



ENHANCING YOUR GARDEN FOR BIRDS

If I keep a green bough in my heart, then the singing bird will come.

Chinese Proverb

I. BIRDS: A TREASURE IN OUR MIDST

A sustainable community is one that balances the needs of people and nature in a way that both can thrive and support one another. Evanston is a unique combination of urban and suburban neighborhoods that have the opportunity to support a wide variety of plants and animals and encourage visits from traveling species such as migratory birds.

Over 275 species of birds have been recorded in Evanston, and some of them need our help to survive.

Migratory birds. Waves of beautiful and rare migratory birds pass through the Evanston area in April/May and September/October, including scores of songbirds that need habitat where they can feed and rest. Most songbirds migrate at night, and morning finds some of them over the lake. They land in the closest habitat they can find, which means that Evanston attracts an abundance of migrating birds. They have flown long distances and arrive hungry and exhausted.

Nesting birds. Each year, almost 100 different bird species, some endangered or threatened, raise their young in various habitats in our area.

This guide is intended to help property owners create and protect habitat that supports migratory and nesting birds. This is probably the most important contribution you can make in your own backyard to conserving native wildlife.

It's likely that your property is already landscaped and has some bird-friendly features in place, but there may be other elements of your garden that could be enhanced to provide an even more welcoming haven for birds. Start small, picking one part of your garden and experimenting with plants that add visual interest for you as well as create an inviting habitat for birds.

Or perhaps you have lost trees due to Dutch elm disease or the Emerald Ash borer. You have an opportunity to plant replacements that will provide particular kinds of food and shelter birds need and want.

Choose among the suggestions that follow to enhance your garden for birds.

II. BIRDS NEED OUR HELP

Birds face tremendous challenges to their survival, and the majority of these are related to human activities. Two of these challenges are global in scale and will require a global response. But our gardens can provide critical habitat that will help birds cope with these challenges.

Habitat loss. The greatest threat to birds is the loss and degradation of habitat. In our area, the ever-expanding built environment -- roads, malls, parking lots, and buildings -- has crowded out the trees and plants that provide food and critical breeding habitat. On a larger scale, deforestation, intensive farming practices, and energy development, such as tar sands and mountaintop removal mining, destroy and degrade habitat.

Climate change. The changing climate is affecting food availability for migrating birds. Different species respond to global warming in different ways and may arrive either too early or too late to feed on the insects, flowers, and berries on which they normally rely.

Some birds are migrating earlier in response to warmer temperatures in their lower-latitude wintering grounds but are arriving before key food sources are ready. Neotropical birds, on the other hand, whose winter environment in tropical regions has not changed significantly, are migrating about the same time as usual while their food sources are peaking earlier in the warmer Northern Hemisphere spring.

As temperatures rise, the ranges of some species are expected to shift northward as they seek habitat and food to which they are adapted. But optimal habitat for some species may no longer exist, threatening their survival. The American Bird Conservancy estimates that there could be 29 percent fewer neotropical migrant species in the Great Lakes region than are currently found here, if global warming continues unabated.

III. CREATING A BIRD-FRIENDLY ENVIRONMENT

Almost any property can be made more inviting for birds and provide the necessities they need to survive and thrive. In addition to helping birds safely migrate and raise their young, improving bird habitat can bring other benefits.

- Birds play an important role in our ecosystem by pollinating plants, dispersing seeds, and eating insects, including many insect pests.
- Good bird habitat is often appealing to butterflies and other pollinators.
- Watching birds and other wildlife is an enjoyable and educational pastime.

A. DESIGN FOR BIRDS

Layered planting. A bird-friendly garden offers different layers of vegetation that give different bird species places for feeding, roosting, nesting, and hiding. Choose plants that vary in height and arrange them to create a tiered effect – larger trees surrounded by moderately-sized shrubs bordered by grasses and flowers, for example.

Diverse Planting. Include trees and plants that provide food for birds in every season. Give special attention to providing a diversity of food sources for the spring and fall migrating seasons, such as nectar-producing flowers, seeds, and berries and as well as species that attract tiny insects.

- **Spring.** In spring, most birds eat tiny insects that are attracted to emerging foliage and flowers; others drink nectar. Oaks — especially bur oaks, whose tender leaves are emerging just as the big wave of migrants comes through in early May — hawthorns, and elms have been proven by local studies to be the big performers. Hickories, hackberry, and honey locust are others. Hawthorn, horse chestnut, Ohio buckeye, crabapple, serviceberry, and certain cherries that flower between May 3 and 20 attract hordes of nectar-drinking migrants. Others eat buds; hop hornbeam buds are a particular favorite.

