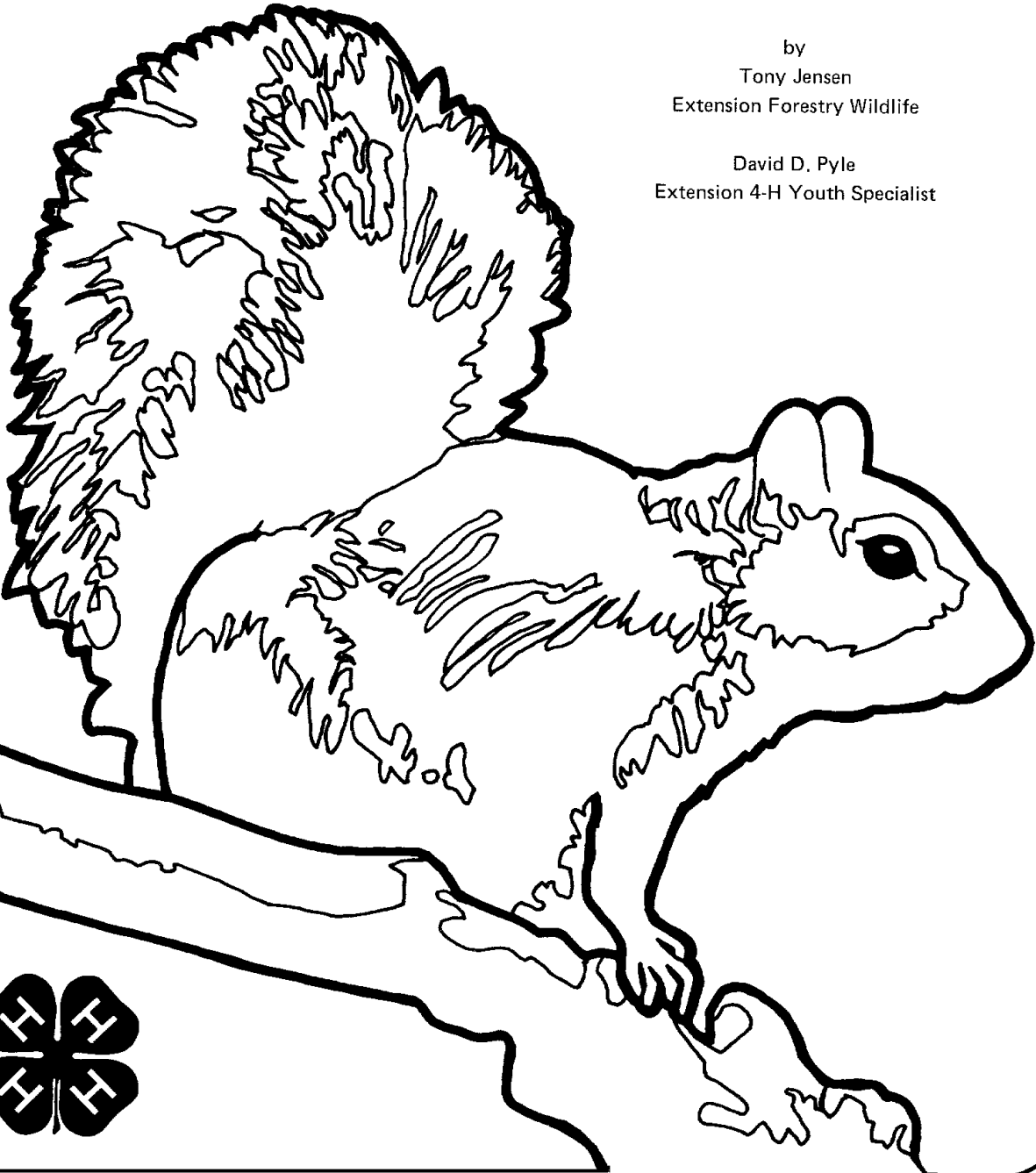


# The World Around Us

## 4H Wildlife Unit I

by  
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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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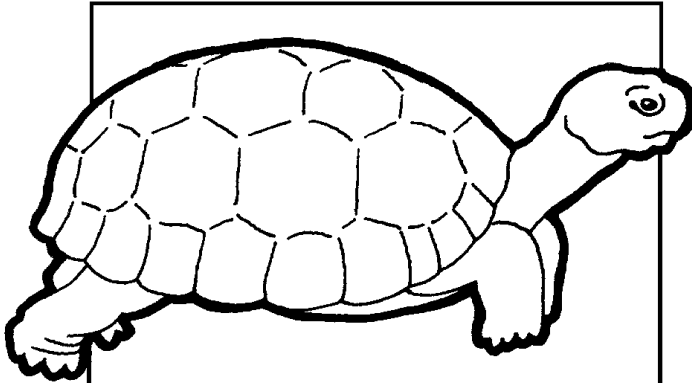
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### Introduction

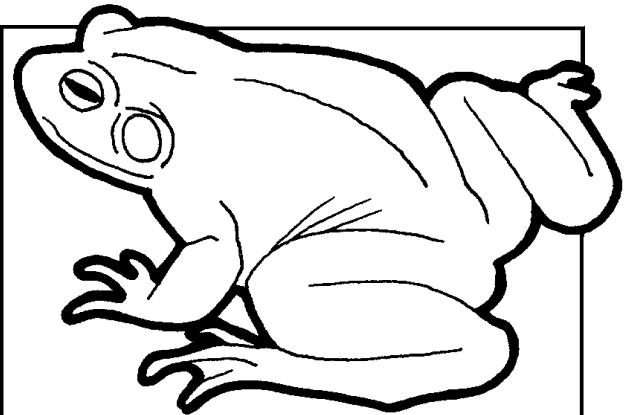
Almost everyone likes to spend some time outdoors looking at wildlife, plants, clouds and sky. We are lucky in Florida to have many acres of woodlands where wildlife live and few men roam. In the summer, for example, you need only to walk through a woods to quickly learn about some of the

animals and insects that live there. The sun, rain, ticks, deer flies, chiggers, fire ants and snakes can make a Florida woodland outing a real environmental awareness trip.

