

# Landscaping for Wildlife-Habitat Elements

## Introduction

Why go to the trouble to landscape in a way that benefits wildlife? Some people do it for educational purposes. Others do it for the sheer enjoyment of being able to observe the wildlife that are attracted to their landscaping. Wildlife-friendly landscaping can also help conserve water when native plants are used.



If you choose to landscape for wildlife, you should consider not only the species you are aiming to attract, but the habitat elements of that species. Habitat elements include food, water, cover, space, and how these elements are arranged in the landscape. Considering these factors will help you attract a wider variety of insect and wildlife species.

## Food

Planting an assemblage of grasses, forbs, shrubs, and trees will ensure a variety of natural food sources for wildlife. The seeds from grasses and forbs are favored by sparrows and other seed-eating birds. Berry producing shrubs provide food favored by waxwings, robins, and orioles. Attract hummingbirds, butterflies, and bees to your yard naturally by planting nectar producing plants. To facilitate feeding by butterflies, plant nectar producing plants in mass and in clusters. This not only provides for easier landings, but also provides more nectar in a single stop to your landscape. Butterfly-flavored plants are not limited to flowers - there are nectar producing vines, shrubs, and trees as well. Lastly, you may choose to augment the food that your garden produces by providing seed, suet, and sugar water.

**Water** can be provided in the form of a pedestal mounted bird bath, ground level water dish, water garden, or pond. While most birds can benefit from a pedestal bird bath, reptiles, amphibians, and small mammals cannot; a ground level water source is needed. A bird-bath does not provide the amount of water, nor the aquatic vegetation needed for fish, frogs, toads, and aquatic invertebrates such as damselflies and dragonflies. So if this is your goal, a pond may be the appropriate choice. Male butterflies are attracted to wet soil or wetter areas at the edge of a pond. It's from these areas that they extract sodium and other nutrients needed for mating. Remember, any water source deeper than several inches should have substrate such as rocks, a brick, or even a ramp to allow smaller critters safe access. Also, be sure to check with your local ordinances; there may be fencing requirements for wa-

ter features that exceed a certain depth.

**Cover or shelter** is needed by all wildlife for hiding, roosting, nesting, and, in some cases, hibernation. Natural cover such as rocks, downed logs, and brush piles provide ground cover that is needed for small mammals, reptiles, amphibians, and invertebrates. Natural cover can also be provided in the form of vegetation that provides ground cover, mid-story cover, and canopy cover. Certain ground nesting birds need grasses and forbs in which they conceal their nest and eggs. Shrubs and vines can be useful escape cover for small birds, especially when strategically planted near popular foraging areas like a bird-feeding station or an area of seed producing flowers and grasses. Trees provide elevated nesting and roosting sites.

Standing dead trees, called snags, provide necessary suitable substrate for cavity excavators. Primary cavity nesters such as woodpeckers, excavate a new cavity in a dead or dying tree. They nest in this cavity for that year only, but secondary cavity nesters, which are incapable of excavating their own cavities, use these cavities in subsequent years. Snags also provide great perching and roosting sites, especially for larger birds. Roosting cover is necessary for birds and bats. Birds, when they aren't actively nesting, rest in between periods of feeding and sleep in a protected roost site. Bats roost all day long in well-protected roosts such as caves, old buildings, or bat boxes. But at night in between foraging periods they rest periodically in less protected areas called night roosts, such as under the eaves of buildings. Space is often defined by a fence or other barriers to travel for wildlife. Choose fencing and/or hardscape elements with this in mind. Consider below ground barriers as well.

Artificial cover can be an important contribution to your landscape and can be provided in the form of roost boxes such as those designed for birds and bats, nesting platforms and shelves, nest boxes for cavity nesting birds, and toad homes. Be aware that nest and roost boxes have specifications for individual species. It is important to investigate nest and roost box specifications, as different species of birds require specific entrance diameters and the wrong diameter can allow non-native birds such as the house finch and starling to overtake a nest box.

## Space

Many wildlife species are territorial, defending an area that contains the food, water, and cover they need. Species that are not territorial occupy a home range within which they perform daily functions and find food, water, and cover. The

amount of space needed for a territory or home range varies with the species, the quality of the habitat, and the time of year. For example, many birds are solitary or paired in summer and flock together in winter.

### Arrangement

Food, water, and cover arranged in close proximity to each other are more attractive to wildlife. Feeders with no nearby cover will either not be used or may increase mortality through exposure to adverse weather or predation. Use windbreaks like conifers or buildings to protect feeding and nesting areas. Place feeders, shrubs with berries, and nest boxes on the protected side. When placing nest boxes, locate them to meet the needs of the intended species.

### Using Native Plants

There are many benefits to using native plants in your landscaping efforts. The obvious benefit of using native plants is their low water requirements. In addition, native animals have evolved with and are therefore adapted to native plants and will benefit from their presence in your garden. Landscaping with natives also helps wildlife by ensuring connectivity between natural habitats. What's more, using natives will attract native insects and micro-organisms, which reduces pests and the need for chemicals. In turn, native insects can attract a new assemblage of insectivorous wildlife.

### Non-native Invasive Plants

Nonnative plants, such as ornamentals can be invasive, spreading within and beyond your landscape. Non-natives are often not beneficial to the environment because they can be invasive, resulting in lower plant diversity, reducing wildlife forage and cover, decreasing soil-binding plants, and increasing soil erosion. Although it may be desirable to landscape with natives only, not all natives are available through nurseries and seed sources and sometimes those natives that are available are more expensive than common ornamentals.

Check with your local Cooperative Extension office to learn more about non-native invasives as well as suitable native plants in your area.

### Tips for Feeding Seed, Nectar, and Suet to Wild Birds

- Seed and suet attract other, potentially unwanted, wildlife such as squirrels, javelina, and wood rats. Squirrels are smart creatures and will try to raid any type of birdseed feeder and javelina are attracted to bird seed that spills onto the ground. Wood rats are not as creative as squirrels, but can climb and are nocturnal. Only feed suet (rendered fat) during the cooler months of

autumn, winter, and spring, as the suet tends to turn rancid in warmer weather. Pre-formed suet blocks can be purchased or home-made.

- Feed birdseed year round but occasionally clean out bird droppings and soiled seed.
- Place feeders near trees and bushes.
- Provide a variety of food types (millet, black oil sunflower, niger thistle, suet, and sugar water) to increase the species of birds.
- Increase the species of birds by providing seed in different feeder types such as tube feeders, hanging trays, and thistle socks. Goldfinches prefer niger thistle, especially when fed from a mesh bag. Flickers and woodpeckers feed on black oil sunflower seeds from a hanging tray more readily than from a tube feeder or on the ground. Mourning doves and quail prefer to feed from the ground.
- Provide a water source near bird feeders; put water in a shallow container and protect from predators (e.g. cats, other birds, snakes).
- The sugar to water ratio for hummingbirds is 1 to 4 and for orioles 1 to 6. Cook the solution until it comes to a rolling boil and do not use food coloring.
- Continue to provide sugar water during the entire summer season as hummers come to depend it.
- Clean hummingbird feeders with a little vinegar water, rinse thoroughly, and refill with fresh sugar water solution every 2 to 3 days during the hottest days.
- Put up your hummingbird feeder when you see the first hummingbird of the season. Feeders should be taken down in the fall, to encourage migration. In desert areas with warm winters, feeders can be left up year-round.

Additional Resource:

[Landscaping for Wildlife - Plant Lists](#), Bulletin #6B

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