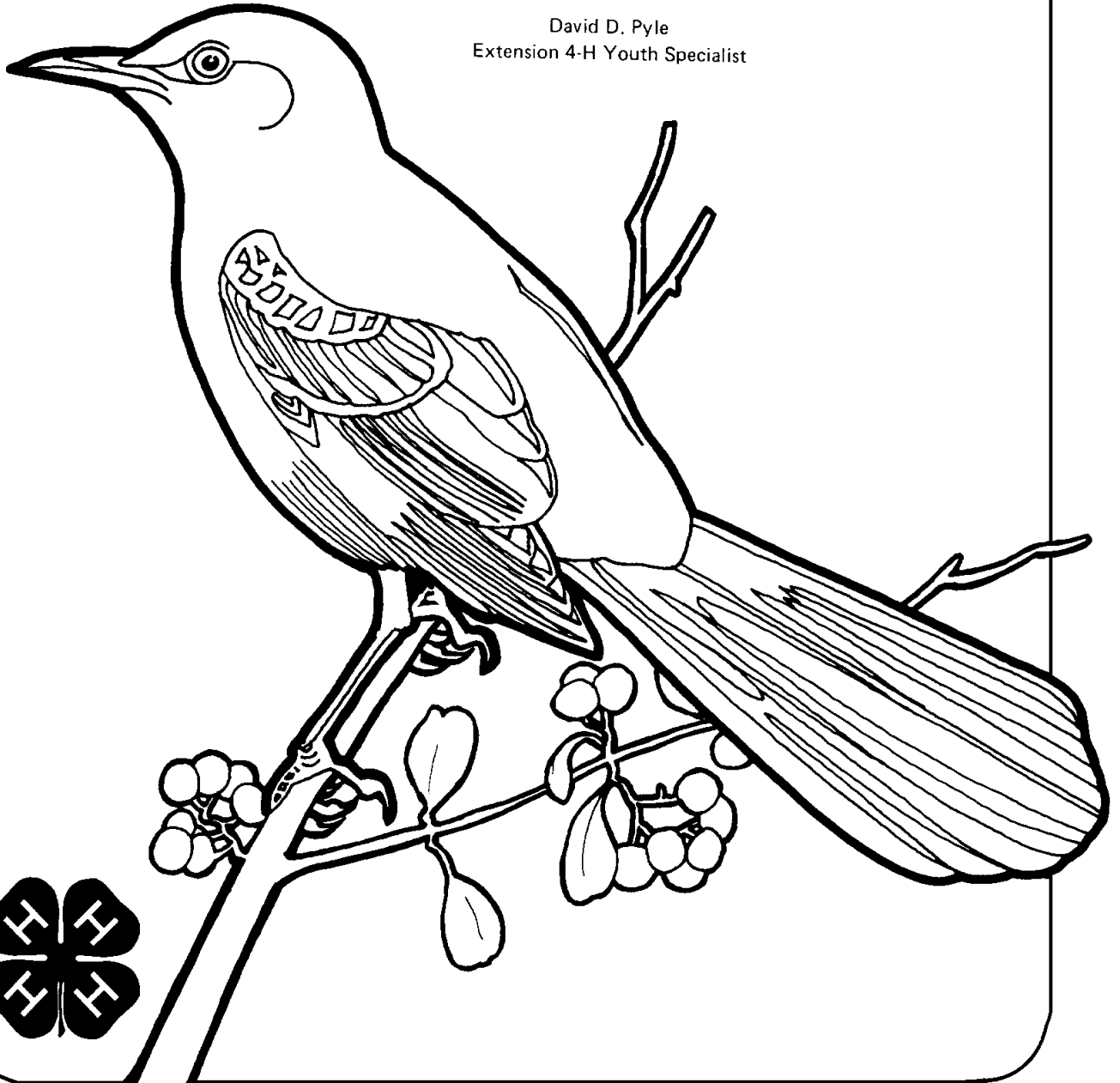


The World Around Us

4H Wildlife Unit II

by
Tony Jensen
Extension Forestry Wildlife

David D. Pyle
Extension 4-H Youth Specialist



Member's Name _____ Age _____

Parent's Name or Guardian's Name _____

Mailing Address _____

Name of Your Club _____ County _____

Name of Your School _____ Grade _____

Years You Have Been in Club Work _____ In This Project _____

Name of County or Home Economics Agent _____

Name of Local Club Leader _____

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What You Will Do

You will learn about birds by walking in the out-of-doors. You will learn to listen and watch carefully for some of the 350 birds in Florida. You will also find library readings helpful as you learn some of the different birds, what they eat and where they live. You can complete the following activities with your leader, with your family, or by yourself.

