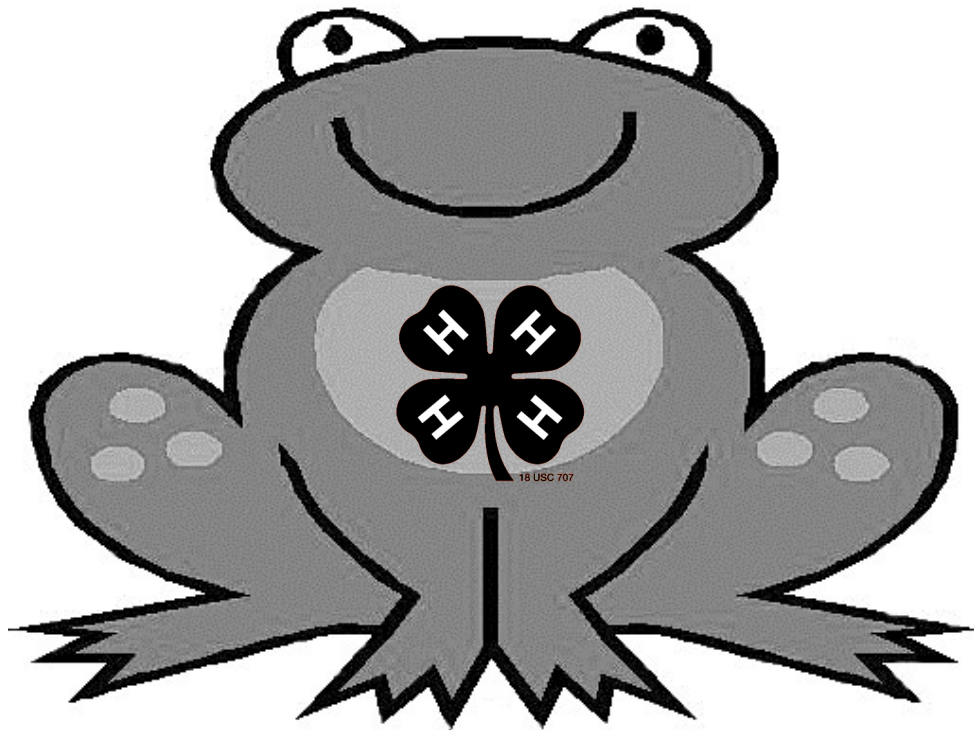


WILDLIFE

Mini 4-H



Draft Developed by:

Purdue University Cooperative Extension Service

Area 7 4-H Youth Development Educators from

Indiana Academic Standards

Following is a list of academic standards that the activities in this book meet:

Kindergarten:

- K.1.1 Raise questions about the natural world.
- K.2.1 Use whole numbers, up to 10, in counting, identifying, sorting, and describing objects and experiences.
- K.2.2 Draw pictures and write words to describe objects and experiences.
- K.3.2 Investigate that things move in different ways, such as fast, slow, etc.
- K.4.1 Give examples of plants and animals
- K.4.2 Observe plants and animals, describing how they are alike and how they are different in the way they look and in the things they do.
- K.6.1 Describe an object by saying how it is similar to or different from another object.

Grade 1:

- 1.1.1 Observe, describe, draw, and sort objects carefully to learn about them.
- 1.1.2 Investigate and make observations to seek answers to questions about the world, such as, "In what ways do animals move?"
- 1.1.3 Recognize that and demonstrate how people can learn much about plants and animals by observing them closely over a period of time. Recognize also that care must be taken to know the needs of living things and how to provide for them.
- 1.1.4 Use tools, such as rulers and magnifiers, to investigate the world and make observations.
- 1.2.1 Use whole numbers, up to 100, in counting, identifying, measuring, and describing objects and experiences.
- 1.2.6 Describe and compare objects in terms of number, shape, texture, size, weight, color, and motion.
- 1.2.7 Write brief informational descriptions of a real object, person, place, or event using information from observations.
- 1.3.4 Investigate by observing and then describe how things move in many different ways, such as straight, zigzag, round-and-round, and back-and-forth.
- 1.4.3 Observe and explain that animals eat plants or other animals for food.
- 1.5.2 Make and use simple picture graphs to tell about observations.

