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Virginia  
Cooperative  
Extension

# 4-H FORESTRY PROJECTS

2000

PUBLICATION 420-073

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## CITY OF HAMPTON 5<sup>TH</sup> GRADE URBAN FORESTRY PROJECT



Virginia  
Tech

VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY



VIRGINIA STATE UNIVERSITY



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## **A SPECIAL NOTE TO PARENTS**

Your child is participating in a joint project between the City of Hampton Public Schools, the Hampton Clean City Commission, Virginia Department of Forestry and Virginia Cooperative Extension. The project is designed to enhance the science curriculum using the urban forest as a study site. Teachers will be using *Project Learning Tree* activities that are correlated with the Virginia Standards of Learning (SOL's). These activities offer a special, hands-on approach to learning. After each activity, a 4-H project book will be sent home so that students can practice what they have learned and extend that learning to new and challenging situations. The end-result is greater mastery of subject matter and life skills.

## **RELATED VIRGINIA STANDARDS OF LEARNING**

Science SOL 5.1- identify organisms using a classification key

Math SOL 5.9- identify the diameter, radius and circumference of a circle

English SOL 5.3- make a planned oral presentation

## **SUGGESTED GOALS AND PLANS FOR THIS PROJECT**

1. Practice identifying trees at home or at a nearby park or open space.
2. Use the key and pictures in this book as a guide.
3. Make a leaf collection and display it at school.
4. Give a presentation about trees to others.
5. Return this completed project to your teacher for recognition.

## **WHY LEARN THE NAMES OF TREES?**

Tree identification is important because different types of trees have different requirements for growth, and have different values to people. If you want to learn more about trees, you will need to know their names. Trees can be studied easily, providing living examples of scientific concepts.

Trees are important to Virginia's economy and quality of life. Virginia's forest industries provide employment to many people, and contribute over \$11 billion to the economy. Trees add beauty to our landscape, increase the value of our homes, filter the air we breathe, provide homes to wildlife, and protect our water supply.

## ACTIVITY ONE

# LEAF KEY TO COMMON TREES IN THE CITY OF HAMPTON

Use this leaf key and the accompanying illustrations to identify trees in your backyard or community park. List the trees you identify in the project record at the end of this project. If you have trees you cannot identify with the key, add them to your leaf collection and ask someone to help you.

1. Needle-leaved trees (conifers- pines, cedars, etc.)
  - A. 5-needle clusters- **White pine**
  - B. 3-needle clusters- **Loblolly pine**
  - C. needles not in clusters
    1. single needles- **Bald cypress**
    2. needles are scale-like- **Redcedar**
2. Broad-leaved trees (hardwoods- oaks, hickories, gums, etc.)
  - A. Trees with opposite arrangement- **Maple, Ash, Dogwood**
  - B. Trees with alternate arrangement
    1. Trees with compound leaves- **Walnut, Hickories, Locust**
    2. Trees with simple leaves
      - a. leaves have rounded lobes- **White oaks, Sassafras, Mulberry**
      - b. leaves have pointed lobes- **Red oaks, Sycamore, Sweetgum**
      - c. leaves with no lobes- **Elm, Tupelo, Cherry, Willow oak, Plums**

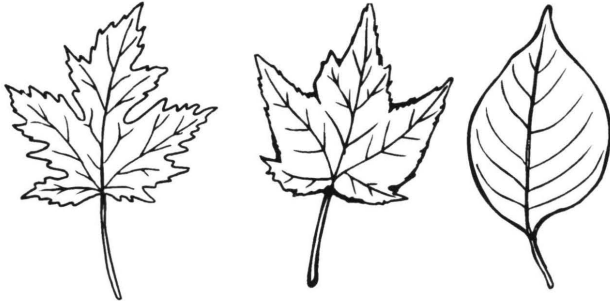


For an on-line identification key, please visit Virginia Tech's forestry outreach web site:

**<http://www.fw.vt.edu/dendro/forsite/welcome.htm>**

# COMMON TREES IN THE CITY OF HAMPTON

## TREES WITH OPPOSITE ARRANGEMENT



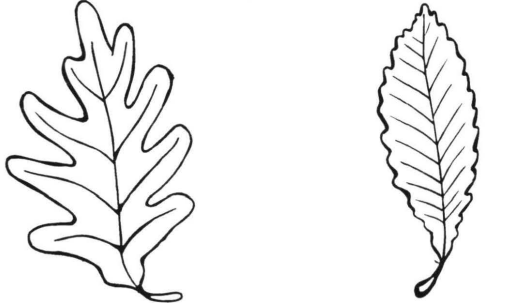
SILVER MAPLE      RED MAPLE      FLOWERING DOGWOOD

## TREES WITH COMPOUND LEAVES



BLACK WALNUT      HONEY LOCUST      HICKORY

## SIMPLE LEAVES, ROUNDED LOBES

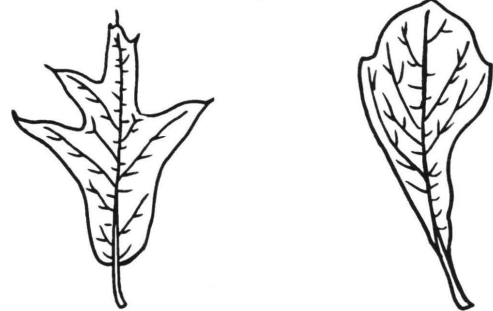


WHITE OAK      SWAMP CHESTNUT OAK



RED MULBERRY      SASSAFRAS

## SIMPLE LEAVES, POINTED LOBES

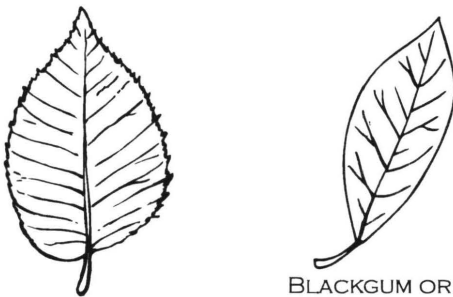


SOUTHERN RED OAK      WATER OAK

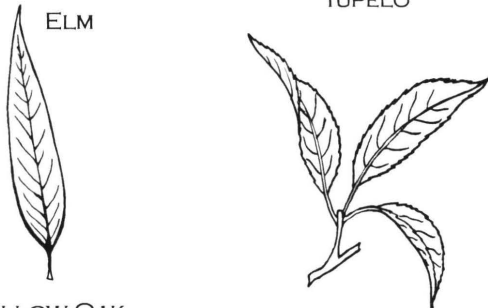


SYCAMORE      SWEETGUM

## SIMPLE LEAVES, NO LOBES



ELM      BLACKGUM OR TUPELO

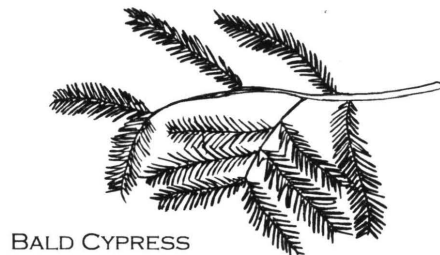


WILLOW OAK      BLACK CHERRY

## NEEDLE-LEAVED TREES



EASTERN RED CEDAR      LOBLOLLY PINE (6"-9" NEEDLES)      WHITE PINE

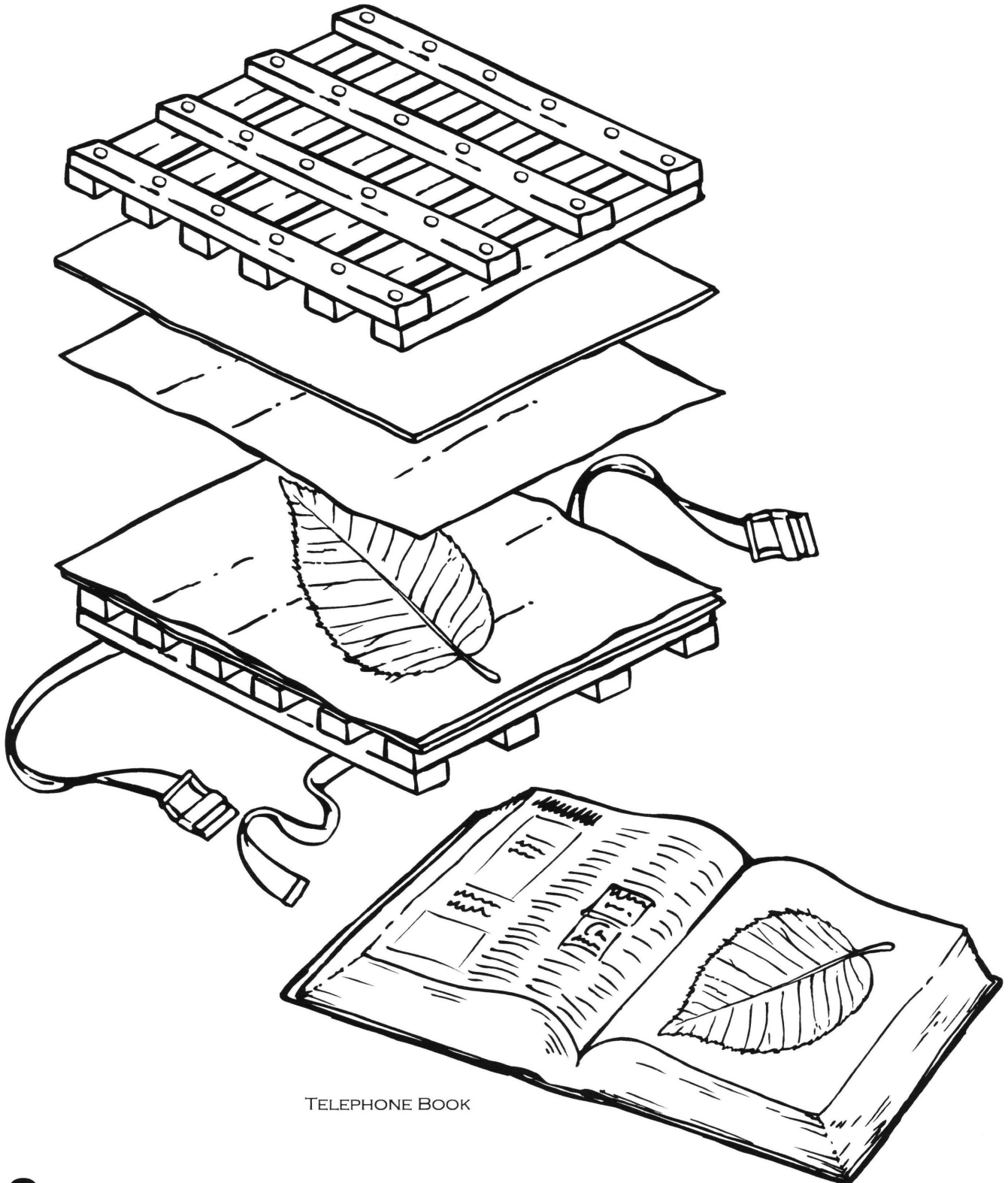


BALD CYPRESS

## ACTIVITY TWO

### MAKING A LEAF COLLECTION

A leaf collection is easy to make and does not injure a tree as long as you are careful to remove only one or two leaves. To make a collection for display, you will need to dry your leaf for several days in a flat position, then glue your leaf to heavy paper. Serious students and professionals use a leaf press to dry their leaves, but you can use a telephone book. Be sure to note the date and location of each leaf you collect.



**ACTIVITY THREE**

**COMPLETING A 4-H PROJECT RECORD**

Your Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Zip code \_\_\_\_\_

Name of your School or 4-H Club \_\_\_\_\_

**PART A.**

Note the name, location, date and size of the trees in your backyard or community park. Measure circumference at breast height (4.5 ft.)

	<b>NAME OF TREE</b>	<b>LOCATION OF TREE</b>	<b>DATE</b>	<b>CIRCUMFERENCE</b>