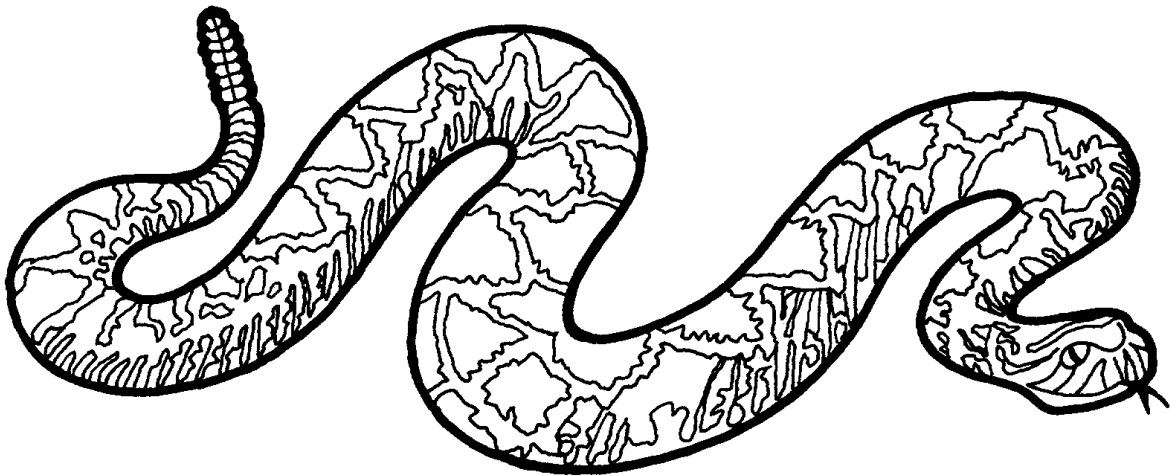
You probably have not thought much about all the wildlife around you. In fact, few people know for sure how many different kinds of animals there really are in the world.



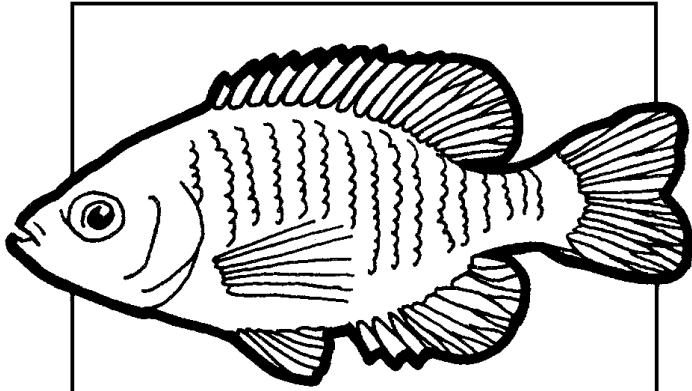
DID YOU KNOW FOR EXAMPLE, THAT THERE ARE THIRTY-FIVE DIFFERENT KINDS OF TURTLES RIGHT HERE IN FLORIDA?



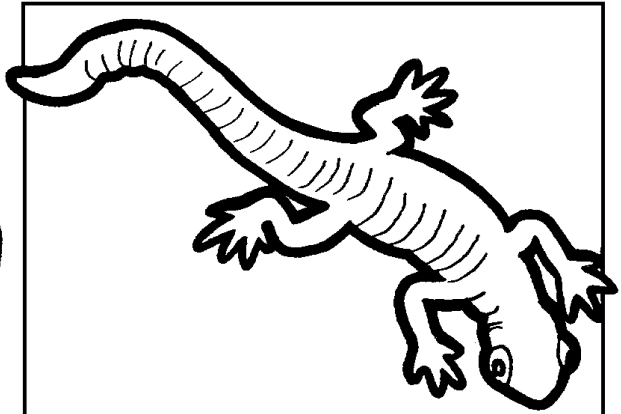
THERE ARE 28 DIFFERENT KINDS OF FROGS.



IF YOU FREQUENTLY HIKE THROUGH NATURE, OR READ ABOUT NATURE, YOU MAY HAVE LEARNED THAT THERE ARE ALSO 25 DIFFERENT LIZARDS AND 60 DIFFERENT SNAKES.



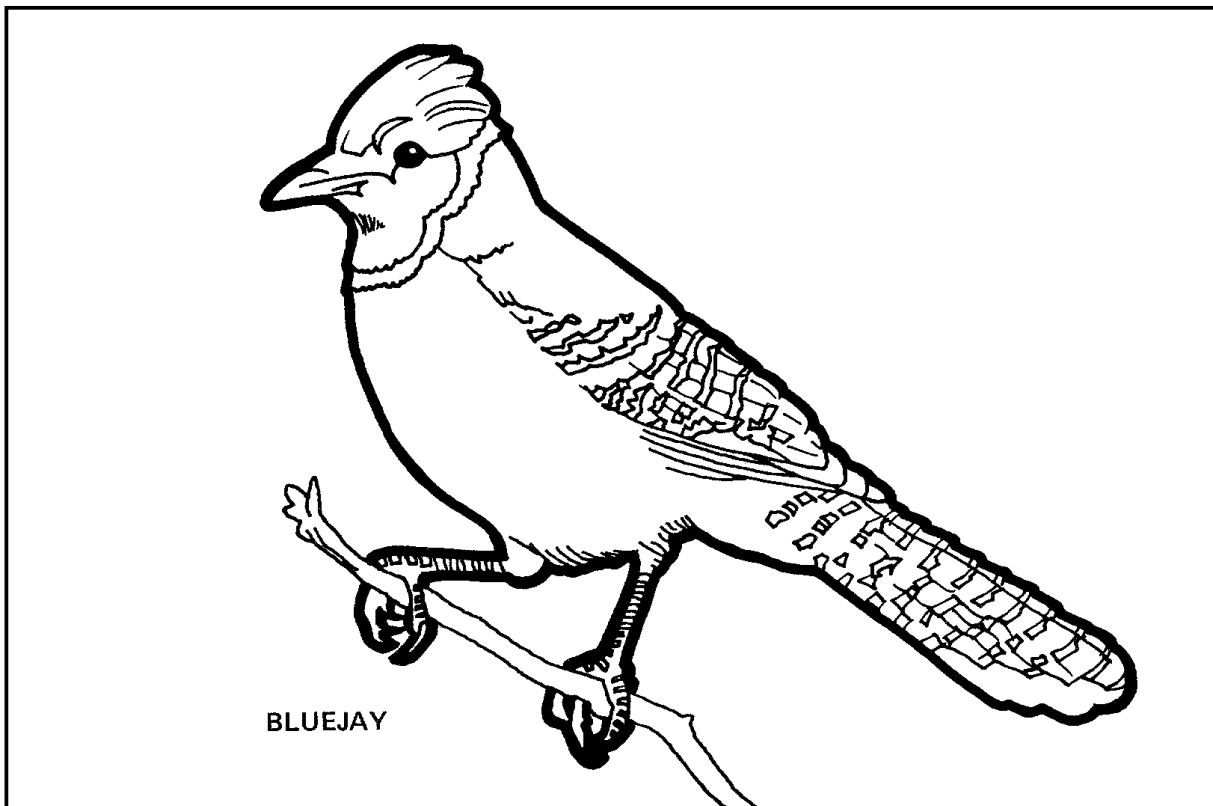
IF YOU LIKE TO EXPLORE NATURE AROUND THE WATER, OR LIKE TO FISH, YOU MAY HAVE CAUGHT SOME OF THE 154 DIFFERENT KINDS OF FISH.



