



PRESENTS

A Guide to Bird-friendly Gardens

Detroit Bird Alliance fosters the appreciation and conservation of birds and the environment we share.

www.detroitbirdalliance.org

Bird-friendly Gardens

Urban areas are typically highly developed and can contribute to bird habitat loss. However, habitat can be restored by planting gardens with bird-friendly native plants. Gardeners can also further help birds by installing birdbaths and bird houses in their gardens.

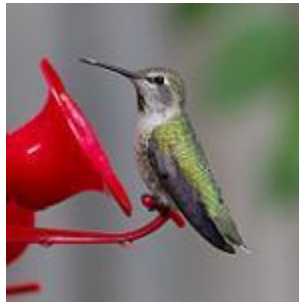
Specific Garden Designs

You can mix and match a variety of native plants to attract a variety of birds, or you can design a specific kind of garden to attract certain kinds of birds. This section describes three specific garden designs:

1. Hummingbird garden
2. Grassland habitat (Meadows)
3. Perennial flower garden
4. Container gardening

Regardless of which kind of garden you plant, **it's important to avoid pesticides and weed-killing chemicals on your garden.** These are harmful to birds and have been traced to declines in bird populations. It is best to pull weeds by hand.

1. Hummingbird Garden



Ruby-throated hummingbird

The Ruby-throated Hummingbird is the only hummingbird found in Michigan. It is a delightful little bird and it is attracted to the color red, as well as orange and pink.

Red, orange or pink flowers in your garden will attract hummingbirds, and there are several native plants in Michigan that come in these colors and provide nectar for hummingbirds to eat.



Cardinal flower
(*Lobelia cardinalis*)



Red columbine
(*Aquilegia canadensis*)



Bee balm
(*Monarda fistulosa*)



Milkweed
(*Asclepias* spp.)



Joe-pye weed
(*Eupatorium maculatum*)

All these plants are perennials so once you plant them they should return every year.

2. Grassland Habitat (Meadows)

Grassland can provide habitat for birds including the Ring-necked pheasant, Bobolink, Field Sparrow, Eastern Towhee, Savannah Sparrow, Tree Swallow, American Goldfinch, Eastern Meadowlark, Brown Thrasher, Killdeer, Red-winged Blackbird, Common Yellowthroat, Song Sparrow and Northern Bobwhite. Grassland habitats are good for migratory and local bird populations that are currently in decline because of grassland habitat loss.

Grasses dominate grasslands. Trees and large shrubs are rarely found in grassland areas. There are many species of grasses that live in this habitat, including purple needlegrass, foxtail, Indiangrass, and switchgrass.

Many animals munch on these grasses, but the plants survive because the growth point on the grasses is very close to the ground. Also, with underground stems and buds, grasses are not easily destroyed by fire. Shrubs and trees that live in grasslands are not as good as grasses at coping with the flames, and often are destroyed by fire.



Purple Needlegrass
(*Nassella pulchra*)



Foxtail
(*Alopecurus*)



Switchgrass
(*Sorghastrum nutans*)



Indiangrass
(*Panicum virgatum*)

Wildflowers also grow well in grasslands and help attract wildlife to grasslands. Popular flowers that you might find growing in grasslands are asters, goldenrod, blazing stars, partridge pea, sunflowers, and wild indigos.



Aster
(*Aster amellus*)



Goldenrod
(*Solidago*)



Blazing Stars
(*Liatris cylindracea*)



Partridge pea
Sunflowers
(*Chamaecrista fasciculata*)



Wild Indigos
(*Helianthus* spp.)



(*Baptisia australis*)

3. Perennial Flowers

Most of the flowers already mentioned in this guide are perennial flowers, and a mixed garden containing a variety of perennials is a great way to attract many kinds of birds. Flowering perennials produce large quantities of seed that provide food for birds, including sparrows and finches.

At the end of the blooming season, don't cut the spent flowers off, but let them dry and hang in place. This will allow the birds to reach the seeds.