*Indiana Academic Standards, continued***Grade 2:**

- 2.1.2 Use tools — such as thermometers, magnifiers, rulers, or balances — to gain more information about objects.
- 2.3.4 Investigate by observing and then describe how animals and plants sometimes cause changes in their surroundings.
- 2.3.7 Investigate and observe that the way to change how something is moving is to give it a push or a pull.
- 2.4.2 Observe that and describe how animals may use plants, or even other animals, for shelter and nesting.
- 2.4.5 Recognize and explain that materials in nature, such as grass, twigs, sticks, and leaves, can be recycled and used again, sometimes in different forms, such as in birds' nests.
- 2.5.6 Explain that sometimes a person can find out a lot (but not everything) about a group of things, such as insects, plants, and/or rocks, by studying just a few of them.





Mini 4-H Parent's Page



Welcome to the Mini 4-H Program! Mini 4-H is designed for youth to explore a variety of project areas.

Your child received this project manual when enrolling in Mini 4-H. This manual will provide fun, age-appropriate learning activities throughout their year(s) in Mini 4-H and their interest in this project.

As a Mini 4-H parent, your job will be to guide and encourage your child through the activity. It is highly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. The 4-H motto is "learn by doing" and is the best educational tool that we can provide for youth.

Additionally, the Mini 4-H program is set up to allow your child to exhibit a project at the 4-H Fair. This project is based upon information within this manual.

The 4-H Fair is an exciting time for 4-H members and families. It is a time that allows community youth to showcase their talents, interests, and enthusiasm for learning.

Mini 4-H is fun! Your child will certainly enjoy it. You can have fun too, by guiding and helping as your child participates in the program. Encourage and praise your child as he/she has fun learning and sharing with you.

If you have any questions regarding Mini 4-H or other 4-H programs, please contact your local Extension Office.



Mini 4-Her's Page



Welcome to Mini 4-H! You are now a member of the 4-H family. You are a special person.

Mini 4-Hers have lots of fun! There are lots of activities for you to explore. You can try new things. You can share it with your friends and family.

Mom, Dad, or another adult can help you with your project. Bring your project to the 4-H Fair and lots of people will be able to see what you have done. You also get a ribbon made just for Mini 4-Hers.

Things to Know About 4-H

The 4-H Symbol:

A four-leaf clover with an "H" in each leaf.

The 4-H Colors:

Green and white

The 4-H Motto:

To make the best, better.

The 4-H Pledge:

I pledge my HEAD to clearer thinking,
my HEART to greater loyalty,
my HANDS to larger service, and
my HEALTH to better living, for my club,
my community, my country, and my world.



What are Wildlife Adventures?

Do you ever wonder about the animals that live in the woods and open areas around your home and city? Would you like to know about how and where they live? The world of wildlife is exciting! There are so many fun things to do. You can get to know wildlife, indoors and out, every month of the year.



Wildlife Adventures involves watching wild animals and birds that live near our homes. Luckily, you won't need much in the way of equipment to enjoy wildlife. You already have the most important tools — your eyes, ears, nose, and hands!

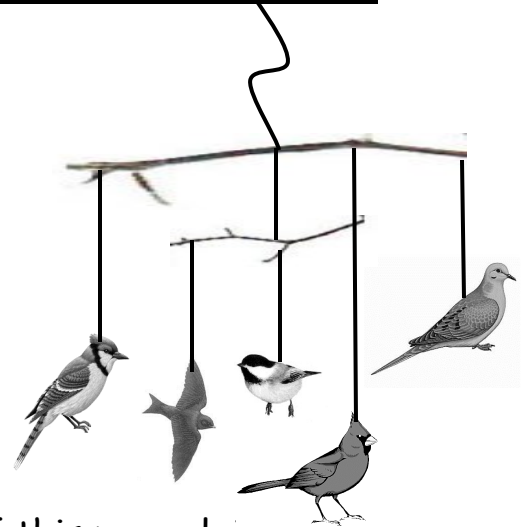


There are some rules to keep in mind when exploring. Ask permission before you wander onto someone's property. Do not pick plants or flowers or tamper with nature or fences in any way. Treat wildlife habitats with great care. Don't just turn over rocks or logs. Animals may live in those places! Take your time to experience wildlife. There is so much we all can learn.

