



MINI 4-H PROGRAM

WILDLIFE PROJECT MANUAL



Draft

Developed by

Purdue University Cooperative Extension Service

Area 7 4-H Youth Development Educators

(Blackford, Delaware, Fayette, Franklin, Henry, Jay, Madison,
Randolph, Rush, Union and Wayne Counties)

PURDUE UNIVERSITY, INDIANA COUNTIES AND U.S. DEPARTMENT OF AGRICULTURE COOPERATING

AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY INSTITUTION

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Please Note: As a professional courtesy, the Area VII Extension Educators request that these materials NOT be copied or duplicated in any means. Copies of the materials may be requested for purchase.

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.

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Mini 4-H 'Parent's Page



Welcome to the Mini 4-H Program! Mini 4-H is designed for you 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. The 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 week 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 feel free to 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-Her's 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-Her's.



Here are some things to know about 4-H.

The 4-H Symbol: A four-leaf clover with an "H" in each leaf



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 or 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 to 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. It also involves building shelters, creating your own critters, making a nature mobile, and learning what type of tracks animals leave behind. 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, 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"x22" poster board (any color)
- OR
- two or three dead twigs of different lengths
- string or heavy thread
- glue or tape



Here is what you do:

1. Find color pictures of the birds at the end of the 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 a title across the top. If you would like to make a mobile, skip to step 6.
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 back of each of the birds.
7. Arrange the twigs so the longest is on top and the shortest is on 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.

It will take some time to find the color picture 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 months. Some birds are seen only in the winter months. It shows how close we live to the wildlife around us.



Activity 2 - Make A 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 what you do 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 may hang your feeder from a post or clothesline pole.
7. Bring your feeder to the fair.



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.
Drill holes in log and fill with melted suet.

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



Some birds will nest in an old kettle or jug in the grass, or one placed securely in the fork of a tree. Hang up a hollowed 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 you do:

1. Since birds like to eat in the mornings, place the bird feeder where you can see it while you eat your breakfast. Remember, if you are doing this activity in the winter, when you begin to feed the birds you must continue to feed them until their natural food is available again.
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"x22" 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 4 to 5 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:

1. Good quality paper.
2. Paper clips.
3. Pencil, ruler and stapler with staples.

Here is what you 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 is 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 centerline 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.
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 point
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.

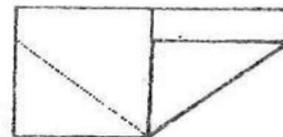
Follow the diagram as you make your airplane.



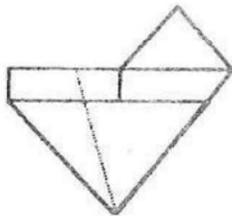
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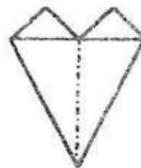
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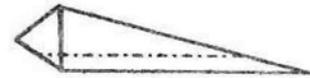
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4.



5.



6.

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:

1. Three glass or plastic jars with lids.
2. Magnifying glass.
3. Tape, pen and slips of paper.

Here is what you 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, the date, where the insect was captured, and 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? List as many ways as you can.

How are they different? List as many ways as you can.

Activity 5 - Local Wildlife



You will need the following things:

1. Pencil

Here is what you do:

1. Take a walk in a park or woods. Look for different kinds of wildlife. Fill out the chart of five different kinds of wildlife.

What wildlife did you see?	Where did you see it?	What does it eat?	What did you find that belongs to it?
Example: Robin	In tree	Worms	Nest, feather

Where did you take a walk to find the wildlife?

How long did it take you to find the wildlife?

How many more kinds of wildlife did you find?

Activity 6 - Make a Chart of Animal Characteristics

You will need the following things:

1. Some continuous length of paper or several 11"x14" sheets.
2. Pen, pencil or marker.
3. Ruler.
4. Magazines, pictures or your own sketches of animals.

Here is what you do:

1. Make a chart that outlines some of the basic animal characteristics.
2. Make a heading for each section.
3. List under the heading some of the characteristics the animals possess.
4. Illustrate the chart with pictures or sketches.
5. Place the chart on a 14"x22" posterboard.
6. Bring it to the fair.