4. Container Gardening or gardening in small spaces

Native Plants of Michigan

Many native plants provide nectar for hummingbirds, butterflies, and bees. Others provide nourishing seeds and irresistible fruits for your feathered neighbors, and they offer places to nest and shelter from harm. They're also a critical part of the food chain—insects evolved to feed on native plants, and by and large, backyard birds raise their young on insects, explains [Douglas Tallamy, the author of Bringing Nature Home](#). Take the Carolina Chickadee: A single clutch of four to six chicks will gobble up more than [9,000 caterpillars](#) in the 16 days between when they hatch and when they leave the nest. So thriving insects means thriving birds.

Many common Michigan native plant and tree suggestions have been included in this guide from around the web to make your green space bird, bee and butterfly-friendly. For a more complete list of plants visit these websites www.birdzilla.com and www.BirdAlliance.org.

To purchase native plants, visit www.wildtypeplants.com, www.michiganwildflowerfarm.com or www.nativeplant.com.



Purple Coneflowers (*Echinacea* spp.). These beautiful blooms attract butterflies and other pollinators during the summer and provide seeds for goldfinches and other birds in the fall.



Sunflowers (*Helianthus* spp.). Birds often eat the sunflower seeds to fuel their long migrations.



Milkweed (*Asclepias* spp.). Milkweed is best known for hosting monarch butterfly caterpillars, but it attracts loads of insects that are great for birds, too. Some birds, like the American goldfinch, use the fiber from the milkweed to spin nests for its chicks.



Cardinal Flower (*Lobelia cardinalis*). While few insects can navigate the long tubular flowers, hummingbirds feast on the cardinal flower's nectar with their elongated beaks.



Trumpet Honeysuckle (*Lonicera sempervirens*). One of the top most well-behaved vines to plant in your garden, the multitudes of red tubular flowers are magnets for hummingbirds. This vine's nectar attracts hummingbirds while many birds like Purple Finches and Hermit Thrushes eat their fruit. During migration, Baltimore Orioles get to the nectar by eating the flowers.



Black-Eyed Susan (*Rudbeckia hirta*). A popular and easy plant to grow, Black-Eyed Susans attract many birds, including goldfinches, chickadees, cardinals, nuthatches, sparrows, and towhees. Butterflies also like them.



Compass Plant (*Silphium laciniatum*). The plant's name refers to the tendency of the lower leaves to orient themselves vertically in a north-south direction when exposed to full sun.



Grass-Leaved Goldenrod (*Euthamia graminifolia*). This member of the aster family is enjoyed by butterflies and songbirds, including the goldfinch and swamp sparrow.



Common Spiderwort (*Tradescantia ohiensis*). An easy-to-grow plant that attracts a variety of pollinators.



Hoary Vervain (*Verbena stricta*). This plant attracts a variety of pollinating insects, and its seeds are eaten by birds like the cardinal and junco.



Red Columbine (*Aquilegia canadensis*). Not only is this flower attractive to hummingbirds and bees, but its seeds and roots have been used to treat several human ailments.



Bee Balm (*Monarda fistulosa*). Bee balm is actually an herb that can be used in tea. It also attracts hummingbirds and butterflies.



Joe-Pye Weed (*Eupatorium maculatum*). Named after Joe Pye, a 19th-century naturalist who is said to have used the plant's roots to heal typhus fever. Joe-pye weed is very popular with butterflies and hummingbirds.



Aster (*Aster amellus*). Asters are attractive to many birds, including cardinals, chickadees, goldfinches, nuthatches, sparrows, and towhees.



Goldenrod (*Solidago*). The seeds of this plant will attract birds like finches, yellow-rumped warblers, and pine siskins.



Blazing Stars (*Liatris cylindracea*). A member of the aster family, this plant attracts various birds and butterflies.



Wild Indigos (*Baptisia australis*). Wild indigos attract birds, and are natural hosts for many kinds of butterflies.