YOU MAY ALSO HAVE SEEN SOME OF THE 29 DIFFERENT SALAMANDERS, AN ALLIGATOR OR A CROCODILE. AND THIS LIST IS ONLY A BEGINNING.

Think for a minute about the birds you have seen. At some time during the year you can see birds of almost any color, shape or size. In fact, there are 350 different birds that fly through the Florida skies.

These birds could not live here except for the insects and plants which live here too. Birds often make a meal of insects and in Florida there are 15,000 different insects to choose from.



Up to this point, you have been reading about wildlife that live on the land or swim in the water. There are other kinds of life in the outdoors. All the trees, shrubs, plants, grass, flowers and moss that grow on the land and in the water are part of nature. There are many different kinds of plants, just as there are many kinds of animals. For example, there are 314 native trees here in Florida. For those of you who like the wild flowers, you may already know that there are many different kinds of wild flowers. But did you know that there are over 3,000 different flowering plants?

By now you probably have the feeling that there are many living things in Florida that you did not know about. And that is exactly the reason for having this 4-H project. We want to help you learn more about the world around you, starting right in your own neighborhood.

### What You Will Do

You will learn about Florida wildlife by walking in the out-of-doors, and observing what you see. You will touch many plants and animals as you learn about the differences in the plants and animals that are in the woodlands and waterways of Florida. You will soon learn about the different smells found in the outdoors. And we hope you will come to love and appreciate the flowers, animals and plants that make Florida so interesting and beautiful. The following activities are planned for you and your leader, you and your family, or you by yourself.

- 1) Take at least three hikes as directed under activities one, two and three on the following pages. You will write down your thoughts and what you saw while on the hikes. In fact, this record book should be taken with you when you take your hikes.
- 2) Make plaster casts of at least two different animals tracks. Instructions for making the plaster casts are found on page 15.

## ACTIVITY ONE Your Outdoor Laboratory

Your first activity will take you into the great outdoors just to explore. This first field trip is really a scavenger hunt.

The following list has several things which you can find in nature. Place a (✓)check beside each item that you are able to find while on your field trip.

#### 1) CAN YOU FIND:

- An animal home? \_\_\_\_\_  
(den, burrow, hollow tree, nest)
- An animal track? \_\_\_\_\_
- An insect? \_\_\_\_\_
- A flower? \_\_\_\_\_
- A flower with fragrance? \_\_\_\_\_
- A seed? \_\_\_\_\_
- A nut? \_\_\_\_\_
- A bur? \_\_\_\_\_
- A bird? \_\_\_\_\_  
or hear a bird? \_\_\_\_\_
- A pretty rock? \_\_\_\_\_
- A smooth rock? \_\_\_\_\_
- A rough rock? \_\_\_\_\_
- A smooth tree? \_\_\_\_\_

- A rough tree? \_\_\_\_\_
- A baby tree? \_\_\_\_\_
- A dead tree? \_\_\_\_\_
- A vine? \_\_\_\_\_
- A vine with three leaves which you should not be touching? \_\_\_\_\_
- Something red? \_\_\_\_\_
- Something yellow? \_\_\_\_\_
- Something green? \_\_\_\_\_
- Something blue? \_\_\_\_\_
- Something black? \_\_\_\_\_
- Something gray? \_\_\_\_\_
- Something round? \_\_\_\_\_
- Something flat? \_\_\_\_\_
- Something smooth? \_\_\_\_\_

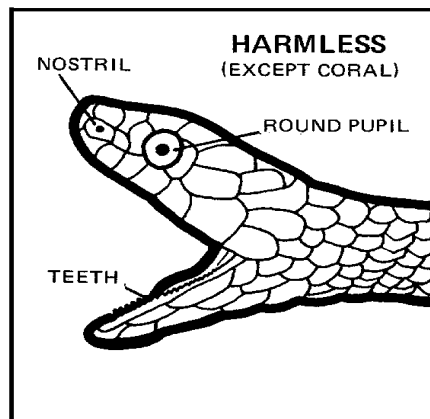
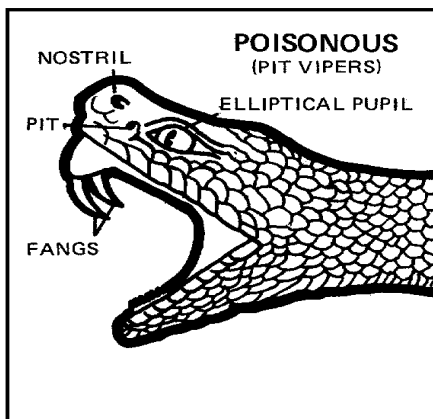
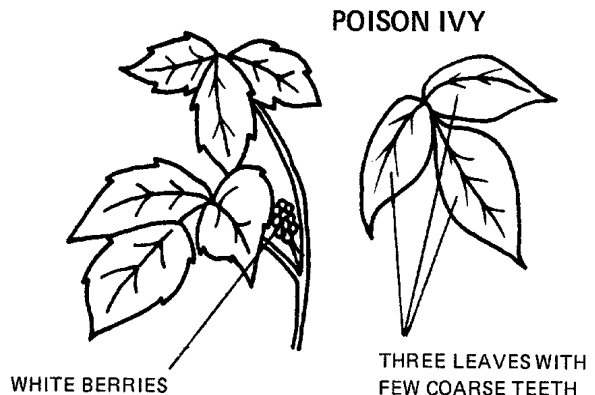
- 2) After you have completed the first activity on this field trip, find a comfortable place near some running water; sit down, and be very quiet for one full minute. Listen to the water running in the brook. Does it say something to you? What does it say? Do you feel close to nature while listening quietly to the water?
- 3) Color the animal and bird pictures in this record book. Paste each of the pictures on a poster board. Below each picture, tell what the animal or bird eats, and where you found or saw it. Try to color the picture the same color that the animals really are. Your leader or parent can help you select the colors. You can also get ideas about the color and what they eat from many of the wildlife magazines and books that are available from the library.
- 4) Exhibit your poster board or animal tracks or both at a local or county fair or exhibit.
- 5) Prepare a demonstration about your wildlife project. Making a plaster cast of an animal footprint would make a good demonstration.
- 6) Answer all the questions and finish all the activity pages in this project book. Your leader will want to see your book as you work through the exercises and when you have finished.

