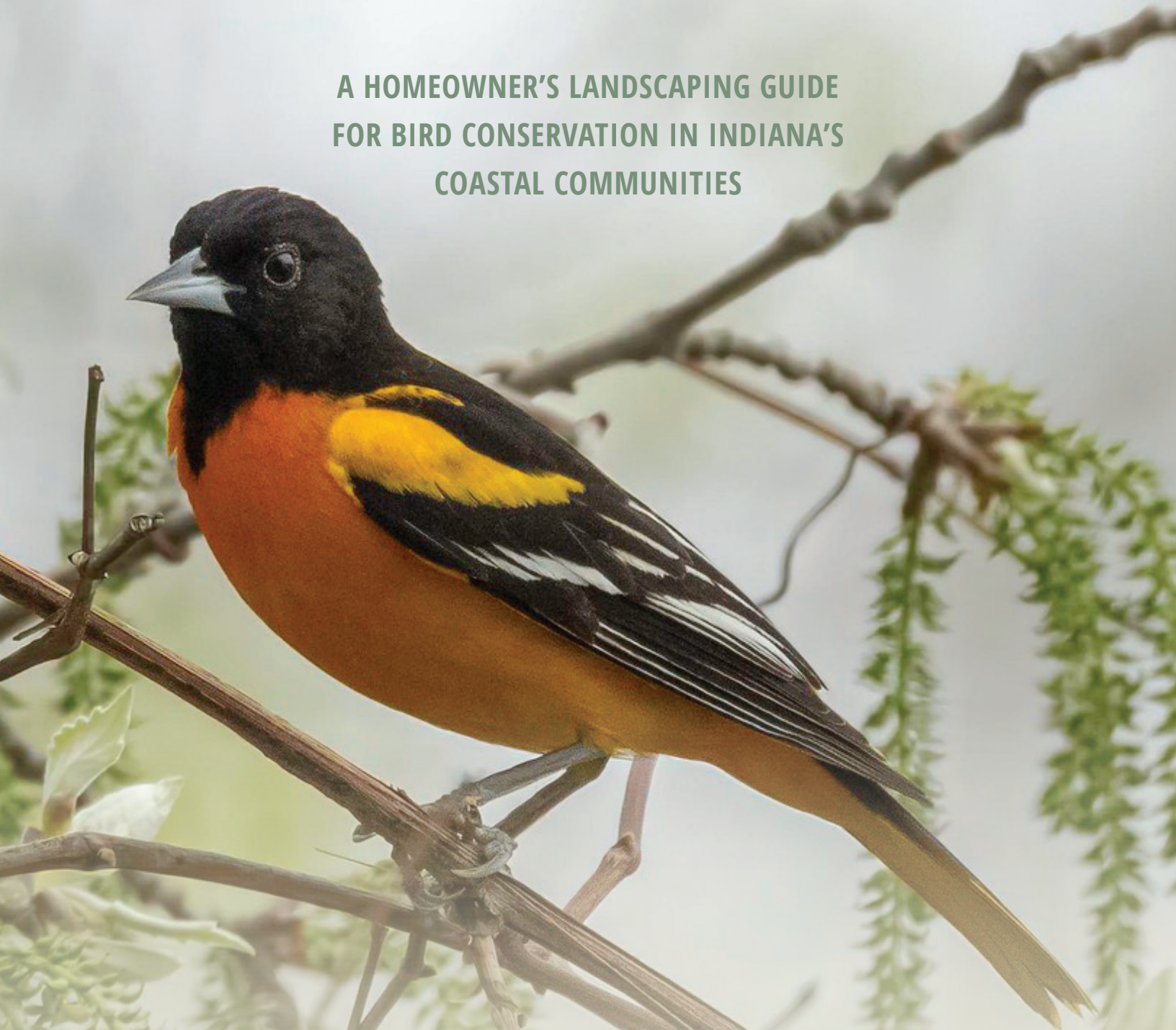
LIVING IN THE DUNES

A HOMEOWNER'S LANDSCAPING GUIDE FOR BIRD CONSERVATION IN INDIANA'S COASTAL COMMUNITIES



Save the Dunes

VOLUME 3

Acknowledgments

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Introduction

"You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make." – Dr. Jane Goodall

The third volume of *Living in the Dunes* invites Northwest Indiana residents to connect with the incredible diversity of birds that call the region home—both year-round and during migration. Through the power of native landscaping, your yard can become a pit stop for migrating birds or a safe, welcoming home for residents.

