

EXPERIENCE



4-H NATURAL RESOURCES

Birds in Your Backyard

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4-H Member's Guide

M-5-17

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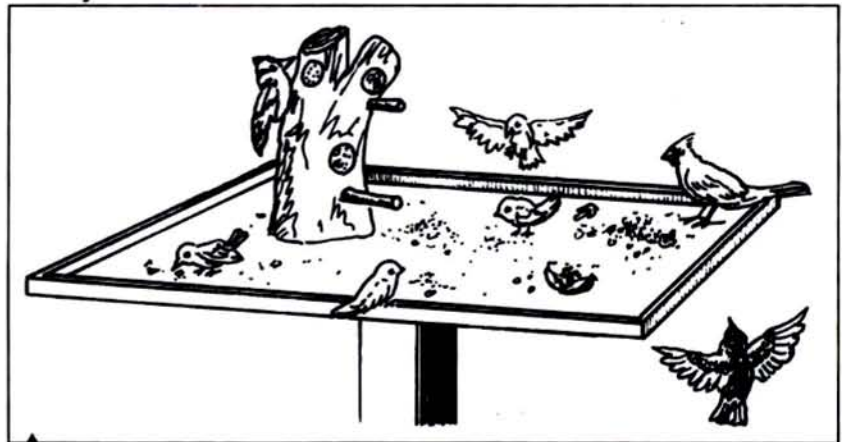
Introduction

Have you ever watched a bird fly, pull a worm from your garden, or crack seeds with its beak? Watching birds not only is fun and interesting but also teaches you a lot about how birds find food, what they like to eat, and where they live. You can enjoy watching birds in a park, field, or wooded area near your house, or you can attract birds to your own backyard. As you watch birds, you will notice differences in their size, shape, color, and markings.

This independent project is part of a series designed to introduce youth to a variety of natural resources subjects by involving them in activities that heighten their awareness of the natural world. Leaders and teachers need no background in natural resources to work and learn with youth on these activities.

Attracting Birds

You can watch birds in their natural homes or you can attract them to you. There are three ways to attract birds:



▲ 1. Feed Birds



▲ 2. House Birds

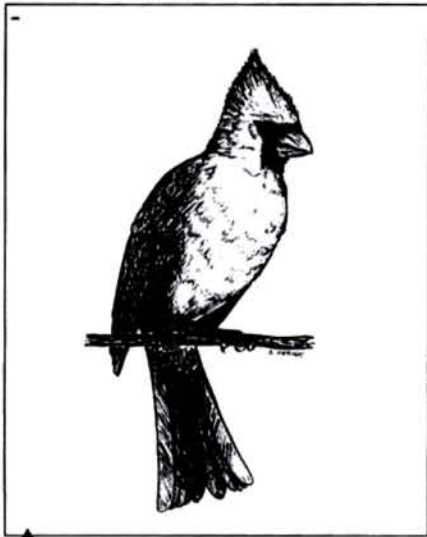


▲ 3. Make a Natural Home for Birds

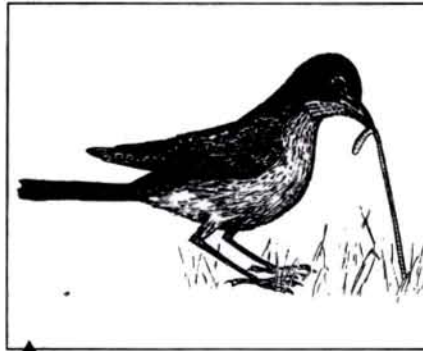


Feeding birds is the easiest way to get a close view of them. Birds like to eat seeds, high-fat food, fruit, or sugar solutions. Some eat insects and some eat animals. Below are examples of birds that eat different foods.

