

THE FLORIDA 4H FOREST ECOLOGY PROGRAM

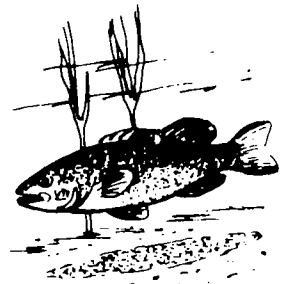
UNIT 5. COMMON FOREST ECOSYSTEMS



A. S. JENSEN

Assistant Extension Forester

Florida Cooperative Extension Service
Institute of Food and Agricultural Sciences
University of Florida, Gainesville
John T. Woeste, Dean for Extension



The Florida 4-H
Forest Ecology Project
Member's Manual
Unit #5

F L O R I D A F O R E S T E C O S Y S T E M S

A. S. Jensen
Assistant Extension Forester
Cooperative Extension Service
University of Florida
Gainesville, Florida

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Introduction

This is the last unit of the 4-H Forest Ecology Series. We hope you have learned something about our Florida woodlands: the trees, lesser plants, insects, diseases, and animals found there.

This wrap-up unit gives a quick look at the various common vegetation types found in Florida.

We hope in the future when you ride along Florida highways you'll be able to distinguish the differences in these major forest types.

Review of previous projects

Unit #1, Introduction to Forest Ecology. Here you learned basic definitions relating to ecology.

Unit #2, Common Florida Plants. Native trees, shrubs, plants, vines, flowers, and grasses.

Unit #3, Common Florida Animals

Unit #4, Common Florida Insects and Diseases. These are insects and diseases that cause damage and death to our trees.