How many sections your chart has is up to you. It depends on how detailed you would like to get. Refer to the chart below to help you get started.

What similarities did you notice within each group?

What are some of the animals that aren't like the others in their group?

Here are some ideas for your chart.

Insects

- Three pairs jointed legs
- Three-part body
- Hard outer skeleton
- One or two pairs wings

Arachnids

- Four pairs legs
- Two-part body
- Hard outer skeleton



Sharks and Rays

- Skeleton made of cartilage
- Rough skin
- Unequally divided tail



Bony Fish

- Scales or bony plates
- Equally divided tail



Amphibians

- First part of life in water
- Moist skin
- Four limbs
- Webbed feet



Reptiles

- Dry skin covered with scales or bony plates
- Four limbs
- Lay leathery-shelled eggs



Birds

- Warm-blooded
- Covered with feathers
- Front limbs are wings
- Lay hard-shelled eggs

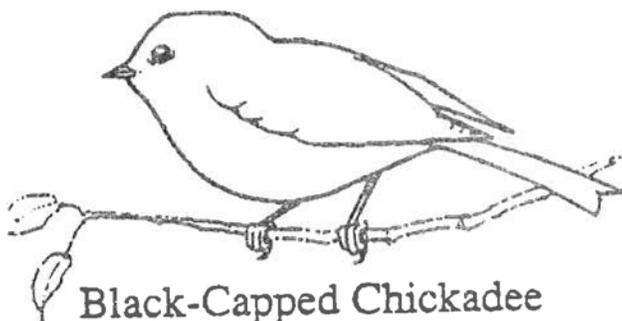


Mammals

- Warm-blooded
- Covered with fur or hair
- Young drink mother's milk



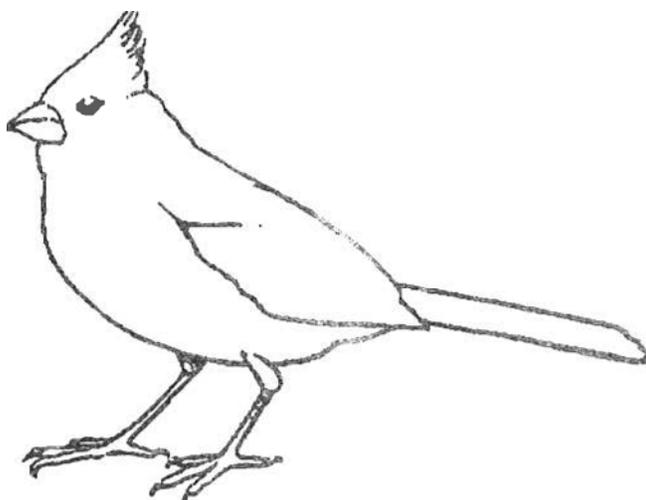
BIRDS



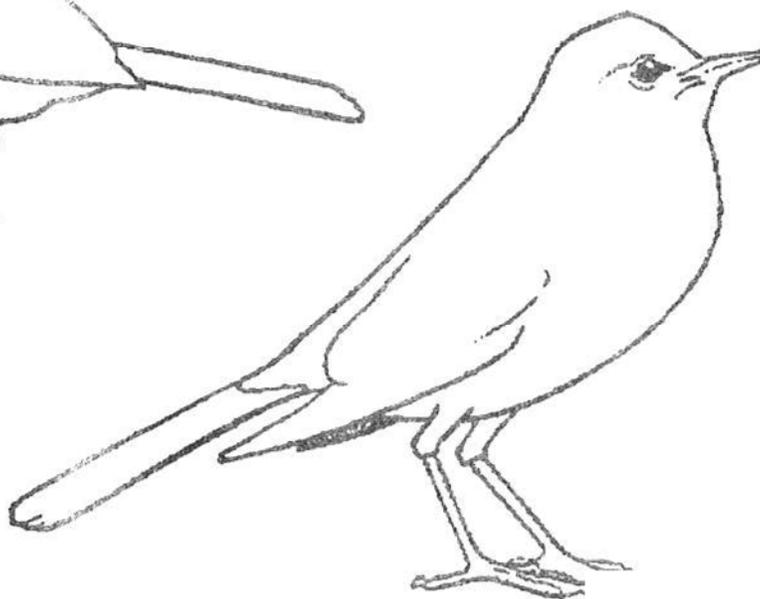
Black-Capped Chickadee



House Sparrow



Northern Cardinal

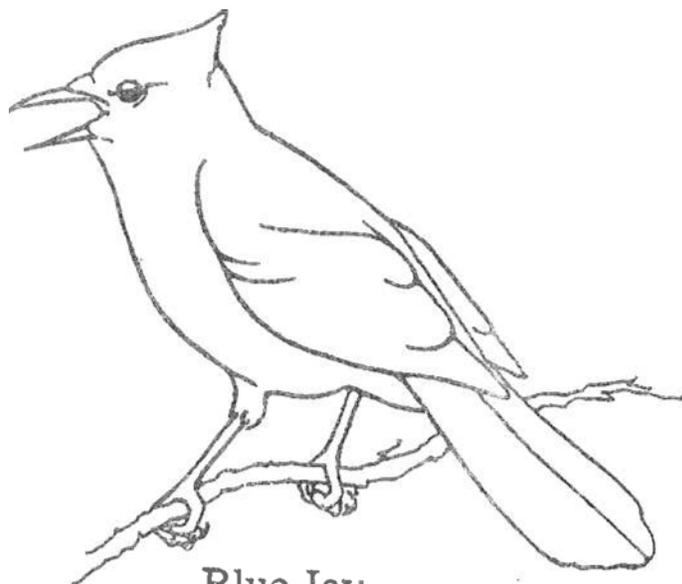


American Robin

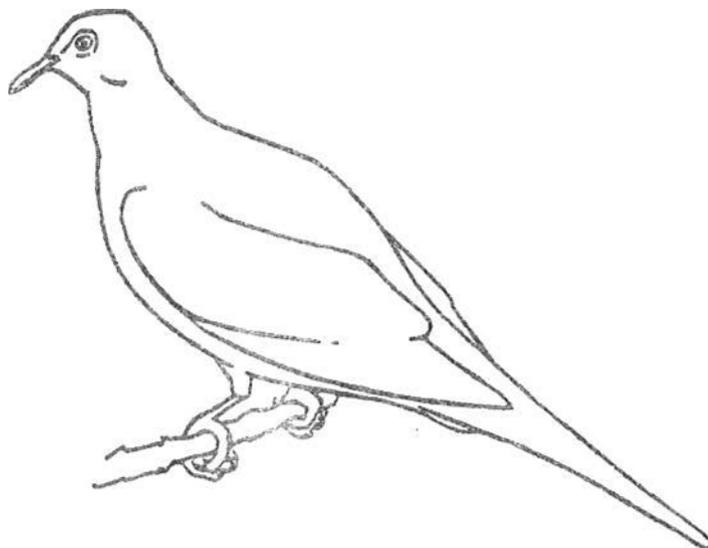
BIRDS



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



"WILDLIFE ADVENTURES" RECORD SHEET MINI 4-H PROGRAM



Name _____

Grade _____

Address _____

Please answer the following questions. Attach this completed record sheet to your project. See you at the fair!!!

1. Why did you choose this project? _____

2. What types of birds did you see? _____

3. What is your favorite bird? _____

4. Did you enjoy this project? _____

Parent's signature: _____ Date: _____



4-H Fair Exhibit

Listed here are the projects you can exhibit at the fair. Choose one project and bring it to the fair for judging. Use the label at the bottom of the page on your exhibit. Choose a different exhibit each year you take the project.

If you have any questions about your projects, please call the Extension office. There are people there who can help you.

- Make an 11" x 14" poster (mounted horizontally with hard backing and covered in plastic) showing different types of birds. You can color and cut out the birds in the manual or find your own pictures of birds.
- Make an 11" x 14" poster (mounted horizontally with hard backing and covered in plastic) about animal characteristics from the information in Activity 6.
- Exhibit the bird feeder that you made in Activity 2.

PROJECT EXHIBIT TAG

Mini 4-H Wildlife Adventures

Name: _____

Age: _____