### A Word of Caution

Before you start out into your neighborhood or the woods or to explore the waterways, read the following paragraphs. These suggestions will help you have a safe and fun experience on your hikes.

- 1) Use your eyes to look at plants, the earth, the animals and the sky. But always watch where you step, lean or sit!
- 2) Use your ears to listen to the sounds of the wind in the trees, to hear the birdsongs, the insect noises and the rustling noise of small animal feet.
- 3) Use your nose to see how many different woody smells you can notice.
- 4) Learn quickly to identify the poisonous snakes (rattlesnakes, cottonmouth, coral snake, and copperhead).

- 5) Learn quickly to identify the poisonous plants (poison ivy, poison oak, poison sumac, and Florida poison wood).



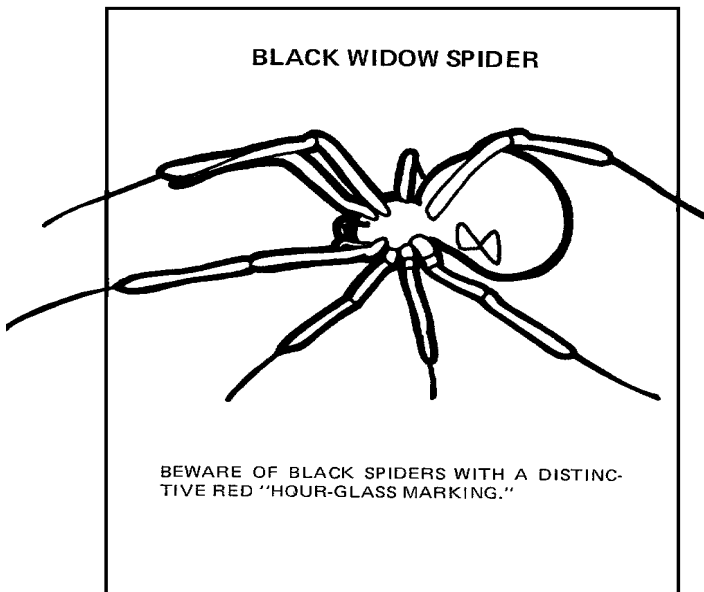
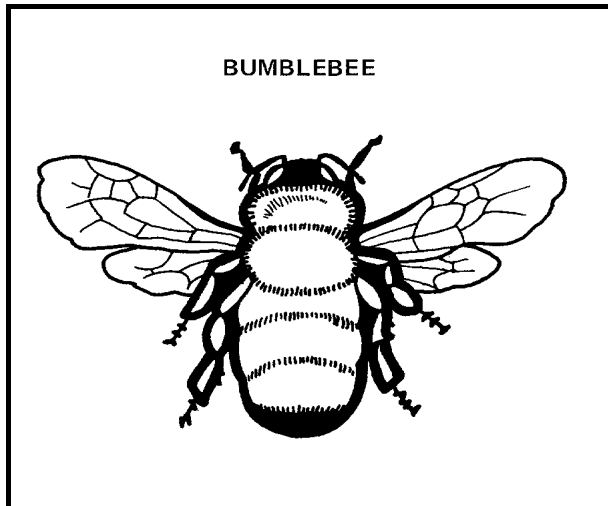
### DIAMONDBACK RATTLESNAKE

Yellow-bordered, diamond-shaped markings are trademarks of this largest and most dangerous of our native snakes. Found throughout Florida in most habitat types, but most common in palmetto flatwoods, brushy pastures, and old fields.

### CORAL SNAKE

Red bands touching yellow marks dangerous coral snake. Red bands touching black is pattern of harmless king snake. Coral has round eye-pupil and lacks facial pit characteristic of rattler and moccasin.

6) Learn quickly to identify the poisonous wasps, stinging caterpillars, scorpions, insects (black widow spiders and fire ants).



7) Learn quickly the habits of sick animals. Animals with rabies may be slow moving, or very aggressive. A good rule to follow is to not get friendly with strange or wild animals.

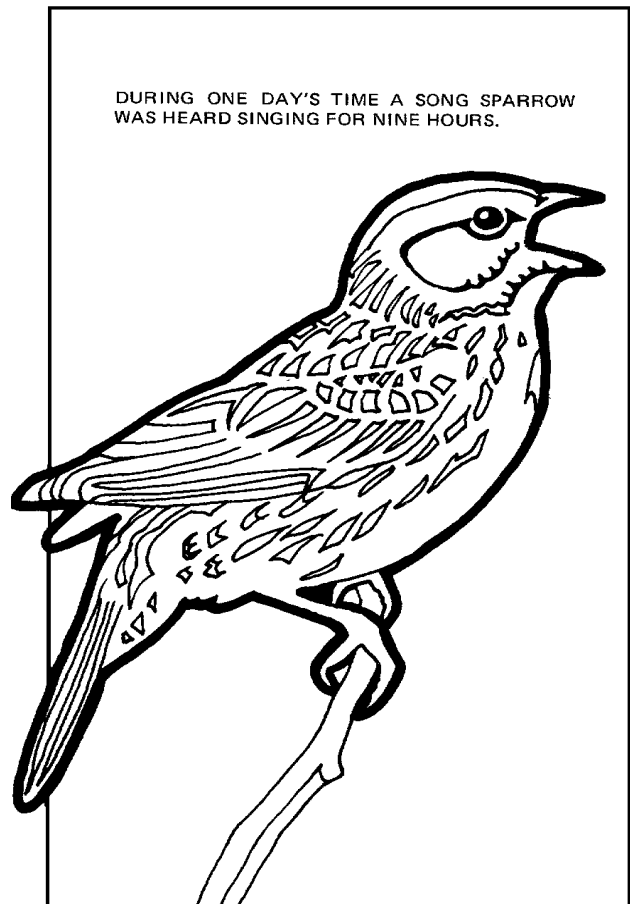
8) Be on the alert for landmarks that will help you get safely home from your hike.

## Equipment Needed for Your Hikes

You need almost no equipment! In fact, don't overload yourself with lots of equipment. You need to be comfortable in order to enjoy the trip. Make sure that you wear clothes that are suited for the area and the season. Don't overload yourself with cameras or binoculars unless you particularly enjoy studying wildlife in that way.

In the beginning just observe and become familiar with the country and what lives there. Later you can take pictures, draw maps or make collections if you like. Make certain you take a pencil or pen and this notebook. And good luck with your project.

On the next few lines, write down words which describe the many sounds that you heard. Tell about the sounds of running water, the sound of a bird's call, a frog's sound, the sound of feet on a path, the buzz of a bee. Try to think up fresh, new words to describe the sounds that you heard.



