



Environmental and Earth Sciences

4-H Forestry

North Dakota 4-H Project Sheet

The life of trees can be very long, and they can tell us much about our past.

- Learn basic facts about trees.
- Identify the trees in your area.
- Learn about pest management in forestry.
- Participate in tree surveys.
- Learn which trees are hardwood, softwood, deciduous or conifer.
- Learn how trees benefit the environment.



Pass it on!

Now that you know how, share it with others. Here are ideas to get you started.

Communication

- Give a presentation on your favorite tree.
- Make a video on how to collect and identify leaves.
- Teach your club how to identify common trees.

Citizenship

- Complete a tree map of the city park for the city recreation department.
- Adopt and maintain a tree at a park or camp.
- Do a presentation at a city council meeting about the identity and age of the city trees at a location.

Here's what you can do all year!

Starting Out Basic/Level 1	Learning More Intermediate/Level 2	Expanding Horizons Advanced/Level 3
<ul style="list-style-type: none"> • Learn why trees are important to our environment. • Collect and identify different leaves. • Learn about climates and growing seasons. • Learn about forest habitats. • Learn how organisms use forest habitat. • Examine parts of a plant and discover the function of the parts. • Learn about photosynthesis. • Learn about the uses of wood. • See how forests are used for recreation. 	<ul style="list-style-type: none"> • Be able to describe growth stages and what trees need to grow. • Learn about major forest changes. • Be able to describe the impact of invasive species on the forest. • Identify Infectious and noninfectious tree diseases. • Identify and record insect damage. • Explore and analyze forest fire risk. • Be able to estimate the volume of a standing tree and forest density. 	<ul style="list-style-type: none"> • Create a community forest map. • Learn about insect control methods in forestry. • Identify ways of genetically improving trees. • Identify forestry jobs. • Explore how different cultures use forests. • Determine the history of a neighborhood tree. • Mentor other youth in tree survey activities. • Explore how different values influence forest use.

Leadership

- Organize the activities to complete a tree survey.
- Help an adult teach a class about trees.
- Volunteer to help with a tree planting.

Entrepreneurship

- Offer to monitor trees for invasive species or insects.
- Start a tree-care business.
- Open a greenhouse or tree-selling business.



Learn more at www.ndsu.edu/4h/ or contact your county NDSU Extension office.



Here are other opportunities to explore forestry:

- Complete an invasive species survey.
- Collect leaves and show them in your science class.
- Visit a tree farm.
- Job shadow a city forester or park ranger to explore careers that interest you.
- Contact your county NDSU Extension office for other local workshops, activities and events.
- Interview a lumber yard manager about his/her business.
- Interested in a college education in the area of forestry? Schedule a visit with North Dakota State University to explore these majors (www.ag.ndsu.nodak.edu/plantsci/horticulture/index.htm).



Exhibit Ideas

- Exhibit a bark collection project.
- Make a poster about the parts of a tree.
- Do a display board on the proper way to prune trees.
- Do a poster about tree farming.
- Create a logbook and picture record of trees on your property or in your area.
- Complete a video of the process of planting and harvesting trees.
- Prepare a poster to show the methods to harvest trees.
- Create a display board that identifies insect damage to trees.
- Make a cost/profit comparison about starting your own tree farm business.
- Do a research project to find the oldest tree in your county.
- Do a display of the common insect pests of North Dakota forests.
- Complete a map of tree distribution in North Dakota.

4-H Resources	Other Resources	Recordkeeping
<ul style="list-style-type: none"> • National 4-H Curriculum <ul style="list-style-type: none"> - Follow the Path (DDA111) - Reach for the Canopy (DDA112) - Explore the Deep Woods (DDA113) - Forestry Helper's Guide (DDA211) • Educational Trunks • 4-H Virtual Forest 	<ul style="list-style-type: none"> • U.S. Forest Service • North Dakota Forest Service • Champion Trees of ND • State Forest Recreation Opportunities 	<ul style="list-style-type: none"> • Planning for My Project Adventure (PA093) • ND 4-H Project Plan (PA095) • ND 4-H Plan of Action (PA096) • ND 4-H Participation for 11- 19 (PA098)
		Contests
		<ul style="list-style-type: none"> • State 4-H Land Judging • State 4-H Range Judging