

Urban and Backyard Wildlife

INTRODUCTION

Why is wildlife important in urban areas? There are several reasons. People can understand themselves better by observing and sharing space with wildlife. People can identify with wildlife. The miracle of birth and death can be experienced by watching animals in natural habitats. We can observe other natural creatures adjust to different outside conditions, just as we adjust in our daily living. By having wildlife close by and coexisting with it, people can learn that they too are part of nature.

Much can be done for wildlife in the urban environment when people take an interest and care. To help, we must know something of the needs of wildlife, have some knowledge of animal species and exercise a measure of good judgment and know-how.



WILDLIFE NEEDS

Before we can help or manage wildlife, we should learn about a few natural laws that influence wildlife. Wildlife in some form can be found almost anywhere the basic needs of food, water, cover and living space are met. This combination of food, water, cover and space is known as habitat. Animals that do not find suitable habitat conditions will either

starve, be preyed upon, be unable to raise young or move to a better environment.

The operation of natural laws determines the success or failure of an animal in a given habitat. Natural laws are the basis for the important wildlife management principle called "carrying capacity." Carrying capacity (any animals—rabbits, woodpeckers, etc.) that a habitat will support or "carry" at one time. The amount and quality of food, cover and water basically determine a habitat's carrying capacity. Carrying capacity is influenced by soil fertility and the way land is used. It can also be affected by the relationships between the animals themselves.

People do not influence soil fertility to a great extent. For the most part, soil fertility will be acceptable or easily corrected in urban areas. The most important way people affect urban wildlife is through land use. The best land use is that which produces direct benefits to people while conserving soil, water, minerals, plants and animal life. To achieve this, the pattern of land use must be varied. Take, for example, a yard or a park that contains only grass . . . few forms of wildlife can prosper here! On the other hand, a diverse yard that combines fruit plants, a strip of grass and a row of evergreen trees is attractive to more different forms of wildlife, since more habitat needs are met.

People cannot produce wildlife by themselves—only nature can do this. We can, however, help wildlife by understanding and working with nature and her laws.



The urban landowner can increase wildlife by following practices which will improve the carrying capacity of his land. The basic practices in wildlife management are to provide and maintain food, cover, water and living space (providing habitat).

TARGET SITES

What kind of areas are we talking about in considering urban wildlife? Do not stop with your own yard. There are many other areas that deserve attention—a nature center, a school yard, a city park, a botanical garden, a camp area, sanctuaries, bike trails, rural life centers or even a vacant lot. Each area can be approached in basically the same manner but on different scales and according to different wildlife needs.



Bike trails make ideal wildlife habitats.

URBAN WILDLIFE SPECIES

The wildlife you can benefit is practically unlimited. Mammals, birds, reptiles and amphibians can all be helped. Mammals could include squirrels, raccoons, opossums, rabbits, chipmunks, field mice, skunks and even foxes. Birds affected will vary according to where you live, but the most common are wrens, sparrows, martins, swallows, chickadees, tit mice, robins, doves, flickers, woodpeckers, cardinals, mockingbirds, bluebirds, bluejays, starlings and black birds. Snakes live in urban areas as do turtles, toads, lizards and frogs. A host of small animals (spiders, insects and aquatic animals) will also benefit from various wildlife management techniques.

HABITAT IMPROVEMENT—WATER

For many species of urban wildlife, especially birds, a suitable water source is a prime habitat consideration that can determine the number of animals in your neighborhood. In attempting to control mosquitoes, many cities or towns have drained or filled areas that provided watering and bathing area requirements for animals.



Water for drinking and bathing is an important habitat requirement.

ACTIVITY I—NEIGHBORHOOD WATER SURVEY

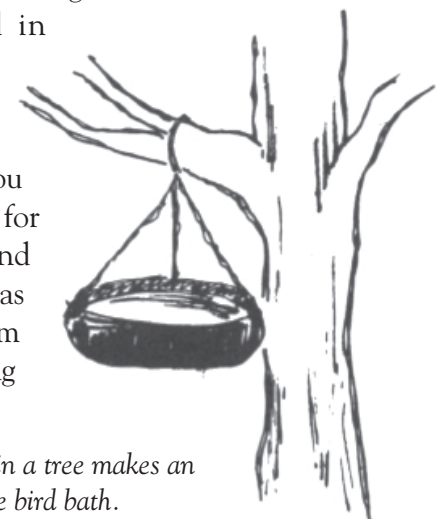
Take a walk through your neighborhood and write down the location of available water sources for birds within a three block radius of your home. Careful attention should be given to locating land depressions with standing water, buildings with flat roofs or faulty gutters that might collect rain water, and any free-running seeps, creeks or canals that might be nearby. Once you have completed your survey, analyze the types of water sources you were able to find. You might ask yourself these questions:

1. Is this source of water a reliable year-round water source or does it evaporate in hot weather or freeze over in cold weather?
2. How much water is available? Does there seem to be enough for many animals?
3. Can the water supply the needs of the animals throughout the year?
4. Is the water clean or is it polluted with oil residue, salts or runoffs from a factory?
5. Does the water smell funny or have slimy rust-brown growth of bacteria in it (sure signs of sewage contamination)?

If the analysis of water resources reveals a water shortage in your neighborhood, what can you do to help meet this need?

ACTIVITY II—ESTABLISHING AND MAINTAINING A BIRDBATH

In order to increase the availability of water, bird baths can be placed in your urban area. Birds enjoy splashing around, and when they gather for this activity it is usually a circus-like affair that can be both informative and entertaining. Birdbaths can be constructed in many ways and almost anything that holds water will do. By constructing baths you will provide a means for birds to keep clean and free of some parasites, as well as providing them with necessary drinking water.



A cut tire in a tree makes an inexpensive bird bath.

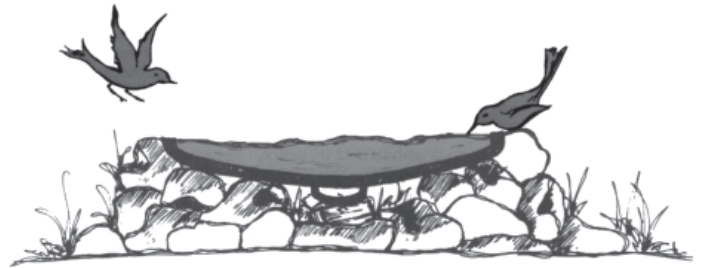
Materials

The following are all that is needed:

- old trash can lid (no holes, preferably steel)
- old car or truck tire (no holes)
- paint and brush
- tie wire, wire cutters
- drill and hacksaw
- 2" x 4" treated lumber 12 feet long (unless bird bath is to be mounted in a tree)



Garbage can lid, weighted with bricks on a section of drain tile.



A garbage can lid, weighted with bricks on a pile of rocks or rubble.

avoid the bath. Remember to maintain the bath by keeping a water supply available and cleaning the container inside to prevent algae buildup. A well-tended birdbath should reward you with many bird watching opportunities as well as providing the birds with a needed place to drink.

HABITAT IMPROVEMENT-FOOD

Winter is a particularly hard time for birds in the urban habitat. During this season, food supplies are at their lowest and even water can be in short supply. (A bird cannot drink an ice cube.) Some people provide bread crumbs for their bird friends during the winter months. This is not a balanced diet. Other foods are easily obtained and are beneficial to typical urban birds. (You may want to obtain a copy of the 4-H Wildlife Activity Guide to Birdhouses and Bird Furniture.)

ACTIVITY III—BIRD FEEDING PROGRAM

Identify 10 birds that you have seen in your neighborhood during the winter. Put their names in Table 1 to the right. Study their feeding habits in your yard and at a bird feeder. Put the foods that they select in the table beside the bird's name for easy reference later.

The foods you list in Table 1 can be incorporated into your winter bird feeding program. These same foods are liked by other birds, too, and may help to attract new species of birds into your neighborhood.

ACTIVITY IV—BUILDING A BIRD FEEDING STATION

You may ask "what is a bird feeding station?" It is any protected place where birds can come to a clean, reliable food source in winter. Let's look more closely at this definition. Several things are extremely important. The key words here are "protected," "clean," and "reliable."

THE ACTIVITY PLAN

To begin you must select a site to erect your bird bath. An area where different birds congregate is a worthy selection. Most likely you will choose your own yard so you can watch the birds. Do not forget any of the areas mentioned previously.

Your water containers can be simple and inexpensive. Examples are an old trash can lid or an old tire cut in half. The tire can be cut in half with a hacksaw. Cut it in half down the middle treads.