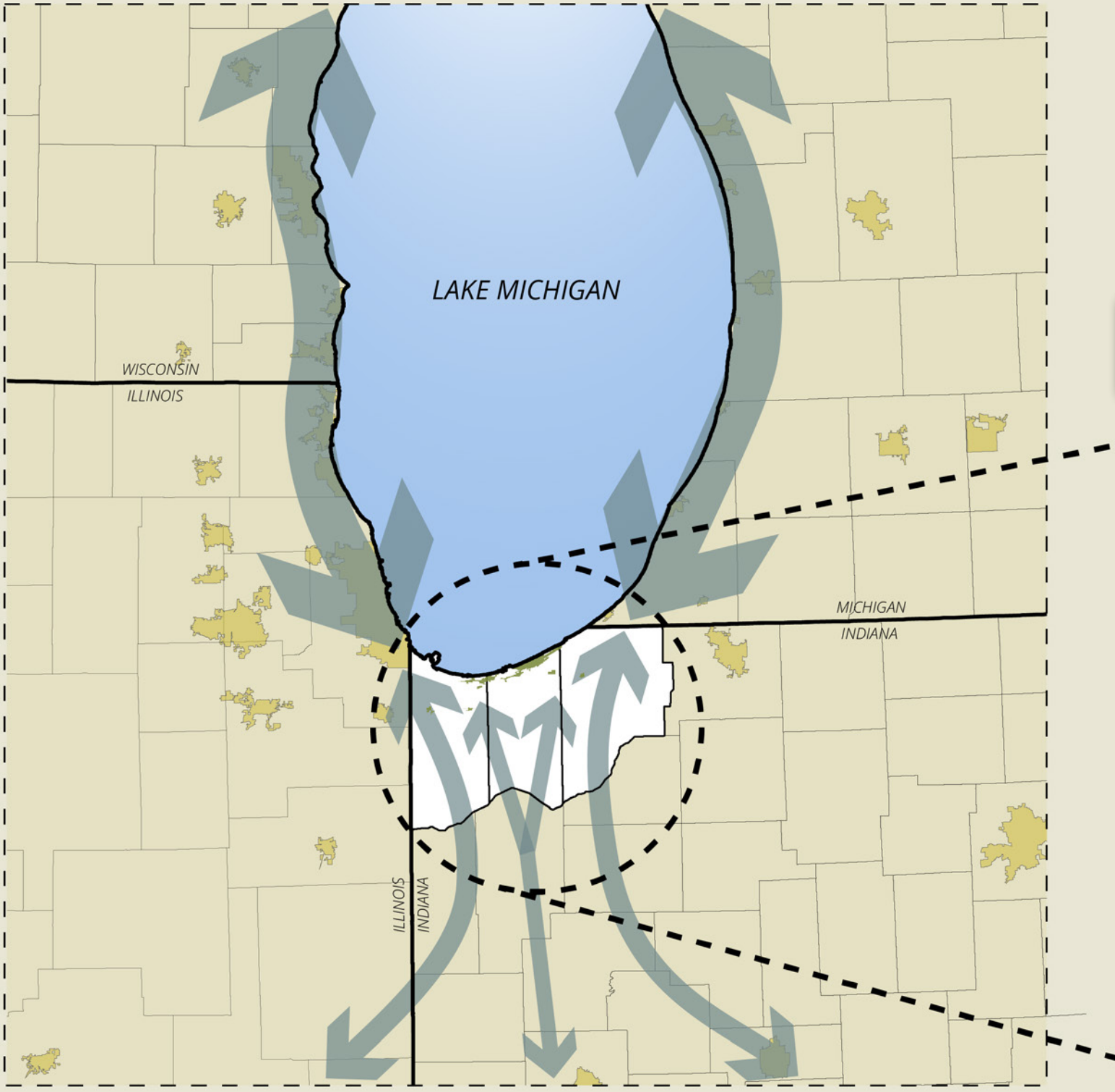
Birds are part of daily life—singing in the morning, darting through the sky, or hopping across a garden. Their frequent presence offers a unique way for people to connect with nature and notice the rhythms of the natural world. In Northwest Indiana, protected lands at Indiana Dunes National and State Parks and a multitude of natural areas are home to a rich variety of plants, insects, and wildlife. This area is recognized globally as a biodiversity hot-spot; over 350 species of birds have been observed at Indiana Dunes National Park alone!

