

# 4-H Natural Resources

# 3

Level



Project  
Guide

## BLAZE THE TRAIL

Name \_\_\_\_\_ County \_\_\_\_\_

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# *4-H Natural Resources*



## **Level 3 Project Guide**

# **BLAZE THE TRAIL**

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# Note to the Project Helper

Welcome to the 4-H Natural Resources project. As a project helper, you have an important role in guiding, supporting, and encouraging youth. This project guide is designed to help youth actively explore the world of natural resources. It includes hands-on activities for both indoor and outdoor fun.

## Natural Resources Project Guides

The three 4-H Natural Resources project guides are designed for beginning, intermediate, and advanced learners. In each lesson, you will find a learning activity that emphasizes a project skill and a life skill. This Level 3 project focuses on four life skills: planning and organizing, leading self and others, communicating and planning your life.

Each project guide includes *Exploring Nature* activities designed to help youth learn by doing. The *Talking It Over* sections help youth process what they have learned as they discuss the experience with you. Keep in mind that most of the questions in this section will not have a right or wrong answer. Your goal is to help youth clarify and expand on their own ideas. *A Step Further* sections provide additional learning activities for youth to explore. Encourage youth to enhance their project experience with these challenging activities. Each project guide also includes an achievement program to recognize youth for their accomplishments.

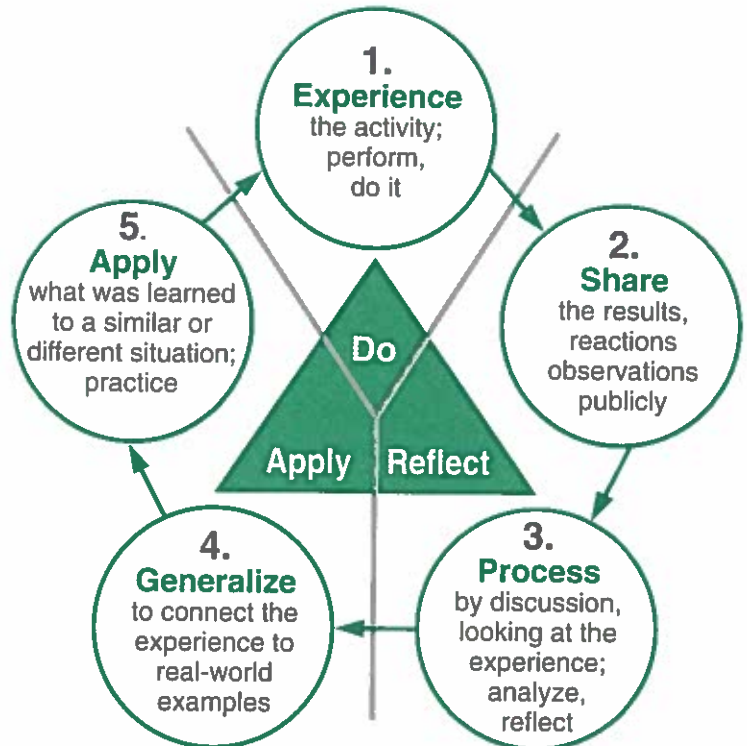
## Leader's Guide

The 4-H Natural Resources series also includes a Leader's Guide. This publication provides more specific content information as well as fun learning activities for groups. These group activities are suitable for families, classrooms, 4-H project groups, or other clubs and groups. You will also find information about the experiential learning model and how to use it to promote life skill development.

## 4-H: Experiential Learning

This learning method — doing an activity, reflecting on the experience, and applying the new knowledge — is called the *Experiential Learning Model*. This model is what makes 4-H youth development education different from other formal education methods. Each lesson in the 4-H Natural Resources series uses experiential learning to help youth get the most out of their learning experiences.

### Experiential Learning Model



As you can see from the diagram above, youth start by completing an activity on their own. Then, you meet together to talk about the experience. With your guidance, youth reflect on what they did and how they can apply the learning to other situations. This method may seem different at first, but with your efforts young people will soon become comfortable with the process, and learning will go well beyond Natural Resources. Good luck!