Activity 1 — Birds of Indiana

You will need the following things:

- Color pencils, markers, or crayons
- Scissors
- 14" x 22" poster board (any color) OR
- Two or three twigs of different lengths
- String or heavy thread
- Glue or tape



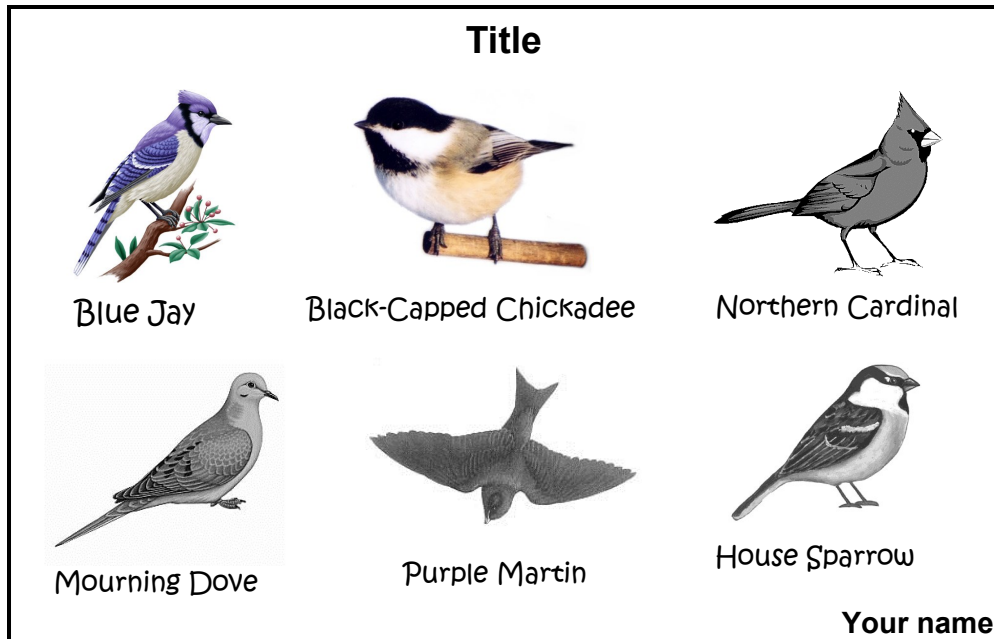
Here is what to do:

1. Find color pictures of the birds at the end of this manual, in a book at home or in the library.
2. Color the birds to match the pictures in the book.
3. Carefully cut out your colored pictures.
4. Arrange the pictures on the poster board. Leave room for your name in the lower right-hand corner and put a title across the top. If you would like to make a mobile, skip to step 7.
5. Carefully glue the pictures to the poster board.
6. To make a bird mobile, follow steps 1, 2, and 3. Tape or glue string or thread of different lengths to the backs of each of the birds.
7. Arrange the twigs so the longest is on top and the shortest is on the bottom. Tie the twigs together leaving 4" to 6" between each twig.
8. Carefully arrange the birds and tie their strings to the twigs. You can move the birds if you need to.
9. Carefully pick up the top twig in the center. Look at how the mobile hangs. Tie a piece of string to the point on the stick where you are holding it. Congratulations! You have a mobile.
10. Bring your poster or mobile to the fair.

Activity 1, continued

It will take some time to find the color pictures of the birds in a book. Look carefully. If needed, ask your librarian to help. This activity helps you to quickly identify the types of birds that live near your home. Look closely. Some of the birds live around your home only during the summer. Some birds are seen only in the winter. It shows how close we live to the wildlife around us.