- **Summer.** Plants that produce fruit and berries from June through mid-August attract local nesting birds, such as cedar waxwings and catbirds. Examples of summer-fruiting plants include serviceberry, mulberry, and wild blackberry.
- **Fall.** Shrubs and plants whose fruits ripen in the fall provide migratory birds with important fuel for the journey and help non-migratory birds build reserves for the winter months. Fall-fruiting plants include arrowwood and other viburnums, elderberry, Virginia creeper, wild grape, spicebush, chokeberry, wahoo, hawthorns, red cedar, and alternate-leaved and gray dogwoods -- and wild raspberry, for a wilder spot.
- **Winter.** Plants whose fruits remain attached into the winter months are important for non-migratory birds. Examples include winterberry, red cedar, cockspur hawthorn, fragrant sumac, and nannyberry. Birds also eat the seeds of wildflowers and grasses, so be careful not to deadhead them in the fall.

Nectar-producing plants attract hummingbirds and orioles, and red tube-shaped flowers are especially attractive to hummingbirds. Native plants such as wild columbine, penstemon, paintbrush, Virginia bluebell, fire pink, orange jewelweed, and liatris or woodland phlox planted in large groupings are particularly appealing. Fragrant white, yellow, and/or lavender flowers attract insects.

Dense Cover. Birds and other wildlife need places to hide from predators and take shelter from severe weather. Low shrubs and thick brush piles provide good cover for ground-feeding species, and evergreens provide important protection from wind, snow, and cold temperatures during winter months. (Note that most evergreens recommended for garden use are not native to this area.)

B. PROVIDE NESTING SITES

Many habitat features that provide good cover can also serve as places where birds and other wildlife can nest and raise their young. Dense thickets and shrubs will entice many bird species while others prefer to place their nests among the branches of trees.

Still other species look for nesting cavities in dead or decaying trees or fallen branches. In urban areas, where property owners promptly remove damaged and dead trees, cavity-nesting birds may find few natural places to raise their young. Setting up a birdhouse or a nesting box in your garden can provide a good alternative.

C. SUPPLY WATER

Birds need a dependable supply of fresh, clean water for drinking and bathing. A well-maintained birdbath will be a bird magnet for your garden. The best birdbaths are shallow and have a gentle slope so birds can wade into the water. Look for one that can be cleaned easily.

Birds often prefer baths at ground level, imitating the puddles they find in nature. But if cats may be a problem, raise the bath two or three feet off the ground. Place it within range of some bushes or trees so birds can escape in case of predators, but make sure the area around the bath is clear so cats and other predators can't lurk there. Placing the bath in the shade will help keep the water cool and fresh. And slowly dripping water will make the birdbath even more attractive.

The water should be no more than two inches deep in the middle of the bath. Clean the birdbath frequently, and change the water every couple of days. Be especially vigilant during August and September when culex mosquitoes, which cause West Nile Virus, are breeding.

D. PROPERLY SITE AND MAINTAIN BIRD AND HUMMINGBIRD FEEDERS

Feeders benefit birds most in winter when natural food supplies are scarce. Some species also visit feeders during spring and fall migrations, while some nesting birds visit feeders in summer months. Proper siting and maintenance is important to protect visiting birds.

- Take steps to prevent window collisions by placing feeders appropriately in relation to windows and by breaking up window reflections near where the birds feed.
- Place feeder(s) near — but not too near — trees or shrubs so birds will have a resting place while feeding as well as a refuge from predators. A distance of about 10 feet should be far enough to prevent squirrels or cats from reaching the feeder. Evergreens are ideal as they offer year-round protection.
- Keep feeders in sheltered areas away from wind and rain.
- Don't put out much food on the ground as it may attract squirrels, opossums, raccoons, and other nest predators.
- Keep feeders – and the ground beneath them -- clean. During summer and periods of high use, clean feeders at least once a week and let feeders dry thoroughly before re-filling.
- Take steps to keep hummingbird nectar from freezing when poor weather threatens.

E. LET YOUR GARDEN GO GREEN

Limit lawn area. Replace shallow-rooted turf grass with deeper-rooted, low-maintenance plants adapted to this area. This will provide better habitat for birds and other wildlife and has the added benefit of minimizing the amount of mowing needed.

Incorporate native plants. These are important to native wildlife, such as pollinators, that may have co-evolved with a particular species. Pollinators often rely on a certain type of flower as a source of food, while the flower depends on the pollinator to transport its pollen to other flowers for reproduction. Native plants are also better for the environment as they generally require less water and less effort at pest control.

Reduce pesticide use and eliminate insecticides. Start with prevention: build healthy soil with compost and mulch; select pest-resistant plants; and pull weeds before they go to seed. If you must use herbicides, choose the least toxic solution and avoid overuse. Choose environmentally friendly alternatives to chemical fertilizers.

Maintain with birds in mind. Allow dead vegetation to stand over the winter, where possible, to provide winter food and shelter. Don't deadhead flowers until late spring. Allow leaves to remain on bare soil under trees and shrubs until spring as well. Install a composting heap; birds will be attracted to the insects it provides.

