



# Habitats

A Fact Sheet Series on Managing Lands for Wildlife

## Components of a Backyard Wildlife Habitat

Bulletin #7137

**W**ildlife need food, water, cover and space. To help you plan how to provide these in your backyard habitat, this fact sheet introduces you to 16 components. Eight are plant components and eight are non-living components. The more components you have, the better your chances of attracting diverse wildlife to your yard.

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*The four basic needs of wildlife are food, water, cover and space. Every wildlife species has its own preferences and requirements for each of these elements.*

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### The Eight Plant Components

A yard that has the eight types of plants described here provides benefits for wildlife year-round, especially food and structural diversity for cover. You might not be able to provide everything on your property. Look at neighboring land to see what plants are present, and allow them to complement the plants growing on your

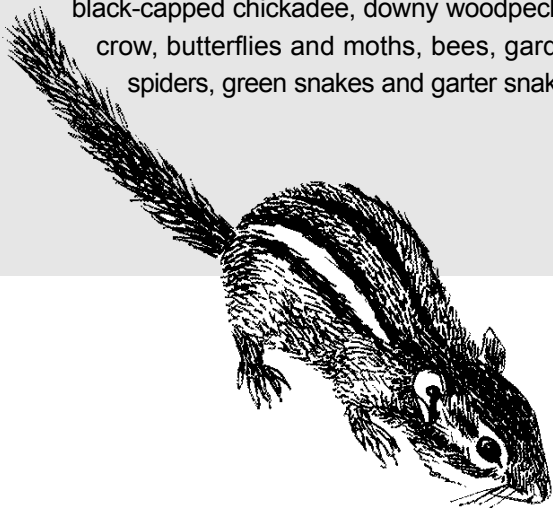
property. Observation, experience, learning and patience will allow you to develop the backyard habitat that works for you and wildlife.

**Evergreens.** Conifers, also called evergreens, are trees and shrubs that do not lose their needles in winter, and stay green throughout the year. Larch is an exception. It is a conifer that loses its needles. Evergreens are extremely important to wildlife because they provide shelter in rain, heat and during the harsh winter weather. During all seasons, they are cover for escaping predators.



## Habitat Profile: Backyards

Most backyards, as clearings in the forest, have enough sunlight for fruiting shrubs and trees as well as for perennial and annual flowers. These plants provide food and cover for many types of wildlife. What we plant in our yards can greatly enhance its habitat value. Common backyard wildlife species include raccoon, woodchuck, squirrel, chipmunk, cardinal, mourning dove, Northern oriole, blue jay, American goldfinch, black-capped chickadee, downy woodpecker, crow, butterflies and moths, bees, garden spiders, green snakes and garter snakes.



They block wind for feeding areas when placed on a windward side. In summer, they are used as nesting sites. The sap, needles, twigs, buds and seeds, and insects that make their homes in evergreens, are food for wildlife. Cavities in the trees are often used for nesting, roosting and shelter. Conifers should be in your backyard habitat if at all possible. Some species to look for or add to your area are red and white pine, spruces, hemlock, cedar and balsam fir.

**Grasses and legumes.** Deer, groundhogs and snowshoe hares use grasses and legumes (pea, clover or bean plants). Many animals eat the early greens to help them recover from the stress of winter. The seeds are eaten by a variety of wildlife species. Some ground-nesting birds use grassy habitats such as fields and meadows.

Areas of your lawn or fields that you do not mow will revert to a grassy habitat, without you planting special grasses. This will increase the diversity of the plants and allow the grasses and flowers to produce seed. The flowers and seeds of many plants we consider weeds are used by wildlife. Another approach is to plant areas of native wildflowers and native grasses, or areas of red clover, white clover, winter rye or timothy.

**Plants for butterflies, bees and moths.** Butterflies and moths need two types of food. Host plants provide egg-laying sites and leaves, which are food for butterfly and moth caterpillars. Some of the damage you see on plants is likely caused by the caterpillars feeding. As adults they drink nectar from flowers. Large, upright, single-blossom flowers of bright colors are the best choice to plant. Single blooms have richer nectar, and it is easier to extract the nectar from them.

