

FORESTRY

PROJECT SUPERINTENDENT:	Holly Faust, 317-776-8412, holly.faust@hamiltoncounty.in.gov
EXHIBIT CHECK-IN:	Sunday, July 11, 4-6 PM
JUDGING:	Monday, July 12, 8:30 AM, Closed Judging
RELEASE:	Tuesday, July 20, 9-11 AM, and 5-7 PM
STATE FAIR ENTRIES:	Three (3) Posters and one (1) Independent Study entry

Project Description:

Nature is all around us. The Forestry project teaches members all about trees and how we use them in our life.

Levels:

<u>Forestry 1</u>	Grades 3-5
<u>Forestry 2</u>	Grades 6-8
<u>Forestry 3</u>	Grades 9-12
<u>Independent Study</u>	Grades 9 & Up

Project Guidelines: Complete three (3) activities in the project manual

Create an exhibit that shows the public what you learned in the forestry project this year. Exhibits must be displayed horizontally, sized 22" x 28", mounted on a firm backing (foam-core board or other), and covered in clear plastic or other transparent material. Be sure to include a label with your name, grade, and county. See poster rules, Page 30, #15. Choose one (1) of the topics listed below, appropriate for your grade in school, and use that topic for your exhibit title. If you are exhibiting leaves, they should be free of any damage and **if you choose to write their scientific names, they must be in either italics or underscored**. (Note: Scientific names are required for herbariums.) The Genus (first name) must have the first letter capitalized. The species (second name) has no capitalization. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to original author.

Forestry 1 Grades 3-5 Follow the Path

Display a poster based on one (1) of the following activities:

Leafing Out- comparisons (pp 6 & 7), Collect, dry, and mount six (6) different species of leaves showing leaf differences: one (1) leaf with opposite arrangement and one (1) with an alternate arrangement, two (2) leaves with different leaf margins, a compound leaf, and simple leaf. Use the 50 Trees of Indiana book (4-H 15-80 or CD-FNR-3) as a reference and identify the leaves and group them under the titles of "arrangement," "leaf margins," and "compound or simple." Draw (or copy the picture) and label the parts of a leaf using the diagram from the manual (Level 1). Title your poster: Leafing Out - Leaf Differences

Leafing Out- collection (pp 6 & 7), Identify and exhibit leaves from ten (10) different trees that are listed in 50 Trees of Indiana book (4-H 15-80 or CD-FNR-3). List at least two (2) unique characteristics of each tree. Title your poster: Leafing Out - Collection

Hold on Tight (pp 10 & 11), Dig up a small plant root system and display along with a drawing of the root system with the anchor, lateral, and feeder roots identified and the "Parts of a Tree" diagram (4-H 641B).

Down in the Dirt (pp 20 & 21), Collect roots from three (3) different habitats: woods, near a creek, and in a pasture or prairie. (Note: do not use the habitats listed in your manual.) Display the roots along with the completed root test chart (copy or recreate) showing the color, size, and shape information. Include any unique features you noted.

My Couch is a Tree? (pp 30 & 31), Use pictures (draw, cut from magazines, print, or take photographs) to show ten (10) things in and around your home that are made from wood.

Fun in the Forest (pp 32 & 33), Visit a state park or forest; take your 50 Trees of Indiana book (4-H 15-80 or CD-FNR-3), diagram the trails you hiked, and list the types of trees you saw. Photographs of you hiking and some of the trees you saw will help tell your story.



Forestry 2 Grades 6-8 Reach for the Canopy

Display a poster based on one (1) of the following activities:

The Leaf Machine (pp 8 & 9), Copy, draw, or find a picture of a cross-section of a leaf. Label the seven (7) parts. Give the chemical reaction for photosynthesis, defining the chemicals: CO₂, H₂O, O₂, and C₆H₁₂O₆. Be sure to balance your equation! There should be the same number of Carbon, Oxygen, and Hydrogen molecules on each side of the equal sign. You may need to ask an older (high school) 4-H member or science teacher for help. Draw the tree canopy, trunk, and roots (or use the tree diagram, 4-H 641B) and identify the crown, trunk (with the parts; heartwood, sapwood, cambium, and bark listed), feeder roots, and anchor roots.

My State's Forests (pp 14 & 15), Use a map, draw, or find a picture of Indiana on the Internet (e.g., www.in.gov/ingisi/). Show where your home, your school, and your fairgrounds are located. Choose one (1) of the following options to complete your poster.