However, human development has fragmented our landscape, making travel and safe nesting more difficult for birds. Residential gardens can fill those gaps by providing food, shelter, and resting spots. A well-planned yard of native plants becomes part of a larger network of habitats, helping birds move safely between protected lands.

Northwest Indiana is also a critical location along the Mississippi Flyway. Each spring and fall, Lake Michigan funnels many thousands of migratory birds along the shoreline, concentrating them in our small but vital region. Observing these migrations is both a joy and a reminder of the region's importance. Birdwatching and stewardship—responsible care for wildlife and habitats—have long been valued here, highlighted by events like the annual Indiana Dunes Birding Festival, which draws enthusiasts from across the world.

This guide encourages residents to enhance their gardens with native plants to support both local and migratory birds. You will learn about the habits and needs of specific species, understand how human actions affect their survival, and discover ways to create safe, nourishing spaces in your own yard. By combining birdwatching with thoughtful garden design, we can create a connected, resilient network of habitats that sustain birds, enrich our communities, and allow people to experience the wonder of nature right outside their doors.

Mississippi Flyway Migration Route



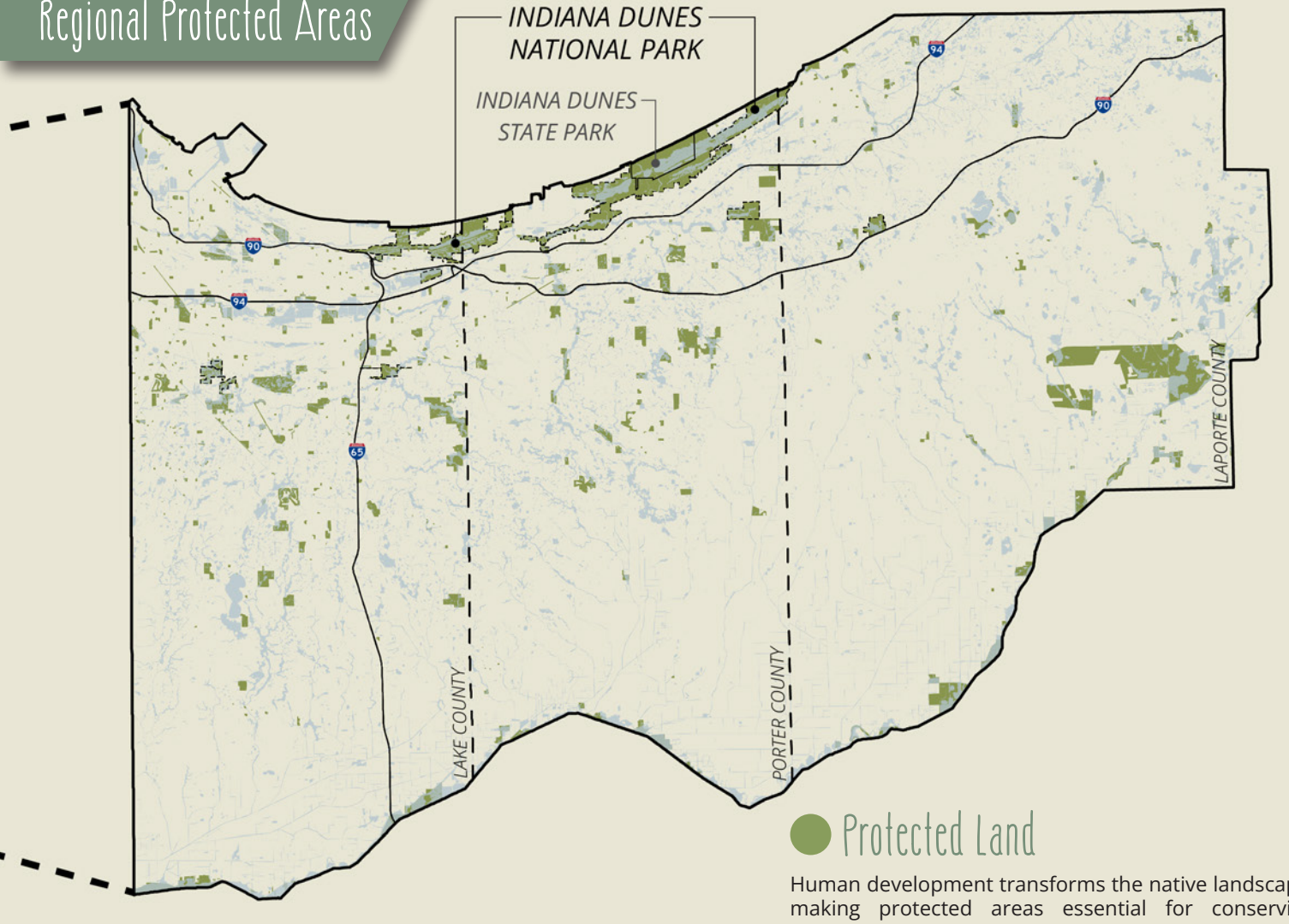
Migration Route

The Mississippi Flyway gets its name from the famous river that guides birds as they travel across the United States and into Canada. More than 350 species use this route each year. In Northwest Indiana, Lake Michigan also plays a key role: many birds follow the shoreline instead of flying over