Plantings for butterflies and moths should be located in a sunny area that is protected from the wind, such as on the leeward side of a building, stone wall, hedge or solid wood fence. Butterflies must be at a certain temperature to be active, so provide sunning areas in the garden where they can perch and spread their wings to warm themselves. Flat stones, an area of mulch, or wood fence posts in your garden serve this purpose. Butterflies obtain water from moist, wet soils rather than from open water. To provide a source of water in the garden, dig a small trench, line it with plastic and fill with wet sand or mud. Another technique is to bury a bucket in the ground, fill it with sand an inch or two from the top, place several rocks and sticks on top of the sand, and fill it with water.

Some host plants for egg-laying sites and caterpillar food are dill, fennel, Queen Anne's lace, parsley, lupine, apple and sweet pea. Nectar



sources include aster, thistle, cosmos, black-eyed Susan, privet, marigold, yarrow and dandelion. Hollyhock, violet, and milkweed serve as host and nectar plants. The plants listed here attract a large number of butterflies. Some butterflies have very specific needs, and study on your part will be needed to identify plants that will provide for them. Most moths are nocturnal, so try to include plants that bloom at night as well as during the day, such as mock orange, sweet William, dame's rocket, petunia and flowering tobacco. The day-flying sphinx moth likes nectar plants such as phlox and cardinal flower.

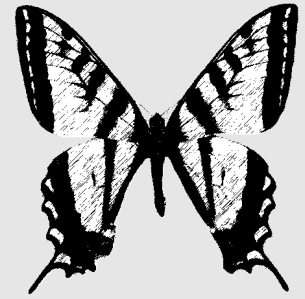
Succession planting will provide nectar all summer. Early flowering plants are very beneficial to bees when they first emerge in spring. The flowers of many herbs we use in cooking are liked by bees as well as butterflies. Other bee plants include speedwell, English lavender, lilac, sedum and thyme. Borage is especially attractive to bees, but because of its rough and sprawling habit, it is more suited to wildflower, vegetable or herb gardens rather than a formal garden. Bees, butterflies and moths are highly sensitive to most pesticides. See UMCE Bulletin #7151, Landscaping for Butterflies in Maine.

#### Plants for hummingbirds and orioles.

Hummingbirds eat tiny insects and spiders as well as nectar. They may consume up to 30 percent of their weight in nectar each day. They drink nectar from many tubular flowers. Red-blossomed flowers attract them, but they will also drink from flowers of other colors. Plants that bloom early in the season benefit ruby-throated hummingbirds when they return from migration in May, and late-summer blooms provide nutrition for their migration in October. Good perennial plants for hummingbirds include Solomon seal, bee balm, American columbine, lily, phlox, lupine, hollyhock,

### Common Butterflies in Maine

- **Swallowtails**  
(Family *Papilionidae*)  
5 species



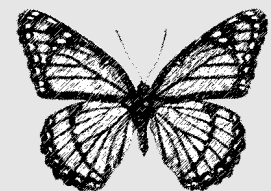
- **Whites and Sulphurs**  
(Family *Pieridae*)  
9 species



- **Gossamer-wing Butterflies**  
(Family *Lycaenidae*)  
28 species



- **Brush-footed Butterflies**  
(Family *Nymphalidae*)  
42 species



- **Skippers**  
(Family *Hesperiidae*)  
27 species

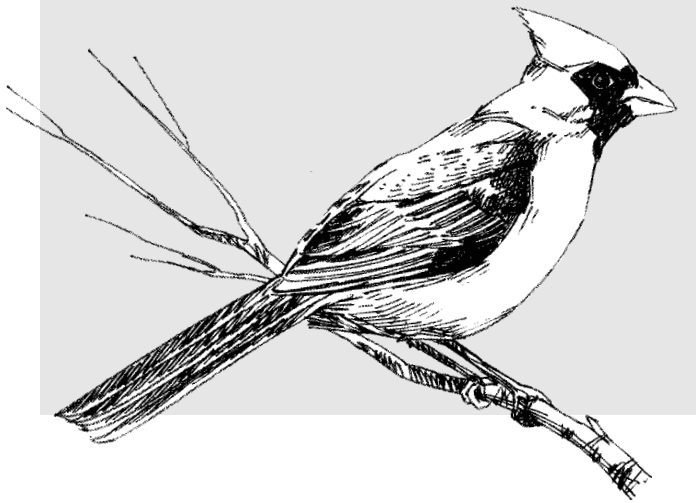


**Source:** Northern Prairie Wildlife Research Center, United States Geological Survey. For complete species listing, check their web page: <http://www.npsc.nbs.gov/resource/distr/lepid/bflyusa/me/toc.htm>.