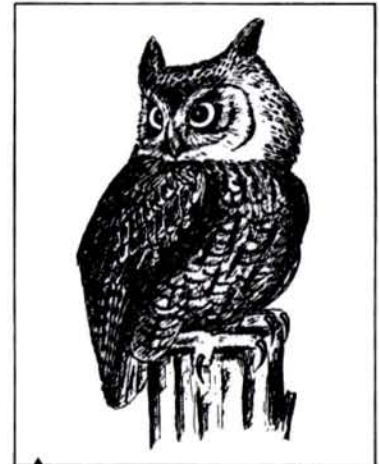
Birds' bodies are built to help them get the foods they need. For example, sparrows and grosbeaks have thick beaks to crack seeds, and their legs are good for perching. Hawks and owls have sharp beaks and talons for tearing meat. Flycatchers and swallows, which are fast and artful flyers, are able to catch flying insects.



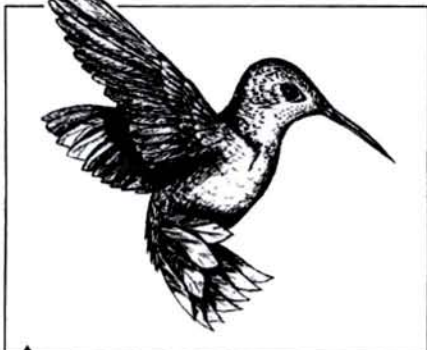
▲ **Seed-eating birds**
(sparrows, grosbeaks, cardinals)
Most seed-eating birds also eat insects in the summer.



▲ **Plant- and animal-eating birds**
(starlings, robins, ducks, geese)



▲ **Animal-eating birds**
(hawks, owls, herons)



▲ **Nectar-eating birds**
(ruby-throated hummingbirds)



▲ **Insect-eating birds**
(flycatchers, swallows, woodpeckers)



Feeding Birds

You can buy premixed bird food from the store or mix your own, often using ingredients found at home. Here are a few suggestions:

- ▶ Black oilseed sunflower seeds have more energy than other sunflower seeds and are a favorite of black-capped chickadees, blue jays, and cardinals.
- ▶ Small seeds such as white millet, cracked corn, and canary seed are eaten by sparrows and goldfinches.
- ▶ Fruits such as chopped apple, banana, and raisins are liked by robins, cedar waxwings, and catbirds.
- ▶ Suet is beef fat and is available at meat markets and grocery stores. Insect-eating birds such as woodpeckers, chickadees, and nuthatches love to eat this high-energy food. Please do not offer suet in the summer, however. It can become rancid and make birds sick.
- ▶ Peanut butter and bacon fat are other foods that suet-eating birds like to eat. (Again, offer only in cold weather.)
- ▶ Sugar solution in a special feeder attracts ruby-throated hummingbirds.