F. REDUCE THREATS

Keep cats indoors. Free-roaming cats pose a significant threat to birds and other wildlife. It's estimated that domestic and feral cats kill hundreds of millions of birds every year in the

United States. Outdoor cats are especially dangerous to birds in the spring when fledglings are on the ground. Life for outdoor cats is lethal for birds and risky for cats. Many veterinarians and animal welfare organizations support keeping cats indoors for their own safety.

Reduce window collisions. Roughly one billion birds are killed and even more are injured every year in the U.S. by collisions with windows. Birds collide with windows for a variety of reasons: they see the reflection of the sky, clouds, and trees; they are attracted to bright lights near the window; or windows are transparent and the birds are attracted to something inside.

To protect birds, start by looking at your windows under different light conditions and from a bird's perspective. Look to see if vegetation is reflected in your windows. Would a bird trying to escape from a predator fly towards the tree it sees reflected in the window? Different conditions will require different solutions.

- For **reflective windows**, take steps during spring and fall migrating seasons to “dress” the outside of the window, altering the appearance of the entire window. The following examples of seasonal window protectors are inexpensive and can be attractive.

- Hang strings or monofilament, each no more than 4 inches apart. (A few scattered decals are not effective.)
- Install outdoor blinds or screens.
- Cover the window with a fine-mesh net so birds will bounce off.

Move bird feeders, birdbaths, and other attractions against windows or more than 30 feet away.

- For **transparent windows**, close curtains/shades. Move houseplants away from windows. Use only low-intensity lighting. Install one of the seasonal window protectors listed above.

Deter predators. Cover trash cans to prevent attracting opossums, raccoons, and other nest predators. Don't put out food for wildlife.

IV. RESOURCES

Gardening for Birds and Wildlife

The Living Landscape: Designing for Beauty and Biodiversity in the Home Garden, Rick Darke and Douglas W. Tallamy, Timber Press (2014).

Creating Habitats and Homes for Illinois Wildlife, Debbie Scott Newman, Richard E. Warner, and Phil C. Mankin, Illinois Department of Natural Resources (2003).

Birdscaping in the Midwest: A Guide to Gardening with Native Plants to Attract Birds, Mariette Nowak, The University of Wisconsin Press (2012).

Birds At Home, Stokes Nature Company,
<http://www.stokesbirdsathome.com/birding/index.html>

Garden for Wildlife: Making Wildlife Habitat at Home, National Wildlife Federation
<http://www.nwf.org/Get-Outside/Outdoor-Activities/Garden-for-Wildlife.aspx>

Enhancing Your Garden for Birds
Citizens' Greener Evanston

Planting for Chicago-area Migratory Birds, Audubon Chicago Region
<http://chicagoregion.audubon.org/planting-chicago-area-migratory-birds>

Plant Finder, Chicago Botanic Garden
<http://www.chicagobotanic.org/plantcollections#plantfinder>

Global Warming and Birds

The Gardener's Guide to Global Warming: Challenges and Solutions, National Wildlife Federation (2007). http://www.nwf.org/~media/PDFs/Global-Warming/Reports/Gardeners_Guide.ashx

The Birdwatcher's Guide to Global Warming, National Wildlife Federation and American Bird Conservancy (2002).
http://www.abcbirds.org/newsandreports/special_reports/birdwatchersguide.pdf

Global Warming and Songbirds: Illinois, American Bird Conservancy and National Wildlife Federation (2002).
http://www.abcbirds.org/newsandreports/special_reports/globalwarming/Illinois.pdf

Bird Feeders, Birdbaths, and Nesting Boxes

All About Birds: How to Attract Birds to Your Yard, The Cornell Lab of Ornithology
<http://www.allaboutbirds.org/page.aspx?pid=1138&ac=ac>

For the Birds: Backyard Bird Feeding, U.S. Fish & Wildlife Service
<http://publications.usa.gov/epublications/forbirds/forbird.htm>

Green Gardening

The Climate Friendly Gardener: A Guide to Combating Global Warming from the Ground Up, Union of Concerned Scientists (2010).
http://www.ucsusa.org/assets/documents/food_and_agriculture/climate-friendly-gardener.pdf

Garden in an Environmentally Friendly Way, National Wildlife Federation
<http://www.nwf.org/Get-Outside/Outdoor-Activities/Garden-for-Wildlife/Create-a-Habitat/Garden-in-an-Environmentally-Friendly-Way.aspx>

Threats to Birds

Make Windows Safer for Birds, Chicago Bird Collision Monitors,
<http://www.birdmonitors.net/Prevent.php>

You Can Save Birds from Flying Into Windows, American Bird Conservancy,
http://www.abcbirds.org/abcprograms/policy/collisions/pdf/collisions_flyer.pdf

Cats Indoors, American Bird Conservancy,
<http://www.abcbirds.org/abcprograms/policy/cats/index.html>