Sample poster



Joke Time!

What happened when the owl lost his voice?

He didn't give a hoot!



Activity 2 — Bird Feeder

You will need the following things:

- An empty half-gallon milk carton, coffee can, glass jar, coconut shell, or pine cones
- Wire or string to attach the feeder to a tree limb
- Small block of scrap wood about 1"x2" that is 1/2" to 3/4" thick
- Stapler, glue, or tape
- Small nail or pin



Here is how to make a feeder from a paperboard milk carton:

1. Cut 2 opposite sides out of the milk carton. Leave about 1" all the way around the cutout. The top should be stapled, glued, or taped shut. Punch a hole in the top to tie the wire or string through.
2. Punch 3 or 4 holes in the bottom of the carton with a small nail or pin. Punch from the inside out so water can drain out.
3. Punch a hole in the center of the top (do not open the top).
4. Color the carton to look like the tree, or cover it with leaves glued on with weatherproof glue.
5. Loop strings or wire through the hole in the top of the carton.

This string or wire will go around the tree limb to support the feeder. Leave enough string or wire to tie the feeder at a height where you can refill it.

6. You also can hang your feeder from a post or clothesline pole.
7. Bring your feeder to the fair.

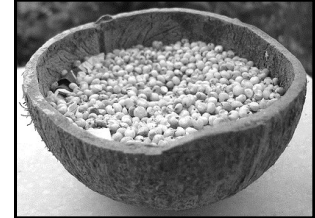


Activity 2, continued

Other bird feeder suggestions:

For seed:

- Coffee can with half a plastic lid on both ends.
- Glass jar hung horizontally.
- Empty coconut shell cut in half.

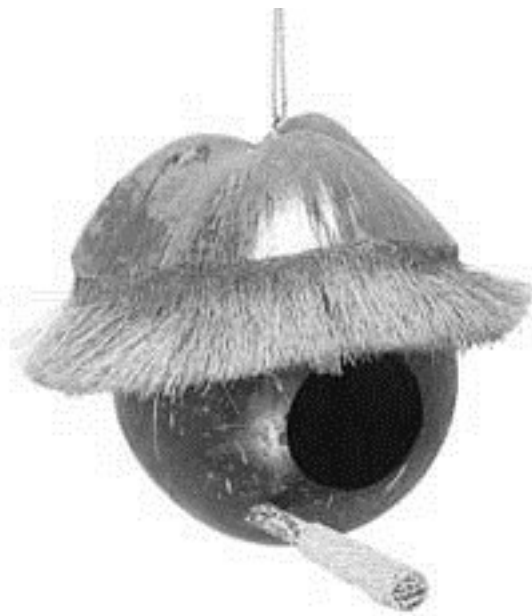
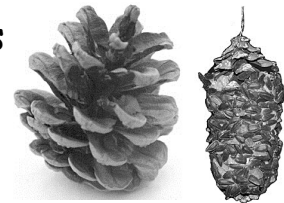


For suet:

- Mesh bag (like the kind onions come in).
- Coconut shell filled with melted suet.
- Holes drilled in a log and filled with melted suet.

Other ideas:

- Slather peanut butter on pine cones and roll them in bird seed.
- Hang coconut half upside down (some birds love fresh coconut!)
- String peanuts on wire or heavy string.

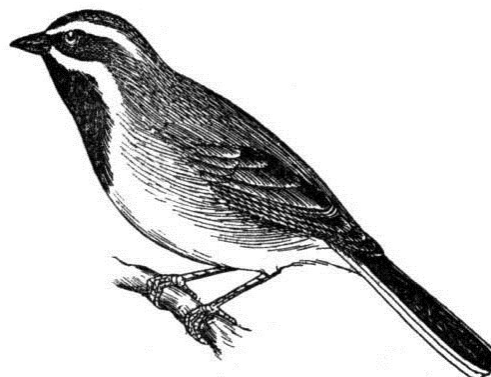


; will nest in an old kettle or e grass or one placed securely fork of a tree. Hang up a lowed-out coconut that has an entrance hole up to 1-1/2" in diameter and see if anyone moves in!