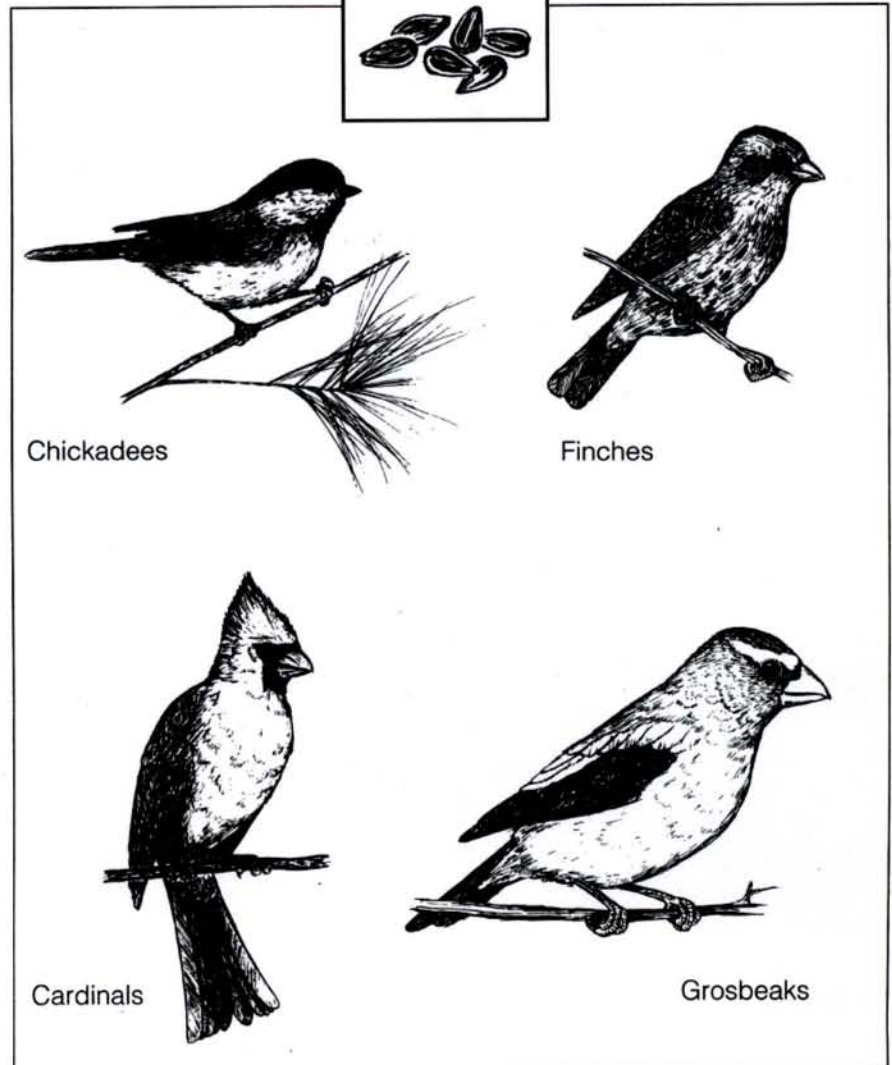
A Note about Water

Birds need water to drink just as you do. If your feeder is not near a source of water, such as a pond or stream, you can place water near the feeder. In the winter, you have to replace the water often because it freezes easily.

What Birds Eat

The following illustrations show what birds you are likely to attract with each type of food.