the open water, which concentrates migrating birds along the lakeshore. This is why our region sees such high numbers of birds during spring and fall migration. Like humans navigating roads, birds rely on rivers, lakes, and surrounding habitats as guides during their long journeys north and south. Along the way, consistent access to food, shelter, and clean water is essential. Migration is largely driven by the search for livable climates and abundant resources. Birds are genetically prompted to head north in warmer months when insects emerge and trees begin to bud, yet climate change is altering these natural cues. Birds may arrive earlier in spring, but if a late cold snap hits, tree buds and insects may be destroyed, leaving the birds with little to eat. This makes safe stopover habitats more important than ever, and home gardens can play a critical role, giving migratory birds places to rest, feed, and regain strength along their journey.

Migration and Protected Areas Maps

The Mississippi Flyway is one of the main bird migration routes in the United States, extending from Minnesota and Michigan in the north to Louisiana and Alabama in the south. Northwest Indiana lies centrally along this major flyway, making the Indiana Dunes Region a particularly special place for bird migration. Each year birds of almost every kind, from waterfowl, songbirds, and birds of prey, follow the shoreline of Lake Michigan, stopping at various natural areas in the region for rest or food. These protected areas—parks, nature preserves, wetlands, etc.—offer refuge for these travelers. However, large habitat gaps remain across our developed region. Your home can help close these gaps by acting as a small but powerful node for birds to safely complete their journeys north and south.