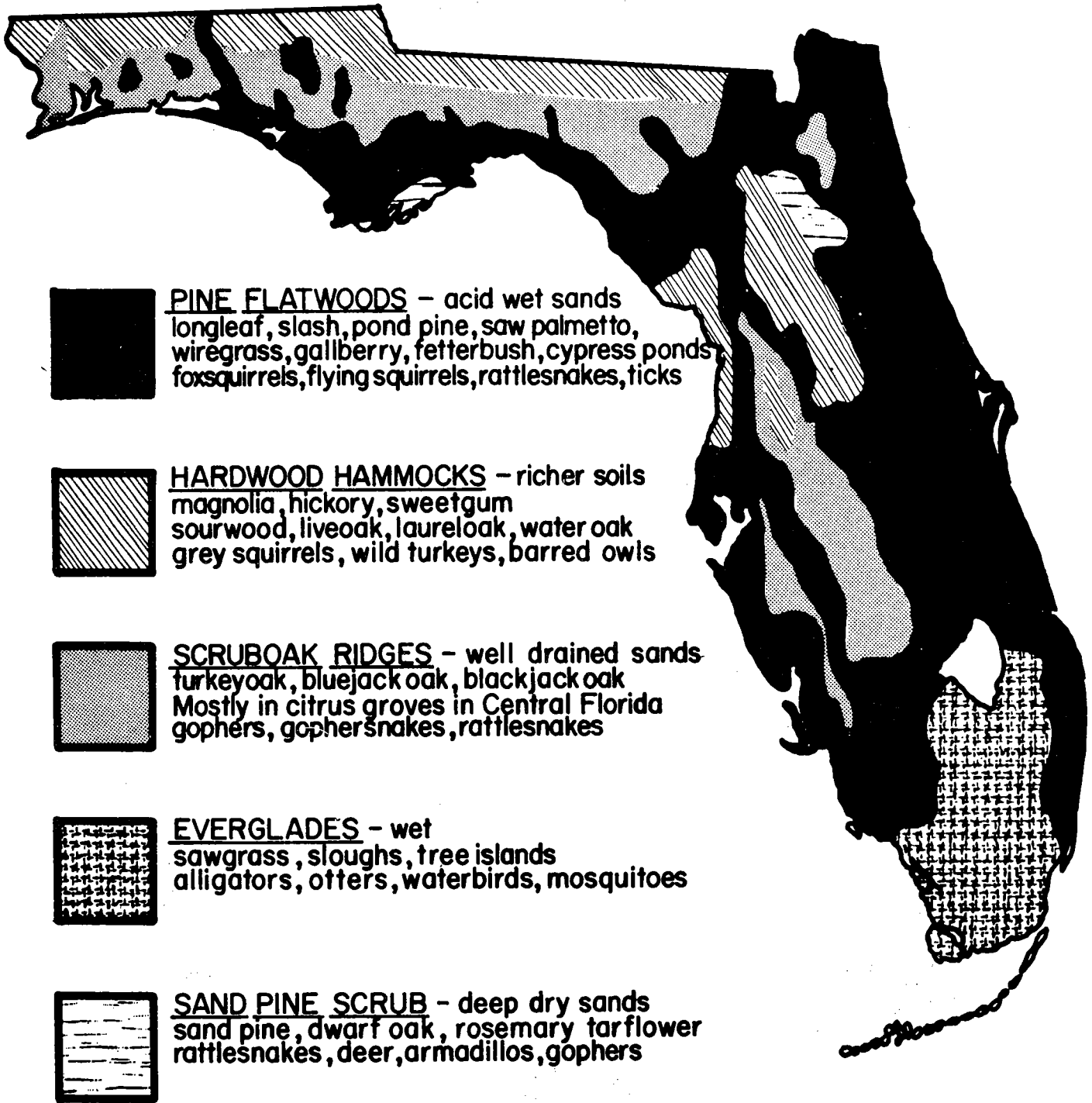
What to do -- step by step

1. Read over the manual.
2. Study the natural vegetation map of Florida.
3. Make a field trip and identify as many natural vegetation types as possible.
4. Answer the questions at the end of this book.



Find the eagle nest!

SOME NATURAL VEGETATION TYPES OF FLORIDA



Prepared by
 A. S. Jensen
 Assistant Extension Forester
 Cooperative Extension Service
 Institute of Food and Agricultural Sciences
 University of Florida, Gainesville

THE NATURAL PLANT COMMUNITIES OF FLORIDA

Study the simple vegetation map on the preceding page which shows some of the important vegetation types of Florida. Remember these are only a few of many types.

After you learn these few important types and if you are interested in learning more about natural vegetation of Florida, study the 17 Natural Plant Communities according to Botanist John Henry Davis, obtain a copy of the map Natural Vegetation of Florida (Agricultural Experiment Station Circular S-178).

According to Dr. Davis, Florida has the following natural plant communities:

1. Coastal strand - A zoned vegetation on sand dunes and rock, composed of pioneer herbs and shrubs near shore with scrub and forest zone more interior. The strand of the Florida Keys has many tropical forests and scrub. Beaches and lands behind.
2. Pine flatwoods - Open woodlands of one to three species of pine: longleaf, slash, and pond pines. Many herbs, saw palmetto, shrubs and small trees form an understory. Included in general flatwoods areas are small hardwood forests, many kinds of cypress swamps, prairies, marshes, and bay tree swamps. Many million acres east and south Florida.
3. Southern slash pine forests - Open woodlands of *Pinus elliottii densa*, mostly on rocklands. Some herbs, shrubs, and hardwood trees of understory are tropical. Small tropical and subtropical hammock forest areas are included. Around Lake Okeechobee, St. Johns River marshes.
4. Forests of mixed hardwoods and pines - Mostly on uplands of clay soils in northwest section. Many differences in composition and age; some young second growth is mostly pines. The more mature forests are mostly hardwoods. Along Georgia and Alabama borders.
5. Sand pine, *Pinus clausa*, scrub forests - Mostly on excessively drained deep sandy soils. These occur on old dunes of #1, and on old dunes or dry sands in the interior.
6. Forests of longleaf pine, *Pinus palustris*, and xerophytic (dry site) oaks - Mostly on well drained uplands. The turkey oak, *Quercus laevis*, and wire grass, *Aristida stricta*, are common. Many former areas of this type are now citrus groves in the central section. Much planted to pines in north Florida.