Activity 3 — Bird Watching

You will need the following things:

- Binoculars (optional)
- A bird feeder
- Bird feed
- Pencil and chart
- A quiet place to sit



Here is what to do:

1. Since birds like to eat in the mornings, place the bird feeder where you can see it while you eat your breakfast.
2. Find a quiet place to sit. You will need to be still for several minutes before the birds come around you. Perhaps you can watch the birds from inside your house.
3. Watch the birds with your binoculars (or your own eyes) and chart what you see. Keep your chart by the window near the bird feeder. Draw pictures of the tracks you see. Ask your family to help, too! Use a book from the library to help identify the birds.
4. Complete the chart. There is an activity sheet at the end called "Birds I Have Seen." You may color it. Glue it with the chart below to a 14" x 22" poster board. Bring it to the fair.

BIRD	HOW MANY	DATE	TIME	WHERE THEY LIVE

Activity 4 — How Do Birds Fly?

You have probably noticed that birds fly in different ways. Crows and robins beat their wings about two times every second; starlings beat their wings four to five times each second. Chickadees are almost as fast as hummingbirds, flapping their wings at least 27 times each second!

How do they do it? They have really strong chest muscles and hollow bones. Try beating your arms as fast as a robin beats its wings. That's three beats per second. How long can you keep up the flapping?

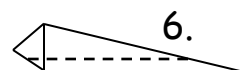
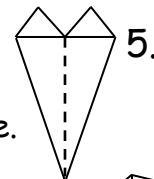
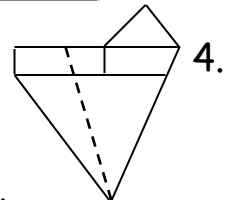
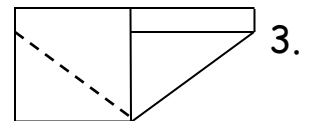
To build your own airplane for flight you will need the following things:

- Good quality paper
- Paper clips
- Pencil, ruler, and stapler with staples



Here is what to do:

1. With a sheet of good quality paper, fold it in half, bringing the two short sides together. Crease this fold.
2. Open the paper.
3. Bring the lower left-hand corner up to the center fold, creating a triangle. There will be some paper sticking out the top. That's OK. Crease this fold. Repeat this step with the right side.
4. With the paper still folded into a triangle, bring the right folded edge up to the centerline. There is a triangle point sticking above the body of the airplane. This is OK. Crease this fold. Repeat this step for the left side.
5. Fold along the center line using the very first folds you made.
6. Lay the airplane on the side.
7. Measure up from the bottom fold approximately 1/2" to 3/4" at each end. These are your guide marks for folding down the wings. Mark them lightly with a pencil.



Activity 4, continued

8. Carefully fold down the wing on the side facing you using the pencil marks as a guide. Crease this fold.
9. Turn the airplane over. Repeat this step for the other wing.
10. Fold the tip of the airplane's nose back into the body at the where the wings begin.
11. Staple the body of the airplane about 1" behind the nose.
12. Slide a paper clip onto the nose for weight.
13. Congratulations! You have made a paper airplane!
14. Repeat these steps as often as necessary to get the airplane just the way you like it. Remember, it is OK if it doesn't turn out right the first time. You can always make another airplane.
15. Color or decorate your airplane. Bring it to the fair.



How do the airplanes fly? There are four forces that affect them and anything that flies — even your paper airplane! Here they are:

LIFT — Force exerted by air on the wing as it passes through the air.

DRAG — Force caused by the air as it strikes the surfaces of the airplane.

THRUST — Force that moves the airplane through the air.

GRAVITY — Force of pull the Earth has.

Lift and thrust must exceed drag and gravity for a bird or plane to fly. Once they are in the air, lift and thrust must equal drag and gravity for them to remain in the air. When drag and gravity exceed lift and thrust, the bird or airplane comes down.