To prepare your container (either the lid or tire), you will need to drill three sets of holes around its lip. At each site drill two holes an inch apart from each other and one-half inch from the container edge. Now you are ready to set up the bath. Locate the bath container on a low fork of a tree. If not available, you can either hang the container down from a tree limb or support it on 2" x 4" stakes (three stakes, four feet long). To fasten the container securely to its support, run tie wire through each set of holes and around the tree body, tree limbs or wooden stakes whichever is the case. Twist the wire ends tightly. Now simply fill the container to a depth of two and one-half inches. Anything deeper will cause birds to

Table 1. Neighborhood Bird Food Chart

Name of Bird	Foods Preferred
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Protected means an area not so much free from wind and rain (although this is desirable) but especially one free from bird predators. If you are feeding birds, it's hopefully not to fatten them up for the free-roaming neighborhood cat. Therefore, any time you construct a feeding station you must pay close attention to its location so that the feeding birds can be as safe as possible. A sunny area with bushes near by provides cover and protection from predators. If you're planning to do some bird watching, an area where the sun is to the viewer's back is best so that color markings will show up. A feeding bird viewed into the sun shows up as a dark silhouette.

Our second word, "clean," is important. Food that has remained too long in feeders will mold and spoil just as your food would. Spoiled food can poison birds or even kill them. Be sure to discard any foods that become discolored or smelly. Also, clean your feeders regularly.

The third key word, "reliable," is perhaps the most important. Birds soon become accustomed to receiving daily handouts. In severe weather when it is least desirable for you to get out, is the time they need you the most. This is because birds need more food to supply their bodies with warmth to enable them to withstand the cold. Without a reliable source of food,

birds dependent on your feeding station may not survive. Always keep a good supply of food in your station. If you have to be away for any length of time, ask a friend to keep the station filled with food while you're gone.

With warmer weather, stop your feeding program. Remember, we are dealing with wildlife. Year round feeding will turn our bird friends into pet-like parasites, totally dependent upon us for handouts and survival. You needn't worry about the birds coming back next winter, for word soon gets around where the food is to be found.

Your station itself should consist of several small feeding areas. Many people spend a lot of money on a fancy all-in-one station that they hope will meet the needs of all the neighborhood birds only to find that their larger station attracts only the "bully" birds of the area. These so-called "bullies," the bluejays, starlings and evening grosbeaks, will fight the smaller birds for the ownership of the station. Because of their strength and size these larger birds will usually succeed in driving away the smaller birds. To make the station attractive to all kinds of birds, provide a variety in the feeding areas. Small feeders without porches are good places for small grasping birds to feed. Feeders placed low to the ground will attract ground feeding juncos and sparrows. Larger above

