



Wildlife

Conservation

for

4-H Club Members

4-H WILDLIFE CONSERVATION PROJECT

L. R. Harrill, *State 4-H Club Leader*

Purpose:

To bring about a better understanding of the value of wildlife and to create a consciousness on the part of the farm boy and girl to the value of such a program in relation to farming, its economic value and its recreational advantages.

Work Required:

The work as outlined in the following pages of this pamphlet.

Basis of Award:

Club members story "My Contribution to a Wildlife Conservation Program"	300 Points
Actual Results Accomplished as shown by Records Submitted	500 Points
Record Books, Neatness and completeness	100 Points
Other Activities in 4-H Club Work	100 Points
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	Total 1000 Points

Award:

A week at the State Wildlife Conference to the 75 club members submitting the best records.

Rules:

1. Any farm boy or girl between the ages of ten and twenty, living on the farm, is eligible.
2. Records must cover a minimum period of 4 months.
3. Records must be in the State office on or before July 22nd.

Acknowledgment is made of help given by members of the staff of the Agricultural Extension Service, the Soil Conservation Service, and the North Carolina Department of Conservation and Development in compiling this publication.

PLAN AND OUTLINE FOR 4-H WILDLIFE CONSERVATION PROGRAM

I. FARM SURVEY

1. Make a sketch map of your farm to show:

(a) Fields, woodlands, thickets, hedgerows, pasture lands, eroded areas, fences, buildings, springs, streams, etc. (See U.S.D.A. Farmers' Bulletin No. 1788—Page 3).

(b) Areas definitely designated for wildlife food and cover protection. (Such areas might include gully and other eroded areas, field borders, small openings in woodlands, brushy areas, abandoned fields, steep slopes and other odd corners about the farm). Letter the fields, woodlands and pasture lands alphabetically, A, B, C, etc., and number the wildlife improvements you have made.

See sample map on page 9.

II. PLAN FOR FIELD IMPROVEMENTS

Write a plan to indicate how each area is to be treated. (Such a plan might show kinds of seed or shrubs to plant, time of planting, and treatment of soil, strips of small grains, lespedeza, soybeans, etc. to be left unharvested along field borders, or other special types of treatments as might be suggested under "Field Improvements.")

III. FIELD IMPROVEMENTS REPORT

This report might indicate the progress in the following types of developments:

1. Food patches planted. (In reporting this and the following activities it might be advisable to refer to wildlife area numbers on farm survey map:) For information relative to location and development of food patches see U.S.D.A. Farmers' Bulletin No. 1788—pages 6 to 19 and 23 to 24).

2. Gully and other severely eroded areas treated to prevent erosion and provide food and cover for wildlife. (See Farmers' Bulletin No. 1788—pages 6 to 15 and figures 4 to 16. Also, see February 1938 issue of "Wildlife Management in North Carolina.")

3. Field borders planted to wildlife food crops and field borders of small grains and lespedezas left unharvested. (See Farmers' Bulletin No. 1788—pages 15 to 19 and illustration on page 15.)

4. Development of additional cover: Allowing hedgerows and ditch banks to grow up with native shrubs, permit thickets to grow near woodland borders and in open areas in woodlands. (See figure 3 and pages 20 to 22 Farmers' Bulletin No. 1788 for kinds of shrubs suitable for providing food and cover.)

5. Planting of food and cover producing shrubs on areas which have been designated for wildlife. (See Farmers' Bulletin No. 1788—pages 20 to 22).

6. Leaving hollow trees as nesting places for furbearers and hole nesting birds. Designate in some manner the location of den trees on farm survey map.

7. The making and erecting of nest boxes for song and insect-eating birds, squirrels, etc. (See Farmers' Bulletin No. 1456 and Helping our Bird Friends.") For suggestions about squirrel boxes see January issue of "Wildlife Management in North Carolina" pages 10 to 11.

(NOTE: The pamphlets "Helping Our Bird Friends" and "Wildlife Management in North Carolina" may be secured from the Division of Game and Inland Fisheries, Department of Conservation and Development, Raleigh, North Carolina.)

U.S.D.A. Farmers' Bulletin No. 1788 may be secured from County Agents or N. C. State College Extension Service.

