



Backyard Wildlife Enhancement

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Fact Sheet 4

Forestry and Natural Resources

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The first step in enhancing a backyard habitat for wildlife is to assess your yard or outdoor areas as they are right now, identifying habitat elements that already exist for wildlife. Some plants that provide seeds, fruits, and nuts are important to many species of wildlife. A dense shrubby area or stand of evergreens will provide cover for many animals, and protection from wind and predators. Begin by taking an inventory of everything in the yard, including the names, sizes and locations of all existing plants. Make a drawing to scale that shows where pathways, plants, fences, large rocks, and other objects are located.

Try looking at your yard from an animal's point of view! Is there a dying tree in your yard that you were thinking of removing? The knotholes could provide a perfect home for a family of flycatchers or squirrels. Is there pile of dead brush that you think is unsightly? It could provide just enough safe cover for a local rabbit.

After assessing your yard for habitat elements, become familiar with birds and other animals native to your area. Learn what species regularly migrate through the area. Consider the size of space you want to devote to a backyard wildlife habitat and which kinds of animals you want to attract.

Some people are primarily interested in attracting butterflies. Planting beds of fragrant, brightly-colored flowers in full sunlight – like butterfly bush, milkweed or cosmos – will attract butterflies. Others may want to invite birds, chipmunks, squirrels, rabbits and frogs to their backyard. Planning and planting activities will vary with the landscape design they envision. When deciding on the species you want to attract, you must provide the essential elements of wildlife habitat.

All wildlife require 4 basic elements to survive: food, water, cover and space to reproduce and raise young. The combination of habitat elements you provide should take into consideration the needs of the wildlife you wish to attract. As a rule of thumb, the widest variety of habitat elements will attract the greatest number of birds and other animals to your yard.

Food

The ideal backyard wildlife management plan supplies as much food as possible in order to meet the year-round needs of many species. Shrubs, trees and other plants that produce acorns and nuts, berries, buds, fruits, nectar and seeds should be included wherever possible. Trees or shrubs

that will provide food for wildlife all year long should be planted. In the Southeast, pines, oaks and pecans provide food for many species.

When native food sources become scarce, especially in winter for birds, sunflower seeds, niger seed, proso millets and cracked corn can be used to supplement native foods. In summer, hummingbirds will readily visit feeders with commercial nectar.

Water

Wildlife need water, both for drinking and for bathing. Water can be supplied in a birdbath, a small pool, clay saucers (from flower pot), a recirculating waterfall, shallow dishes, or through a dripping hose. Vegetation also holds water droplets from rain or morning dew, but a more constant, reliable source of water is preferred in a wildlife habitat area.

An elevated birdbath will protect birds from cats and other predators, and can be an attractive addition to the yard. A dripping hose or shallow, wide-rimmed dish will provide water for small animals when placed near shrubbery or other cover. A small pool set into the ground can provide not only water for drinking and bathing, but cover and reproductive area for small fish, frogs, insects, or reptiles.

Water sources should be dependable all year long. In summer heat, be sure to replace water regularly; and in winter, when temperatures drop to freezing, remember to remove ice and refill with water daily.

Cover

Wildlife need protective cover just as people need the shelter of a house. Cover can be provided in many forms. Plants that serve as food can also serve as cover. Dense shrubs, hollow logs, rock piles, brush piles, stone walls, evergreens, tall grass, and water provide cover for many animal species. Ideal wildlife habitats will include plants ranging widely in size and density, from small evergreen shrubs to tall, full-grown trees, so that birds and other animals can choose the appropriate cover that they need for feeding, hiding, courting, and nesting activities.

Space

Wildlife need areas or space in which to reproduce and rear their young. Reproductive areas provide specific cover types that offer protection from harsh weather and predators during vulnerable periods. For example, mature trees offer reproductive cover for squirrels and nesting birds. Dense shrubbery provides safe reproductive cover for a variety of other wildlife species.