Sunflower seeds



Chickadees

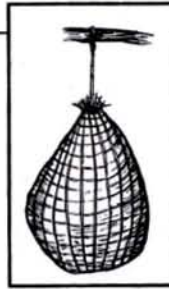
Finches

Cardinals

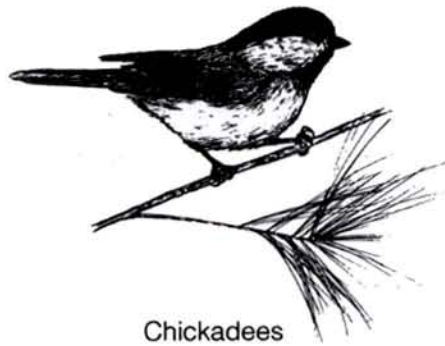
Grosbeaks



Suet



Woodpeckers

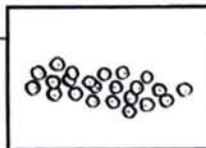


Chickadees

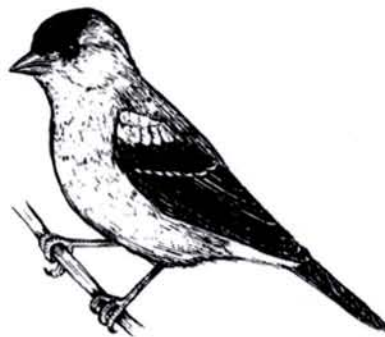


Nuthatches

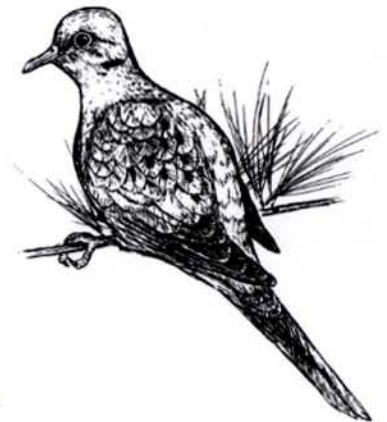
Millet



Sparrows



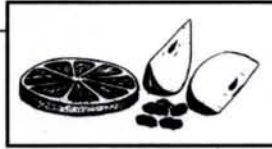
Goldfinches



Mourning doves



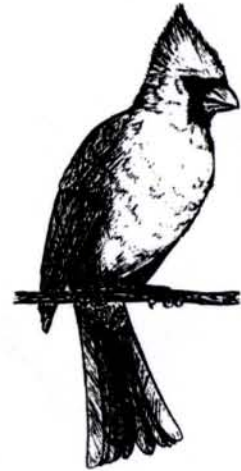
Fruit and Berries



Blue jays



Cedar waxwings



Cardinals



Activity 1. Cooking for Birds

The following recipes are for foods that birds like to eat.

Seed Cakes

(Have an adult help you with the cooking.)

Ingredients:

- ▶ suet (or peanut butter)
- ▶ seed mixture (either mixed yourself or store-bought)

Grind or chop up suet, then melt it in a pan over LOW heat. Pour the seed mixture into a muffin pan so that each mold is 3/4 full of seed. Pour the melted suet over the seed mixture, stir the suet and seeds, and let cool. When the seed cakes are cool, place them in a suet feeder, window-sill feeder, or on a feeding table. Keep extra cakes in a sealed bag or container in the refrigerator.

Birdseed Mixture

(for seed eaters)

Ingredients:

- ▶ 5 pounds sunflower seeds (black oilseed sunflower seeds provide the most energy)
- ▶ 25 pounds coarse chicken scratch feed

Mix together and feed, using a covered bird feeder. If the mixture gets wet, it will cake and become moldy, which can make birds sick. Store any extra seed mixture in a sealed, animal-proof container.

Bird Food Necklace

Ingredients:

- ▶ suet
- ▶ raisins
- ▶ apple slices
- ▶ dates
- ▶ cranberries
- ▶ stale bread

Using a needle and long thread, string the food together. Hang these "necklaces" in your trees or shrubs for the birds to enjoy.



Activity 2. Bird Feeders

You can feed birds in many types of feeders. Here are a few suggestions:

- ▶ Use at least two different feeders to attract a variety of birds. (Examples are suet feeder, seed feeder, or nectar feeder.)
- ▶ Be sure all the food in the feeders is fresh. Moldy or rotten food can make birds sick.
- ▶ Place bird feeders where the birds are safe from cats and other animals. More birds will visit your feeder if they feel safe.
- ▶ If you want birds to come continuously to your feeder in the winter, do not let the food supply run out.

▶ Birds may take a few weeks to find your feeder when you first put it out. Continue to keep fresh food and water out for the birds and soon they will come to your feeder.

▶ You can make simple bird feeders using materials and objects from around the house.

The following pages show bird feeders you can make. Make one or more of these feeders, or use your imagination and design your own. Your leader has plans for making other feeders for this project. Ask for copies if you are interested.

Simple Pine Cone Feeder

What You Will Need

- ▶ Large, open, dry evergreen cone
- ▶ String or wire
- ▶ Peanut butter
- ▶ Knife or other spreading utensil
- ▶ Small seeds or oatmeal
- ▶ Bowl

How to Make It

1. Tie string or wire onto base of cone.
2. Use knife to spread peanut butter on cone, partially filling it.
3. Roll cone in seeds, or oatmeal, in bowl. Seeds will stick to peanut butter and cover cone.
4. Hang in tree.

How to Use It

If cone is not large enough to support a perched bird, it should be hung where a bird can reach it using other support.

Refill the cone with peanut butter and seeds as birds eat them.