IV. WILDLIFE SURVEY

1. Make a Wildlife Survey and record the information called for in the columns of the proper tables on the following pages.

(a) Game Animal Survey. This will include the following animals: Quail, turkey, grouse, doves, squirrels, rabbits, deer and bear.

(b) Furbearing Animal Survey. (Opossum, racoon, mink, weasel Otter, muskrat, fox, wildcat, etc.)

(c) Hawk and Owl Survey. (Sparrow hawk, pigeon hawk, sharp-skinned and Copper's hawks—blue darters or blue-tails-red-shouldered hawk, red-tailed hawk, barn owl, screech owl, barred owl, great horned owl, etc.) Designate harmful and beneficial species as suggested in Farmers' Bulletin No. 497 and Department of Agriculture Circular No. 370.

(d) Song and Insect-eating Bird Survey. Including such birds as robins, mockingbirds, flycatchers, bluebirds, wrens, etc.

2. List: (a) Number of cats on farm.

(b) Number of dogs on farm: Hounds, Bird Dogs; others.

EXPLANATION OF WILDLIFE SURVEY CHARTS

1. In the "Name" column give the common names of the animals you observe on the farm. List the game animals in the "Game Animal Survey" chart; the fur-bearing animals in the "Fur-bearing Animal Survey" chart; etc.

2. Location column: Indicate whether the nest is on the ground in a bush or tree, in a hollow snag, etc.

3. Found or Seen column: If a nest is found record the date and put the word nest in parenthesis (). If it is a den give the date and put the word den in parenthesis.

4. Number of Eggs or Young column: Record the number of eggs or young found as follows; 11 eggs, 2 parents; or 2 parents and 1 fawn, etc.

5. Habitat column: In this column give a brief description of the place where the nest, den, young or old animals were observed. Example: Nest in edge of broomsedge field about 30 feet from a farm road.

GAME ANIMAL SURVEY

Name	Nest or Dens		Adults No. Eggs or Young	Habitat: Woods, field border, along creek, etc.
	Location	Date Found or Seen		

FUR-BEARING ANIMAL SURVEY

Name	Dens		Adults or Young	Habitat: Woods, field border, along creek, etc.
	Location	Date Found or Seen		

HAWK AND OWL SURVEY

Name	Nests		Adults No. Eggs or Young	Habitat: Woods, field border, along creek, etc.
	Location	Date Found or Seen		

SONG AND INSECT-EATING BIRD SURVEY

Name	Nests		Adults No. Eggs or Young	Habitat: Woods, field border, along creek, etc.
	Location	Date Found or Seen		

V. PLANT SURVEY

1. Make a Plant Survey and record the information called for in the proper tables on the following pages:

(a) Shrubs and vines found on the farm which produce food and cover for wildlife. (See U.S.D.A. Farmers' Bulletin No. 1788—pages 20 to 22.)

(b) Trees found on the farm which produce food or cover or both and which may have other important uses.

(c) Other food and cover producing plants found on the farm such as lespedeza, partridge, pea, etc.

2. Collect and mount a specimen of each plant listed in the Plant Survey charts. Number each mounting and label with both common and scientific name.

FORESTRY

Trees and wildlife serve each other in a mutual relationship. In this program we should study trees in the light of such relationship. Trees furnish food for both birds and animals; birds and animals aid other elements of nature in distributing and planting the seeds of trees. Birds also serve the trees by destroying many insects which prey on and destroy trees. As the forestry phase of this program you should conduct the following projects:

1. Find, identify, and name the forest trees on your home farm, and show their commercial uses, how their seed are distributed, and how and what animals and birds they serve. Indicate with an (x) the trees which are best for shade in your community.

(Reference—U. S. Miscellaneous Publication No. 217, and "Aids in Tree Study for 4-H Clubs.")

2. Find, identify, and name the forest shrubs on your home farm. Show commercial or other uses; how and what animals and birds they serve. Indicate with an (x) such shrubs as are useful for ornamentals around the farmstead.