Partridge Pea (*Chamaecrista fasciculata*). The partridge pea is a species of legume that is easy to grow. It supports many kinds of pollinators, and mixes well in a grassland habitat.



Purple Needlegrass (*Nassella pulchra*). This native grass helps suppress invasive plant species, and its large root system helps prevent soil erosion.



Foxtail (*Alopecurus*). Foxtail is a grass that helps support grassland birds like red-winged blackbird, bobolinks and meadowlarks.



Switchgrass (*Panicum virgatum*). A tall warm-season grass found in meadows, switchgrass attracts a variety of birds, including pheasants, and provides good cover for them during the winter.



Indiangrass (*Sorghastrum nutans*). Another favorite of pheasants for nesting and winter shelter.



Oak Tree (*Quercus* spp.) Bur Oak, White Oak and Northern Pin Oak. These trees are an integral part of the food chain. Many species of birds use the cavities and crooks of these trees for nesting and shelter. Birds are also drawn to the abundance of insects and acorns that are found on oaks—to learn more, check out Doug Tallamy's work at www.bringingnaturehome.net/



Dogwoods (*Cornus* spp.). Red-osier Dogwood, Gray Dogwood. Cardinals, titmice, and bluebirds all dine on the fleshy fruit of dogwood trees.

Bird Feeders, Baths, and Houses

In addition to attracting birds to your yard with plants and landscaping there are other things you can add to your garden to draw birds. One surefire way to get a crowd of birds is to hang a feeder full of their favorite seed. You can also feature a bird bath in your garden, as they also attract birds by providing a source of fresh water. And finally, you can choose to decorate your garden with bird houses, which provide shelter for birds and a place to build their nests.

Bird Feeders

There are many types of feeders ranging from a simple tray feeder on up to an elaborate squirrel-defying hopper. A good bird feeding station should include several types of feeders and seed mixes as bird species have different tastes and eating habits.

Location

When setting up your bird feeding station, make sure there are shrubs or trees (especially evergreens) within a few yards so that birds can take cover if a hawk or cat appears looking for a snack.

Bird feeders should also not be near any windows as millions of birds die each year flying into them. If they are near a window, there are several types of stickers and netting you can place on the outside of the glass to prevent collisions. Plastic fruit-tree bird netting, usually used to prevent birds from getting to fruit crops, can be easily hung against your window. This makes the window visible to birds so they can steer clear. If a bird does hit your window, keep your eye on it; do not touch the bird or bring it inside. Hopefully after several minutes or longer, the bird will be able to shake off the bump and fly away.

Feeder Types

- A simple tray feeder a few inches off the ground (or seed spread directly on the ground) will attract mourning doves, northern cardinals, and several species of sparrow.
- A tube feeder with small perches will prevent large birds from eating the seed but will attract finch species, black-capped chickadees, nuthatches, and house sparrows.
- A hanging hopper feeder looks like a little house with openings at the bottom for seed to spill out into a tray. Larger birds can use this feeder including blue jays, common grackles, and red-winged blackbirds.
- Suet feeders can be store-bought or you can make one yourself from a simple onion bag tied to a tree. Suet, which is typically a mixture of animal fat and seed, attracts woodpeckers such as the downy and the red-bellied woodpecker, as well as other birds.
- Hummingbird feeders are typically red and filled with a sugar water solution (do not dye the solution red). These will also attract Baltimore Orioles.

- There are many ways to make feeders out of soda bottles, pine cones, and other materials. All you have to do is Google it!

Seed Types

The easiest seed to buy that will attract the most types of birds is black oil sunflower seed. When purchasing seed mixes try to find a mix that contains much of this type. Many cheaper seed mixes contain a lot of cracked corn, wheat and milo that some birds shun. Instead opt for seed mixes that include white and red millet along with safflower.

If you want to attract house finches and goldfinches make sure to have niger seed available in a special tube feeder with small holes. Finally consider putting out specialty foods out such as fruit, peanuts, and peanut butter to attract even more birds.