Some Backyard Plants That Help Wildlife

Trees	Bur Oak (<i>Quercus macrocarpa</i>)
	White Oak (<i>Quercus alba</i>)
	Red Oak (<i>Quercus borealis [rubra]</i>)
	Black Walnut (<i>Juglans nigra</i>)
	Hickory (<i>Carya spp.</i>)
	Black Cherry (<i>Prunus serotina</i>)
	Hackberry (<i>Celtis occidentalis</i>)
	Russian Olive (<i>Elaeagnus angustifolia</i>)
	Crabapple (<i>Malus spp.</i>)
	Hawthorne (<i>Crataegus spp.</i>)
	Eastern Red Cedar (<i>Juniperus virginiana</i>)
	Pines (<i>Pinus spp.</i>)
	Spruce (<i>Picea spp.</i>)
Shrubs	Dogwood (<i>Cornus spp.</i>)
	Sumacs (<i>Rhus spp.</i>)
	Elderberry (<i>Sambucus spp.</i>)
	Wild Plum (<i>Prunus americana</i>)
	Chokecherry (<i>Prunus virginiana</i>)
	Cotoneaster (<i>Cotoneaster spp.</i>)
	Viburnums (<i>Viburnum spp.</i>)
	Highbush Cranberry (<i>Viburnum trilobum</i>)
	Firethorn (<i>Pyracantha spp.</i>)
Vines	Honeysuckles (<i>Lonicera spp.</i>)
	American Bittersweet (<i>Celastrus scandens</i>)
	Virginia Creeper (<i>Parthenocissus quinquefolia</i>)
	Trumpet Creeper (<i>Campsis radicans</i>)
	Wild Grape (<i>Vitis spp.</i>)
	Raspberry and Blackberry (<i>Rubus spp.</i>)

Other examples of reproductive space are birdhouses and nesting shelves attached to homes, trees, or poles in the yard. Water-dwelling animals use small pools and ponds for reproductive cover. Rock piles or hollow trees provide safe reproductive areas for several species of wildlife.

Natural reproductive cover will become available as habitat plantings mature. However, artificial structures can be constructed and placed in strategic locations to accelerate the process of attracting birds and

mammals (squirrels, bats, rabbits) or to supplement natural nesting sites in mature habitat.

Planting for Habitat

Plants are perhaps the most important part of a backyard habitat because they provide an environment for people as well as for songbirds and other wildlife. Plants add beauty and comfort to your home and often increase the property value.

As mentioned earlier, plants provide shelter, nesting sites, and a variety of foods for wildlife. Proper selection of plants can fill family needs for beauty and comfort, and at the same time provide a haven for wildlife.

Since trees and shrubs will continue to grow, it is important to consider mature plant size, shape and placing.

Using the sketch you made of your yard, plan for where future shade or sun may be needed. Plants used for screening sometimes have a short lifespan. Allow flexibility in your plan to provide for replacing such trees and shrubs. Remember that open space is important, too – for viewing wildlife, for recreation, and for separating use areas.

Guidelines to Plant Selection

Where you live – soil type, climate, and other growing conditions – is important in plant selection. Results of a soil test can be helpful when selecting plants and in knowing what soil treatments might be needed for them. Your local Cooperative Extension office can usually help in getting a soil test for a small fee.

Choose plants that are adapted to the growing conditions in your area. Long-lived plants, such as trees and shrubs, must be able to withstand the climate during all seasons, especially winter and summer extremes. It's good to get advice on which plants are best suited. Nursery personnel and your local Cooperative Extension office can help with plant selection.

Native species are usually your best bet as they are generally more adapted to the area, tend to be disease-resistant, and are more familiar to the birds.

Small herbaceous plants are also good for backyard habitats. Sunflowers, zinnias, marigolds, millet and native grasses can provide food and/or cover for songbirds.

Plant Diversity

A backyard with a variety of plants generally attracts more wildlife species, and is often more attractive in appearance as well. A variety of plants also offers a greater choice of food and cover.

Providing a variety of different plant species will alleviate many seasonal or weather-related effects. For example, unfavorable conditions such as very cold winters or drought may cause some plants not to bear fruit. Other plants, such as some oaks, bear fruit only in alternate years. Planting a variety of different species helps ensure a steady food supply every year.

Feeding Birds

Birds are the easiest backyard animal to attract, and each year more and more Americans are discovering the joys of learning about birds. Fortunately, South Carolina is an excellent place to do this.

Feeding is the simplest way to bring a variety of birds within easy viewing range. When feeding birds, remember that some are seed-eaters, others eat fruit, some eat insects, still others eat animals, and hummingbirds feed on flower nectar. The right kinds of seeds will attract many seed-eaters. Suet (hard beef fat) is relished by many insect-feeders such as woodpeckers, and a sugar-water solution attracts hummingbirds.

