertically along the edge of a piece of paper. Each letter will become the first letter of a new word. New words may describe students' feelings while in nature or things they are seeing or hearing. You may also invite them to use the name of an animal or plant as the vertical word from which to start their poem.

->Include drawings.

Grade level: 3-12

Wisconsin Model Academic Standards Addressed:

English Language Arts: A.4.1, A.4.3, A.8.1, A.8.3, A.12.3, B.4.1, B.8.1, B.12.1, C.8.1, C.8.2, C.12.2

Activity Time: 10-45 minutes

Supplies:

- Paper
- Pencils
- Clipboards
- Examples of nature writing
- Poem templates

Helpful & Inspiring

Resources:

1. *The Earth Speaks* by Steve Van Matre
2. "Who I Am" by Felice Holman, See Appendix VI, page 40

May also wish to research the following nature writers' works:

3. Edward Abbey
4. Henry David Thoreau
5. Rachel Carson
6. Mary Oliver
7. August Derleth
8. Aldo Leopold
9. Walt Whitman
10. John Muir
11. Robert Frost
12. Gary Snyder
13. John Moffit
14. Wendell Berry