## **ACTIVITY TWO**

### **Know Your Area**

Pick a small area near your home. The area may be in your yard, a vacant lot, a portion of a city park or a nature area along a road or stream bank. The area does not need to be large. An area containing several trees will probably be large enough. Observe what you can see in this area.

Start the activity by looking at what grows in the area. Bend down and examine the low growing plant life. Look closely at the plants and crawling insects. Smell and feel the plants. After you have done that, scrape away a tiny area of the plant material and try to see what lives under the plants. A small magnifying glass will help you discover the world of small living creatures in the soil. After you finish your study of the area, answer the questions which follow on pages 9 and 10.

The pictures on pages 12 and 13 are of some wildlife like that you might find in your area of study. Color the animals shown, using their natural colors. You may find out what colors to use from observing animals; asking friends, parents or teachers; or using library books on nature. When you have colored in the pictures, cut out the pages and mount them on cardboard. Then they can be displayed at fairs, exhibits, demonstrations or talks.

1) Tell about the area you picked for study. Tell about the number and different kinds of plants you saw. How were the plants different from each other? \_\_\_\_\_

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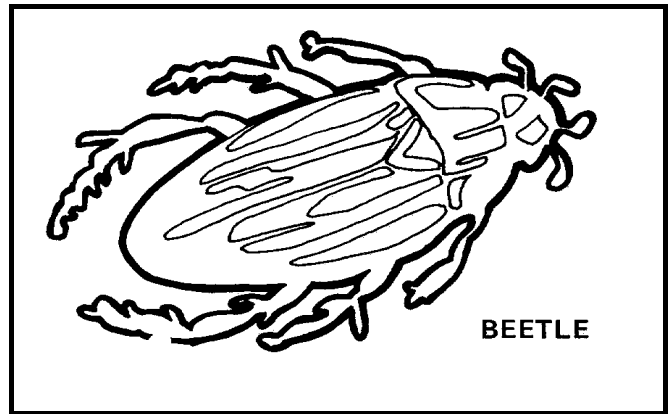
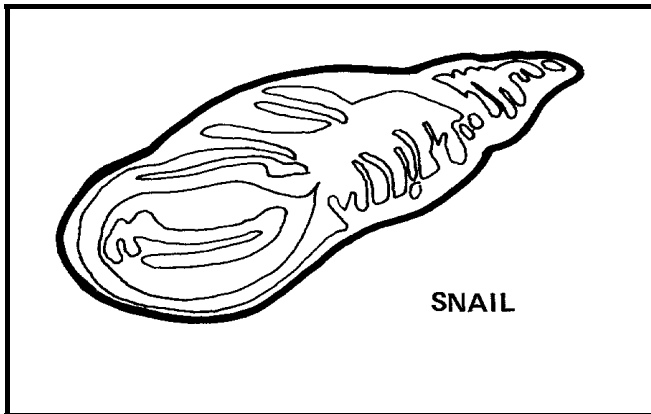
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2) What were you able to see when you scraped away the plant life to look at the soil? Tell about any crawling animals, the soil color, color and shape of rocks or other soil pieces, or any other interesting thing that you saw or felt. \_\_\_\_\_

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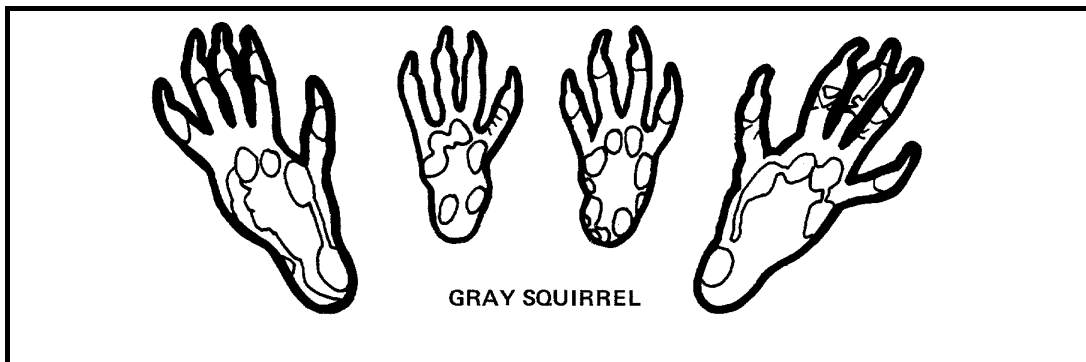


3) List any signs of animals that you found in your study area. Look for animal tracks, feathers, nests, droppings, den holes or signs of animal feeding. Tell what you saw. \_\_\_\_\_

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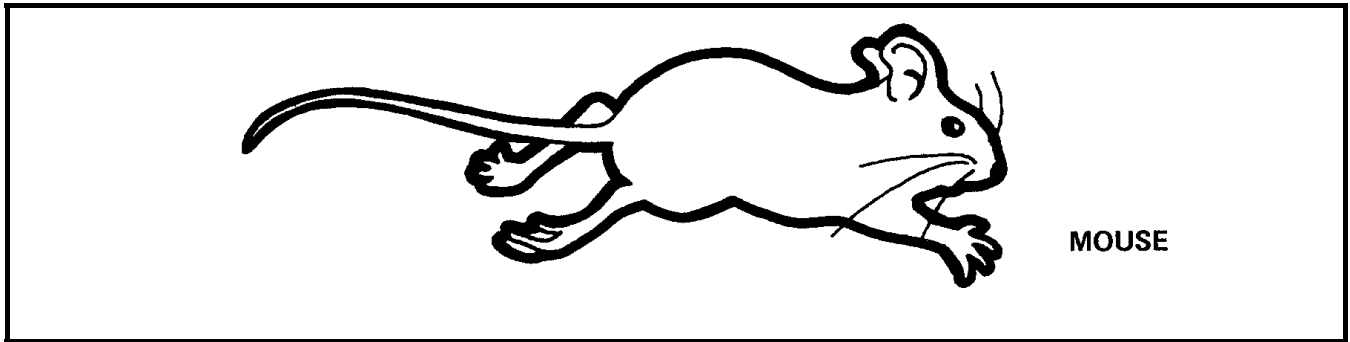
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4) Pick a comfortable spot under a tree or in some quiet spot on your area. Remain alone and quiet for at least 10 minutes. If you are working with other 4-H members or your family, have each one select a different spot. Remember, **no talking!** Make notes about what you see, hear and smell. Also, observe what happens to you. Did you get any mosquito bites? You may use the following spaces to write down what you saw and what happened during the 10 minute period.

DATE OF THE STUDY \_\_\_\_\_

WEATHER CONDITIONS \_\_\_\_\_



ANIMALS SEEN: (Birds, Insects, Lizards, Mammals, etc.) You may describe the animals if you do not know their names. (For example, you may write that you saw a small brown bird, a green lizard, or a pretty butterfly.)