7. Cypress Swamp Forests - Mostly in depressions and bordering rivers and lakes. Forests of many shapes, as round domes and long strands. Some have hardwood species associated. Cypress is also common in #2 and #8, and a scrub form in #12.
8. Swamp Forests, mostly of Hardwoods - Several kinds bordering most rivers and in many of these hardwood swamps.
9. Mangrove Swamp Forests and Coastal Marshes - Usually there are tidal conditions which vary from saline to brackish. Tropical mangrove forests in southern area; and grass, sedge, and rush marshes along more temperate coasts. Low coastline - no dunes.
10. Hardwood Forests - Mostly on rich soil uplands. These are mixed evergreen and deciduous hardwoods. Some areas are nearly original hardwood stands but many are old second growth with pines. Mostly north central Florida.
11. Grassland of Prairie Type - Wet prairies on seasonally flooded lowlands. Dry prairies on seldom flooded flatlands. Many former areas of these are now improved pastures. South Florida.
12. Region of Open Scrub Cypress - Mostly on rock and marl soils that are often flooded. Small areas in this region are tall domes and strands. Also there are some hardwood and palm hammocks. South Florida.
13. Forests of Abundant Cabbage Palms, Sabal Palmetto - Vary from scattered palms to groves of palms and oaks in hammocks. Cabbage palms are also abundant in #2, #3, #8, #11, #12, and #15. South Florida.
14. Freshwater Marshes - Some are mixed marshes of many kinds of herbs and bushes, and some are dominated by one plant, such as the Saw Grass Marshes, mainly of *Mariscus jamaicensis*. All through Florida.
 - a. Everglades Region Saw Grass Marshes - Area mostly dense to sparse saw grass, a few tree islands and sloughs. South Florida.
 - b. Everglades Region Saw Grass Marshes, Sloughs, Wet Prairies, and Tree Islands - The tree islands vary from Bay Tree type to Tropical Hardwoods. Region now changing. South Florida.
15. Wet to Dry Prairie-Marshes on Marl and Rockland - Some are mostly thin saw grass, others are bushes and grasses. Extreme south Florida.

Water Areas - Only a few of the thousands of lakes and ponds are shown. These and rivers are habitats for abundant aquatic plants. State-wide.

I N F O R M A T I O N

MEMBER'S NAME _____ AGE _____

PARENTS OR GUARDIAN'S NAME _____

MAILING ADDRESS: STREET OR BOX NUMBER _____

CITY _____ STATE _____ ZIP _____

NAME OF YOUR CLUB _____ COUNTY _____

NAME OF YOUR SCHOOL _____ GRADE IN SCHOOL _____

YEARS YOU HAVE BEEN IN CLUB WORK _____ IN THIS PROJECT _____

NAME OF COUNTY OR HOME DEMONSTRATION AGENT _____

NAME OF YOUR LOCAL CLUB LEADER _____

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RECORD SECTION

Match up the correct plants or animals with the natural vegetation type you commonly find them in. Remember that many common plants or animals can be found on several of the ecosystems, but may not be common.

<u>Ecosystem</u>	<u>Common Plants and Animals</u>					
a. Pine flatwoods	_____	_____	_____	_____	_____	_____
b. Hardwood hammock	_____	_____	_____	_____	_____	_____
c. Scruboak ridge	_____	_____	_____	_____	_____	_____
d. Everglades	_____	_____	_____	_____	_____	_____
e. Sand pine scrub	_____	_____	_____	_____	_____	_____

<u>Soil</u>	<u>Trees</u>	<u>Plants</u>	<u>Animals</u>
1. Well-drained sand	6. Magnolia	18. Tar flower	25. Barred owl
2. Wet soils -- marsh	7. Bluejack oak	19. Sawgrass	26. Gopher - turtle
3. Deep dry sand	8. Slash pine	20. Rosemary	27. Rattlesnake
4. Rich soils	9. Hickory	21. Wiregrass	28. Gophersnake
5. Acid wet sands	10. Blackjack oak	22. Fetterbush	29. Wild turkey
	11. Pond pine	23. Gallberry	30. Fox squirrel
	12. Sand pine	24. Saw palmetto	31. Flying squirrel
	13. Longleaf pine		32. Otter
	14. Dwarf oak		33. Mosquito
	15. Sweetgum		34. Deer
	16. Laurel oak		35. Gray squirrel
	17. Water oak		



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This five unit series with Leader's Guide was published at a cost of \$195.96 or 6.5 cents per copy, to be used in the educational programs in Florida's 4-H Clubs.

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