Ex.	White oak	back yard at home	9/15/99	60 cm
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____

**PART B.**

Complete at least one of the following activities.

**ACTIVITY**

**DATE COMPLETED**

- 1. Exhibit your collection of leaves, fruits, or other items.
- 2. Write a story or give a presentation on trees.
- 3. Do a citizenship activity related to forestry.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# **SUGGESTIONS FOR EXHIBITS,**

## **PRESENTATIONS AND COMMUNITY SERVICE**

### **EXHIBITS**

- Collection of nuts, fruits and seeds of trees
- Leaf collection (dried, and pasted on paper)
- Wood samples (blocks of wood, labeled)
- Photographs (compare bark or shapes of trees)
- Drawings (compare trees growing in different conditions, or at different ages)

### **PRESENTATIONS**

- "The 10 most important trees of \_\_\_\_\_ County"
- "How to identify trees" (show examples of opposite vs. alternate; simple vs. compound, etc.)
- "How trees are used" (show examples of paper, lumber, veneer, plywood, etc.)
- "The pines of Virginia" (do a combination of identification and uses)
- "The white oak tree" (tell all you know about one species)

### **CITIZENSHIP**

- Contact the Hampton Clean City Commission. They have plenty of ideas and programs. Telephone: (757) 727-6394. Website: <http://www.hampton.va.us/hccc/>
- Keep a scrapbook that illustrates the value of trees to people, and show it to others.
- Read a book about trees to a younger audience.
- Donate a leaf/seed/photo collection to a library or teacher.
- Identify the trees at your school for nature study.
- Help organize or conduct an Arbor Day activity.
- Draw a poster about trees or forests, and exhibit it in a public place.