- 1) Take at least three hikes to learn about birds in your area. (Activity 1)
- 2) Build a simple bird bath near your home. (Activity 2)
- 3) Build or buy a bird feeder and place it near your home. (Activity 3)
- 4) Build or buy a bird house and place it near your home. (Activity 4)
- 5) Collect pictures of 10 birds you have learned to know. (Activity 5) Pictures may be obtained from many sources including flash cards, magazines, paperback books, and the Audubon Society. Mount the 10 pictures on a 22 X 28 piece of poster board or cardboard. Under each picture, place a label which contains the following information:
Name of Bird: Robin
Where found: Backyard
A favorite tree: Wild Plum
Food eaten: Insects
- 6) Exhibit your poster at a local or county exhibit or fair.

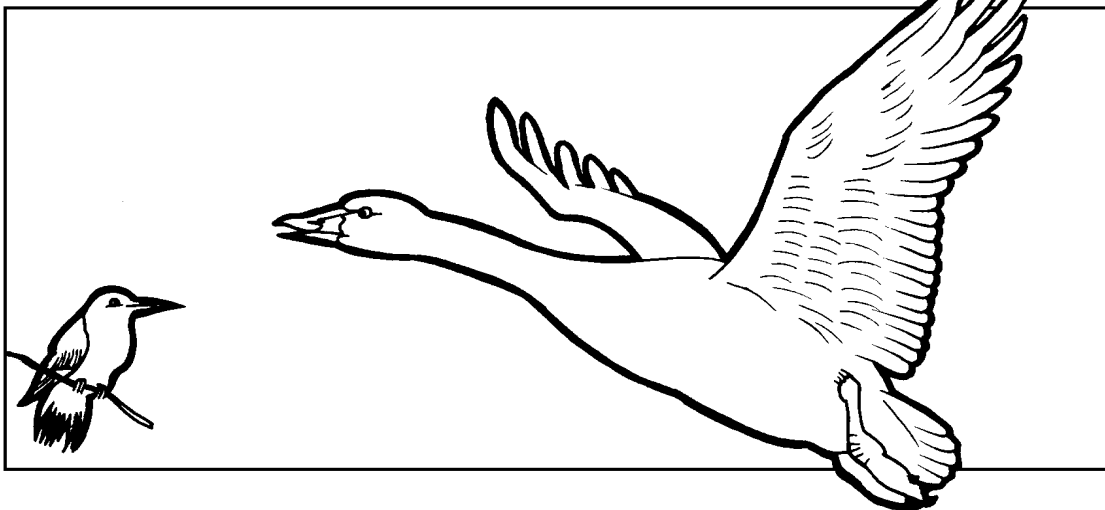
7) Prepare a demonstration about your wild-life project. Showing how to make a bird house or a bird bath would be a good demonstration.

8) Answer all the questions and finish all the activity pages in this project book. Show your project book to your leader as you do the work. (Activity 6)

Beginning Bird Study

The best way to learn about birds is to go out and start to look and listen for them. Go with an adult leader or Audubon Society member or someone else that knows common birds. Go to the local library and check out a bird identification book. There are a great many to choose from. This project will list birds present in Florida but you will have to find pictures in a good book. Here are a few tips to help you enjoy your wildlife project:

- 1) Borrow a pair of field glasses to see the birds better.
- 2) Always try to observe birds with the sun to your back. When the sun shines on the bird from your back or a slight angle you can see colors clearly. If you look into the sun all you will see is a black silhouette in a tree top or floating on a pond.
- 3) Learn something about the different groups of birds and where they are found. Different natural habitats and vegetation types have different birds associated with them. If you want to see water birds, look over water. If you want to see woodpeckers, look on tree trunks!



