

4-H Volunteer Leaders' Conference

February 1, 2014

go.ncsu.edu/extensionforestry4h



**Extension
Forestry:
Offerings for
4-H Youth &
Adults**

Do you like to.....

- ... spend time outside?
- ... explore natural places?
- ... investigate and watch wildlife?
- ... learn new information that you can
share with your family, friends & 4-Hers?
- ... be a lifelong learner?
- ... meet other 4-Hers?



Then one of these 4-H programs could be for you!

- Wildlife Projects
- Forestry and Wildlife Presentations and Project Record Books
- WHEP
- Forestry Invitational



Wildlife Projects

- Variety of interest areas
- Can be done with your family, your club, or by yourself
- Great ideas for presentations and project record books!

Turtle Tales



Life Skill: Communication
Project Skill: Researching and describing native turtles
Objective: Educate peers about turtles found locally
Success Indicator: Participants collect accurate and interesting information about turtles and communicate their findings to a group

Butterfly Buffet



Life Skill: Critical thinking

Project Skills: Identifying butterfly species and their nectar sources

Objective: Observe wild butterflies and their feeding habits, record findings, and make recommendations

Success Indicator: Participants keep detailed records of observations and recommend which plants would be most beneficial to local butterflies

Forestry and Wildlife Presentations

- Lots of different topics fit into this category
- Not many presentations in the older age categories
- Can use your experiences with wildlife projects, WHEP, and Forestry



Project & Cumulative Records

- Environmental Science is a catch-all category for Project and Cumulative Records



What is WHEP?

Wildlife

Habitat

Evaluation

Program



WHEP is...

(official program description - BORING)

.....a 4-H youth natural resource program dedicated to teaching wildlife and fisheries habitat management to junior and senior level (ages 9-19) youth in the United States.

WHEP is...

(unofficial North Carolina definition)

- A chance to learn about wildlife around you
- An opportunity to explore new places
- A way to work towards a team goal
- Career Exploration
- FUN!



North Carolina State Contest

- Four Activities
 - Wildlife Identification & Wildlife Knowledge
 - Identifying Wildlife Foods
 - Aerial Photos
 - On-site Wildlife Management Practices



Wildlife ID

- Do you know what this animal is?

**CORRECT!
NORTHERN
CARDINAL**



Wildlife ID

- How about me? What am I?



Wildlife Foods

- What am I?



BARK

Wildl





Traffic

More...

Map

Satellite

Earth

On-Site Management Practices

- Looks at everything you have learned and make recommendations on how the land should be managed for specific species



State Contest

- A day full of fun contest activities
- Time to meet and hang out with other 4-H members from across the state
- Contest rotates across the state – visit new places!
- Scoring is based on worksheets that you will practice with your club

State Contest

- AWARDS!!!
 - Top 3 JR and SR teams receive awards
 - Awards for top scoring individuals
 - Participant ribbons



State Contest

- Top Scoring Senior Team has the opportunity to represent NC at NATIONAL WHEP INVITATIONAL, held in a different state every year



2014 State Contest

- May 3, 2014 @ Carolina Beach State Park
- General Contest Day Schedule

9:00 am ----- Registration
10:00 am ----- Contest Begins (Activity III then II & IV)
12:00 pm ----- Lunch
12:45 pm ----- Contest Resumes (Activity I)
1:30 pm ----- Scoring and Activities for Contestants
4:30 pm ----- Presentation of Awards

- Can our team come and watch?



Forestry Invitational

- The SUPER BOWL of 4-H Forestry!
- State contest
 - Held in Raleigh in late September
 - Five Events
- National Invitational
 - Held in West Virginia in July
 - Eight Events



Why Forestry??

Official Reasons (Boring!)

- Develop an appreciation of the importance of conserving forests as a sources of income, raw materials, and enjoyment necessary for quality living
- Acquire information and understanding of practical forestry skills in forest management and the use of forest and wood products

Why Forestry??

Unofficial reasons - the NC version!

- Top manufacturing industry in North Carolina
- ~78% of forestland in NC is owned by Non-industrial Private Landowners (you, me and our families)
- NC ranked #4 in the % of forestland
- Jobs at all educational levels, pay scales
- Get to be outside!

Why Forestry??

- Opportunities to be on cool TV shows like Ax Men and Swamp Loggers!
- A good jumping off point for any youth that wants to be involved with natural resources
- Don't forget our urban forests, too!