Log Suet Feeder

What You Will Need

- ▶ Dead tree limb, 2" to 4" in diameter and about 18" long. (A soft wood such as pine will be easier to work with than a hard wood such as maple. Be sure the pine limb is dry; otherwise the sticky resin, or sap, will be messy.)
- ▶ Small hand saw
- ▶ Hand drill
- ▶ Drill bit, 3/4" or 1"
- ▶ Screw eye
- ▶ Suet or peanut butter
- ▶ Knife or spreader
- ▶ Wire or string

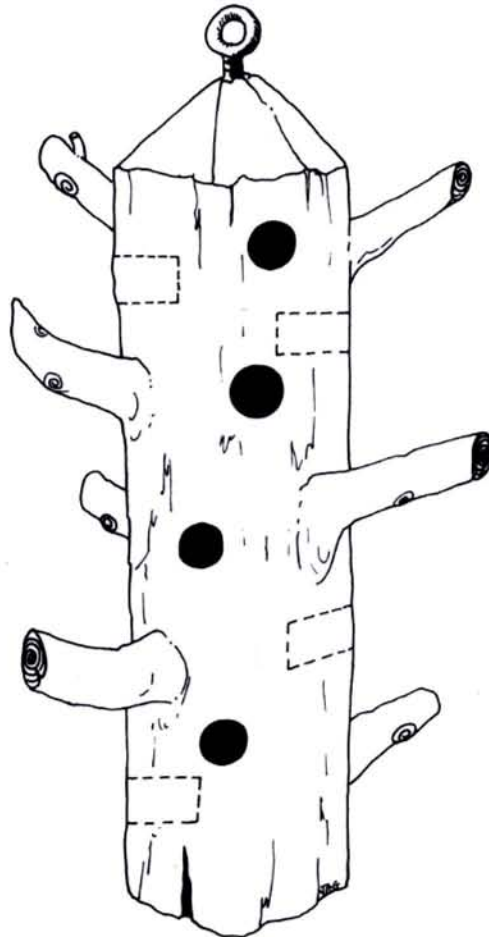
How to Make It

1. Cut off the side branches of the tree limb, leaving about 2" of each branch.
2. Drill holes 3/4" deep all over the log with hand drill.
3. Screw in the screw eye at the top of the log.
4. Spread and fill the holes with suet or peanut butter.
5. Loop and tie wire or string through the screw eye.
6. Attach the feeder to a branch.

How to Use It

Hang the feeder on a tree branch high enough that dogs or other animals cannot pull it down but low enough that it is easy to refill.

Refill the feeder when the suet or peanut butter is eaten.





Simple Jug Feeder

What You Will Need

- ▶ Empty plastic jug (such as a one-gallon milk jug with cap)
- ▶ Marking pen or pencil
- ▶ Scissors
- ▶ Strong string or thin wire
- ▶ Glue
- ▶ Heavy, flat rock
- ▶ Bird seed, bread crumbs, or crackers

How to Make It

1. Rinse the jug.
2. Draw an outline of the door as shown in the diagram.
3. Cut out the door.
4. Carefully make two small holes with the point of the scissors at the top of the jug just below the cap. Thread the string or wire through the holes in the jug. Glue cap in place.
5. Find a large, heavy, flat rock to add weight to your feeder. Clean the bottom of the rock. Glue the rock to the inside of your feeder. (The weight will help reduce swaying of the feeder in the wind.)
6. Fill the feeder with bird seed, bread crumbs, or crackers.

How to Use It

Hang feeder in a high place. Refill when empty.