ACTIVITY ONE -- The Bird Hike

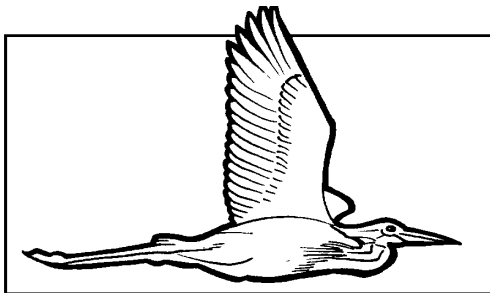
In order to complete the entire project, you should plan three bird hikes. If possible, plan each hike for different times of the day or different seasons of the year. By doing this you can see a greater number of different birds.

After you have located a good bird reference book, you are ready for your first bird hike. Remember to wear comfortable clothing. Don't take along too much equipment. Take your binoculars if you have some.

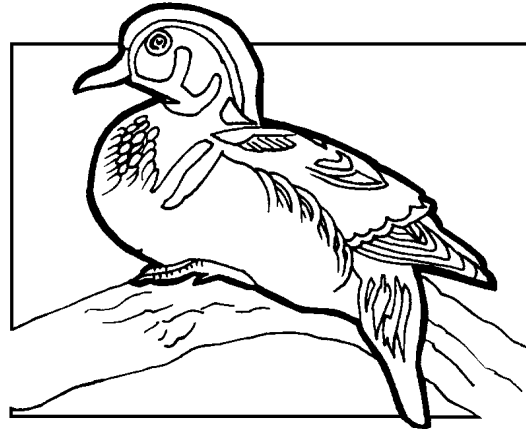
As you begin your hike, walk as quietly as you can. The listening skills which you developed in Unit 1 will be useful on the hike. When you begin to hear and see birds, find yourself a comfortable place to sit and observe. Using your reference book and your adult companion's knowledge, make an entry on the attached chart for all the birds that you see. You will find three separate charts at the end of the book. Use one chart for each hike. Do not worry if you cannot name each of the birds that you see. You can find out the names once you return home. Birds belong to groups. Each group is made up of birds that are similar in where they live, what they eat, and their body characteristics. The following grouping may help you in naming the birds that you see on your bird hikes.

Bird Groups

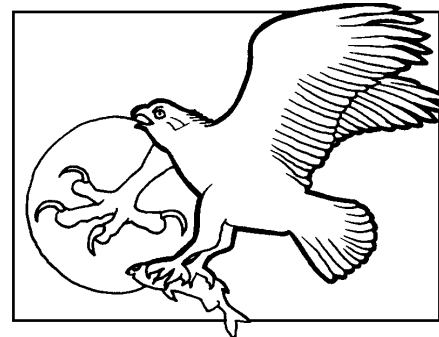
Wading Birds -- Herons, Egrets and Bitterns are examples. They have long legs and long pointed bills. These birds are usually seen wading in shallow water looking for small fish and frogs. The Cattle Egret and Great Blue Heron are in this group.



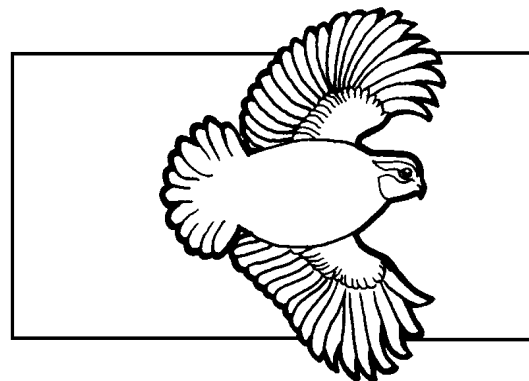
Water Fowl -- Ducks, Geese, and Swans are examples. Ducks are divided into two groups: the *dabbling ducks* which tip up to find food on the pond bottom, and the *diving ducks* which dive for their food. The Wood Duck and Florida Duck are in this group.



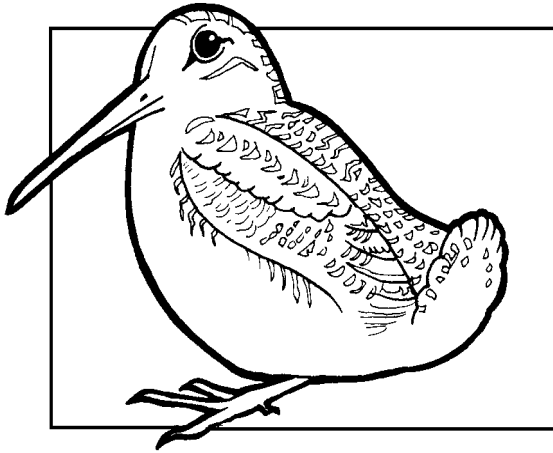
Birds of Prey -- Hawks, Vultures, and Eagles are examples. These birds have hooked beaks, strong feet and can be seen soaring overhead or perched in a dead snag for prey. Red Shouldered Hawk, Sparrow Hawk, Osprey, Owls, and Vultures are in this group.