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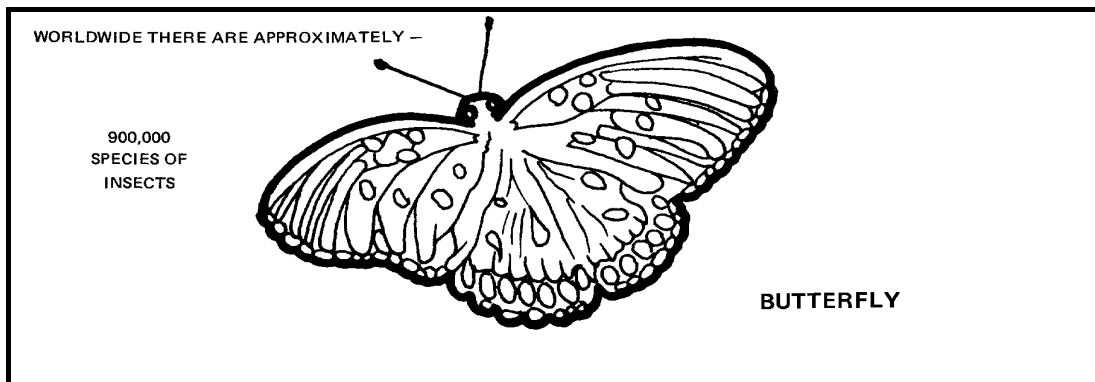
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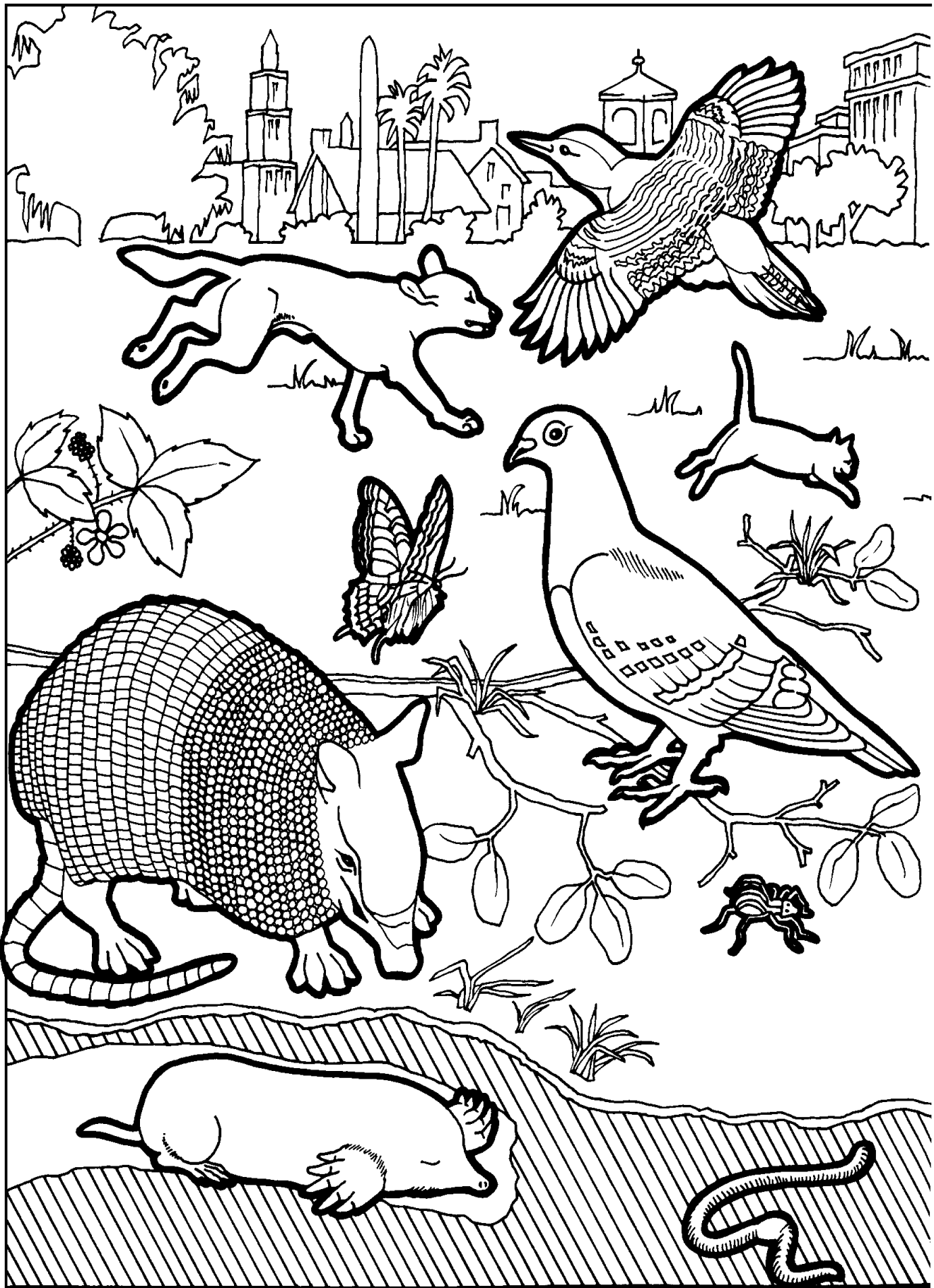
Number of mosquito bites which I got \_\_\_\_\_

Number of fly bites which I got \_\_\_\_\_

Number of ticks which I found \_\_\_\_\_

5) Find another comfortable spot and watch one wild creature for at least 10 minutes. You may watch the creature longer if you wish. Select an animal that will likely stay within your sight for the 10 minute period. As you watch the animal (squirrel, bat, insect or butterfly) make notes of what the animal does. Write a short story about what the creature was doing while you were watching. Make sure you include in your story why you think the animal was spending the time as it was.







### ACTIVITY THREE

#### Learn About Your Talents

This third activity will help you learn about some talents which you may not know that you have. One of the wonders of nature is that it helps us to relax and think about the world around us. Often when you are alone with nature, you find that you can be creative in a way that you did not know. The following activity will help you express yourself as you describe the thoughts which you have while observing and studying the outdoors.

For this activity you will need paper and a pencil. Take the paper and pencil with you on a hike into the woods or some other favorite spot where you can observe wildlife. Find a comfortable place to sit. As always be on the lookout for poisonous plants and animals and be as careful as you can. If you are hiking with your friends or other 4-H Club members, make certain that each of you finds a different spot to sit. It is best if you are far enough apart that you cannot see each other. After you have each found your spot, make no other sounds.