Regional Protected Areas



Protected Wetlands and Water

Open water is critical for birds during migration and throughout the year. Wetlands—areas where water covers the soil all or part of the time—provide drinking water, bathing sites, and help regulate body temperature, which is essential for survival on long journeys. They also support insects and plants that birds feed on and play a key role in improving water quality by filtering pollutants. By providing water, shelter, and food in your yard, you can create mini stopovers that complement nearby wetlands and help migratory birds rest, refuel, and thrive in a fragmented landscape.

Protected Land

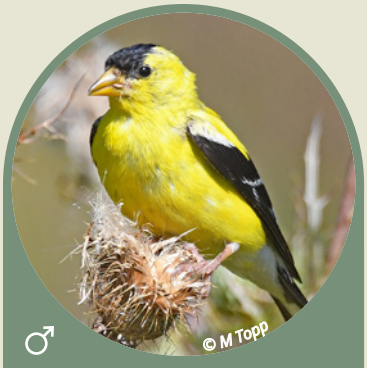
Human development transforms the native landscape, making protected areas essential for conserving important habitats. The areas shown on the map above include federal, state, local, and privately protected lands, and are categorized as nature preserves, wilderness areas, national park and state park land, or other protected areas. These spaces provide safe locations for birds and other wildlife to feed, rest, and raise their young. Your own yard can help extend these habitats by using native plants to create food, shelter, and water resources. Even small gardens can serve as stepping stones, connecting fragmented protected lands and giving native birds additional safe places to forage, nest, and thrive.

Birds of Indiana's Coastal Region

Observing birds deepens our connection to nature, and it guides how we design our gardens to truly meet nature's needs. Northwest Indiana is both a vital stopping point and a place many birds call home, with more than 350 species recorded at Indiana Dunes National Park alone. The 20 bird species listed in this guide are those commonly seen in the region's gardens. With this guide you can learn to recognize these birds by their features and understand their habitat, needs, and food requirements.

Some birds are year-round residents, while others migrate seasonally through our region, searching for food and suitable nesting conditions. The timeline below each bird shows when you are most likely to see that species during the year, based on whether it is a year-round resident or a seasonal visitor. Additionally, some species show differences between males and females, known as sexual dimorphism. For the dimorphic species in this guide, the top photo—marked with a male symbol—shows the male plumage, while the bottom photo—marked with a female symbol—shows the female plumage.

Regardless of appearance or size, each of these birds plays an important role in the Indiana Dunes Region, and your garden can give them the home they need.



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Spinus tristis
American Goldfinch

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 4-5"
Habitat: weedy fields, open floodplains, prairies, parks, and backyards
Food: seeds from thistle, sunflowers, birch, cedars, and grasses
Nesting: female builds nest high in a shrub or sapling where two or three vertical branches join
Fun Fact: unlike most birds they are strict seed/plant eaters, very rarely eating insects

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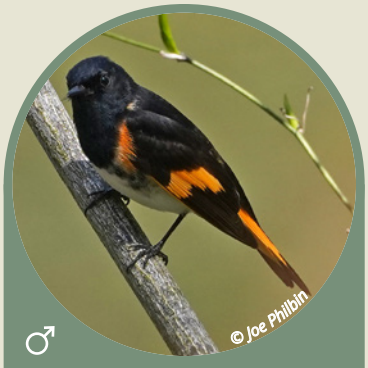

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Setophaga ruticilla
American Redstart

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 4.5-5.5"
Habitat: deciduous forests, woodlands with shrubs, and often near water
Food: mostly insects like flies and moths, also berries and fruits in late summer
Nesting: usually supported by main trunk of tree. common nest trees include maple, birch, and ash
Fun Fact: they flash the bright red patches in their tail to scare insects so they can prey on them