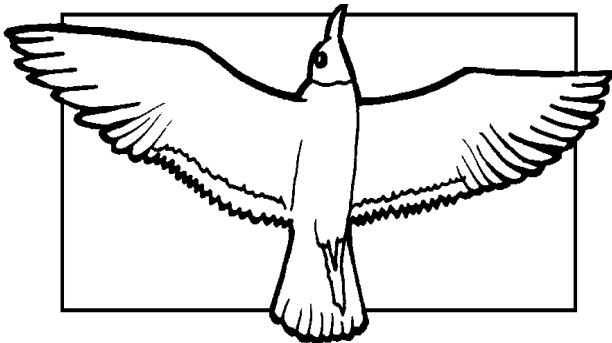
Grouse and Quail -- These birds are "chicken like" and they can be found in and around farm areas. Bob-White Quail, the common member of this family, is found throughout Florida.



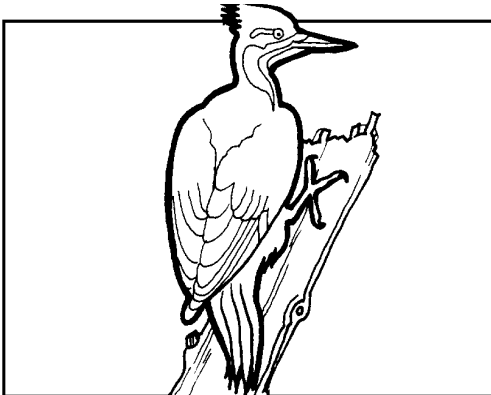
Shore Birds -- Birds of the seashore or pond margins are included in the Shore Birds group. Sand Piper, Snipe, and Wood Cock are common examples.



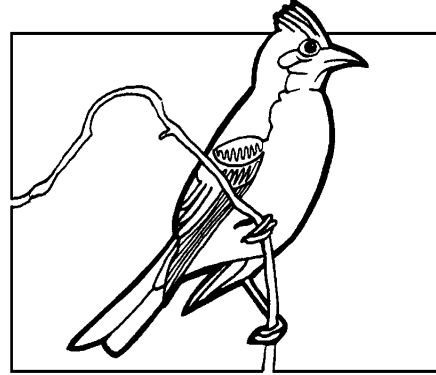
Gulls and Terns -- Long-winged, strong flying birds of the seashore make up this group. Gulls usually feed on the surface while terns usually dive for food. Herring gulls and Black Billed Terns are common.



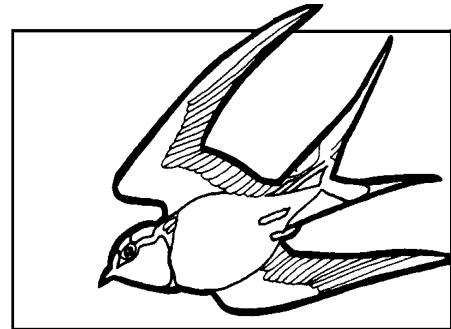
Woodpeckers -- These birds are usually seen climbing tree trunks probing for insects. Red-headed Woodpeckers, Flickers, Redbellied, Downey, and Sap Suckers are common examples.



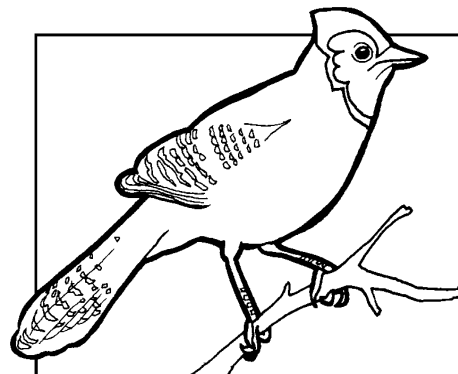
Fly Catchers -- You frequently see these small birds perched on bare twigs or on power lines. They fly from their perches to catch bugs in flight. In between times they sit very still except when jerking their tails. King Birds, Phoebes, and Fly Catchers are some examples of this group.