Forestry Events – State

- Five events
 - Tree ID
 - Insect ID
 - Disease ID
 - Tree Measurement
 - Compass & Pacing



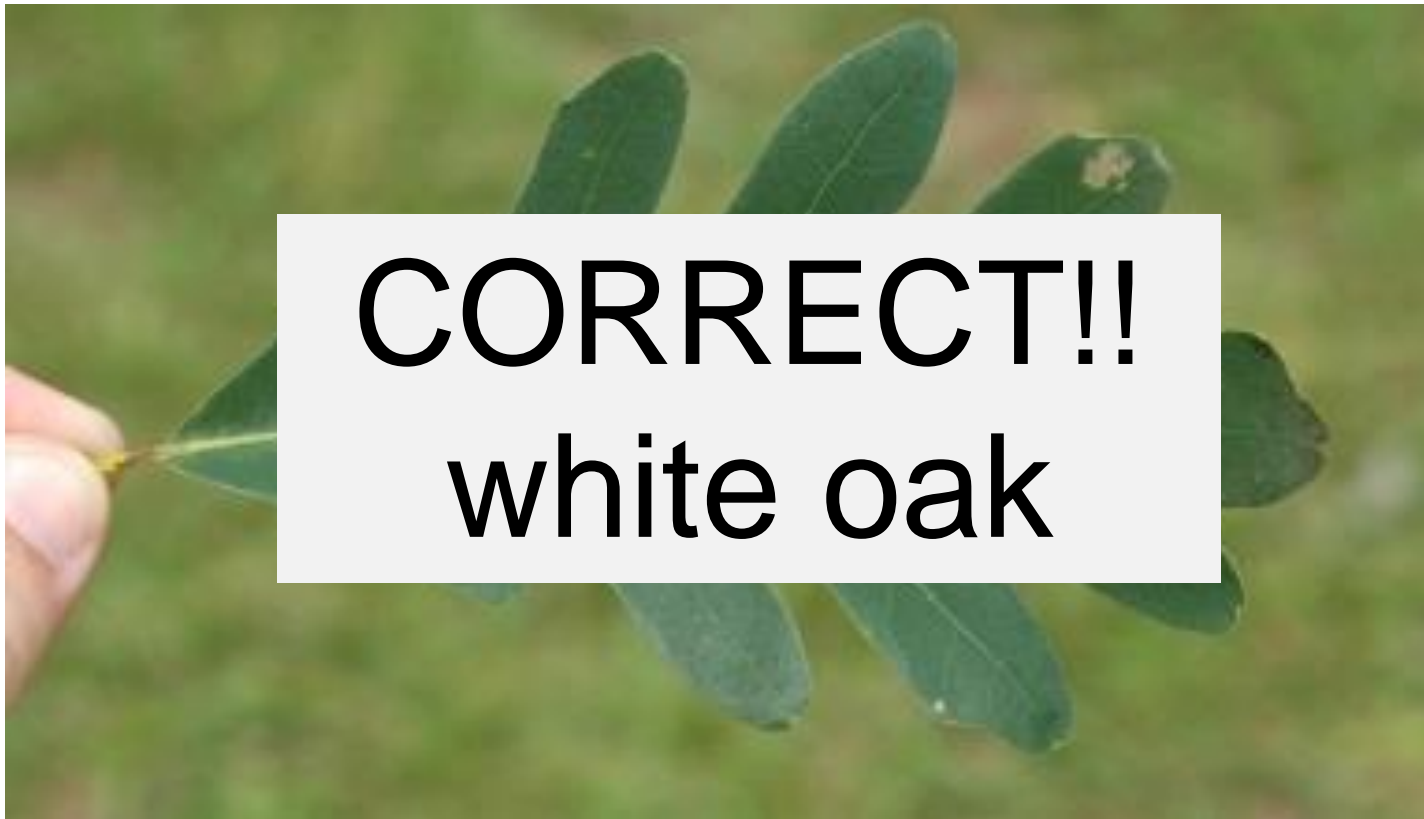
Tree ID

- What am I?



Tree ID

- Can you guess me?



Insect and Disease ID

- Need to know 10 insects & 10 diseases
- List is provided
- Flashcards available for study



- [illegible]



Compass and Pacing

- Added in 2013
- Provides great map & compass skills to carry throughout life
- Hands-on



State Contest

- Top 3 JR and SR teams are recognized
- Top scoring individuals recognized
- Participant certificates
- Top Senior Division Team has the opportunity to represent North Carolina at the national contest in West Virginia



2014 State Contest

- September 13, 2014
@ Schenck Forest in Raleigh
- Begins at 10am, wrap up by 4
- All events completed individually
- What more info?? Attend one of the
Wanted: 4-H Forestry Coaches sessions led
by two 4-H volunteers this afternoon!