What provides the thrust for your paper airplane?

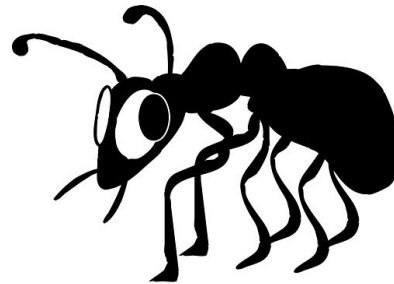
How do birds provide thrust for flight?

Watch several different birds fly. Talk about what you see. Do the birds flap their wings all the time? Have you ever seen a bird stay in the air without flapping its wings? *Hint: Look for a big bird up in the air.*

Activity 5 – Insects

You will need the following things:

- Three glass or plastic jars with lids
- Magnifying glass
- Tape, pen, and slips of paper



Here is what to do:

1. Capture three different insects, placing one in each of the jars.
2. Close the lids tightly.
3. Use the pen to write this information on a slip of paper:
Common name of the insect
Date
Where the insect was captured
Your name
4. Tape the slip of paper to the top or side of the jar. Bring the insects to the fair.
5. Write down what you observe about the insects. How are they alike or different? List as many ways as you can.

Joke Time!

Where do ants go for vacations?

Frants! (France)



Activity 6 – Local Wildlife

You will need a pencil.

Here is what to do:

Take a walk in a park or woods. Look for different kinds of wildlife. Fill out the chart of five different kinds of wildlife. Cut out your completed chart, and, along with some pictures or drawings of the wildlife you saw, create a 14" x 22" poster to take to the fair.

What Wildlife Did You See?	Where Did You See It?	What Does It Eat?	What Did you Find That Belongs To It?
<i>Example: Robin</i>	<i>In tree</i>	<i>Worms</i>	<i>Nest, feather</i>

Where did you take a walk to find the wildlife?

How long did it take you to find the wildlife?

What other kinds of wildlife did you find?



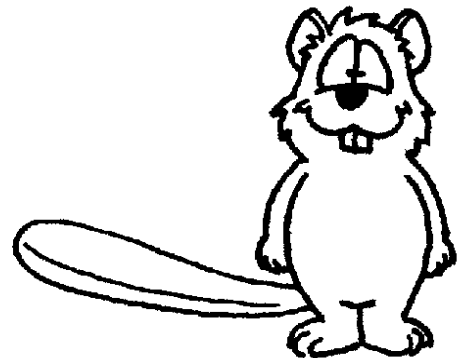
What to Exhibit

Listed here are the projects you can exhibit at the fair. Choose one project each year and bring it to the fair for judging. Check the fair book or project manual for the date and time it is due. There may also be special project exhibit rules for you to follow.

If you have any questions about your projects, talk to your 4-H Adult Leader or the Extension Office.

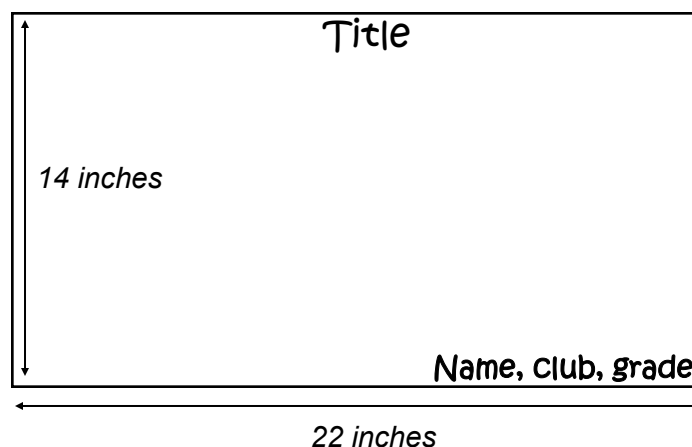
Pick one of the following each year to exhibit:

- Birds Poster (from Activity 1)
- Birds Mobile (from Activity 1)
- Bird Feeder (from Activity 2)
- Bird Watching Chart Poster (from Activity 3)
- Paper Airplane (from Activity 4)
- Three Insects (from Activity 5)
- Local Wildlife Poster (from Activity 6)



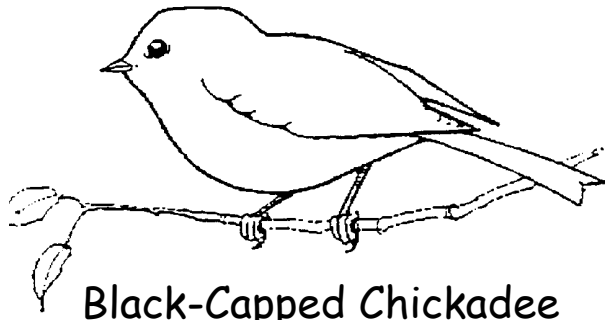
General Poster Guidelines:

- Posters should be laid out horizontally
- Be sure to include a title across the top (like "Mini 4-H Wildlife")
- Include your name, club, and grade in the lower right-hand corner



Good Luck and Have Fun!

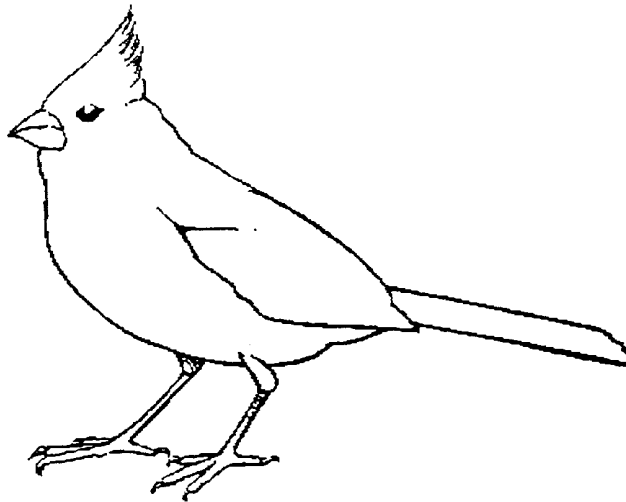
Birds



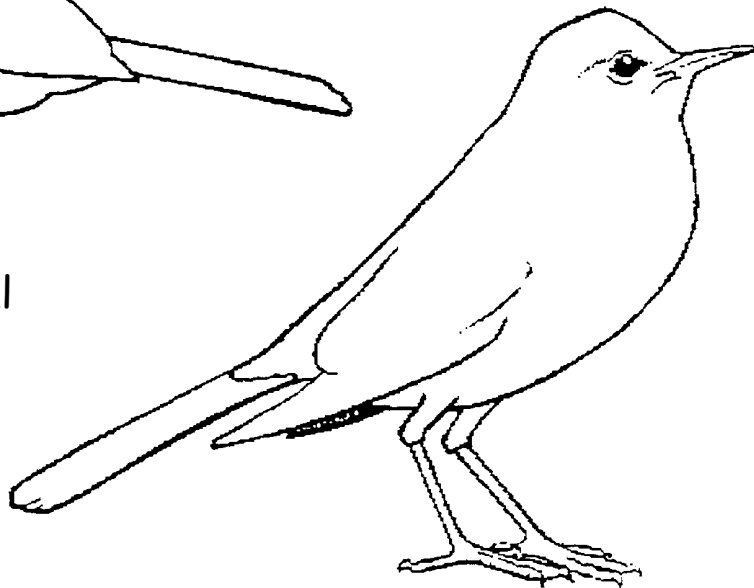
Black-Capped Chickadee



House Sparrow



Northern Cardinal

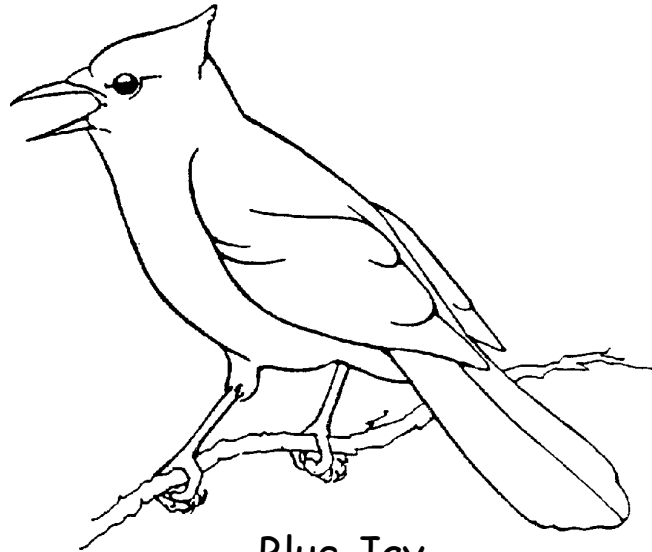


American Robin

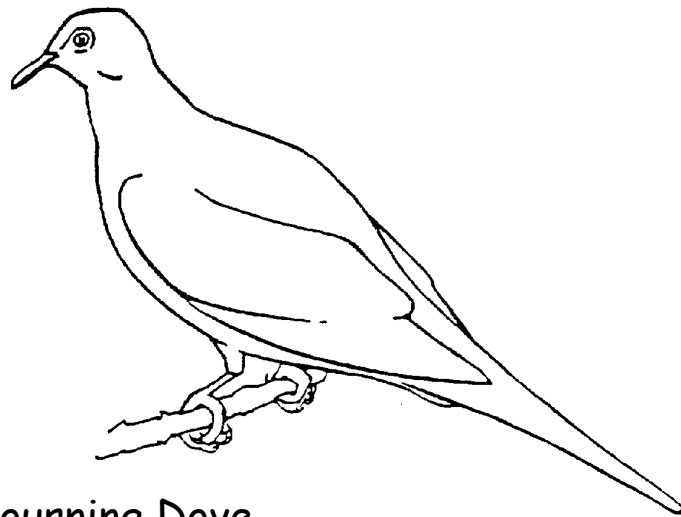
Birds



Downy Woodpecker



Blue Jay



Mourning Dove

Birds I Have Seen

Put a check in the box by the birds you have seen. Color the birds to match how they look. You can draw any birds that are not pictured here.

Draw and color other birds you have seen

BLUE JAY

BLACK-CAPPED CHICKADEE

WHITE BREASTED NUTHATCH

BARN SWALLOW OR PURPLE MARTIN

AMERICAN ROBIN

HOUSE WREN

WESTERN MEADOW LARK