Swallows -- This group is made up of small, long winged birds usually seen chasing insects. Martins, Chimney Swifts, Tree Swallows, and Barn Swallows belong to this group.



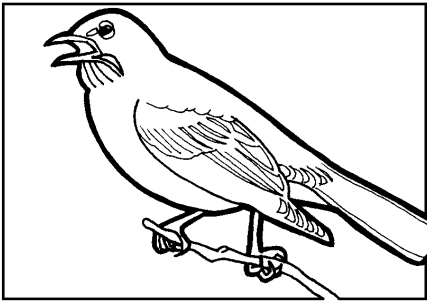
Jays -- Everybody knows a Bluejay. A Florida Jay is also common in our sand pine scrub areas.



Thrashers -- Thrashers are Robin-sized birds of woods and pastures. Examples include the brown Thrasher, Catbird, and Mockingbird. Don't include Thrushes, which are in a group below.



Thrushes -- The Robin, Bluebird, and several Thrushes are examples of Thrushes. Except for the Bluebird these birds are mostly brownish. Some have speckled breasts. These good songsters are usually found on the ground.



Warblers -- These small, brightly colored birds feed on insects. They are often seen in tree tops and deep woods. There are many kinds which make them difficult to tell apart. Myrtle Warbler, Pine Warbler, and Yellow Warbler are examples.

Meadow Larks, Black Birds and Oven Birds -- This group of birds can be found in several wildlife communities from high trees to marshes. Meadow Larks in fields, Orioles in trees, and Grackles in marshes are examples.

Finches and Sparrows -- Strong, cone-shaped beaks adapt this group of birds for crushing seeds. They can be found all over Florida. Cardinals, Grosbeaks, Sparrows, Towhees, and Juncoes are in the group.

Attracting Birds to You

Birds, as all creatures, need food, water and cover. Birds may be attracted to your yard by placing a bird bath and bird feeder in a good location. Making a planting of native trees, shrubs, vines or flowering plants also attracts birds. The activities that follow will help you attract birds. Before you decide to attract birds to your house or barn area you will want to read the next section.

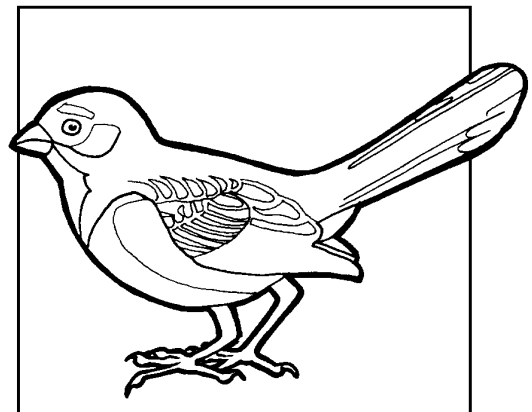
A Word of Caution

Most people never realize there may be disadvantages to attracting birds around the home. Most of these pertain to the welfare of the birds themselves.

When large numbers of birds are attracted to the same spot there is the danger of disease. This is especially true where birds pick up food from the ground. Food on the ground may be contaminated by the droppings of sick birds. To help keep the birds healthy, put their food in hoppers or containers which keep birds from walking in the feed.

Birds often become dependent upon you for food once you start feeding them. In fact, your feeding may cause too many birds to gather. In this case an interruption to feeding is disastrous particularly if this occurs when adults have young in the nest which they are forced to leave. Bird populations that become dependent on feeding stations may become diseased and lazy.

Encouraging local overpopulation of birds may also affect man's interests. The increased demand for food may cause birds to eat products of the garden or agricultural crops. Keep in mind that certain birds eat



farm crops. Some birds also damage or eat livestock feed or transmit diseases or parasites. Some birds mess up cars and structures with their droppings. Birds usually considered most damaging include: House Sparrows, Starlings, Blackbirds, Robins, Flickers, Doves, and Buzzards.

Activities Two and Three which follow are designed to attract birds to you so that you might observe them closely. After you have completed the bird bath and bird feeder activities, you should begin to watch for birds in the area. A bird identification chart appears on page 11. This chart is for you to use to keep track of the birds which come to the bird bath or feeder. The following bird characteristics will help you name each bird.