## Profile: Cardinal

Cardinals live in forest edges, groves, parks and suburban gardens. They are attracted to areas with thick, shrubby growth, which they use for nesting and roosting. They build their nests about 10 feet above the ground. Their natural foods include fruits from shrubs and vines, such as blackberries, dogwood, grapes, serviceberries, viburnum and blueberries, as well as seeds from lilac, pine, ragweed, sunflowers and river birch. Cardinals live their lives within a few miles of their territory. It is likely they mate for life.



daylily and coralbells. Annual plants include fuchsia, geranium, nasturtium, impatiens, gladiolus, sage and petunia. Shrubs with attractive flowers are azalea and butterfly bush. Hummingbirds are also attracted to some flowering trees. Incorporate native plant species into your garden because they tend to have a better supply of nectar than do highly cultivated varieties.

Your yard will be even more attractive to hummingbirds if you provide shrubs and trees with perching and resting sites. They survey their territory while perched on a bare branch. A small damp area or a saucer partly filled with water offers a place to bathe.

Orioles feed on fruit, insects, nectar and

blossoms. Fruits include blackberries, blueberries, serviceberries, pears, apples, grapes and elderberries. Orioles eat insects, including ants, caterpillars, grasshoppers, spiders and wasps. They are attracted to the nectar and blossoms of several red or orange flowers, such as daylily, hollyhock, lemon daylily, and cherry and plum trees.

**Summer fruit, berry and cover plants.** These plants provide food and cover for wildlife during the summer months. During the summer, many species of wildlife are reproducing and need sites for nesting. Some species prefer nesting in thickets created by trees and shrubs that spread by suckers. Vines climbing on fences and dead trees also provide sites for nests. Reproduction requires a great deal of energy and many species depend on fruits and berries to get through this period. Although many birds eat insects during this time, many also seek out fruits. Animals such as fox, raccoon and skunk eat berries as part of their diet. Butterflies, moths and bees will use rotting fruit as part of their diet. Select plants that produce fruit at different times during the summer, such as serviceberry, pin cherry, chokecherry, black raspberry, red raspberry, grape and blueberry.

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*Cover provides shelter from the weather, places to hide from predators, resting spots, and sites for nesting. Many plants, shrubs and trees offer cover as well as food. Some wildlife species prefer cover in stone walls, brush piles or tree cavities.*

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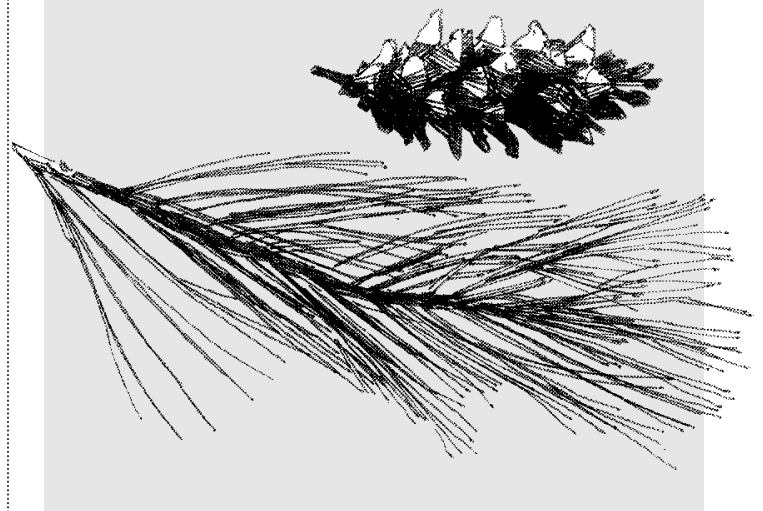
**Fall fruits, grains and cover plants.** Some trees, shrubs, vines and herbaceous plants produce fruit or seed in the fall. These benefit many migratory birds so they build up their fat reserves before they leave their summer range. Resident wildlife species need fall foods to build up food stores or fat reserves to survive the winter. Some plant species that produce food in the fall are American mountain ash, varieties of dogwood, varieties of crab apple, Virginia creeper, winterberry and sunflowers. You might grow grains, such as field corn, oats or wheat, and leave them in the garden after frost. Flowering annuals and perennial plants, when left standing in the garden at the end of the summer, provide seed for wildlife in the fall. Examples are cosmos, phlox, liatris and aster. Plants that provide cover to wildlife continue to be important, and as leaves fall, evergreens become even more essential for shelter from weather.

