



Forestry Project Brief

Learning Objectives

- Learn about the forest as a living community Identify trees by their leaves, fruit or flowers, bark
- Learn about forest and wood products
- Learn how to keep our forests healthy.
- Practice skills such as planting, pruning, thinning and cruising
- Learn about the business of forests: logging, wood products, and careers.

Fair Projects

- Leaves/ Twig display Board
- Pressed leaf collection
- Educational displays such as:
 - Photosynthesis
 - Plant growth stages
 - Cross section of a tree
 - Forest biomes
 - Logging methods

Demonstration Ideas

- Making a leaf press
- Mounting a leaf, fruit or wood specimen
- How to plant a tree
- Making a tree scale stick
- Measuring tree for logs and lumber
- Aging a tree
- Making paper

Field Trips

- Timber Stand Improvement (TSI) areas
- Saw mill, pulp mill, wood pellet manufacturing
- Tree nursery
- Christmas Tree Farm
- Wood product plant

Ideas for Speech Topics

- Healthy forests for a better world
- Use of fire in forest management
- Economic impact of forests in Missouri
- Personal forestry

Critical Thinking

- Using a map and compass to navigate unfamiliar terrain
- Identification - What kind of tree is that?
- Landscaping or habitat development - selecting the right tree for the desired purpose.
- Analyzing fire risk
- Practicing timber stand improvement

Community Service

- Participate in Arbor Day Celebration
- Donate and plant a special tree on a public area
- Help conduct a tree survey for your community
- Construct or maintain hiking trails at a state park

Science & Technology

How science and technology is practiced in this project? Examples:

- Botanical terms, principles, processes (photosynthesis)
- Tree identification - use of dichotomous key
- Map and compass skills (map reading, longitude, latitude, true north, magnetic north, azimuth, declination)
- Forest Ecology

Show Me Character

Trustworthiness - includes honesty, promise keeping and loyalty.

- Do what you say you will do
- Only report on animals and plants you have observed
- Stand up for what you believe is right

Respect - includes courtesy and proper treatment of people and things.

- Leave only your footprints behind.
- Don't damage trees, trails, or other property
- Be tolerant of new ideas

Responsibility - includes the pursuit of excellence, accountability and perseverance.

- Practice wise use of natural resources, conserve soil, plant trees, preserve clean water
- Teach others about taking care of the environment
- Think of ways to make your environment better for everyone

Fairness - involves consistently applying rules and standards appropriately for different age groups and ability levels.

- Share resources with others
- Allow everyone to experience outdoor areas equally
- Share your space with the wildlife living around you

Caring - promoting the well being of people and things in a young person's world. It denotes action and not just feelings.

- Help keep animal and plant environments clean and safe for all the inhabitants
- Be thankful of those who give their time to you
- Give everyone equal chances when playing games or giving demonstrations

Citizenship - includes making the home community and county a better place to live for themselves and others.

- Take care of the world and community in which you live
- Recycle
- Conserve water and electricity

Show Me Standards

Missouri 4-H members will acquire the knowledge and skills to gather, analyze and apply information and ideas, communicate effectively, recognize and solve problems, make decisions and act as responsible members of society.

4-H members will acquire a solid foundation which includes knowledge of:

- **Mathematics** - addition, subtraction, multiplication, and division; other number sense, including numeration and estimation; and the application of these operations and concepts in the workplace and other situations.
- **Social Studies** - economic concepts and principles
- **Communication Arts** - writing formally and informally
- **Science** - characteristics and interactions of living organisms

Resources

931 Forestry Level 1

Y620 4-H Project Record
Y9310 Follow the Path
LG9300 Forestry Helper's Guide

932 Forestry Level 2

Y620 4-H Project Record
Y9311 Reach for the Canopy
LG9315 Forestry Helper's Guide

933 Forestry Level 3

Y620 4-H Project Record
Y9312 Explore the Deep Woods
LG9315 Forestry Helper's Guide

Additional publications available online at

<http://www.mdc.mo.gov/landwater-care/plant-management/forest-and-tree-management>

To Order

Extension Publications online at <http://extension.missouri.edu/explore/shop/> or by phone 1-800-292-0969

For additional resources check with your local University of Missouri Extension Center or the 4-H Source Book at <http://www.4-hmall.org/educationalresources.aspx>.

When placing your order for the forestry curriculum, supplemental literature may also be requested.

Supplemental Literature for Forestry Curriculum

Y9313 Fifty Common Trees of Missouri
Y9314 Missouri's Oaks and Hickories
Y9315 Show Me Trees (poster)

LG9316 Ecology of Missouri Forests
LG9317 Anatomy of a White Oak
LG9318 Forests: Layers of Leavers