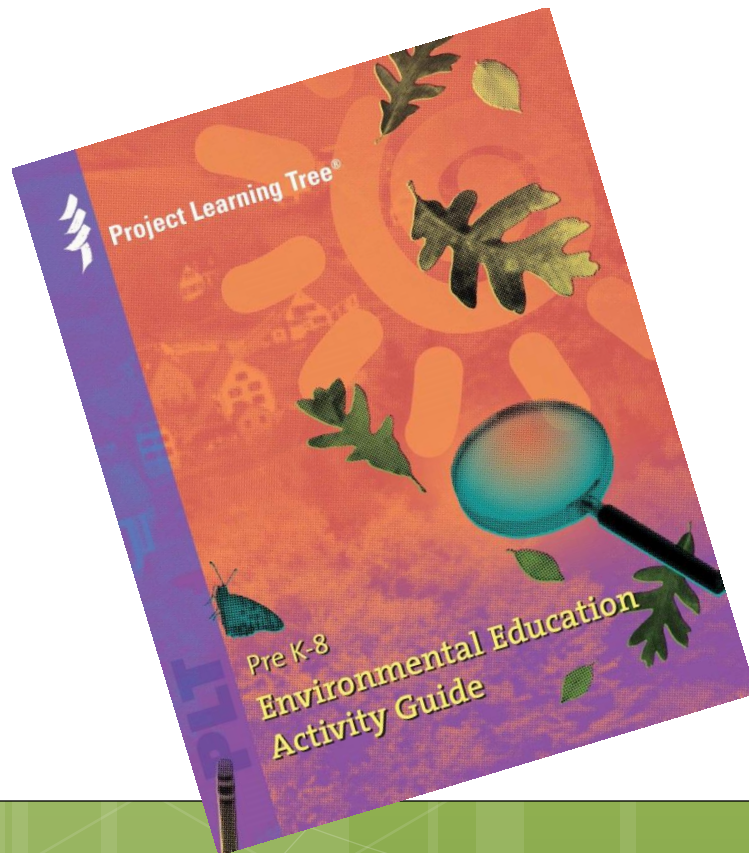
Natural Resource 4-H Programs

Goals:

- Build upon what you already know
- Start small (maybe a presentation or project) and build up to something bigger (state contests)
- Work with your leader and club members to learn the information
- Start now! Go to a contest and see what is it about - then work hard on the information for the following year.

Whew? There is more???

YES!! For you, the volunteer leader, we have Project Learning Tree (PLT)!



Project Learning Tree

- Environmental Education Activity Guide
- 96 Activities
- Easy to use, hands-on
- Provided FREE of charge at workshop (mostly free)
- Workshops across the state
- Ask your 4-H agent to help you set up one!

www.ces.ncsu.edu/plt

Tree Factory

By acting out the parts of a tree, students will learn about the structure of a tree. They create a tree factory.

Copyright 2012, American Forest Foundation. Permission to reprint and distribute this activity from Project Learning Tree's "PreK-8 Environmental Education Activity Guide" has been granted to the North Carolina Office of Environmental Education. Educators can receive the complete guide by attending a Project Learning Tree workshop. Contact Renee Strnad, North Carolina State PLT Coordinator, at 919-515-5518 or renee_strnad@ncsu.edu. For more information about Project Learning Tree, please visit www.plt.org.



Activity
63

Levels

Activity: Grades 3-6
Variation: Grades PreK-2

Subjects

Science, Physical Education,
Performing Arts

Concepts

- Populations of organisms exhibit variations in size and structure as a result of their adaptation to their habitats. (4.1)
- The structure and scale of an ecosystem are influenced by factors such as soil type, climate, availability of water, and human activities. (4.2)

Skills

Ordering and Arranging,
Representing, Identifying
Attributes and Components,
Comprehending



Differentiated Instruction

Prior Knowledge, Curricular/
Personal Connections, Paired/
Cooperative Learning, Key
Vocabulary, Higher Order
Thinking, Oral/Reading/
Writing Skills



Technology Connections

Digital/Video Cameras,
Presentation Software, Graphic

OBJECTIVE

- Students will understand the structure of a tree and how different parts of a tree help the tree function.

ASSESSMENT OPPORTUNITY

- Pass out art supplies such as drawing paper, scissors, construction paper, toilet paper rolls, straws, aluminum foil, scissors, and tissue

BACKGROUND

From a tree's tiny **root hairs** buried in the ground to the highest leaves in its **crown**, each part of a tree plays a role in helping it to function. Here's a rundown of the various parts of a tree and what each one does:

Leaves

Leaves are the food factories of a tree. Using energy from the sun, which they capture with a pigment called **chlorophyll**, leaves convert carbon dioxide and water into oxygen and sugar (food!). This

process is called **photosynthesis**. The gases needed for and generated by photosynthesis enter and exit through tiny holes called **stomata**, on the under surface of the leaves. Water vapor also exits through the stomata in the process of **transpiration**.

Trunk and Branches

The trunk provides support for branches, which in turn support the tree's leaves. The trunk and branches contain the tree's "pipes"—the tubes that transport water and nutrients to the leaves, and sugar from the leaves to the rest of the tree. They also contain the growing layer of the tree that makes the trunk, branches, and roots of the tree thicker each year. Here's a look at a tree trunk from the

Tree Trunk Layers

OH! One more great resource....

- Office of Environmental Education and Public Affairs
 - Calendar Listing of events statewide
 - Discover EE Centers in your backyard

eenorthcarolina.org

N.C. Environmental Education

N.C.DENR Office of Environmental Education and Public Affairs

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All things Extension Forestry 4-H

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