**Winter fruits, seeds and cover plants.** For trees and shrubs to provide winter food, the fruit or seed must be persistent, which means it remains on the plant long after ripening. "Persistence" also means that the fruit is above the snow and accessible. These fruits, with low appeal to wildlife when not mature, become sweeter as they freeze and thaw during the fall and winter. The fruit is available to provide resident wildlife species food in lean times during the winter and into early spring, and for returning migratory birds. If space is a limitation in your yard, consider winter food plants first. They are the most important because natural foods are scarce during this season. Conifers provide essential shelter from winter weather.

**Plants that produce nuts and acorns.** Nuts and acorns are seeds called hard mast. Many animals depend on hard mast throughout the fall and

### **Profile: Eastern White Pine**

The Eastern white pine (*Pinus strobus*) is excellent cover for protection from weather, for nesting, and for escape from predators. Sap, needles and seeds, as well as insects that are attracted to the tree, are all food for wildlife. Other evergreens, such as white spruce (*Picea glauca*), offer similar benefits.



winter. Wild turkey, blue jays, wood duck, red and gray squirrels, raccoons and white-tailed deer all use hard mast for food. Trees such as oak, hazel and beech produce nuts and also have natural cavities that are used for nesting and shelter by many wildlife species.

### **The Eight Non-living Components**

Non-living things can be as important as plants in providing good habitat for wildlife. In some instances, they are very easy to incorporate into your landscape. This section describes eight non-living components for you to consider: nest boxes; dead trees, fallen trees and perches; brush piles and rock piles; cut banks, cliffs and caves; dust and grit; salt; water; and feeders.



## Profile: Sugar Maple

The sugar maple's (*Acer saccharum*) buds, seeds, and insects that are attracted to the tree provide food for wildlife. The sugar maple also provides cover for resting, escape and nesting.



**Nest boxes.** Nest boxes are artificial tree cavities. Many species of wildlife use nest boxes and platforms. Each species of bird and mammal has specific preferences or requirements for their nest box, including the location. Follow instructions and build the structure for the specific species you want to attract. Incorrect design can make inhabitants easy prey. County Extension offices have information on building safe and usable nest boxes and platforms. Designs for winter roosting boxes for some bird species are also available.

**Dead trees, fallen trees and perches.** A “snag” is a dead or dying tree. Snags are like gold in the wildlife world. Snags are used as nesting sites, perching sites, as food sources and to establish territory. Some species create cavities in snags;

some use the cavities made by other species. The larger the snag, the better. It should be at least six inches in diameter and six feet tall. If there is a dead or dying tree in your yard, consider leaving it, unless it is a hazard.

Perches are used by many birds to sing when establishing territory or attracting a mate, as a launching area to catch insects, or to watch for predators. Dead branches, snags, and artificial perches will add to the use of your backyard habitat.

**Brush piles and rock piles.** These provide nesting and den sites, and escape cover for many species of wildlife, including small mammals, birds, amphibians and reptiles. They should be placed near the edge of a wooded area, far from your house and garden, as they may attract skunks and groundhogs. Piling the prunings from your yard in a secluded corner will create a brush pile that grows over the years. You may wish to make a platform several inches above the ground, or use logs or stone as the base, and place brush on it, so that the pile does not decompose quickly.