3. Collect and either print or mount a leaf specimen of each tree or shrub on your list. Number each print or mounting with same number given on list, label with both the scientific and approved common name. (See U. S. Miscellaneous Publication No. 217 and Extension Literature listed on page 12.) Put trees and shrubs in separate groups.

EXPLANATION OF TREE AND PLANT SURVEY CHARTS

1. In the "Name" column give the common name and where possible the scientific name of plants identified.

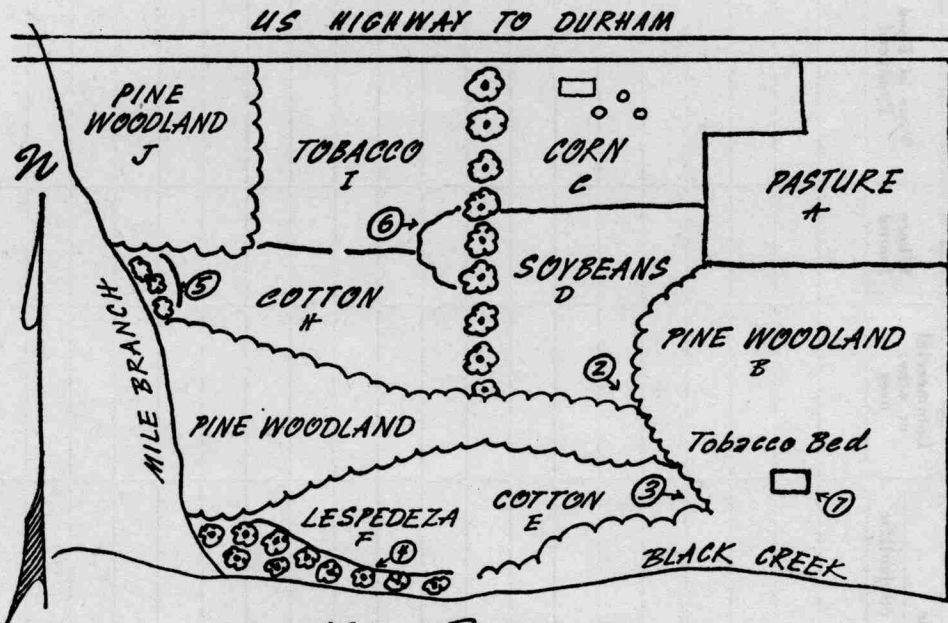
2. Commercial or other Uses Column: State whether the plant is used for lumber, grain, hay, ornament, etc.

3. Where Found Column: Indicate whether found in woodland, hedgerows, old field, swampy land, etc. In some cases you may give the section of the state where it is found.

4. Type of Food Produced column: Such as fruit, seed, acorn, green food, browse (buds, twigs, etc.).

5. Time of Year Food Available: Where possible give the months or portions of months during which the food or foods are available.

6. Animals using Such Food column: Where possible list the more important animals that use the foods produced. If you cannot determine what individual animals eat the food produced, then give the general groups of animals that use such foods.



Map Symbols

- FENCE — * * * * *
- STREAM —————>
- ROAD —————
- WOODLAND BORDER —~~~~~
- HEDGEROW * * * * *
- WILDLIFE AREAS ① ② ③
- FARM DWELLINGS □

SOURCES OF FORESTRY INFORMATION

Office of Extension Forester, N. C. State College, Raleigh, N. C.

