



Extension FactSheet

School of Natural Resources, 2021 Coffey Road, Columbus, Ohio 43210

Native Landscaping for Birds, Bees, Butterflies, and Other Wildlife

Kathi L. Borgmann, Graduate Associate
Amanda D. Rodewald, State Extension Specialist, Wildlife

Throughout the world, habitat loss is the leading cause of species endangerment and extinction. In the Midwest, a large portion of the land has been cleared due to agricultural and urbanization pressures, leaving marginal and fragmented habitats. Consequently, backyards play an increasingly important role in wildlife conservation. You can help reduce the negative effects of habitat loss on birds, bees, butterflies, and other wildlife species in your area by creating a favorable landscape. Providing wildlife-friendly habitat in urban and suburban areas is especially important for migrating birds and butterflies. These groups of animals also are least likely to cause nuisance or damage problems.

Landscaping with native trees and shrubs

A wildlife-friendly landscape is composed of four essential items: 1) food, 2) water, 3) cover or shelter, and 4) a place to raise young. To provide the most beneficial habitat for birds, bees, and butterflies, native trees and shrubs should be emphasized. Why native species? Native plants are adapted to local conditions and, therefore require less maintenance (especially irrigation and fertilization). Native plants also provide the best quality resources because wildlife species are adapted to use native plants. Planting native species also maintains the natural diversity of flora and fauna in the area.

Exotic plants can threaten other plant and animal species. Several exotic plants have escaped from garden cultivation and are now causing serious damage to natural areas and preserves. Examples of highly invasive

exotic plants include multiflora rose (*Rosa multiflora*), bush honeysuckle (*Lonicera maackii*, *Lonicera morrowii*, and *Lonicera tatarica*), garlic mustard (*Alliaria petiolata*), asian bittersweet (*Celastrus orbiculatus*), russian olive (*Elaeagnus angustifolia*), privet (*Ligustrum vulgare*), japanese honeysuckle (*Lonicera japonica*), and dame's rocket (*Potamogeton crispus*). A complete list of problem exotic species can be obtained from ODNR Division of Natural Resources (<http://www.dnr.state.oh.us/odnr/dnap/dnap.html>) and the Ohio Chapter of The Nature Conservancy (<http://www.tnc.org>). Avoid choosing horticultural varieties when possible because altered varieties may not be appropriate for growing conditions of Ohio nor provide the best resources for wildlife.

Before you start landscaping your yard, plan ahead. Map your backyard and determine what environmental conditions you have (i.e., soil conditions and amount of sun). To provide optimal habitat for a diverse array of species in your backyard, choose a variety of trees and shrubs of varying heights to mimic natural forest structure. You will want to plant a few different species of canopy trees, along with fruiting shrubs of various shapes and sizes. Choose plants that provide habitat or resources at different times of the year. For example, conifer trees provide cover and

warmth during the winter, whereas fruiting trees provide seasonal food resources. When choosing fruiting shrubs, select species that produce fruits at different times of the year to ensure that food is available throughout the season. In addition, many of the fruiting shrubs display large fragrant flowers that add to the attractiveness of your yard.

A wildlife-friendly landscape is composed of four essential items:

- 1) food***
- 2) water***
- 3) cover or shelter***
- 4) a place to raise young***

What Should I Plant?

Below is a list of recommended native Ohio trees and shrubs you can plant to create a wildlife friendly backyard.

Species	Wildlife Benefits ¹	Soil Conditions ²	Light Conditions ³
Trees			
Boxelder (<i>Acer negundo</i>)	W, B, BF	W - D, V	SU - LS
Black Maple (<i>Acer nigrum</i>)	W, B	M, AK	LS
Red Maple (<i>Acer rubrum</i>)	W, B	W - D, V	LS - SH
Silver Maple (<i>Acer saccharinum</i>)	W, B	M, V	SU - LS
Ohio Buckeye (<i>Aesculus glabra</i>)*	W, B, BF	W - M, AC	SU - LS
Paw Paw (<i>Asimina triloba</i>)*•	W, BFL	M - D	SU - LS
Shagbark Hickory (<i>Carya ovata</i>)	W, B	M - D	SU - LS
Mockernut Hickory (<i>Carya tomentosa</i>)	W, B	M - D	SU - LS
Hackberry (<i>Celtis occidentalis</i>)*	W, B, BFL	V, L, AK	SU
Red Bud (<i>Cercis canadensis</i>)*	BE, HB, BF	M - D, V	SU - SH
Flowering Dogwood (<i>Cornus florida</i>)*•	W, B, BFL	M - D	SU - LS
American Beech (<i>Fagus grandifolia</i>)	W, B	M - D, AC	SU - LS
Red or Green Ash (<i>Fraxinus pennsylvanica</i>)	W, B	W - M, V	SU - LS
Honeylocust (<i>Gleditsia triacanthos</i>)*	W, B, BE	V	SU - LS
Common Juniper (<i>Juniperus communis</i>)•	W, B	D, V	SU
Eastern Red Cedar (<i>Juniperus virginiana</i>)•	W, B	M - D, AK - AC	SU
Tuliptree (<i>Liriodendron tulipifera</i>)*	HB, BFL	W - M	LS - SH
Sweetbay Magnolia (<i>Magnolia virginiana</i>)*•	W, B	M - D, V	SU - SH
Red Mulberry (<i>Morus rubra</i>)*•	W, B	M	SU
White Pine (<i>Pinus strobus</i>)	W, B	M - D, AC	SU - LS
Eastern Cottonwood (<i>Populus deltoides</i>)	W, B, BF	W - M	SU
Black Cherry (<i>Prunus serotina</i>)*•	HB, BFL, B	M, V	SU - LS
Common Chokecherry (<i>Prunus virginiana</i>)*•	W, B, BF	M - D, N	SU
White Oak (<i>Quercus alba</i>)	W, B	M - D, V	SU