2009 Reviewed and Edited by Area 7 Extension Educators

RaeAnn O'Neill, CED, 4-H Youth Development, Blackford County
Richard Chalupa, 4-H Youth Development, Delaware County
Jane Richard, 4-H Youth Development, Delaware County
Jonathan Ferris, CED, ANR, 4-H Youth Development, Fayette County
Cindy Hartman, CFS, 4-H Youth Development, Fayette County
Angie Riffle, CED, 4-H Youth Development, Franklin County
Cara Kobza, 4-H Youth Development, Jay County
Bethany Ratts, CED, 4-H Youth Development, Henry County
Gary Simmons, 4-H Youth Development, Madison County
Beth Leonhard, 4-H Youth Development, Madison County
Laura Mickler, 4-H Youth Development, Randolph County
Jennifer Logue, CED, ANR, 4-H Youth Development, Union County

Original Compiled by

Brian Gauck, Extension Educator, CED, 4-H/Youth Development
Purdue University Cooperative Extension Service - Rush County

Resources and References

Wildlife Adventures, Mini 4-H Manual, Rush County, Indiana
Cloverbuds, Minnesota Extension Service, University of Minnesota
Excerpted permission from *The Kid's Nature Book*
by Susan Milord ©1989, 1996, Williamsburg Publishing Company,
Charlotte, VT 05445, 800-234-8791, \$12.95.

January 2009
December 1997
Updated December 2008