Birdbaths

Don't forget to keep your feathered friends hydrated! A birdbath can be as complex as a heated basin to prevent freezing in the winter or as simple as an old skillet filled with water. Birds need very shallow water to drink and bathe—fill your bath no more than 1 ½ inches. Make sure the surface isn't too slippery or the birds won't be able to get a grip when drinking or bathing; you can throw a few flat rocks or gravel in your bath to help the birds keep their footing.

Keep bushes or dense undergrowth nearby so birds can hide while they are preening and drying off. Every few weeks or so, scrub the bath to prevent mold and algae. An added bonus of birdbaths is that chipmunks and squirrels will drink out of them instead of chewing on your plants for water in hot weather!

Bird Houses

When birds choose to build their homes and raise young in our yards and gardens, we feel really privileged. Luckily you can encourage more bird families in your environment by installing bird houses. There are many types of bird houses at stores and many plans for building them online. However, not all houses are created equal. For the most part, bird houses should not have any perches or decorative work on them. Perches actually help predators get to the babies!

Bird houses also should not be painted or treated with any chemicals. Typically, nest boxes should be cleaned out at the end of nesting season to prevent parasites. Nest Watch through the Cornell Lab of Ornithology is a great resource for choosing the right house for your yard. For example, a chickadee bird house should be hung between five and ten feet above the ground, away from the prevailing wind, have a hole 1 1/8 inch and be about 8 inches deep. Depending on the size, shape, and location of your bird house, you can attract wrens, titmice, nuthatches, owls, bluebirds, American kestrels, purple martins, and woodpeckers!

Birds and Gardening are good for you!

Humans have an innate need to connect with nature—it's important to our health and well being. According to Julia Africa at The Center for Health and the Global Environment at the Harvard School of Public Health, "An emerging body of evidence suggests that people should be encouraged to seek out natural environments for their psychological, physical, cognitive and emotional health benefits." Here are some specific examples:

- Viewing natural scenes increases pleasurable emotional states and thereby reduces the desire to engage in unhealthy behaviors such as smoking and drinking.¹
- Families who can see nature from their windows are less likely to be involved in violence toward their partners or children.²
- People who walk in a park for an hour experience a 20 percent increase in memory and attention.³
- Students who could view a natural scene through the window performed better on exams than students who could only see human-constructed scenes.⁴
- Hospital patients who could view a natural scene through their window required less painkiller, and were discharged earlier than those who could not.⁵

Birds are an important part of nature. The Detroit area is fortunate to be home to a wide variety of birds. In fact, the Detroit River is part of a globally-recognized Important Bird Area (IBA) that includes a flyway for migrating birds.

Birdwatching is an enjoyable activity that engages people with nature recreationally. We see birds all the time, but birdwatching helps us notice them. It can be fun to see how many kinds of birds you can identify. Over time you can learn to recognize their songs, tell the difference between males and females, and see how they interact with their families and flocks. According to the Nature Travel Network, in 2013 birdwatching was the 15th most popular outdoor recreational activity in the United States, and it's expected to grow even more.

Four Seasons of Birds in Metro Detroit

One of the pleasures of working in a garden is being surrounded by our feathered friends. Whether you have a flock of American Goldfinches in your sunflowers or an American Robin feeding her young in your oak tree, you will have no shortage of bird antics to keep you company. With a little work, any green space including an urban garden can provide food, shelter, and nesting sites for birds. Michigan has hundreds of bird species throughout the year, but there are several species that you are more likely to see in your yard and garden in the Detroit Metro area.

Spring

As it starts to get warmer, many migratory birds return from their winter homes while some birds just pass through Michigan on their way further north to Canada. During this time of year you may start to see Red-winged Blackbirds, Common Grackles, Brown-headed Cowbirds, Baltimore Orioles, Killdeer, Ruby-throated Hummingbirds, Barn Swallows, and Chimney Swifts. American Goldfinches live in Michigan year round, but the males molt back into their bright yellow feathers during this time. You may also see small and often brightly colored warblers (there are many species) flitting through your trees looking for insects as they migrate north. Remember to listen for the loud crow of the colorful Ring-necked Pheasant; count yourself lucky if a pair decides to raise a brood in your lot!