Species	Wildlife Benefits ¹	Soil Conditions ²	Light Conditions ³
Scarlet Oak (<i>Quercus coccinea</i>)	W, B, BFL	D	SU - LS
Red Oak (<i>Quercus rubra</i>)	W, B, BFL	M - D, AC	SU - LS
Black Oak (<i>Quercus velutina</i>)	W, B, BFL	M - D, AC, V	SU
Canadian Yew (<i>Taxus canadensis</i>)*•	W, B	W - M	SU - SH
American Basswood (<i>Tilia americana</i>)	B, BE	M, AK, AC	SU - LS
Shrubs			
Black Chokecherry (<i>Aronia melanocarpa</i>)*•	W, B	D, AC	SU - LS
Cockspur Hawthorn (<i>Crataegus crus-galli</i>)*•	W, B	M - D, V	SU
Thicket Hawthorn (<i>Crataegus punctata</i>)*•	W, B	M - D, V	SU
Washington Hawthorn (<i>Crataegus phaenopyrum</i>)*•	W, B, BF	W - M	SU
Dogwood (<i>Cornus</i> Spp.) [Red-osier (<i>C. stolonifera</i>), Silky (<i>C. obliqua</i>), Pagoda (<i>C. alternifolia</i>), and Gray (<i>C. racemosa</i>)]*•	W, B, BFL	W - M	SU - LS
Burning Bush (<i>Euonymus atropurpureus</i>)*	W, B	M - D	SU - SH
Running Strawberry Bush (<i>Euonymus obovatus</i>)*	W, B	M - D	SU - SH
Common Winterberry (<i>Ilex verticillata</i>)*•	W, B	M - D, AC	SU - LS
Spice Bush (<i>Lindera benzoin</i>)*•	W, B, BF, BFL	M, V	SU - SH
Common Ninebark (<i>Physocarpus opulifolius</i>)*•	W	W - D, AC, AK	SU - LS
Smooth Sumac (<i>Rhus glabra</i>)*•	W, B, BF	M - D	SU
Elderberry (<i>Sambucus canadensis</i>)*•	W, B, BF	M, D, W	SU - LS
Bladdernut (<i>Staphylea trifolia</i>)*	W, BE	M - D	SU - SH
Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)*•	W, B	M - D, AC	SU - SH
Arrowwood (<i>Viburnum dentatum</i>)*•	B	M, AC, V	SU - LS
Nannyberry (<i>Viburnum lentago</i>)*•	W, B	M - D	SU - SH
Blackhaw Viburnum (<i>Viburnum prunifolium</i>)*•	W, B	D, AK	SH

* flowering species • fruiting species valuable to wildlife and/or birds

¹ Food and/or cover provided for; W = wildlife, B = birds, BF = butterflies, BFL = butterfly larva, BE = bees, HB = hummingbirds

² W = wet, M = moist, D = dry, N = neutral soils, AK = alkaline soils, AC = acidic soils, CA = calcareous soils, L = limestone, V = adaptable to a variety of soil conditions

³ SU = sun, LS = light shade, SH = shade

Beware of Exotic Species

- Multiflora Rose (*Rosa multiflora*)
- Bush Honeysuckle (*Lonicera maackii*, *Lonicera tatarica*, *Lonicera morrowii*)
- European Buckthorn (*Rhamnus cathartica*)
- Privet (*Ligustrum vulgare*)
- Barberry (*Berberis thunbergii*)
- Russian Olive (*Elaeagnus angustifolia*)

Additional Resources

Online Resources

- **National Wildlife Federation**—<http://www.nwf.org>
Provides helpful information on creating backyard wildlife habitat and provides certification
- **OhioLine**—<http://ohioline.ag.ohio-state.edu/~ohioline>
Native Plants Bulletin—<http://ohioline.osu.edu/b865/index.html>
Information on native plants of OH; growing conditions, where to purchase, etc.
- **National Audubon Society**—<http://www.audubon.org/>
- **Ohio Department of Natural Resources**—<http://www.odnr.gov/>
Division of Natural areas—<http://www.dnr.state.oh.us/odnr/dnap>
Division of Wildlife 1-800-WILDLIFE <http://www.dnr.state.oh.us/wildlife/resources/>
Provides information on backyard wildlife habitat
Division of Forestry—<http://www.hcs.ohio-state.edu/odnr/forestry.htm>
You can purchase several native trees and shrubs from the Division
- **Birdsource**—<http://www.birdsource.org/>
Information on creating backyard wildlife habitat as well as information on the great backyard bird count.
The great backyard bird count is an excellent way to contribute to bird conservation and research. Feb. 15-18th
- **Environmental Protection Agency Green Acres Program**—<http://www.epa.gov/grtlakes/greenacres/>

Books

Go Native—Gardening with Native Plants and Wildflowers in the Lower Midwest by Carolyn Harstad
Landscaping with Wildflowers and Native Plants by William Wilson
Peterson's Guide to Eastern Birds
The Birds of Ohio by Bruce Peterjohn
Peterson's Guide to Eastern Trees and Shrubs by George A. Petrides
The Woody Plants of Ohio by Lucy Braun
Newcomb's Wildflower Guide by Lawrence Newcomb

Benefits of Native Landscaping

- Reduces time, energy, and money spent on yard maintenance
- Raises property values
- Promotes biodiversity
- Increases value to wildlife
- Prevents or reduces erosion
- Reduces the need for herbicide, pesticide, and fertilizer applications

Visit Ohio State University Extension's web site "Ohioline" at: <http://ohioline.osu.edu>