**Cut banks, cliffs and caves.** Most backyards do not include these features, nor is it advisable to create them. However, these are habitat features





of which we should be aware, appreciate, preserve and manage, if possible. Many types of birds and animals, such as bank swallows, red foxes and bats, use banks, cliffs and caves. We can provide bat houses in our yards.

**Dust and grit.** Many birds take dust baths to help control external parasites. A two-foot wide area of very fine sand or soil works well for this purpose. Grit is coarse sand eaten by birds to help digest their food. Providing grit in a tray or bed near your bird feeders may make your yard more attractive.

**Salt.** Although some foods provide salt and other trace elements to wildlife, there are some species that seek out salt. Pine grosbeaks, moose and deer are examples. Be aware that during hunting season, it is unlawful to place salt or food out to entice deer, or to hunt from a blind overlooking the area.

**Water.** The presence of water greatly increases the variety of wildlife that will be attracted to your yard. Different species of wildlife use different types of water sources. Butterflies use mud

## Checklist for Components of a Backyard Habitat

Use this handy checklist to find out how many wildlife-promoting features you have in your backyard habitat. What would you like add?

Component	Have	Will Add
Evergreens	<input type="checkbox"/>	<input type="checkbox"/>
Grasses and legumes	<input type="checkbox"/>	<input type="checkbox"/>
Plants for butterflies, bees and moths	<input type="checkbox"/>	<input type="checkbox"/>
Plants for hummingbirds and orioles	<input type="checkbox"/>	<input type="checkbox"/>
Summer fruit, berry and cover plants	<input type="checkbox"/>	<input type="checkbox"/>
Fall fruit, seed and cover plants	<input type="checkbox"/>	<input type="checkbox"/>
Winter fruit, seed and cover plants	<input type="checkbox"/>	<input type="checkbox"/>
Plants that produce nuts and acorns	<input type="checkbox"/>	<input type="checkbox"/>
Nest boxes	<input type="checkbox"/>	<input type="checkbox"/>
Dead trees, fallen trees and perches	<input type="checkbox"/>	<input type="checkbox"/>
Brush piles, rock piles and snake-hibernating mounds	<input type="checkbox"/>	<input type="checkbox"/>
Cut banks, cliffs and caves	<input type="checkbox"/>	<input type="checkbox"/>
Dust and grit	<input type="checkbox"/>	<input type="checkbox"/>
Salt	<input type="checkbox"/>	<input type="checkbox"/>
Water	<input type="checkbox"/>	<input type="checkbox"/>
Feeders	<input type="checkbox"/>	<input type="checkbox"/>



puddles and birds use birdbaths or shallow ponds. Birdbaths should be no more than three inches deep, with gently sloping sides, and a rough surface to provide good footing. A birdbath may be placed on the ground or on a pedestal. It should be 15 feet from any shrubs or trees where cats may hide. Dripping water is very attractive to birds. A heated birdbath will provide water all through the winter. Any creek, springs or wetlands on your property should be lovingly preserved. Be cautious with activities near these features so that erosion and sedimentation do not occur.

**Feeders.** Bird feeders supplement the food provided by the habitat you have created, or while you are waiting for plants to mature and provide food. Feeders placed where you can see them from your house give you enjoyment. Feeders also provide relief to birds during extreme

winter weather. Feeding during the summer provides a steady food supply during a period requiring high energy and continues your watching enjoyment. In winter, feeding suet in an onion bag, a plastic-coated wire holder or pushed into holes in small logs is very beneficial to woodpeckers, nuthatches and chickadees. Mealworms are relished by several bird species. See UMCE bulletin #7125, "Raising Mealworms," and UMCE bulletin #7124, "Bird Feeding Basics."

Sanitation and proper maintenance of feeders is necessary to keep your feeders safe for birds. Many diseases are passed among birds gathering at feeders. Contact your county Extension office for information on this topic, as well as plans for feeders and nest boxes.

*For more information, contact your county office of the University of Maine Cooperative Extension.*

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University of Maine Cooperative Extension.**

**Sources:**

"Landscaping for Wildlife," Carrol L. Henderson, Minnesota Department of Natural Resources, 1987.

"Enhancing Your Backyard Habitat for Wildlife," by Peter M. Picone, Connecticut Department of Environmental Protection, 1995.

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