Bottle Feeder

1. One empty gallon plastic mayonnaise jar from school cafeteria.



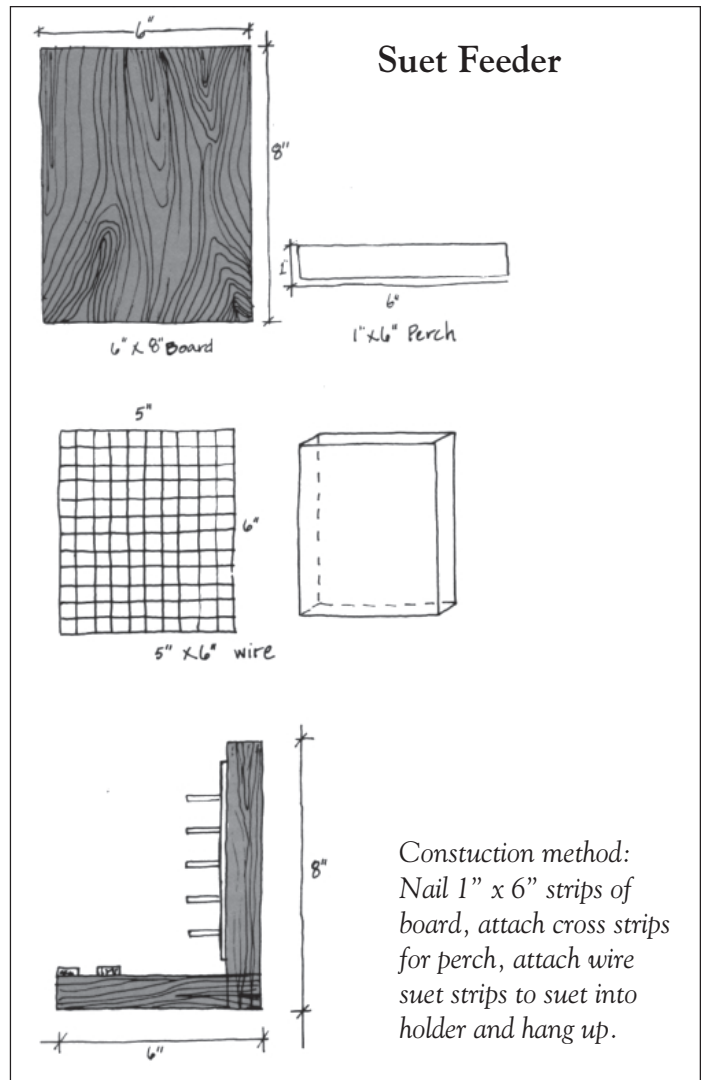
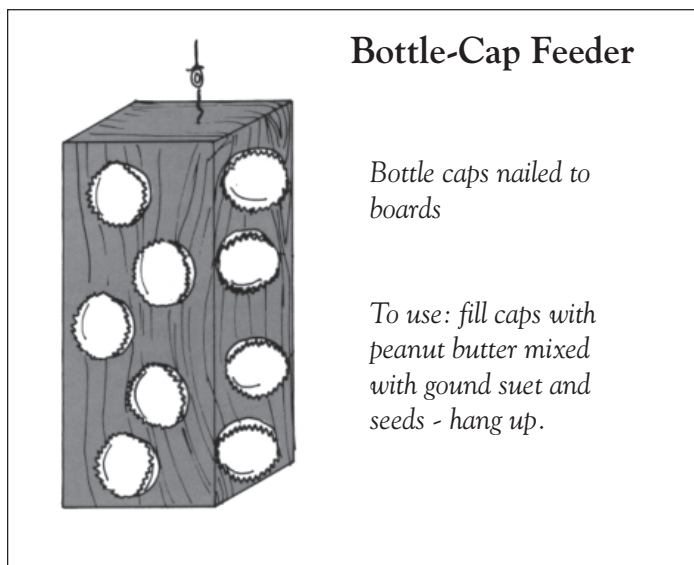
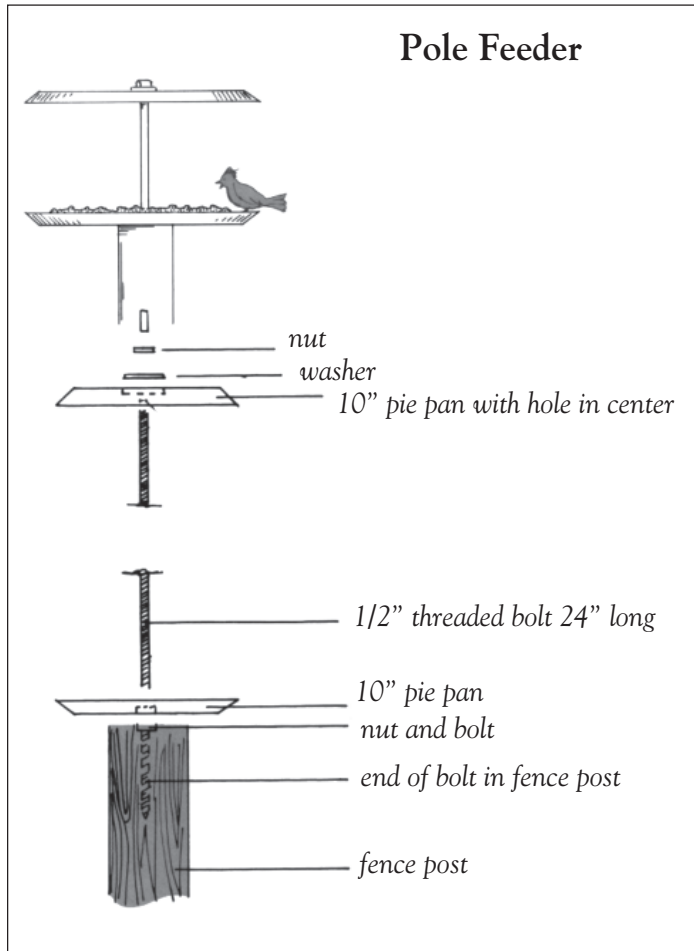
2. Cut several holes



3. Turn upside down and hang up with rope through hole in bottom of jar, tie a large knot to keep rope from slipping out. Fill with seeds.



ground feeders will draw in cardinals, woodpeckers and other larger birds. Meat-eating birds such as woodpeckers and starlings enjoy a piece of suet to peck on. The illustrations on these pages show how you can assemble your station to provide food for many of your neighborhood birds. Select and build the types of feeders that you feel will best meet your needs.



