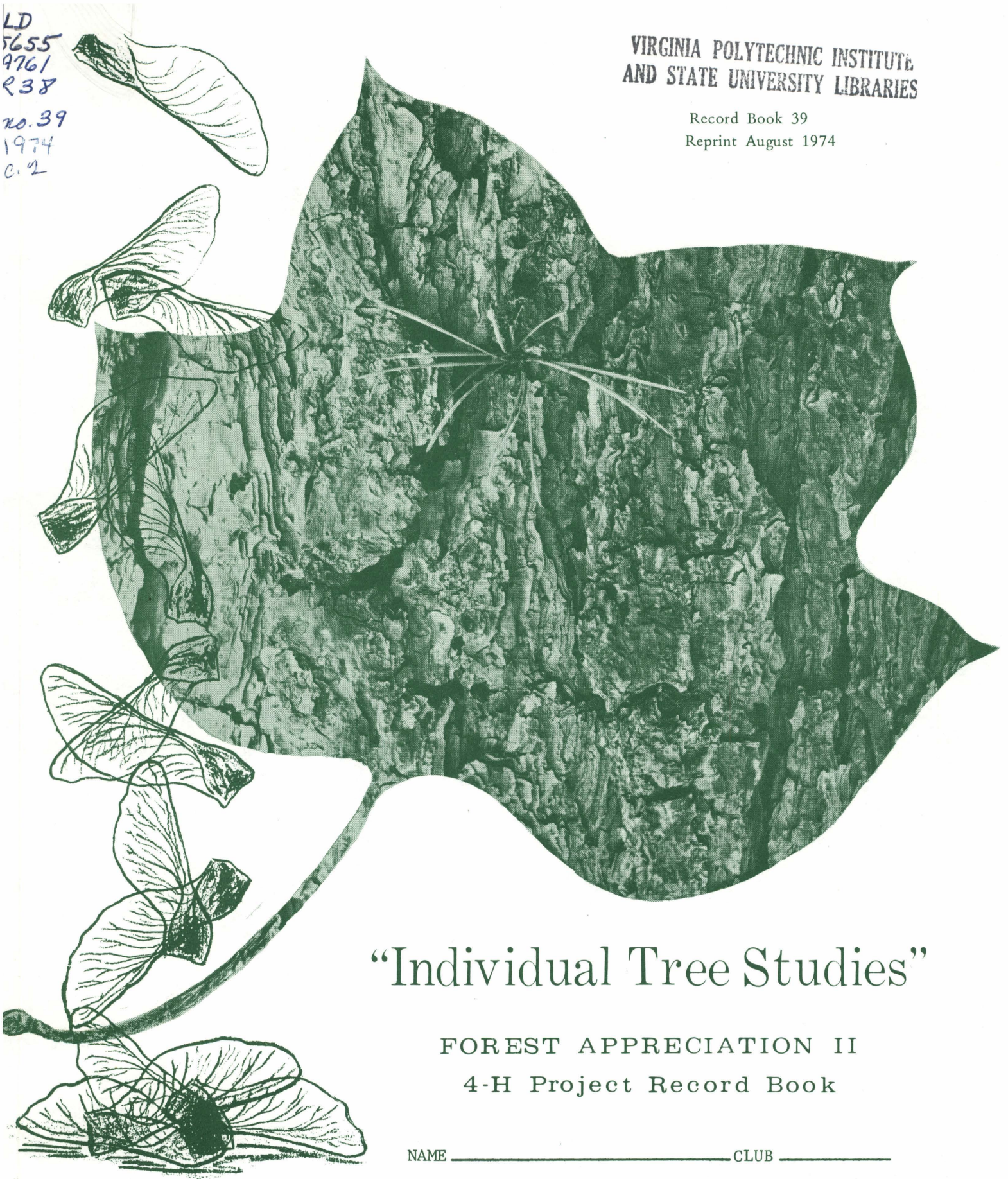


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Record Book 39
Reprint August 1974



“Individual Tree Studies”

FOREST APPRECIATION II
4-H Project Record Book

NAME _____ CLUB _____

COUNTY _____ YEAR 19__

EXTENSION DIVISION
VIRGINIA POLYTECHNIC INSTITUTE
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1914
MAY 8
JUNE 30

Record Book 39

Cooperative Extension Service

Reprint March 1973

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Importance of Forest Appreciation Projects

Virginia is a timber producing state. Because of this we also have a large number of industries producing wood products. The paper and furniture industries use large amounts of wood from our forests each year. As our population increases we will need more and more trees for the many products manufactured from wood. With more timber available for industries to use, more wood-using industries will move into Virginia.

Unfortunately, most of our woodlands are not producing the right kind of trees or the best quality of timber. Neither are they producing as much timber per acre as they could. The result is that timberland owners are not getting nearly as much income from their forest land as they do from their other crops and pastures.