- Extension Circular No. 218—Management, Harvest and Sale of Pine Timber for Pulpwood
- Club Series No. 8—Forestry Manual and Record Book for 4-H Club Members
- For Manual Supplement No. 1—Leaf Prints—An Aid to Tree Study
- For Manual Supplement No. 4—Aids in Tree Study for 4-H Clubs
- For Manual Supplement No. 5—Read the Verse—Name the Tree
- For Manual Supplement No. 6—Nature Speaks
- Mimeographed Circular—Forest Planting
- U. S. Department of Agriculture, Washington, D. C.
- Farmers' Bulletin 1169—Insects Injurious to Deciduous Shade Trees and Their Control
- Farmers' Bulletin 1453—Growing and Planting Coniferous Trees on the Farm
- Farmers' Bulletin 1123—Growing and Planting Hardwood Trees
- Farmers' Bulletin 1501—Nut Tree Propagation
- Farmers' Bulletin 1591—Transplanting Trees and Shrubs
- Farmers' Bulletin 1567—Propagation of Trees and Shrubs
- Farmers' Bulletin 1405—Windbreak as a Farm Asset
- Farmers' Bulletin 1486—Longleaf Pine Primer
- Farmers' Bulletin 1517—Loblolly Pine Primer
- Farmers' Bulletin 1671—Shortleaf Pine
- Farmers' Bulletin 1628—Growing Black Locust Trees
- Farmers' Bulletin 1210—Measuring and Marketing Farm Timber
- Farmers' Bulletin 1664—Christmas Trees as a Cash Crop for the Farm
- Farmers' Bulletin 1693—Growing Christmas Holly on the Farm
- U. S. D. A. Misc. Publication No. 217—Forest Trees and Forest Regions of the United States
- U. S. D. A. Leaflet 30—Cutting the Farm Woods Profit wise
- U. S. D. A. Leaflet 84—Planting Black Walnuts
- University of North Carolina Press, Chapel Hill, N. C.
- Trees of the Southeastern, Coker-Totten

INSECT SURVEY

Every member is required to collect and preserve at least twenty kinds of insects and to record on Insect Survey Form the information requested for each of the twenty insects. It is suggested that some of these insects be collected in the woods, some in the garden, and some in the field. If insects are observed preying on livestock, these insects should be included in your collection also. U.S.D.A. Farmers' Bulletin No. 1601, Collection and Preservation of Insects, should be used as a guide in mounting the insects for your collection. It is further suggested that in this collection you include only adult forms, as the immature stages are more difficult to preserve. Your collections may be mounted in cigar boxes, or homemade boxes. An extra page of Form No. 1, has been included for those club members who desire to collect more than twenty insects.

All of the information on Form No. 1, except common name of the insect and the plant or animal hosts, can be recorded by the use of check marks. Most insects furnish food for birds, fish, or some other form of wildlife, but

Fill in blanks and check

INSECT SURVEY

Form No. 1

No.	Common Name of Insect	Plant or Animal Hosts	Economic Importance			
			Harmful	Beneficial	Furnish Feed For	
					Birds	Other Wildlife
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

205-10
Wash
Commodore

if you are uncertain about this information, place a question mark in the space you think should be checked. Most insects are either beneficial or harmful. Where an insect has not been observed as a pest of forest, crop, or animal, it should be checked as beneficial, or a question mark substituted for the check mark in the column headed "Beneficial." U. S. D. A. Farmers' Bulletins, Nos. 506, Food of Some Well-known Birds, and 630, Some Common Birds Useful to the Farmer, will be valuable sources of information on insect-eating birds.

SELECT LIST FOR REFERENCE

U. S. D. A. Farmers' Bulletins:

1. No. 506, Food of Some Well-Known Birds.
2. No. 630, Some Common Birds Useful to the Farmers.
3. No. 658, Cockroaches.
4. No. 740, House Ants.
5. No. 1169, Insects Injurious to Deciduous Shade Trees and Thier Control.
6. No. 1220, Insects and Fungus Enemies of the Grape.
7. No. 1260, Stored Grain Pests.
8. No. 1270, The More Important Apple Insects.
9. No. 1353, Clothes Moths and Their Control.
10. No. 1362, Insects Injurious to Ornamental Greenhouse Plants.
11. No. 1371, Diseases and Insects of Garden Vegetables.
12. No. 1408, The House Fly and How to Suppress It.
13. No. 1495, Insect Enemies of the Flower Garden.
14. No. 1472, Preventing Damage by Termites or White Ants.
15. No. 1557, Insects Attacking the Peach in the South and How to Control Them.
16. No. 1601, Collection and Preservation of Insects.
17. No. 1654, Insects of Pecan and How to Combat Them.
18. No. 1688, Insect Enemies of the Cotton Plant.

The above listed publications may be ordered from the Superintendent of Documents, U. S. Department of Agriculture, Washington, D. C., or obtained through your county agricultural agent. It is suggested that you secure copies of these bulletins for your reference files.

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