# Fun with the Natural Resources Project

Welcome to 4-H Natural Resources. In this Level 3 project, you will explore fun ways to learn about nature both indoors and outdoors. You'll plan and conduct community service and educational activities related to natural resources. You'll help younger kids learn about natural resources and explore career opportunities in this exciting field. All kinds of exciting opportunities await you in the 4-H Natural Resources project. Set high goals for yourself and see just how far you can go.

## Natural Resources Activity Guide

The activities in this guide will give you new challenges to explore. Work with your project helper to complete each activity. Remember, this guide is not designed to provide you with answers to all of your questions. Learn to find and use resources such as books, videos, Extension Service educators, and professionals such as foresters, biologists, resource conservation educators and others who work in the field of natural resources.

Record your goals and work in this guide. A written record will be useful as you progress through Level 3. It will also show all that you have learned and accomplished in the project.

## Project Guidelines

- Do at least four required activities and three challenge activities each year.
- Complete Level 3 within three years.
- Participate in at least three of the learning experiences listed on page 5 each year.
- Record project goals and accomplishments.
- Practice the life skills emphasized in this unit: planning and organizing, leading self and others, communicating, and planning your life.

## Your Project Helper

Your project helper will be a great resource for you. Choose someone who will support your efforts to complete the natural resources achievement program. Your helper will meet with you to set goals, suggest resources to use, and give feedback as you complete each activity. Write the name and phone number of your helper below.

Project Helper: \_\_\_\_\_

Phone: \_\_\_\_\_

# My Project Plans & Highlights

## Natural Resources Project Goals

Name \_\_\_\_\_

List goals that you want to achieve in the Level 3 Natural Resources project:

Year \_\_\_\_\_

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Year \_\_\_\_\_

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Year \_\_\_\_\_

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## Natural Resources Highlights

Date and list important things you do and learn in this project.

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## Major Learning Experiences

Date any of these things that you do.

Year	Year	Year	Activity
			Give a public presentation
			Attend a natural resources workshop
			Participate in a community environment project
			Participate in a natural resources tour
			Attend a natural resources project meeting
			Exhibit at a fair
			Your own activity

# Natural Resources Achievements: Unit 3

## Directions:

1. Do at least four required activities and three challenge activities each year.
2. Finish at least 20 (required or optional) activities in three years to complete this level.
3. Date each activity when you complete it and have your project helper initial it.

**Required:** Complete at least two of the following activities:

Helper	Date	Activity
		Take a Hike
		Tree Jobs
		Taking Pride

**Required:** Complete at least three of the following activities:

Helper	Date	Activity
		You're the Helper
		Nature Skills
		Eco-Connections
		Water: Keeping it Safe

**Options:** Complete any of the "A Step Further" activities listed below, or write your own challenge.

		A Step Further page 9 # 1
		A Step Further page 9 # 2
		A Step Further page 11 # 1
		A Step Further page 11 # 2
		A Step Further page 13 # 1
		A Step Further page 13 # 2
		Write your own step further idea here:

**Options:** Complete any of the "A Step Further" activities listed below, or write your own challenge.

		A Step Further page 15 # 1
		A Step Further page 17 # 1
		A Step Further page 17 # 2
		A Step Further page 19 # 1
		A Step Further page 19 # 2
		A Step Further page 21 # 1
		A Step Further page 21 # 2
		Write your own step further idea here:



**Required:** Complete at least three of the following activities:

Helper	Date	Activity
		Taking Sides
		The Big Screen
		Get on Line
		Center Stage

**Required:** Complete at least one of the following activities:

Helper	Date	Activity
		Career Check
		On the Job

**Options:** Complete any of the "A Step Further" activities listed below, or write your own challenge.

		A Step Further page 23 # 1
		A Step Further page 23 # 2
		A Step Further page 25 # 1
		A Step Further page 25 # 2
		A Step Further page 27 # 1
		A Step Further page 27 # 2
		Write your own step further idea here:

**Options:** Complete any of the "A Step Further" activities listed below, or write your own challenge.

		A Step Further page 31 # 1
		A Step Further page 31 # 2
		A Step Further page 33 # 1
		A Step Further page 33 # 2
		Write your own step further idea here:

I certify that \_\_\_\_\_ has completed the Level 3 natural resources project.

