

Creating Landscapes for Wildlife

By Cindy Gilberg

Since the beginnings of European settlement, natural landscapes in the United States have been transformed by industry into less diverse landscapes. For instance, there are over 40 million acres of turf in the U.S. That equals the size of Missouri. There are about 350 million acres of crop land which is four times the size of California, and 790 million acres of range and pasture land which is about 40% of all the land in the lower 48 states. The result is less habitat for birds, butterflies, and other living creatures. A viable solution is simply to reverse the process. Convert some pasture and crop land into CRP (conservation reserve program). Mow less lawn and create landscapes that are friendly to wildlife. Whether you live on a quarter acre or 100, no landscape is too small to make a difference in enhancing biodiversity.

Here is how it works. Plant diversity is the key to attracting the widest array of wildlife visitors. Landscaping with Missouri native plants helps to restore the habitat necessary to sustain wildlife. Wildlife needs food, water, shelter and nesting sites.

Food

The majority of animals eat nectar, pollen, seeds, berries, and each other! Bumblebees eat nectar from wild indigo (*Baptisia* spp.) while butterflies prefer milkweed (*Asclepias* spp.). Bees thrive on the flowers of mountain mint (*Pycnanthemum* spp.) and



wild hydrangea (*Hydrangea arborescens*) and hummingbirds vie for columbine (*Aquilegia canadensis*) and red buckeye (*Aesculus pavia*) blossoms. Black-eyed Susan (*Rudbeckia* spp.) and coneflowers (*Echinacea* spp.) are favored by seed-eating birds like gold-finches and indigo buntings. Small-flowing trees and shrubs that produce berries include viburnums, dogwoods (*Cornus* spp.), and winterberry holly (*Ilex verticillata*). Predation can happen in a native garden. Here is a flavor of what you might see: crab spiders nabbing bees, wasps paralyzing spiders, praying mantis munching ladybugs, baby birds devouring insects, turtles snapping frogs, and much, much more.

Water

Water features like birdbaths, garden pools, constructed streams, wetlands and ponds are wildlife magnets. These are the places that animals drink, bathe, cool down, lay eggs, and prey on others. Here are a few animals that you can see near water. Dragonflies lay eggs on open water and their off-spring eat mosquitoes! Butterflies and bees drink at shallow water edges. Frogs and salamanders lay eggs here. Red-shouldered hawks frequent water and eat crayfish, frogs, and water snakes. The list goes on.

Nesting Sites and Shelter

Birds and insects will nest in the oddest places at times...garden pots, canoes, and holiday wreathes come to mind. But wildlife can be encouraged to nest in gardens by including some of their favorite plants. Grasses and sedges provide building materials for many song-birds. Bats take cover in winter

beneath the bark of shagbark hickory. Winter flocks of junco's and sparrows tuck themselves between grass plants on the coldest days.

When working on a limited budget, consider your garden to be a work in progress, adding to it over a period of two to three years. Buy smaller plants and take advantage of late season sales. Gardening friends usually have extra plants to swap. Many people collect seeds and grow their own. The Native Plant School at Shaw Nature Reserve offers an in-depth class on propagating native plants in late winter (see the Native Plant School schedule at <http://www.shawnature.org/NPS>).

Each of us can create small oases in our own yards - natural gardens where we can observe nature on a daily basis. Always include a place to sit and rest, observing all there is to see. A native plant garden offers the opportunity to rediscover nature up close, reconnecting with the natural world around us. Sit back, grab your binoculars and enjoy the show!



Rather than focus on just a bird or butterfly garden, note that diversity is the key to attracting the widest array of wildlife visitors. This is easy to achieve on most properties since they typically have a combination of shade trees, shrubs and open spaces. Add a native garden with a small water feature and it is ideal for attracting not just birds and butterflies, but also many pollinators, toads and more. Create a plant list that provides various needs in combination. For instance, fall blooming asters provide nectar for migrating monarchs that are also looking to lay their eggs on milkweed (*Asclepias*).