HABITAT IMPROVEMENT-SHELTER

A proper living site is very important to animals. Without proper shelter, animals cannot survive and raise young even though food and water needs are met. Within the urban environment we can improve the habitat of wildlife if we understand some important concepts about predators and prey.



Can you identify which of these animals is the predator?

Predation is important in nature. Predation is the act of one animal killing another for food. The predator (hunter) seeks out the prey (hunted animal) for food to survive. One animal preys upon another and it, in turn, can be preyed upon by still larger animals in a continuing chain of events known as a *food chain*. Within the urban environment the wild natural predators have been replaced by their domesticated counterparts. Wolves, coyotes and foxes have been replaced by dogs. The larger wildcats, such as the bobcat, the mountain lion or the panther have been replaced by the house or alley cat. The biological role of these animals is the same as their wild cousins. They are top carnivores—the last link in the food chain. These domesticated animals therefore naturally have a diet of meat and feed on urban wildlife.

Predation in nature is good from the standpoint of weeding out the sick, weak or injured members of a group of animals. It is easier to capture a sick animal than it is to capture a well one. As a result, the sick, weak and injured are captured, killed and eaten by a predator next in line up the food chain. The predator benefits because it obtains food; the population of animals being preyed upon benefits by having the sick and the weak eliminated. Predators also help keep the prey population within the carrying capacity of the habitat.

In nature a balance is achieved between the predator and the prey. If too many predators are running around loose, then more prey are destroyed until the population of prey is too low to support that many predators. As a result, the predators either move on to other areas or stay and starve. Either way the number of predators in the area will be reduced. The remaining prey are then allowed to rebuild their numbers. As more prey appear the number of predators will increase due to the increased food supply;

Table 2 A Survey of Neighborhood Predators

Predator Survey			Date		
Animal	Location	Sex	Health	Age	Condition
Dog Cat		Male Female	sick, hungry, well, injured, blind, expecting young full grown	pup kitten young	collar tied loose

Free roaming dogs and cats are a threat to urban wildlife.



and so the cycle begins again. As long as a few prey and predators remain, the cycle will continue and the balance of nature will be achieved. If, however, all the prey or predators are destroyed, the balance cannot be maintained.

ACTIVITY V—PREDATOR SURVEY

Within your neighborhood count all the cats and dogs roaming around loose during a three-hour period in an area of one block. Note the location of animal, its sex if possible, its general age and general state of health. A table such as Table 2 might be useful . . . or invent one of your own.

From your survey and other sources, answer the following questions:

1. What type of animal is most often seen predating in your neighborhood?
2. How many of the loose animals seem to have homes?
3. How many animals appeared to have litters of young?
4. Did you see any evidence of predation (dead, half-eaten prey, feathers, piles of bones, fur)?

5. Does your neighborhood have a leash law regarding stray animals? If so, what is it? (Contact police information or city hall.)
6. Does your city operate an animal shelter for stray animals? If so, what happens to these animals?
7. Did any of these observed animals wear bells to warn other animals of their presence?
8. During your survey did you see any of the animals actively hunting other animals?
9. What might you conclude is the state of the predator population in your neighborhood? Does it pose a serious threat to increasing wildlife numbers in your community?
10. What suggestions or recommendations do you have that might help combat the problem? To whom should these suggestions be made? Can you as an individual do anything? What about your own pet?

NATURE SANCTUARY

How might an area be made safer for wildlife? You may have already touched upon this in the preceding activity. One thing that we might consider is that an animal with a safe place to hide is less likely to be attacked than one in the open. Efforts to provide safe nesting areas for young, free from predation, should increase wildlife numbers by reducing the number of young lost. You might say then, "How might I provide safer living and nesting areas for wildlife?"

ACTIVITY VI—CONSTRUCTING A NATURE SANCTUARY

In a portion of your yard, a portion of a park or an abandoned lot, construct a nature sanctuary. A sanctuary is an especially protected area where we can attempt to improve food, water and shelter for wildlife.

First, get permission to use the land from its owner—private individual, park personnel or your parents. Describe what you want to do, what you hope to achieve and how and when the work will be accomplished.

Once you have permission, you're ready to begin. First you need to investigate what you have to work with. If your area is trashy, clean it up first. Determine what major animal types you could attract to the sanctuary (birds, squirrels, rabbits).