Sit quietly for a few moments. Listen, smell and touch objects around you. As you see things that interest you, that you find exciting or just plain curious, try to tell about your feelings on your pad of paper. You may want to write a short story or poem about some animal or plant that you see. You may smell something fragrant and want to try to describe that sensation on your paper. Let your mind wander and write about something you see, feel or hear.

When you return to your group you may want to exchange papers, read your thoughts or show your drawings to the others. When you return home, tape your work on the inside back page of this workbook.

After you have finished with the listening activity, meet with other members of your club and discuss each of the following questions.

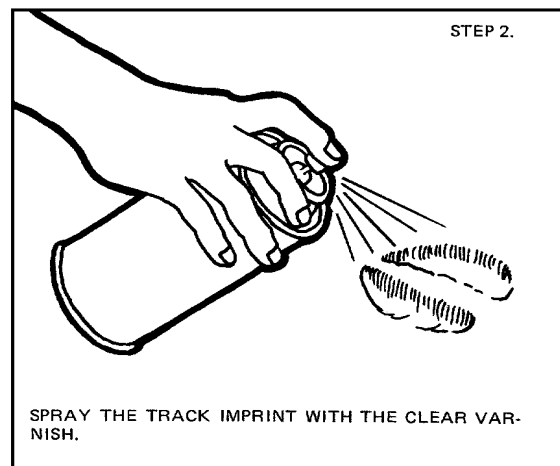
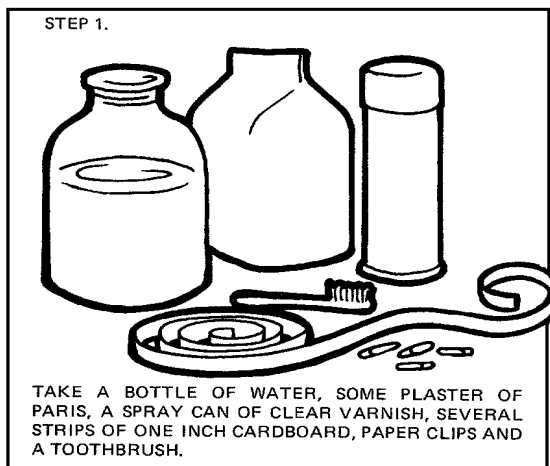
- 1) How do plants, animals and birds help each other to live?
- 2) What causes rocks or trees to be different shapes or sizes?
- 3) In what ways are animals and people alike?

### ACTIVITY FOUR

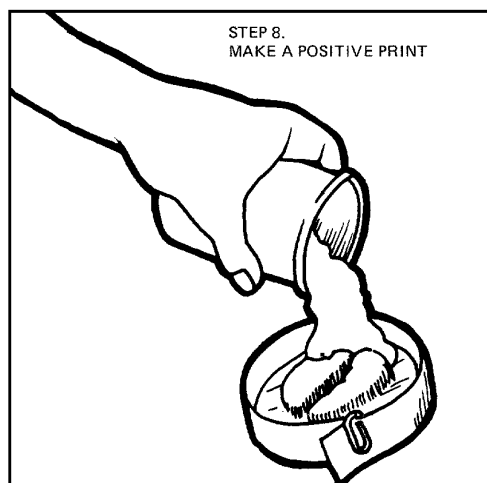
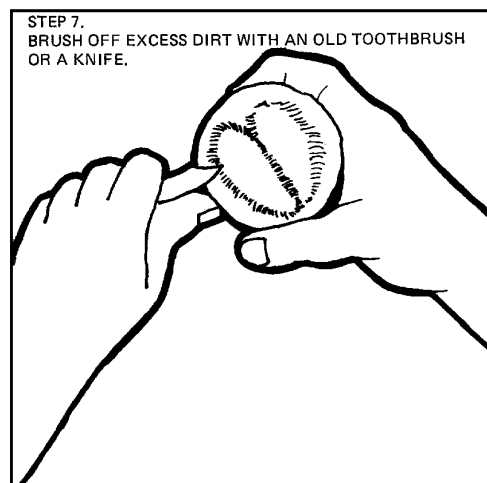
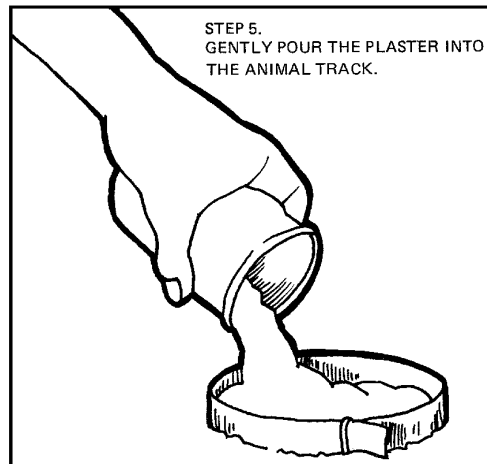
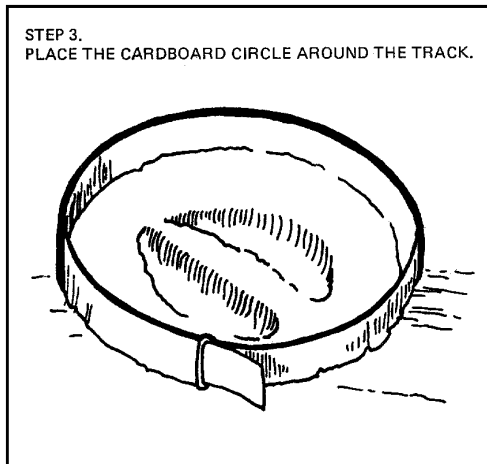
#### Animal Tracks

An interesting collection of drawings or a plaster cast collection of animal tracks makes an ideal wildlife project to exhibit or demonstrate. You can make your own plaster casts by following the steps below.

- 1) Go into the woods or some other area where you can expect to find animals. Take with you a bottle of water, some plaster of paris, a spray can of clear varnish, several strips of one inch cardboard, paper clips and a toothbrush. As you hike along, look for a recently dried mud puddle, a stream bed or a newly plowed fireline or sandy road. A good time to explore these areas is right after a rain.
- 2) Once you locate the tracks, spray the track imprint with the clear varnish. This is important if the track does not appear solid. The varnish will hold the soil in place when you pour the plaster of paris into the print.