Not all of us have woodlands to manage, nor do we have open land to plant. However, as citizens of a state in which forestry is so important, we should become acquainted with the value of forests to all of us, whether or not we own timber land.

In addition, the study of trees can be a most fascinating hobby. We not only can learn to identify trees, but we can also study their uses, how their seeds are spread, and many other interesting things about them.

The projects in Forest Appreciation may be taken by boys or girls, rural or city club youth. They can open up an exciting new field of study for all 4-H members.

Description of Forest Appreciation Projects

1. Forest Appreciation I - "Introduction to Forestry", VPI Record Book #28 revised. This is the beginning project in 4-H forestry. It should be taken by all 4-H members who want to get acquainted with our forests as well as those who plan to take other forestry projects. By taking this project you will learn what a forest is, the value of forests to all of us and some of the forest enemies. You will also learn how to identify the common trees in your local community.
2. Forest Appreciation II - "Individual Tree Studies", VPI Record Book #39. We all know that trees go through many changes each year. On our hardwood trees the leaves come out in the spring, flowers and fruit are formed, growth takes place during the summer months, and the leaves change their color and drop in the autumn. Most of these events take place in conifers also but are not so noticeable. The purpose of this project is to watch these things on selected trees throughout the year. It can become a fascinating hobby.
3. Forest Appreciation III - "Tree Identification", VPI Record Book #44. 4-H members who have taken Forest Appreciation I - "Introduction to Forestry", have learned to identify ten trees. In almost every part

of Virginia, even in the cities, there are from 25 to 50 species of trees which can be identified. This project is designed for you if you wish to learn to identify most or all of the trees in your neighborhood. In addition to making a collection of leaves, you will also make a collection of tree twigs to help in your identification.

4. Forest Appreciation VI - "Readings in Forest Conservation", VPI Circular #781. Many 4-H members enter public speaking or essay contests. In many of these contests the subject is some phase of conservation. In others you choose your own subject. The purpose of this project is to make material available to you to use in such a contest. If you do not wish to enter contests, you may still take and complete this project by giving a talk on what you have learned about forest conservation before a group.

Forest Appreciation II

"Individual Tree Studies"

by

Carl J. Holcomb, Extension Forester, V.P.I.
and

William A. McElfresh, Assistant Extension Forester, V.P.I.

Objective of Project

The objective of this project is to learn about the growth of a tree from the time its buds begin to swell in the early spring until the leaves drop in the fall.

It may be taken after Unit I, Forest Appreciation has been completed or with Unit I if the club leader approves. It is designed to be taken by urban as well as rural 4-H members. Girls, as well as boys, will enjoy this project.

Requirements

1. Select at least 3 trees of different species for this project. They may be of any size and may be located in your yard, school grounds, park, or anywhere it will be convenient to study them throughout the year.
2. Watch your trees and keep a record of the dates when the buds begin to swell, the leaves and flowers begin to grow, leaves change color and drop, etc.
3. Make sketches or take pictures of the trees you are studying both in winter and in summer.
4. Write a brief essay on what you have learned from watching your trees throughout the year.

Suggestions for Judging and Scoring Project

1. Quality of work	40 points
2. Neatness	20 points
3. Completion of project book	<u>40 points</u>
TOTAL	100 points

References

The following references will be helpful to you in working on this project:

1. What to Look for in Growing Trees. Leaflet 169, VPI Cooperative Extension Service.
2. Forestry in Virginia. Publication 50. VPI Cooperative Extension Service.
3. Virginia Trees - A Check List of the More Common Species. Circular 746. VPI Cooperative Extension Service.
4. Leaves and Fruit of Virginia Forest Trees. Leaflet 45. VPI Cooperative Extension Service.

Books about Trees

1. A POCKET GUIDE TO THE TREES by Rutherford Platt. A Cardinal Edition. Pocket Books, Inc. Descriptions, stories and simple keys.
2. TREES - A Golden Nature Guide by Zim and Martin. Simon and Shuster, Inc. Tree descriptions and range maps.
3. TREE TRAILS AND HOBBIES by Ruth Cooley Cater. Doubleday and Company. An inspirational book of tree study which will inspire many to take it up as a hobby.
4. TREES - Yearbook of Agriculture 1949. U. S. Department of Agriculture. Articles on many phases of forestry including tree and wood descriptions.
5. A NATURAL HISTORY OF TREES OF EASTERN AND CENTRAL NORTH AMERICA by Donald Culross Peattie. Houghton-Mifflin Company. Leaf, fruit and twig drawings. Descriptions and stories.
6. THE GREAT AMERICAN FOREST by Rutherford Platt. Prentice Hall. A history of trees for North America and very descriptive story of tree growth.

Note: Titles 1 and 2 are inexpensive books obtainable at most bookstores. Titles 3 to 6 may be obtained in school or other libraries.