Suet Feeder

What You Will Need

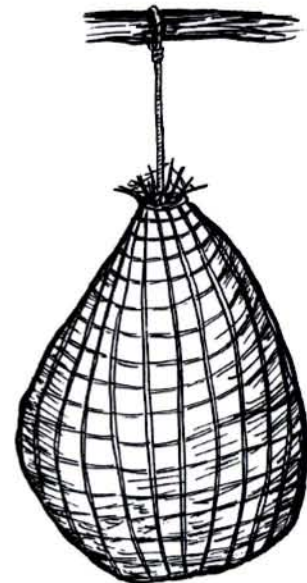
- ▶ Mesh bag, used to package oranges or onions
- ▶ Suet
- ▶ Thin wire

How to Make It

1. Fill the mesh bag with suet.
2. Tie a knot at the top of the bag.
3. Loop and tie the wire to the bag.

How to Use It

Hang the bag by the wire loop from a tree. Make sure the bag is high off the ground so animals such as dogs cannot jump up and get it.





Identifying Birds

After you have placed some feeders outdoors, spend time watching the birds that visit the feeders. By looking carefully you will notice that birds look and act differently from one another. Just as people come in different shapes and sizes and vary in the color of their eyes, skin, and hair, birds come in many shapes and sizes too. Some birds are brightly colored while others are dull. Birds fly and walk differently, and each bird has favorite foods.

Based on their differences, birds are grouped into families. Birds that are similar are in the same family. Each bird also has a common name, such as robin, cardinal, or pigeon. To find out the family, common name, and other information about a bird, ask the following questions:

Where Did You See the Bird?

Birds most often are found where their favorite food is available. It is unlikely to see a robin, which likes to eat worms, swimming in a lake. You probably would not see a duck pulling a worm in your garden either. You are most likely to see a duck on a lake and a robin in a garden.

What Size Is the Bird?

Is it small like a sparrow, midsize like a robin, or bigger than a pigeon? Knowing the size of a bird can help you figure out what it is.

What Is the Shape of the Bird?

Is it short and plump or long? Does it have a long or short tail? Does it have a short or long bill? The overall shape of a bird is often a good clue for identification.

How Does the Bird Behave?

Does it hop or walk? Does it climb trees? Does it wade or swim? Watch how the bird acts to get clues about what bird it might be.

What Color Is the Bird?

Brightly colored birds are usually easy to identify. Often the males of a certain bird are brightly colored while the female's coloring is dull so she blends in with the natural surroundings. The female's coloring often protects her and the nest from being seen by enemies.

What Markings Are on the Bird?

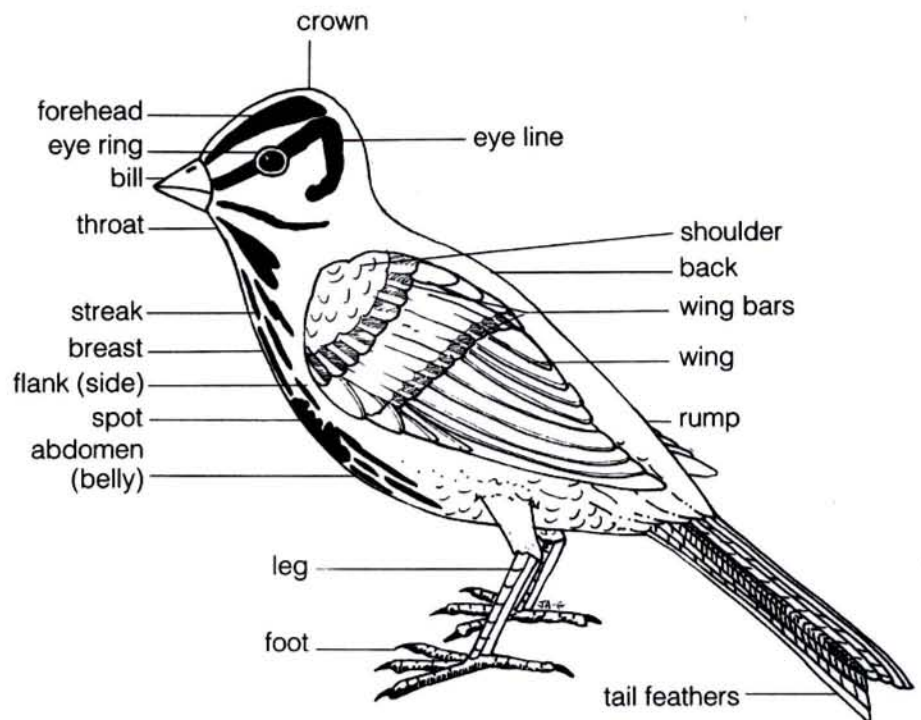
In addition to color, size, and shape, markings such as eye stripes, wing bars, white patches, and color patterns can help you correctly identify