Project Helper's Signature \_\_\_\_\_ Date \_\_\_\_\_



# Outdoor Classroom

Skills in planning and organizing are some of the management skills involved in situations you often experience. To be effective in planning and organizing you need to decide what you want to accomplish and what resources you have to use. Also, you need to have a plan of action to use those resources and reach your goals. The next few activities will give you experience in setting goals, thinking about resources and developing plans to reach the goals.

**Project Skill:**  
*Nature observations*

**Life Skill:**  
*Planning and organizing*

**Activity:**  
*Plan and organize a nature hike*



## Take a Hike

Hiking on nature trails or in the woods can be a wonderful way to learn about the world around us. If you are hiking by yourself — or with a group — you should follow this code of ethics:

- don't litter; pick up litter left by others
- be careful with fire
- stay on the trails; avoid shortcuts
- respect wildlife; don't disturb animals or their homes
- avoid cutting green trees or damaging plant life
- close gates if you open them
- ask permission each time before hiking on private property
- leave the area as you found it

## Exploring Nature

### Select an Appropriate Site

Before planning a nature hike, get information about potential sites from local park and recreation districts, national wildlife refuges, state and national parks and private landowners.

Think about the following things when you plan your hike:

- Depending on the experience of your group, try to pick a place that will offer a few challenges, but one that is not too difficult.
- Remember to take rest breaks.
- Take a map and a compass and know how to use them.

### Make a Plan

#### Who

**Where** (Be sure you have a map and that someone knows where you are going and when you plan to return)

**When** (date; raindate)

**Clothing** (Dress in layers and remember raingear)

**Footwear** (Very important to have comfortable shoes. Sneakers for shorter, less difficult trails; hiking boots for longer and more difficult trails)

**Equipment** (First aid supplies, compass, etc.)

**Water/snacks/food**

**Other details** (transportation to and from site, costs, etc.)

# Talking It Over

## Share What You Learn

What did you learn from the experience?

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What do you think the hikers learned?

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## Use What You Learn

What will you do differently on the next nature hike you plan?

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What planning strategies or skills that you used to plan your hike could you use in other situations — say to plan a vacation?

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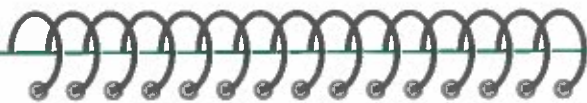
How does planning and organizing help us reach our goals?

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## Field Notes

Things to observe on a nature hike:

- types of animal life
- types of plant life
- habitats close to the ground
- habitats high off the ground
- sounds and noises
- smells
- temperature, humidity levels
- effects of weather and seasons
- types of animal food sources, water and cover

## A Step Further

1. Keep a field notebook to take notes on what you see on nature hikes. Look closely to see things others may miss. Listen, smell, feel. Make your observations as accurate as possible. Sketches are also good to include.
2. Take a nature hike at night. Be sure you are familiar with the trail. What differences are there between night and day? Morning and evening?



**Project Skill:**

*Understand the role of trees in the environment*

**Life Skill:**

*Planning and organizing*

**Activity:**

*Design a landscape using trees*

## ***Tree Jobs***

Trees are a valuable natural resource. They can provide lumber for furniture or construction, and fiber for paper. Trees also provide shade, protection from strong winds, aesthetics and recreation. Also, many of the fruits we eat come from trees. Benefits from trees can be maximized when a well thought out plan is used to manage an area of land.

## ***Exploring Nature***

Landscape plans can be developed on large or small scales. Plans for a home lot in a city is different than a plan for a 100 acre forest. Trees growing in an urban or rural landscape provide multiple benefits even though they were planted to provide the landowner with one or two primary benefits. For example; a farmstead windbreak planting is established primarily to protect a rural home from cold winter winds, but it also provides habitat for wildlife, enforces aesthetics and increases the value of the property.

Research and design a landscape plan using trees which will provide two or more of the following benefits; shade, protection from winter winds, wildlife habitat, lumber and wood products, recreation, aesthetics, soil conservation or food for people.

Your plan should include:

- Orientation of the area, ie. North Direction
- Types or species of trees
- Location of trees
- Spacing between trees

Write a paragraph which describes your plan and all the benefits that are being provided by your tree plantings.

**Use the space below to sketch your plan**