REQUIREMENT NO. 1 - Select at least 3 trees of different species for this project. They may be of any size and located in your yard, school grounds, park, or any place where it will be convenient to study them throughout the year.

Tree No. 1

Common name of tree _____

Scientific name of tree _____

Size of tree: Height _____ ft.; Diameter $4\frac{1}{2}$ ft. above ground _____ inches

<u>Observation</u>	<u>Date Observation Made</u>
1. Buds begin to swell	_____
2. Buds open	_____
3. Leaves begin to take shape	_____
4. Leaves grown to full size	_____
5. Flower buds open	_____
6. Flowers in full bloom	_____
7. Seeds, fruit, or cones begin to form	_____
8. Seeds, fruit, or cones reach full size	_____
9. Seeds, fruit, or cones mature.	_____
10. Seeds, fruit, or cones begin to fall from tree	_____
11. Branch tips begin to grow	_____
12. Branch tips complete growth	_____
13. Leaves begin to turn	_____
14. Leaves begin to fall	_____
15. Leaves completely fallen from tree	_____

Additional Observations:

Tree No. 2

Common name of tree _____

Scientific name of tree _____

Size of tree: Height _____ ft.; Diameter $4\frac{1}{2}$ ft. above ground _____ inches

<u>Observation</u>	<u>Date</u> <u>Observation</u> <u>Made</u>
1. Buds begin to swell	_____
2. Buds open	_____
3. Leaves begin to take shape	_____
4. Leaves grown to full size	_____
5. Flower buds open	_____
6. Flowers in full bloom	_____
7. Seeds, fruit, or cones begin to form	_____
8. Seeds, fruit or cones reach full size.	_____
9. Seeds, fruit, or cones mature	_____
10. Seeds, fruit, or cones begin to fall from tree	_____
11. Branch tips begin to grow	_____
12. Branch tips complete growth	_____
13. Leaves begin to turn	_____
14. Leaves begin to fall	_____
15. Leaves completely fallen from trees	_____

Additional Observations:

Tree No. 3

Common name of tree _____

Scientific name of tree _____

Size of tree: Height _____ ft.; Diameter $4\frac{1}{2}$ ft. above ground _____ inches

<u>Observation</u>	<u>Date Observation Made</u>
1. Buds begin to swell	_____
2. Buds open	_____
3. Leaves begin to take shape	_____
4. Leaves grown to full size	_____
5. Flower buds open	_____
6. Flowers in full bloom	_____
7. Seeds, fruit, or cones begin to form	_____
8. Seeds, fruit, or cones reach full size	_____
9. Seeds, fruit, or cones mature	_____
10. Seeds, fruit, or cones begin to fall from tree	_____
11. Branch tips begin to grow	_____
12. Branch tips complete growth	_____
13. Leaves begin to turn	_____
14. Leaves begin to fall	_____
15. Leaves completely fallen from tree	_____

Additional Observations:

Tree No. 4

Common name of tree _____

Scientific name of tree _____

Size of tree: Height ---- ft.; Diameter $4\frac{1}{2}$ ft. above ground _____ inches

<u>Observation</u>	<u>Date Observation Made</u>
1. Buds begin to swell	_____
2. Buds open	_____
3. Leaves begin to take shape	_____
4. Leaves grown to full size	_____
5. Flower buds open	_____
6. Flowers in full bloom	_____
7. Seeds, fruit, or cones begin to form	_____
8. Seeds, fruit, or cones reach full size	_____
9. Seeds, fruit, or cones mature	_____
10. Seeds, fruit, or cones begin to fall from tree	_____
11. Branch tips begin to grow	_____
12. Branch tips complete growth	_____
13. Leaves begin to turn	_____
14. Leaves begin to fall	_____
15. Leaves completely fallen from trees	_____

Additional Observations:

Tree No. 5

Common name of tree _____

Scientific name of tree _____

Size of tree: Height _____ ft.; Diameter $4\frac{1}{2}$ ft. above ground _____ inches

<u>Observation</u>	<u>Date Observation Made</u>
1. Buds begin to swell	_____
2. Buds open	_____
3. Leaves begin to take shape	_____
4. Leaves grown to full size	_____
5. Flower buds open	_____
6. Flowers in full bloom	_____
7. Seeds, fruit, or cones begin to form	_____
8. Seeds, fruit, or cones reach full size	_____
9. Seeds, fruit, or cones mature	_____
10. Seeds, fruit, or cones begin to fall from tree	_____
11. Branch tips begin to grow	_____
12. Branch tips complete growth	_____
13. Leaves begin to turn	_____
14. Leaves begin to fall	_____
15. Leaves completely fallen from trees.	_____

Additional observations:

REQUIREMENT NO. 2 - Sketch or photo of one of my trees in winter.

The same tree in summer

REQUIREMENT NO. 3 - Essay on some things I have learned about trees by watching them throughout the year.
