# **FORESTRY**

**Cass County** 

Mini 4-H



Draft Developed by:

Purdue University Cooperative Extension Service Area 7 4-H Youth Development Educators from Blackford, Delaware, Fayette, Franklin, Henry, Jay, Madison, Randolph, Rush, Union, & Wayne counties



## Mini 4-H Parent's Page



Welcome to the Mini 4-H Program! Mini 4-H is designed for youth to explore a variety of project areas.

Your child received this project manual when enrolling in Mini 4-H. This manual will provide fun, age-appropriate learning activities throughout their year(s) in Mini 4-H and their interest in this project.

As a Mini 4-H parent, your job will be to guide and encourage your child through the activity. It is highly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. The 4-H motto is "learn by doing" and is the best educational tool that we can provide for youth.

Additionally, the Mini 4-H program is set up to allow your child to exhibit a project at the 4-H Fair. This project is based upon information within this manual.

The 4-H Fair is an exciting time for 4-H members and families. It is a time that allows community youth to showcase their talents, interests, and enthusiasm for learning.

Mini 4-H is fun! Your child will certainly enjoy it. You can have fun too, by guiding and helping as your child participates in the program. Encourage and praise your child as he/she has fun learning and sharing with you.

If you have any questions regarding Mini 4-H or other 4-H programs, please contact your local Extension Office.



## Mini 4-Her's Page



Welcome to Mini 4-H! You are now a member of the 4-H family. You are a special person.

Mini 4-Hers have lots of fun! There are lots of activities for you to explore. You can try new things. You can share it with your friends and family.

Mom, Dad, or another adult can help you with your project. Bring your project to the 4-H Fair and lots of people will be able to see what you have done. You also get a ribbon made just for Mini 4-Hers.

### Things to Know About 4-H

The 4-H Symbol: A four-leaf clover with an "H" in

each leaf.

The 4-H Colors: Green and white

<u>The 4-H Motto:</u> To make the best, better.

The 4-H Pledge: I pledge my HEAD to clearer thinking,

my HEART to greater loyalty, my HANDS to larger service, and

my HEALTH to better living, for my club,

my community, my country, and my world.





### Exhibit Tips



- 1. Choose 1 of the 8 activities to exhibit. Next year choose a different exhibit.
- 2. Poster suggestions:
  - a. Poster board should be displayed horizontally.
  - b. Title should be at the top of the poster.
  - c. Exhibit 5-7 items on the poster.
  - d. Be completely COVERED BY A CLEAR PLASTIC material, not plastic wrap. Poster sleeves are available in the Extension Office.
  - e. Leave a 5"x 6" space in the lower right-hand corner for the exhibit card the Purdue Extension staff will provide at Fair check-in.
- 3. In some of the activities, there is a choice of exhibits.

  Choose one of the choices both exhibits are not required.
- 4. Books may be made with white paper for the activities and colored paper for the cover and back, and stapled. There should be 5-7 pages in the book.
- 5. If forestry will be taken again next year, leaves may be collected this fall for exhibit next year.
- 6. You are to complete the Mini 4-H Forestry Record Sheet (included at end of this manual) to turn in when you take your exhibit to the fair.
- 7. You are encouraged to enter your exhibit at the Cass County 4-H Fair on Saturday prior to the start of the fair. You should enter your exhibit between the hours of 7:30 9a.m. Be sure to bring your Mini 4-H Forestry Record Sheet.

Sample poster

Title

Fair
Entry
Exhibit
Label



## What is Forestry?



Do you like to take a walk in the park or sit under a tree in the summer? Do you like a real Christmas tree instead of an artificial one? Have you seen animals or birds that make their homes in trees? Can you find things made of wood around your home? If you can answer "yes" to any of these questions, Mini 4-H Forestry is for you! Forestry is the study of trees. Tree leaves come in many sizes and shapes. Many trees have colorful leaves. Trees are cut down in forests and are made into wood. Trees help us in many ways. The forestry project will help you learn many things about trees.



## Parts of a Tree



The main parts of a tree are the leaves and branches, the trunk, and the roots. The sun shines on the leaves, which helps make food for the tree. The leaves provide shade. The leaves are attached to the branches. Birds build nests in the branches. We get such things as lumber and paper products from the trunk. The roots feed the tree



and keep the wind from blowing it

Can you match each part of the tree to where it is located on the picture? Draw a line from the part to where it

Roots

Branches

Trunk

Leaves

## Activity 1 — Draw a Tree

### Materials you might need:

Pencil, paper, crayons or markers

On a piece of paper, draw and color a tree. Make sure you draw all the parts of the tree. You may want to include birds or animals in the picture. Try to label the parts of the tree if you know them.