Generally, you should feed birds during the colder months of the year when their natural foods are less available. Some birds will come to the feeders throughout the summer, but the availability of natural foods usually reduces their numbers. During late spring and summer, many backyard birds eat insects and feed insects to their young. This can be beneficial to gardens and lawns. If you feed during warm weather, be sure the feed does not become moldy or spoiled.

Suet

Suet is hard fat, usually beef, available at butcher shops. It is especially attractive to insect-eaters, and is a good winter energy source. Birds like un-cooked suet just as it comes from the butcher. It can be fed in a hanging onion or orange sack or in a suet feeder. Suet is sometimes supplemented with a protein source such as canned dog food, dried eggs or peanut butter.

Homemade Suet Recipe

- 1 part peanut butter
- 1 part shortening
- 1 part flour
- 1 part cornmeal
- 1 part cracked corn
- 1 part mixed seed or sunflower seeds

Melt the peanut butter and shortening then add remaining ingredients and cool.

Seeds

Commercial seed combinations, readily available from a variety of stores, provide a convenient way to get started in bird feeding. However, commercial mixtures often contain large amounts of seeds that most birds do not prefer. A good alternative is to mix your own. Recent research has shown that small oil-type sunflower seeds and white proso millet are preferred by many backyard birds. One good seed combination includes:

- 50% sunflower seed,
- 35% white proso millet,
- 15% finely cracked corn.

Many other combinations also work well.

	Striped Sunflower Seed
	Black Oil-type Sunflower Seed
	Niger Thistle Seed

Many types of feeders are available commercially or they can be made at home. Simple feeders can be made from milk cartons or jugs, from a piece of wood used as a platform, or even from a pine cone.

Bird Feeding Tips

1. Place feeders where cats cannot hide and harm the birds when they come to feed. Try to situate it so that feeding birds are protected from strong winds. A good spot is a somewhat open area with bushes or trees nearby for shelter and escape cover.
2. Begin feeding early – about September or October – and continue without interruption until spring.
3. Use a variety of feeders. Aggressive birds may prevent other birds from feeding if only one feeder is used. Small feeders without perches are good places for small grasping birds to feed. Feeders placed low to the ground will attract ground-feeding birds such as juncos and native sparrows. Larger above ground feeders will draw in cardinals, grosbeaks, mourning doves and other larger birds.

Backyard Birds and Their Favorite Foods

American Goldfinch	Hulled sunflower seed, niger seed or thistle seed
Cardinal	Sunflower seeds of all types, finely-cracked corn, millet
Chickadee	Oil-type sunflower, cracked nutmeats and suet
Dark-eyed Junco	Red and white proso millet, canary seed, finely-cracked corn, oil-type sunflower seed
Grosbeak	Sunflower seeds of all types
Mourning Dove	Oil-type sunflower seed, milo, finely-cracked corn, canary seed, hulled oats, proso millet
Woodpecker	Suet, sunflower seed

Bats in Your Backyard

Bats are increasing in popularity as a desired backyard visitor. Bats are important in nature, and can consume up to 500 insects in an hour, including mosquitos! The actual health hazard to humans is small, since very few bats actually carry rabies. The main health hazard comes from bats roosting in your house, which can be a source of histoplasmosis if bat droppings are allowed to accumulate.

If you want to increase the bat population around your house, there are two things you can do: 1) grow plants which attract night-flying insects, and 2) provide roosting areas for bats.

Planting for Insects that Attract Bats

The following is a list of plants which attract night-flying insects that bats like to eat:

- Salvia
- Silene
- Phlox
- Stock
- Cornflower/Bachelor's Buttons
- Spearmint
- Four O' Clocks
- Moonflower
- Nicotiana

Bat "Houses" or Roosts

There are several bat houses available commercially, or you can build your own. Size and design will make a difference in the species and numbers of bats attracted to the roosts. A small single-chambered design will usually only attract solitary male bats. Whereas a large, multi-chambered design is preferred by females as maternity colonies.

The chances of a bat house being occupied is increased if bats are already seen in the area and there is a body of water nearby. It is best to put houses up by late February or early March to give the houses time to "season," and to be available before the females return in spring.

Bat Box Installation Tips

1. Orient boxes southeast or southwest to receive at least 7 hours of sun in morning and/or afternoon.
2. Attach boxes at least 15 feet high to side of building or pole. Boxes can be placed on trees if they receive enough sun.
3. Place boxes near a water source if possible.

Don't be discouraged if bats are not attracted bats right away. Sometimes it takes quite a bit of time before bats will establish in an area, but once they do, they will usually return.