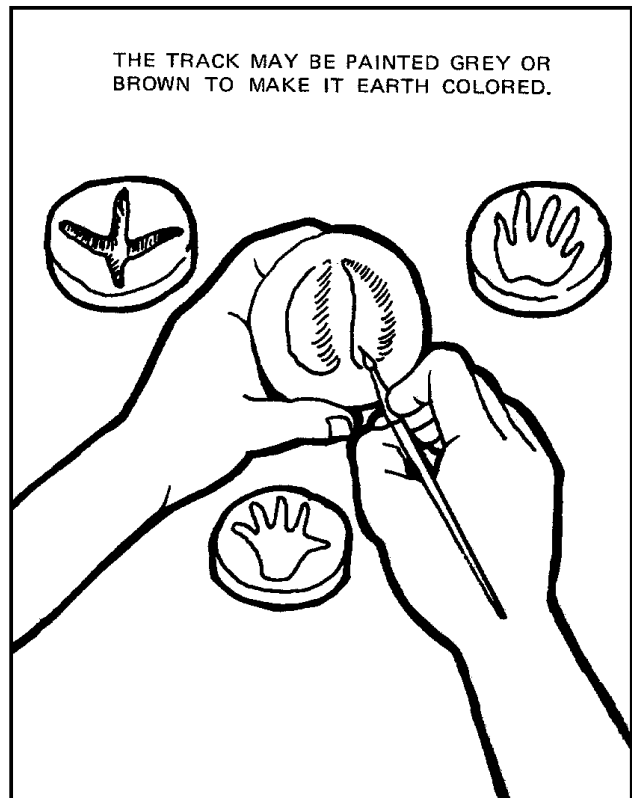
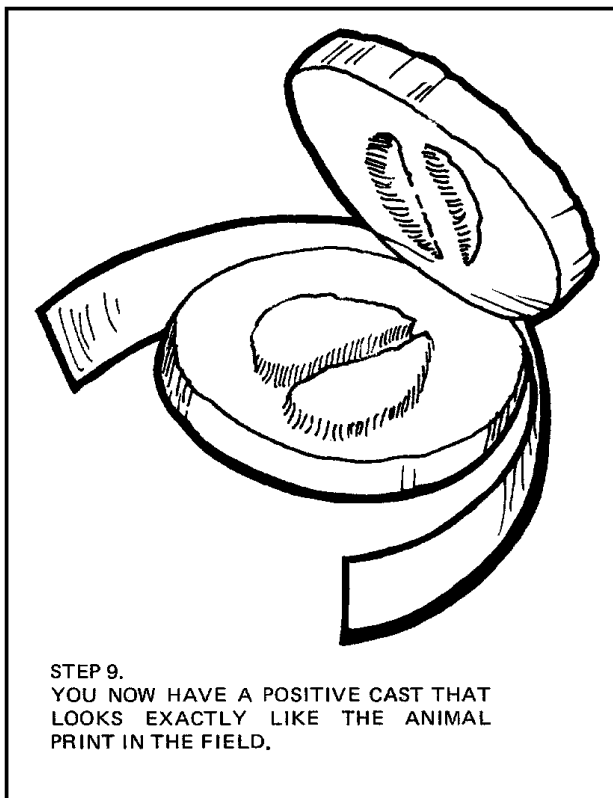


- 3) Next, take your cardboard strips and roll into a circle. Use the paper clip to hold the cardboard in the shape of the circle. Place the cardboard circle around the track.
- 4) Mix some plaster of paris with the water until it is thin enough to pour. Equal amounts of plaster and water usually make a good mixture.
- 5) Gently pour the plaster into the animal track, letting it flow in from the sides if possible. Let the plaster harden for about 20 minutes.
- 6) After the plaster has hardened for about 5 minutes, place a few clean small sticks across the plaster to help strengthen the animal cast. Pour some more plaster into the mold to cover the sticks. If you find that your plaster hardens too fast, you can add some vinegar on your next trip to slow down the hardening. The addition of salt will make the plaster harden faster. Be certain to only mix enough plaster for one or two tracks as the plaster will harden in the can.
- 7) After the plaster is dry, remove the cast from the cardboard mold. Brush off the excess dirt with an old toothbrush or a knife. You now have a negative print.



- 8) Take your negative print home. As you have time, you can make a positive print. Here is how you do that.
- First make a small cardboard frame. Encircle your track with a piece of cardboard about twice as tall as the negative. Fasten the cardboard ends with a paper clip. After you have finished the frame, spread vaseline over the surface of your negative print.
  - Mix some plaster of paris exactly as you did on the field trip. Pour the plaster into the cardboard frame.
  - While the plaster is still wet, press your negative into the plaster and leave it there until the plaster is hard.
- 9) You now have a positive cast that looks exactly like the animal print in the field. Write the name of the kind of animal track you have. Note also the date, county and location where you found the track. You can write this information on the flat side of the cast or on the back. The track may be painted grey or brown to make it earth colored. You may wish to make extra tracks to exchange with other members of your club who find different ones. You may also wish to place a wire on the back side of the positive cast before it dries so that the cast can be hung for display.

If you find a good track and have no plaster and water available, powder up some dry leaves with your hands. Sprinkle the powdered leaves over the track. Blow away any excess that does not stick. Find some clay soil and mix with ditch water in an old bottle, paper cup or can. Pour the mixture of mud slowly into the track and let dry. Handle carefully. Make a positive cast using plaster.



## **ACTIVITY FIVE Wildlife Colors**

While doing the first four activities, you have seen several different birds, animals and insects. You have observed the many different shapes, sizes and colors of Florida wildlife. Activity Five will help you learn more about what Florida wildlife eat and where they live.

Inserted in this manual are the pictures of eleven different birds and animals found in Florida. Using your knowledge about the colors of each of these animals and using books available at the library, color each of the pictures. As closely as you can, match the color of the animal as it is in the wild. You may use crayons, watercolors or paint as you wish.

After you have completed the coloring, cut out the pictures and paste them on a posterboard or cardboard sheet. Display them at your 4-H club meeting, county fair or other appropriate places.

Arrange the pictures neatly on the poster since you may wish to exhibit your work at a fair or exhibit. Under each picture write the following three things which you have learned about the animal or bird pictured:

- 1) The name of the bird or animal.
- 2) Where the bird or animal was found.
- 3) What the bird or animal usually eats.

**EXAMPLE:**

**ROBIN**

**YARD**

**EARTHWORMS**

### **Project Summary**

- 1) Which of the activities in the project did you like the best?

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- 2) In your own words, tell what you think "wildlife conservation" means.

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- 3) What do you think the words "wildlife habitat" mean?

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4) What is "ecology"?

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5) How many different kinds of snakes are found in Florida?

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6) Name the four poisonous snakes found in Florida.

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7) How Many native trees does Florida have?

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Can you name at least one native tree?

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8) Can you name at least three common Florida mammals?

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**Tape or glue your story, poem, picture or song from activity three here.**

**MORE SPACE FOR YOUR ACTIVITY**

**MORE SPACE FOR YOUR ACTIVITY**

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