Make note of any shrubs, bushes or trees you might have growing in your sanctuary area. If there are some already, you're lucky. Now do some planning. For example, consider a bare, vacant lot.

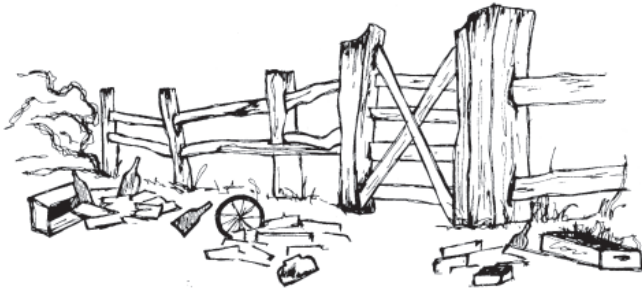
If no water is available at the site, the construction of a ground level birdbath (see birdbath activity) may be wise. The choice of a ground level birdbath would allow use of this water source by small mammals as well as birds.

Once water considerations have been taken care of, it is time to consider food. A well-established nature sanctuary would contain a variety of growing plants to provide food and shelter. Because there are no plants, you'll have to start with free-standing feeders or hanging feeders on poles. To provide variety, several types of each can be used.

One squirrel feeding platform (provided you do have squirrels) and two bird feeders might be enough to make up your sanctuary feeding station. A hungry squirrel can eat a lot of bird food, so try to bribe them with some favorites of their own.

The squirrel feeding platform can be merely several boards fastened to the top of a post with a rim of wood around the edge to help contain the peanut hulls. To conserve as much as possible on posts, a hanging bird feeder can be attached to the side of the post bird feeder. Once filled with food, the feeders should start attracting wildlife visitors. Trash hulls and wasted food from squirrels or birds should periodically be removed from the feeding area. This is done to insure fresh clean food for visiting wildlife, as well as to reduce the chances of drawing rats to the sanctuary area.

You've taken care of two of the three requirements for wildlife—food and water. It is now time to consider putting in some plants for shelter and protection.



A future site of a nature sanctuary.

Large shrubs and small trees are not only beautiful but also provide excellent shelter for wildlife. Some times you can find neighbors or friends who want to thin out what they already have. Sometimes city park systems have seeds or plants for beautification projects that they might let you have. Remember, it doesn't hurt to ask! Also, you might keep an eye on houses that are being torn down or streets being widened, in case a lot of plants are destroyed and hauled off to the dump.

Some wild plants are easily adapted for use in nature sanctuaries. These might be located and moved to the sanctuary site. For information on what will grow in your area to provide shelter and food for the sanctuary, consult your local county Extension agent. He has information on using these kinds of plants. Some other plants you might consider are lespedezas, a rapid-growing ground cover often planted along roadsides. They can be planted toward the rear of the sanctuary for both food and shelter. A row or two of tall-growing sunflowers can be used to outline the sanctuary's rear boundary. Pumpkins, cantaloupes or watermelon vines near the birdbath will provide a



A



B



C

A. Fast growing groundcovers such as lespedeza provide attractive low cover.

B. Some plants such as sunflowers provide both food and shelter.

C. Running vegetation can be used to provide shelter.

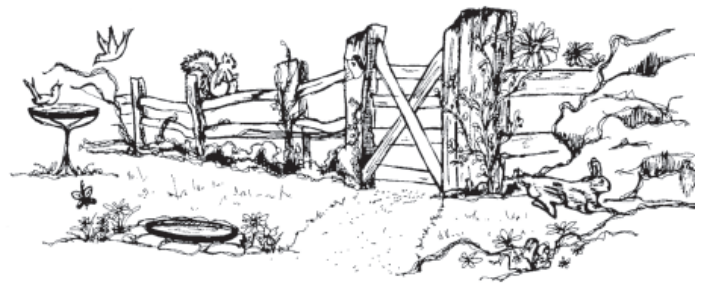
low, fast-growing ground cover. These vines will soften the appearance of the area as they grow and should remain low enough for wildlife to see any approaching danger.

Care taken in the selection of plants for the sanctuary will give an inexpensive and easily maintained array of plants that should help to draw in our animal friends.

A neatly lettered sign stating the name of your community or club followed by "Nature Sanctuary" is all that is still needed to officially declare your neighborhood's concern about its urban wildlife through urban wildlife management.



A ground level water source, a pole feeder with a variety of feeders and a squirrel feeder platform.



Finished wildlife sanctuary

OTHER SOURCES OF INFORMATION

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