### Knock on Wood



There are many things we use every day that are made from wood. Our homes, furniture, pencils, and even the paper in this manual are made of wood. Look around your home and neighborhood. Can you list 4 things made of wood?

L.	2.	•
_		
3.	4	•

## Activity 2 — Uses of Wood

### Materials you might need:

pencil paper magazine scissors

14" x 22" poster board glue, camera — optional

Make a poster with pictures cut from a magazine or pictures taken with a camera of items that are made of wood. A title of your poster could be "Uses of Wood." • Use 5 to 7 pictures on your poster.







### Home Sweet Home



Many small animals make their homes in branches of trees or live in a hole in the trunk of a tree. Have you seen a nest or a hole in the tree? Take a walk in a park, woods, neighborhood, or schoolyard and look for animals that use trees for their home. Can you look for a bird nest or a hole where a squirrel, raccoon, or hive of bees might live?



### Activity 3 — Animal Homes

### Materials you might need:

pencil
crayon
scissors

14" x 22" poster board

paper magazine glue camera —



Make a poster with pictures cut from a magazine or pictures taken with a camera of animals that make their homes in trees. A title for your poster could be "Animals That Live in Trees."

Use 5 to 7 picture on your poster.

-OR-

Draw and color a picture of an animal and its home in a tree such as a bird in a nest in a tree, or a squirrel or raccoon in a hole in a tree.



What do you call a piece of wood with nothing to do?

Bored. (Board)



## Shapes of Leaves



Tree leaves have many shapes. Some leaves may look like a fan while others may look like a star, the palm of your hand, or a needle. Walk in a park, woods, neighborhood, or yard and collect leaves that have different shapes.

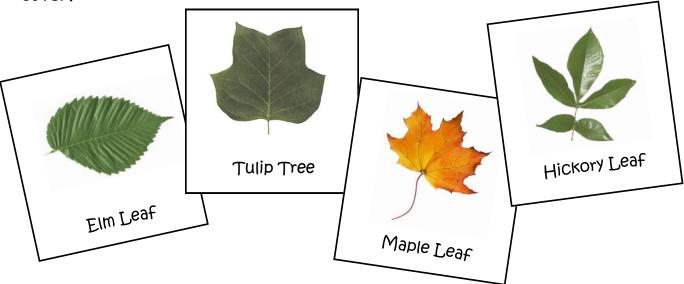
### Activity 4 — Shapes of Leaves

### Materials you might need:

pencil container for leaves

paper glue or tape

Paste or tape 5 to 7 leaves on a piece of paper,  $8-1/2" \times 11"$  (one leaf per page). Use notebook paper or plain white paper. Label the leaf if you know the name of the tree it came from. Use a piece of colored construction paper for the front and back covers and staple together. You now have a "Leaf Book." Put a title and your name on the front cover.





## Types of Trees



There are many types of trees. There are trees that grow very tall and have lots of branches to provide shade. We get apples, pears, and other fruit from fruit trees. Walnuts, pecans, and other nuts are produced on many kinds of nut trees. Some trees are even used as holiday decorations. Smaller trees bloom in the spring or summer and provide color in our yards. Each tree has a special purpose.

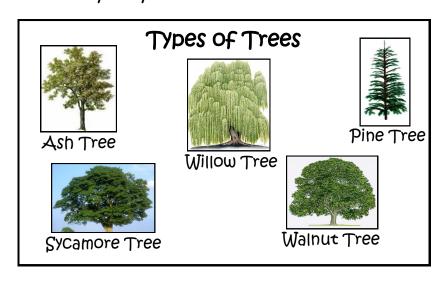
### Activity 5 — Types of Trees

#### Materials you might need:

pencil paper magazine

scissors glue 14" x 22" poster board

Make a poster with pictures cut out of a magazine of the different types of trees. Write the use of each tree by its picture. Write the name of each tree by its picture. A title for your poster could be "Types of Trees." Use 5 to 7 pictures in your poster. — OR — Draw a picture of your house and yard. Show what types of trees you have or would like to have in your yard.

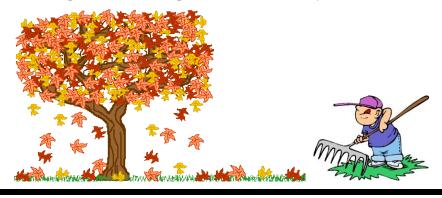




### Fall Colors



Leaves can be many different colors. In the summer, many leaves are green but some can be yellow, purple, or other colors. In the fall, the leaves change to bright colors of red, gold, orange, and yellow. Some trees like evergreens have green leaves all year.