Another example is hummingbirds, which love the nectar of plants such as columbine (*Aquilegia*) and bergamot (*Monarda fistulosa*), also eat small insects that pollinate other flowers. When many of these plants are in the garden, the needs of these creatures are satisfied.

Native plants eliminate the need for pesticides so you can ensure that wildlife visitors will not be adversely affected. Remember that today's caterpillar feeding on plants is tomorrow's butterfly. Likewise many small insects provide dinner for toads, frogs and birds.

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What can one person do in restoring the biodiversity of our area? "Think globally, act locally" - step by step, garden by garden we can all contribute and make a big difference.

Deer Resistant Landscaping with Native Plants, Oh Dear!

For those of us who live in deer country, gardening can be an exercise in futility. Deer are adaptable. As we move into their territory we often replace their original habitat with a well-watered and fertilized smorgasbord of plants. Gardeners soon discover that browsing deer can do a large amount of damage in a short amount of time. As a result, deer control and the discovery of browse-resistant plants is on the mind of those of us who face this challenge.

First things first. Absolutely don't feed the deer (corn, sorghum, etc.) as this is an invitation for them to stick around and see what else is on your 'buffet table'. Next, repellents are useful, but require several applications. Fences over nine-feet tall work well, especially for protecting vegetable gardens, but can be expensive for larger areas. Deer are primarily nocturnal though much of our suburban deer populations are active during the day as well. Most are unafraid of human activity or even dogs.

As for deer-resistant plants the search may be frustrating. I'm told that hungry deer will eat most anything and that their favorite native plants include asters, phlox and lilies. The good news is that there seem to be many native plants that deer tend to avoid.

Deer rely on their sense of smell to determine whether an area is safe and which plants are desirable to eat. So it makes sense that plants with aromatic foliage, such as wild bergamot (*Monarda fistulosa*), deter deer. Other plants are distasteful or poisonous, such as the ground cover squaw weed (*Senecio obovatus*). Some plants repel deer because of their texture – coarse, rough, hairy, or spiny. This group includes native plants like rattlesnake master (*Eryngium yuccifolium*) and prickly pear cactus (*Opuntia humifusa*). A deer resistant garden has a high percentage of these types of plants mixed in so that deer are confused and move on. By using a combination of deer resistant plantings and repellants you can achieve a more peaceful coexistence with deer.

All native plants contribute in some way to a well-rounded, healthy habitat for animals. Listed here are but a few of the many that have good landscape qualities.

Perennials for sun:

Aster (*Aster* aka *Symphyotrichum*)
Blazingstar (*Liatris* spp.)
Coneflower (*Echinacea* spp. and *Rudbeckia* spp.)
Little bluestem (*Schizachyrium scoparium*)
Prairie dropseed (*Sporobolus heterolepis*)

Perennials for shade:

Beebalm (*Monarda bradburniana*)
Columbine (*Aquilegia canadensis*)
Solomon's seal (*Polygonatum commutatum*)
Wild geranium (*Geranium maculatum*)
Wild ginger (*Asarum canadense*)
Dogwoods (*Cornus* spp.)
Winterberry (*Ilex verticillata*)
Red buckeye (*Aesculus pavia*)
Spicebush (*Lindera benzoin*)
Fragrant sumac (*Rhus aromatica*)
Blackhaw (*Viburnum prunifolium*)



GrowNative! (www.grownative.org) is a very helpful website that has an on-line plant encyclopedia with photos. It is part of the Missouri Department of Conservation and also lists nurseries where these plants can be purchased.

Gardening for wildlife is the subject of Dave Tylka's book "Landscaping for Wildlife and People". Dave's experience with gardening in Missouri and his extensive knowledge of our native fauna combines to give readers a wealth of practical, detailed information for creating their own wildlife-friendly garden.

The Native Plant School (www.shawnature.org/nps) schedule continues to add new classes in addition to repeating many popular subjects. For all your native plant information, come and learn hands-on in an informal setting within the Whitmire Wildflower Garden and Shaw Nature Reserve.

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