Bird Characteristics¹

1) **Size** -- A good way to compare size is to use the crow, robin and sparrow as standards. If a bird is larger than a crow it might be a hawk, owl or gull. If it is between the size of a crow and a robin it might be a blue jay, cuckoo or some species of woodpecker. A bird smaller than a sparrow might be a warbler, wren, kinglet or chickadee.

2) **Shape of head and beak** -- The shape of the head and beak indicates the manner in which the bird obtains food. Seed eaters, such as sparrows and finches, crack their food before swallowing. These birds have round heads and short, stout beaks. Herons, bitterns and other birds that eat fish have long, sharp-edged bills (Fig. 1) for spearing. The large spoon-like bill of the duck (Fig. 2) is equipped with comb-like teeth on the inside edges for straining food. Birds such as the Wilson Snipe have long, slender, sensitive bills (Fig. 3) suited for probing in mud. Flesh-eating birds, such as hawks and owls, have strongly hooked bills with knife-like edges (Fig. 4). The woodpeckers have straight chisel-like bills (Fig. 5) for drilling into wood to get insects. The tongue (Fig. 6) is barbed and pointed for spearing the soft-bodied insects and dragging them from their tunnels. The sparrows, finches and grosbeaks have cone-shaped bills which are formed for eating seeds. The crossbill has an unusual bill (Fig. 7) adapted to picking seeds from pine cones. The nighthawk has a small bill (Fig. 8) that

appears to be rather useless. This bird feeds largely on insects which are taken from the air in flight.

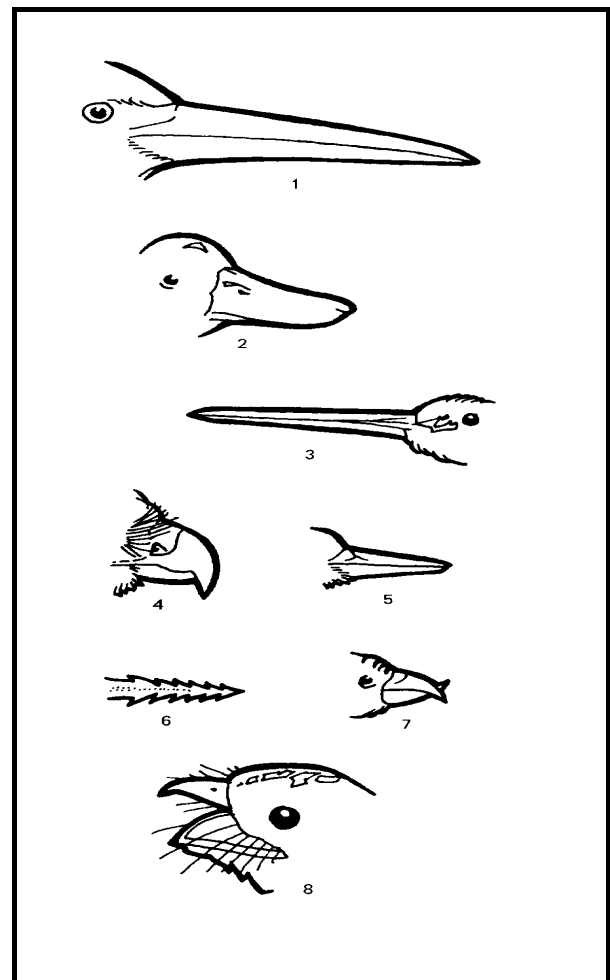
3) **Other shapes** --

- a) body shape (plump, sleek, thin, short and stubby, streamlined)
- b) tail shape (rounded, wedge, square, notched)
- c) wing shape (rounded, pointed, ragged)
- d) leg shape (long or short)

4) **Sweep** -- What are the flight characteristics? (Jerky, darting, swooping, irregular flight)

5) **Song** -- Are there phonetic sounds such as “raspy, chip-chip, peter-peter?” or a trill?²

You will be most successful if you make regular observations of your bird bath and bird feeder over a period of several days. Early morning and late evening hours would probably be convenient for you.



1. 4-H Circular 620, *Ohio Birds*, Cooperative Extension Service, The Ohio State University, Columbus, Ohio 43210.

