



Indiana Native
Plant Society

Bringing Youth to Nature



INDIANA NATIVE PLANT WIZARD WORKBOOK

April 2019

The native plants of Indiana want you to become an INDIANA NATIVE PLANT WIZARD and share what you learn, while earning this patch, with friends and adults you know. For more background on the 20 activities in this workbook, refer to the Indiana Native Plant Wizard Leader Manual.

Welcome, Wizard In Training! Please complete the following chart:

Wizard in Training (WIT) name	
WIT age	
Group/Location, if applicable	
Group Leader, if applicable	
Other group adults, if any	

Activity 1. Take a walk and find poison ivy. Learn to identify it. In the winter see if you can find birds eating poison ivy berries)

a. Draw a picture of poison ivy. Include leaves and stem.

b. Write why you should avoid touching poison ivy.

c. Write what you should do if you touch poison ivy.

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 2. Take a walk and look for the tulip tree, the Indiana state tree. Learn to identify it and learn what insects depend upon the tree.

a. Draw a picture of the Indiana state tree (be sure to include leaves and a flower if the flower is present). And/or your leader may ask you to do a bark rubbing with crayons.

b. b. Look for insects buzzing around the tulip tree flowers, if you can see them from the ground. If the branches are too high, look on the ground for fallen twigs and blossoms. If possible, look for caterpillars eating the leaves or stems of leaves and draw a picture of the insects or caterpillars on the parts of the tree. This tree is also called a yellow poplar.

c. Write about why you think insects and caterpillars are attracted to tulip trees

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WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 3. Visit a butterfly garden. Learn to identify native plants that attract butterflies.

a. Learn the names of three plants that attract butterflies. Draw a picture of a butterfly on one of the plants you learned. Or use stickers to create a picture.

b. What attracts butterflies to native plants? Label these plant parts on your flower above.

c. Write the name of the food or energy source the butterflies get from the native plant flower.

d. Cover your eyes, be very quiet, and listen to the sounds in the butterfly garden for about 5 minutes. Write what sounds you hear.

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 4. Take a walk in the woods. Look for caterpillars eating stems or leaves of native plants.

a. Draw a picture of a caterpillar on a plant. Or use stickers to create the picture.

b. Label the plant part being eaten by the caterpillar in the picture above.

c. (Optional) Listen to your leader read the story, “The Very Hungry Caterpillar”.

(Ages 11 and above)

d. Write why caterpillars are so important to a healthy ecosystem.

e. List at least three different types of wildlife that eat caterpillars.

f. Write how many caterpillars it takes to feed a baby chickadee each day.

WIT initials _____



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Activity 5. Take a walk in a wooded area. Learn to identify deciduous and evergreen trees. Observe the food, shelter and nesting sites that wildlife (insects, birds and mammals) use in the trees.

a. What is the difference between deciduous trees and evergreen trees?

b. Ages 5 to 10, draw a picture of a deciduous tree leaf and the fruit of a deciduous tree OR

draw a picture of an evergreen tree leaf and the fruit of an evergreen tree.

Ages 11 and above, do both of the drawings in b.

(Ages 11 and above)

c. Shagbark hickory is a native deciduous tree with shaggy bark. Write the name of a federally endangered species that uses this tree (hint: it is a flying mammal).

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 6. Take a walk in a forest or woodland. Learn to identify the four layers that make up the forest/woodland community.

a. Draw a forest/woodland community and label the four layers.

(Ages 11 and above)

b. Add appropriate wildlife to your drawing at each layer and label the wildlife.

WIT initials _____



Activity 7. Take a walk in a prairie. Learn why wildflowers and grasses are good for insects, birds and other wildlife.

- a. Look for nests and wildlife among the prairie plants.
- b. Listen to the sounds in the prairie.
- c. Write three reasons why prairies are good.

d. Write two management methods that are used to maintain prairies.

(Ages 11 and above)

e. Write at least one difference between a shortgrass prairie and a tallgrass prairie.

Name a state where you would find a shortgrass prairie.

Name a state where you would find a tallgrass prairie.

WIT initials _____



Activity 8. Learn why native plants are important to all of us.

a. What is a native plant?

b. Write the names of three native plants found in Indiana.

c. Write as many reasons as you can think of that native plants are important.

(Ages 11 and above)

d. For at least one of the three native plants listed in (b), write three wildlife species that use that plant.

e. Select one of the wildlife species you wrote in (d) above and list another wildlife species that depends upon the selected one. (Example: caterpillars eat tulip tree leaves and then chickadees eat caterpillars.)

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 9. Learn about invasive plants and why it is important to understand the damage they cause to ecosystems.

a. Write two ways invasive plants hurt our native ecosystems.

b. Are all invasive plants “exotic”?

c. Write why weeds are not the same as invasive plants.

d. Write the names of three invasive plants found in Indiana.

(Ages 11 and above)

d. Write three invasive plants that are illegal to plant in Indiana.

e. Show your parent or an adult friend an invasive plant growing in your neighborhood. Tell them why invasive plants hurt the ecosystem.

Signature of adult whom you taught about invasive plants:

(Adult signature)

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 10. Take a walk in a woodland or forest and look for ferns. Try to find two different species. Learn to identify the parts of ferns.

a. Draw a picture of one fern that you find. Label the frond and spores.

b. Write the names of two native ferns found in Indiana.

(Ages 11 and above)

c. Write the names of six native ferns found in Indiana.