a bird. The markings on a particular bird are called its *field marks*.

All of this information can help you when using an identification key or *field guide* to find the name of a bird. Field guides are books that have pictures and information about birds. Birds are generally grouped by family in a guide. Information about color, field marks, behavior, and range (where the bird is usually found) are included in most field guides. Several field guides are available; talk to your leader or parents about getting a field guide to help you identify birds.

Key Parts and Field Marks of a Bird

The picture below shows you common parts and markings of a bird. Knowing these names will help you understand a field guide and look for field marks.





Activity 3. A Field Record of Birds

A good way to keep track of all the birds you see is by keeping a *field record*. A field record can be completed for each bird you see at your feeder, in your yard, on walks, and on trips. An example of a completed field record of a male cardinal is included below.

Field Record

Common name: NORTHERN CARDINAL

Family: GROSBEAKS, FINCHES, SPARROWS, BUNTINGS Sex: Male Female

Date: DEC. 10 Location: AT HOME

Where sighted (check one): Woods Lake Garden

Stream Field Ocean Park Cliff or building

Other _____

Size: House sparrow Robin Pigeon or larger

Field marks: RED BODY WITH POINTED CREST ON HEAD, BLACK AROUND BILL.

Behavior: FIRST BIRD AT FEEDER IN THE MORNING, LAST BIRD AT FEEDER IN THE EVENING.

Fill out a field record for each different bird you see. If you are not sure what bird you saw, fill out a record anyway. Write *unknown* next to the common name and fill out the rest of the record. Be sure to make careful notes of field markings. Later, you or your leader may be able to identify the bird from your record using a field guide. Remember that males

and females of the same bird often look very different. Place a copy of the field record and a field guide where you watch your feeder. Record the different birds and the new birds you see each day for a week. Be sure to watch for birds at different times of the day. Have your leader make copies of the field record as you need more.

You may want to start a "Lifetime List" of birds you see. Write in a notebook the name of the bird and the date and place you observed it; you can add to this list for the rest of your life.



Field Record

Common name: _____

Family: _____ Sex: Male Female

Date: _____ Location: _____

Where sighted (check one): Woods Lake Garden

Stream Field Ocean Park Cliff or building

Other _____

Size: House sparrow Robin Pigeon or larger

Field marks:

Behavior:

Field Record

Common name: _____

Family: _____ Sex: Male Female

Date: _____ Location: _____

Where sighted (check one): Woods Lake Garden

Stream Field Ocean Park Cliff or building

Other _____

Size: House sparrow Robin Pigeon or larger

Field marks:

Behavior:



Activity 4. Project Story

On a separate sheet of paper write a short story about your Birds in Your Backyard project. Describe what activities you did, the feeders you made, the birds you saw, and what you learned by doing the project. Attach completed copies of the field records to your story.

Other Projects

If you have enjoyed this project and want to study birds further, try one of the 4-H projects listed below. They are available from your Cooperative Extension 4-H office.

Bird Study: An Introduction to Ornithology for Youth (L-5-8)

This project focuses on bird behavior. Activities are related to territorial behavior, predator mobbing, and nesting behavior.

Understanding Birds of Prey (L-5-9)

An advanced project dealing with birds of prey. Activities include owl pellet analysis, migration counts, and hawk observation.