2. Milam, Joe, Shirley Menendez, and Ricky Hicks. *Environmental Education Objectives and Field Activities*, Paducah Public Schools, Paducah, Kentucky Fourth Edition, 1971.

ACTIVITY TWO A Bird Bath

Bird Bath Specifications

Use a shallow pan, a garbage can lid or a ready-made concrete bath. One with a dripping faucet

over it is good. One with a gentle fountain or a small sprinkler is almost irresistible. *Bird baths draw the birds*; once they come they can be made to stay if food and cover are available.

ACTIVITY THREE The Bird Feeder

Bird Feeders

Many types of feeders are available. Both feeders and baths should be close to cover and as safe from cats as possible.

Seed mixtures are available at many stores, but

birds like leftovers almost as well. These include: old bread, cake crumbs, bits of fruit, dry cereal, etc. A medium scratch feed mixed with bread or raisins will attract many species including: mockingbirds, catbirds, cardinals, sparrows, redheaded woodpeckers, doves and warblers.

ACTIVITY FOUR The Bird House³

You can encourage birds to live near you if you provide a place for them to live. In this exercise you are to either build or purchase a bird house.

Building a bird house can be fun. Many inexpensive, ready-to-build bird house kits are available. If you make your own be sure to make it with

a particular bird in mind. Hole openings and house sizes vary from species to species. After you have decided what bird you wish to attract look at the following chart. Your parents or leader can help you make the bird house according to the specifications.

Nest Box Dimensions For Each Species

Species	Diam. of Entrance Hole (Inches)	Floor (Inches)	Depth (Inches)	Entrance Ht. Above Floor (Inches)
Wood Duck	3 X 4	12 X 12	18 X 24	10 - 20
Bluebird	1 ½	5 X 5	8	6
Chickadee	1 1/8	4 X 4	8 - 10	6 - 8
Tufted Titmouse	1 1/4	4 X 4	8 - 10	6 - 8
Nuthatches	1 ½	4 X 4	8 - 10	6 - 8
House Wren	7/8	4 X 4	6 - 8	1 - 6
Caroline Wren	1 1/8	4 X 4	6 - 8	1 - 6
Crested Flycatcher	2	6 X 6	6	1
Flicker	2 ½	7 X 7	16 X 18	14 X 16
Purple Martin	1 ½	6 X 6	6	1
Tree Swallow	1 ½	5 X 5	6	1 - 5
Barn Owl	3	8 X 8	12 - 15	9 - 12
Squirrel	3	9 X 9	12 - 20	10 - 15

3. Additional information about bird house construction can be obtained by reading the article entitled "Build a Bird House" by Michael Miller which appeared in the January-February 1977 issue of *Florida Wildlife*.

Remember the following don't's:

- 1) Don't make the opening too big.
- 2) Don't place the hole near the bottom of the box, except for martins.
- 3) Don't use tin cans. They usually get too hot.
- 4) Don't set up more than three or four boxes of a particular type per acre.
- 5) Don't leave old nests in boxes. After each brood take down the box and clean it.

ACTIVITY FIVE

Your Bird Picture Collection

It is always nice to have pretty pictures of animals that we enjoy. Pictures of birds are no exception. In this exercise you are to collect colored pictures of 10 birds that you have seen on your bird hikes. Mount the pictures on a posterboard or a piece of cardboard that

is about 22 X 28 inches. Arrange the pictures attractively for display at a local or county 4-H exhibit. Go back to page two and look at the label which goes with each picture. Make a label for each bird. You can get information for the labels from the next section. You will also need to read your reference books.

Plants of Value to Florida Birds

Oak -- Woodpeckers, Bluejays, Catbirds, Brown Thrashers, and Quail all like acorns, especially live oak (37 species in all use live oak).

Holly -- Mockingbirds, Cardinals, Robins, Bluebirds, and Cedar waxwings use hollies.

Dogwood -- Woodpeckers, Mockingbirds, Cardinals, Bluebirds, and Waxwings (45 species in all) use the dogwood trees.

Wild Plum -- Mockingbirds, Thrashers and Robins use the wild plum. A wild plum thicket also makes good quail cover.

Elderberry -- Woodpeckers, Bluejays, Mockingbirds, Robins, Bluebirds, Waxwings, Orioles, Tanagers, Cardinals, and Towhees use the elderberry.