- Show where Indiana's state forests are located. List a few facts about each. Visit a state forest and have someone take your picture by the sign, if possible.
- Show where some state parks and state forests are located (pp 5-15). List some facts about each one. Visit a state park or forest and have someone take your picture by the sign, if possible.

Someone Call a (Tree) Doctor and Stop Bugging Me (pp 22-25), Collect ten (10) samples of tree leaves, twigs, stems, or roots damaged by insects or disease and the fruiting body or disease that caused the damage. List information about the insect or disease and the species of tree that was affected.

Fire in the Forest (pp 26 & 27), Explain the Fire Triangle and describe what happened during and after a famous forest fire. Drawings or pictures will help tell the tale.

Growing Every Day (pp 30 & 31), Complete the table for five (5) large trees that you can find and measure in your county. Research to find out how to make and use a Tree Measuring Stick (FNR-4) and use that to calculate the volume of each tree. Explain why you think your results varied with the two (2) methods of determining tree volume (the one in your 4-H manual or using a tree measuring stick).

Tree Planting- Plant one to three (1-3) shade trees. Include information about the tree (or trees) you planted, why you chose the species you did, what are the benefits of this tree, and how tall this tree (or trees) will be when mature. Explain why you chose the planting site that you did, where you found your planting information, what steps you followed, the hole size, care of your tree (watering and weed control), and any other information you can give. Include a picture of your tree (photo or drawing). Reference: FNR-FAQ-18-W.

Forestry 3 Grades 9-12 Explore the Deep Woods

Display a poster based on one (1) of the following activities:

A World of Forests (pp 16 & 17), indicate the three (3) major forest biomes on a copy, drawing, or picture of the world. Complete the table given in the activity.

City Trees (pp 20 & 21), complete the questions about Tree City (page 20). Show (draw or use pictures) some trees that are often used in city plantings and explain the benefits of these trees.

Trim the Trees (pp 26 & 27), explain the five (5) different kinds of tree pruning for urban trees. List some do's and don'ts of proper pruning.

My Boss is a Tree (pp 34 & 35), list five (5) jobs that require a knowledge of trees and forestry. Explain the training and education that is needed and what types of things you might be doing if you had this job.

Tree Planting- Present a tree planting plan for at least 100 trees. Include the type of trees you planted, pictures, cost, method of planting, weeding, pruning your trees, and any additional information. Your exhibit must have a title, labels, backing, and plastic covering as required in the manual. Reference: FNR-FAQ-18-W.

Herbarium Collection- Trees

Collect twenty five (25) terminal twigs and at least two (2) leaves, if space allows (only one (1) compound leaf is required), from native forest trees. Mount the specimens on 11½" x 16½" paper. One (1) leaf on the twig must be mounted to show the back side of the leaf. Label each sheet with the following: common name, scientific name, where collected, county where collected, date collected, name of collector, and specimen number. **Cover each specimen.** There are no specific references given for these exhibits. Youth are encouraged to use Extension publications, the Internet, books, and forest specialists to develop these items.

Note: Your herbarium collection must be accessible to the judges. Do not cover it under the plastic that covers your poster. You may want to attach a folder or other holder over your poster to hold the mounted, covered specimens.

Herbarium Collection- Shrubs

Collect twenty five (25) terminal twigs, with leaves attached, from native shrubs. Mount the specimens on 11½" x 16½" paper. One (1) leaf on the twig must be mounted to show the back side of the leaf. Label each sheet with the following: common name, scientific name, where collected, county where collected, date collected, name of collector, and specimen number. **Cover each specimen.** There are no specific references given for these exhibits. Youth are encouraged to use Extension publications, the Internet, books, and forest specialists to develop these items.

Note: Your herbarium collection must be accessible to the judges. Do not cover it under the plastic that covers your poster. You may want to attach a folder or other holder over your poster to hold the mounted, covered specimens.

Independent Study Grades 9-12

Advanced topic- Learn all you can about and Indiana or Eastern Deciduous forestry topic of your choice and present it on a poster. Include a short, manuscript, pictures, graphs, and list the works cited to describe what you did and what you learned. Title your poster, "Advanced Forestry Independent Study."

Mentoring- Exhibit a poster that shows how you mentored a younger 4-H member. Include your planning, the time you spent, the challenges and advantages of mentoring, and how the experience might be useful in your life. Photographs and other documentation are encouraged. Title your poster: "Forestry - Mentor."

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