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Native Plant Wizard Workbook April 2019

Activity 11. Take a walk in a neighborhood or park and learn to identify native bushes/shrubs. Observe wildlife using shrubs for food, shelter and nesting places.

a. Describe a shrub (also called a bush) and write how it is different from a tree.

b. Draw a shrub with one wildlife species that eats food from that shrub.

c. Write the names of three native shrubs found in Indiana.

(Ages 11 and above)

d. Expand on (c): Write the names of two more native shrubs for a total of five shrubs found in Indiana. Include and indicate the following: one shrub that produces berries, one that produces nuts, one that produces seeds, and one that produces catkins (slim, finger-like, drooping clusters of tiny flowers).

WIT initials _____



Activity 12. Take a walk in a neighborhood or park and learn to identify vines.

a. Write a description of a vine and how it grows

b. Draw a picture of the leaves of a native vine that grows in Indiana.

c. Write the names of three vines you found on your walk. Indicate if the vine is native or non-native to Indiana.

(Ages 11 and above)

d. Write the names of three invasive vine species that are eliminating native habitats in Indiana.

WIT initials _____



Activity 13. Take a walk in the woods, a neighborhood or a park in the fall. Collect three differently colored leaves from the ground, one each from a different tree. (Do not collect leaves in a nature preserve.)

a. Attach the leaves to this page and write the name of the tree next to each leaf.

b. Next to each leaf, indicate if the tree is native or non-native to Indiana.

c. Listen to the sounds of nature on the walk. Smell the air.

d. Write what you hear and what you smell on your walk.

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 14. Visit a pond or other wetland. Learn to identify wildlife in the water and around the pond / wetland.

- a. Listen for wildlife at the pond / wetland.
- b. Smell the air around the pond / wetland.
- c. Look for birds and wildlife around the pond / wetland.
- d. Look at the plants around the pond or growing in the wetland.
- e. Collect some water in a white, flat-bottomed container and use a magnifying glass to look for life (invertebrates and other aquatic life) in the water.
- f. Draw the pond or wetland. Include at least two plants, two birds and four other species of wildlife that you saw or heard. If you saw any fish, include those in your drawing too. Also include what you saw in the water that you looked at through the magnifying glass.

Activity 15. Take a walk along a stream or river. Learn to identify plants and wildlife that live there.

- a. Listen for birds and other wildlife at the stream / river.
 - b. Smell the air around the stream / river.
 - c. Look for birds and wildlife, including their homes, around the stream / river.
 - d. Look at the plants growing by the stream / river.
 - e. List any wildlife homes you found along the stream / river.
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- f. Write about the difference between a pond / wetland and a stream / river.

(Ages 11 and above)

- g. Write a comparison of a lentic system to a lotic system. Which system do you find in a pond / wetland? Which system do you find in a stream / river? If you were a plant, would you rather be in a lentic or lotic system?

Activity 16. Learn about leaves.

a. Close your eyes and hold out your hand so that your leader can place a mystery tree leaf in your hand for you to investigate without looking.

1. Feel the upper and lower sides.
2. Feel the edges of the leaf.
3. Smell the leaf.
4. (Optional) Take a very small bite and taste the leaf

b. Open your eyes and write about the tree leaf.

1. How did it feel?
2. How did it smell?
3. (Optional) How did it taste?
4. Who might eat the tree leaf that you investigated with your senses?

(Ages 11 and above)

d. Write at least five wildlife species that use this tree species for food, nesting, shelter, or something else.

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 17. Take a planned Nature Scavenger Hunt with a naturalist, botanist, biologist or an adult who knows about nature.

Write a description of the wildlife, plants, birds and other items you discovered with your eyes, ears, nose and fingers on the scavenger hunt. At each station or point on the hunt, write or draw on this page.

WIT initials _____



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Activity 18. Visit a prairie or rain garden in the fall with a naturalist, botanist, biologist or an adult who knows about nature and collect (harvest) native plant seeds.

- a. Harvest seeds in the proper way from at least 3 native plants.
- b. Keep the seeds from each plant separate from seeds of the other plants.
- c. Working with the adult, divide the seeds from each plant into small piles and place in paper or manila envelopes. If you're using small plastic bags, make sure the seeds are dried out; otherwise they tend to mold.
- d. Label each packet with the following information:
 1. Grows in SUN or SHADE or PART SUN
 2. Grows in WET or DRY soil
 3. How tall the plant grows (height).
 4. How wide the plant grows (width).
 5. Months that the plant flowers.
 6. Color of the flowers
- e. Share your seed packets and knowledge with others.
- f. Attach the label from one of your seed packets below.

WIT initials _____



Activity 19. Listen to a naturalist, botanist, biologist or an adult who knows about nature explain why native plants are important to the life cycle of insects, birds and the health of planet Earth where we all live.

Draw or write what you learned from the talk.

WIT initials _____



Native Plant Wizard Workbook April 2019

Activity 20. Share your native plant knowledge (wizardry) by taking an adult on a “show and tell” walk in a garden, park or natural area where you know the plants.

- a. Point out and name 5 (**10 for ages 11 and above**) native plants (trees, shrubs, ferns, vines and/or wildflowers) and tell how native plants support wildlife.
- b. Point out and name 2 (**4 for ages 11 and above**) invasive plants and tell why these plants are bad for the ecosystem.
- c. After the walk, have the adult write what they learned from you about the importance of native plants, and sign this page.

Adult, please write what you learned about plants:

Adult signature: _____

WIT initials _____



Congratulations!

You have earned the Indiana Native Plant Wizard patch.



Central Indiana Girl Scouts may purchase official patches with the Girl Scout logo at the Girl Scout store.

Others may follow the instructions in the Indiana Native Plant Wizard Leader Manual to receive a patch.