Summer

In the late spring into early summer, most birds are nesting. If you ever see a bird flying with food in its mouth, keep watching as you may see it land in its nest! Nests you may spot in your garden include the American Robin's mud and stick nest, a House Wren's or Black-capped Chickadee's cavity nest, a Barn Swallow's mud nest tucked under an eave, or the messy nests of European Starlings and House Sparrows.

Fall

During Autumn, many birds return south to spend the winter where it's warmer. As with the spring, you may see warblers or kinglets pass through to get a bite to eat before flying many more hundreds of miles during the night. In the fall American Crows form large flocks as do European Starlings, Red-winged Blackbirds, and Common Grackles. You may also see a V of Canada Geese soaring overhead, honking forlornly.

Winter

The cold, snowy Michigan months are actually a great time for birds especially if you have a bird feeding station in your garden. Though Northern Cardinals, White-breasted Nuthatches, Downy Woodpeckers, Red-bellied Woodpeckers, Blue Jays, House Finches, Mourning Doves, Rock Pigeons, House Sparrows, Black-capped Chickadees, and Tufted Titmice are in this region year round, you have a good chance of seeing them at your feeder in the winter. Some birds migrate to Michigan from Canada in the fall because to them our state is warm! These birds include Dark-eyed Juncos, White-throated Sparrows, and American Tree Sparrows.

Gardening for birds help mitigate threats to birds.

Though there seem to be a lot of birds in the sky, the majority of bird species are actually in decline. Some are endangered to the point where their numbers may not be sustainable unless

conservation efforts are increased. Two of the biggest threats to birds are climate change and habitat destruction.

Climate Change

The science is clear that climate change is the most significant threat to North American birds. Rising temperatures can fundamentally alter where birds can survive. Climate change affects how much food birds can find, where they can survive, and increases the effects of habitat loss. Their natural ranges are already altering due to climate change. According to National Bird Alliance's 2014 Birds and Climate Change report, 314 North American bird species could lose half of their current ranges due to rising temperatures.

Habitat Destruction

Habitat destruction is pervasive across the globe, and it poses a major threat to birds. Habitat destruction occurs in three different ways:

1. Habitat is destroyed when land gets developed.
2. Habitat also suffers when land becomes fragmented, where it gets divided up by roads or other development, and can no longer sustain healthy bird populations.
3. Finally, habitat can also be destroyed by pollution or invasive species.

Enjoy some birdwatching in your garden

Now that all these great birds will be coming to your garden, what's the best way to watch them, and how can you tell what they are? Birdwatching, also known as "birding," is a great way to enjoy birds, but it takes patience, careful observation, and practice.

When you birdwatch try to look for movement and listen for birds. Birds are often inactive during midday, but very active during the morning and evening.

You don't need a lot of equipment to enjoy bird watching. Just watching a bird without special equipment is still birdwatching, but optics like binoculars will help view the birds and "bring them closer." The most common binoculars used by birders are 8X42 and 10X42 binoculars. This magnifies the birds 8 or 10 times and has a front lens that's 42 millimeters, which lets in light to help see details. Binoculars that have higher zoom are often difficult to use and a lower zoom won't show the birds as well. Higher quality binoculars are helpful, but are very expensive. Refurbished binoculars often are just as good as new, but at a fraction of the cost. Bird Alliance has an online guide to choosing binoculars that includes a section with recommendations for specific brands and models: [Binoculars](#)

Using binoculars to watch birds takes a little bit of practice. Many people often "get lost" in their binoculars and are unable to find birds. It's helpful while birding to look for movement with your

naked eyes. Once you spot something you can see up close, do not move your eyes and slowly bring your binoculars up.