Sumac -- Mockingbirds, Catbirds, Cardinals, Robins, Bluebirds, and Quails (36 species in all) use the sumac. However, tests have shown that quail fed sumac seed exclusively died of starvation faster than birds fed nothing! We have a lot to learn about preference and nutritive values of wild plants.

Pokeberry -- Mourning Doves, Ground Doves, Mockingbirds, Catbirds, Brown Thrashers, Robins, Bluebirds, Waxwings, and Cardinals (37 species in all) use pokeberry.

Beautyberry -- Mockingbirds and Robins (12 species in all) use the beautyberry.

Sunflower -- 46 bird species use sunflower seed.

Red Cedar -- 22 species use Cedar. Cedar is also a good hedge and windbreak tree.

CLUE CHART FOR BIRD IDENTIFICATION							
Period of Observations: Date _____ to _____							
Time of Observations: _____							
SIZE	SHAPE	COLOR OF HEAD & NECK	COLOR OF BACK & WINGS	COLOR OF CHEST AND UNDERPARTS	SWEEP	SONG	NAME IF KNOWN
Example: Length 12 inches	Wedge-shaped tail, pointed beak	Blue crest, white on wings and tail	white throat and underparts	steady and slow	Jay, Jay	Blue Jay	

General Information on Florida Birds
(Answers to all of these questions may be found in the project book.)

1) How is a bird different from other animals?

2) How many different kinds of birds are found living in, passing through, or wintering in Florida?

3) List five birds that you like the best of all the birds that you saw.

4) List two reasons why attracting birds to your yard might not be a good idea.

5) Did you observe any damage caused by the birds which you attracted by your bird bath, bird feeder, or bird house? If yes, what was the damage, and which bird caused the damage?

6) What books or literature on birds besides this project book did you read?

7) Write a short story about the bird bath that you made for this project. Mention how you made it, what you made it from, where you put it and the birds that you saw using it.

Florida Audubon Society, P.O. Drawer 7, Maitland, FL 32751 (407-647-2615) publishes the *Florida Naturalist*, and *Florida Conservation Digest* and has a free catalog available on books and birdwatching articles, etc.

Publications

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- Jensen, A. S. 1976. *Making a wood duck nest box* Wildlife Report 76-32p.
- Jensen, A. S. 1976. *Attracting birds around the house*. Wildlife Report 76-14p. Available from Tony Jensen, Extension Forester, 118 N-Z Hall, University of Florida 32611.
- Naggiar, Morrie, editor; "*Florida Wildlife*," Florida Game and Fresh Water Fish Commission, Farris Bryant Bldg., 620 S. Meridian Street, Tallahassee, FL 32304.
- Peterson, R. T. 1947. *A Field Guide to Eastern Birds*. 229 p. Colored plates. Houghton-Mifflin. \$4.95.
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4-H CLUB MEMBER BIRD RECORD											
FIRST HIKE											
				Time of Day Seen			Time of Year Seen				
Body Shape (sketch)	Size of Bird	Color & Markings	Where Found	Morn.	Aft.	Eve.	F	W	Sp.	Sum.	Bird's Name

4-H CLUB MEMBER BIRD RECORD											
SECOND HIKE											
				Time of Day Seen			Time of Year Seen				
Body Shape (sketch)	Size of Bird	Color & Markings	Where Found	Morn.	Aft.	Eve.	F	W	Sp.	Sum.	Bird's Name

4-H CLUB MEMBER BIRD RECORD											
THIRD HIKE											
				Time of Day Seen			Time of Year Seen				
Body Shape (sketch)	Size of Bird	Color & Markings	Where Found	Morn.	Aft.	Eve.	F	W	Sp.	Sum.	Bird's Name

1. This document is 4HWRM11, which supercedes 4H-287, one of a series of the-H Youth Development Program, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Date reprinted June 1995. Please visit the FAIRS Website at <http://hammock.ifas.ufl.edu>.
2. Tony Jensen, Extension Forestry Wildlife, and David D. Pyle, Extension 4-H Youth Specialist, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.
3. Appreciation is expressed to Morrie Naggiar and Wallace Hughes, Editor and Art Director respectively of "Florida Wildlife", the official publication of the Game and Fresh Water Commission, for permission to adopt the illustrations which appear throughout this publication. Graphic design by Ralph Knudsen. Layout by Greg Deming.



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