### Activity 6 — Colored Leaves

#### Materials you might need:

pencil paper magazine scissors glue or tape 14" x 22" poster board crayons or markers

Take a walk in your yard, the woods, park,or neighborhood. Collect 5 to 7 different colored leaves. If you cannot find leaves of different colors, cut out pictures from a magazine of trees with colored leaves. Tape or glue the colored leaves or pictures of trees with colored leaves on the poster board. The title of your poster could be "Colored Leaves." — OR — Make a colored leaf book. With crayons or markers, draw your own leaves in the shapes and colors that you saw. Glue or paste leaves collected (one per page) on white paper. Use colored construction paper for the front and back and staple together. Put your title and name on the front.

Collect leaves this fall for your Mini 4-H Forestry exhibit next year.



### Textures



The bark protects the tree from insects, diseases, and injury. Feel the bark of a tree. Does it feel rough or smooth? Does the bark feel the same at the bottom of the tree as at the top? Feel the leaves. Do they feel rough on one side compared to the other? The bottom side has veins, or ridges. The veins help the leaves get water so they can grow.

## Activity 7 — Rubbings

### Materials you might need:

pencil paper crayons

Use notebook paper or plain white paper. Make bark rubbings by holding the paper against the bark and coloring back and forth over it with crayons. The ridges on the bark will show up darker than the depressed area, leaving the bark's pattern on the paper. A leaf rubbing can be made by placing the leaf on the table vein side up. Place the paper over it and use the side of a crayon to color over the leaf. Use different leaves and colors. Make 5-7 different bark and leaf rubbings. Use a piece of construction paper for the front and back covers and staple together. You now have a "Tree Rubbing Book." Put a title and your name on the front.



Oak tree bark



Oak tree bark rubbing



## Forestry Senses



Take a walk in a forest or woods. Quiet — what do you hear? Look — what do you see? What do you smell? What do you feel? Use your senses to hear, see, smell, and feel the woods around you.

### Activity 8 — Test Your Senses

### Materials you might need:

pencil chart clipboard container for collecting items

paper glue or tape

Take a walk in the woods. List in the chart below what you saw, smelled, heard, or touched. List 5 to 7 things in your chart. Use one white piece of paper for each sense — saw, smelled, heard, and touched. Write or draw what you saw, smelled, heard, or touched. If you collected any items, place or glue them to the piece of paper. Use colored construction paper for the front and back and staple together. Put a title and your name on your "Senses Book."

My Forestry Senses

What I Saw	What I Smelled	What I Heard	What I Touched



## Indiana State Standards



Following is a list of Science Standards that the activities in this book meet.

### <u>Kindergarten</u>

- K.2.2 Draw pictures and write words to describe objects and experiences: Activities 1, 3, 5, 6.
- K.3.1 Describe objects in terms of the materials they are made of, such as clay, cloth, paper, etc.: Activity 2.
- K.4.2 Observe plants and animals, describing how they are alike and how they are different in the way they look and in the things they do: Activities 3, 5, 6.

### Grade 1

- 1.1.1 Observe, describe, draw, and sort objects carefully to learn about them: Activities 1, 3, 7, 8.
- 1.2.6 Describe and compare objects in terms of number, shape, texture, size, weight, color, and motion: Activity 6.
- 1.2.7 Write brief informational descriptions of a real object, person, place, or event using information from observations: Activity 8.

### Grade 2

2.4.2 — Observe and describe how animals may use plants, or even other animals, for shelter and nesting: Activity 3.



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#### 2009 Resources and References

Mini 4-H Forestry Manual, Madison County, Indiana Mini 4-H Forestry Discovery Manual, Henry County, Indiana Mini 4-H Forestry Manual, Delaware County, Indiana

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#### MINI 4-H FORESTRY RECORD SHEET

EXHIBIT YOUR POSTER OR BOOK. FILL OUT THIS MINI 4-H FORESTRY RECORD SHEET AND BRING WITH YOUR EXHIBIT TO THE 4-H FAIR.

NAME	_GRADE IN SCHOOL
YEAR IN MINI 4-H FORESTRY PROJECT (circle)	1st or 2nd
CLUB ATTENDED	
WHAT DID YOU LEARN MOST FROM YOUR MIN	II 4-H FORESTRY PROJECT?
WHO HELPED YOU WITH THIS PROJECT?	
DID YOU HAVE ANY PROBLEMS WITH YOUR MI	
WHAT WAS THE MOST FUN PART OF DOIN	G THIS PROJECT?



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