Other equipment you may want are spotting scopes, which are powerful enough to have 20X to 60X zoom, a camera, nature journals to write observations and sketches, and field guide books and apps.

Starting with a local field guide is often easier for a beginner. It's often not helpful to have a large national guide; it's difficult to take outside with you and has birds not commonly seen in the area. We recommend ***Birds of Detroit*** by Chris Fisher and Allen Chartier

<http://www.amazon.com/Birds-Detroit-U-S-City-Guides/dp/1551051265>

The national Bird Alliance organization also has an online field guide to North American birds, available in both English and Spanish: <http://www.BirdAlliance.org/bird-guide>

Learn to Identify Birds

The Cornell Lab of Ornithology has a four-step approach to identifying birds:

1. First you judge the bird's size and shape
2. Then look for its main color pattern
3. Take note of its behavior
4. Factor in what habitat it's in

A great way to learn is from others! Birding is a great social activity. Detroit Bird Alliance has free field trips with excellent leaders happy to share their knowledge. Detroit Bird Alliance can also supply binoculars and field guides upon request. Check out the list of upcoming field trips: detroitbirdalliance.org

You can also learn on your own—it just takes practice! The best way is to start with the birds you see every day: House Sparrows, European Starlings, Northern Cardinals, American Goldfinches, Red-winged Blackbirds, American Robins, etc. If you see a bird you do not know, carefully observe it and look it up in a bird guide.

Citizen Science

You can put your new found birdwatching skills to important use through many citizen science projects that help monitor bird populations. One of the most beloved and long running is **Project FeederWatch** through the Cornell Lab of Ornithology. From November to April, people around the country keep track of birds at their feeders. By following a reporting formula, you can count birds as often as every week or more infrequently. New watchers will get a research kit explaining the reporting guidelines and processes to get you started.

Also through the Cornell Lab of Ornithology and Bird Alliance is the **eBird** website. This is for reporting bird counts and interesting sightings any time of the year in any location. You can check out other birders' reports to see what cool birds are hanging out in your area.

Scientists have learned a lot from citizen science reports; they have been able to map in real time how birds' migration and nesting patterns along with their ranges have changed due to climate change and habitat destruction.

Become a member of Detroit Bird Alliance!

Joining the Detroit Bird Alliance is another great way to help birds. Our mission is to promote awareness and protection of the environment through education, research and advocacy in Detroit and the surrounding area. We support local activities to foster the preservation of birds and the clean air, water, wetlands, grasslands, woodlands and other natural resources they depend upon.

Membership donations help fund Detroit Bird Alliance's education and conservation programs. By becoming a member you will help ensure that the organization can continue doing good work to support birds. You can sign up at the Detroit Bird Alliance website: www.detroitbirdalliance.org.

Footnotes

1. Russell and Mehrabian, 1976
2. Kuo and Sullivan, 2001
3. Kaplan et al, 2009
4. Tennessen and Crimpich, 1995
5. Ulrich, 1984

Photography Credits

Native Plants of Michigan

Purple Coneflower at Meadowlark in June by Tom Stovall - Meadowlark

Botanical Gardens - dcbgarden.com/meadowlark/

Sunflowers by Terence Yim

Milkweed by Anne McCromack

Cardinal Flower by Eleanor

Trumpet Honeysuckle by John Brandauer

Black-eyed Susan by Linda

Compass Plant by Cranbrook Science

Grass-Leaved Goldenrod by Frank Mayfield

Common Spiderwort by Joshua Mayer

Hoary Vervain by Aaron Carlson

Yellow Bur Oak by daryl_mitchell

Dogwood by Andrew Holmes
Switchgrass by Great Lakes Bioenergy Research Center - www.glbrc.org
Red Columbine by Kate
Bee Balm by Gene Wilburn
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Blazing Stars by USFWSmidwest
Wild Indigos by Fritz Flohr Reynolds
Indiangrass by Paw Paw
Partridge Pea by USFWSmidwest

Hummingbird Garden

Hummingbird by Moppet65535

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