♀

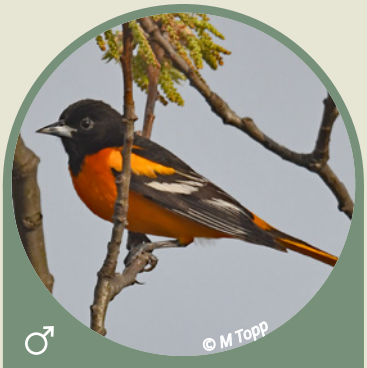
Turdus migratorius
American Robin

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 9-10"
Habitat: lawns, parks, wooded areas, and forests
Food: forage on the ground for a variety of intertebrates, or fruits and berries
Nesting: lower branches in trees, also on structures, gutters, and leaves
Fun Fact: can nest up to 3 times in a season. despite being the symbol of spring, robins are in our area all year



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Icterus galbula
Baltimore Oriole

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 6.7-7.5"
Habitat: open deciduous forests, forest edges, river banks, and parks
Food: insects, fruit, and nectar
Nesting: they build a sock-like nest that hangs from thin forked branches
Fun Fact: male orioles do not molt into their bright plumage until they are 2 years old

♀

Eastern Bluebird: A Triumph of Human Stewardship

Illustration by Catherine Hu

Once teetering on the brink of decline, the Eastern Bluebird has become a shining example of how human intervention can reverse environmental loss. In the mid-20th century, bluebird populations plummeted due to habitat destruction and competition from invasive species like European Starlings and House Sparrows. Thanks to passionate conservationists and community science, the tide turned.

The key to their comeback? Nest boxes, bluebird trails, and restoration of native plants have all played a role in increasing their food supply and population growth. Across North America, volunteers installed thousands of specially designed bluebird boxes, giving these cavity-nesting birds safe places to breed. Public awareness campaigns and local monitoring programs of these boxes and trails further bolstered their numbers. Today, Eastern Bluebirds are thriving in parks, backyards, and open woodlands—often singing their sweet, warbling tunes from fence posts and tree branches.

This recovery is not just about birds—it is about people. It is a testament to what communities can achieve when they rally around a cause. The Eastern Bluebird's resurgence reminds us that with knowledge, commitment, and collaboration, we can restore balance to our ecosystems and celebrate the beauty of nature once more.

Poecile atricapillus
Black-capped Chickadee

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 5-5.5"
Habitat: forests, open woodlands, parks, and disturbed areas
Food: mostly insects in summer, along with seeds, berries, suet, and peanuts
Nesting: cavities from woodpeckers or excavated themselves, and nest boxes
Fun Fact: chickadees cache food, meaning they hide it for later. they can remember thousands of hiding spots

Cyanocitta cristata
Blue Jay

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 9.5-11.5"
Habitat: forests, especially forest edges, and forests with oaks. common in suburbs and urban areas
Food: insects, nuts, seeds, small animals, eggs, and nestlings of other birds
Nesting: outer branches of trees between 10-30 feet from the ground
Fun Fact: although we see them year-round in our area, Blue Jays do migrate each season

Bombycilla cedrorum
Cedar Waxwing

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 6-7"
Habitat: parks, woodlands, suburban areas, and urban areas
Food: fruits like serviceberry, dogwood, hawthorn, and juniper; or insects
Nesting: close to the ground up to 50 feet in a forked branch
Fun Fact: they have a waxy, red secretion on the tips of some of their wing feathers which gives them their name

Spizella passerina
Chipping Sparrow

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 5-6"
Habitat: woodland edges, forests, parks, and backyards with shrubs
Food: seeds, small fruits, and many insects in summer
Nesting: female typically builds a nest low (less than ~10') in evergreens, sometimes in deciduous trees
Fun Fact: they often use animal hair to line their nests

To Garden for Insects is to Garden for Birds


© Matt Igleski

Nearly all North American terrestrial birds depend on insects and other arthropods for survival, especially during the breeding season. Soft-bodied insects such as butterfly and moth larvae (i.e., caterpillars) are critical to reproduction as they are packed with protein and are easily digested by nestling birds. Thousands of these insects are required between hatching and fledging. Most adult birds also rely on insects for food, primarily insectivorous species such as swallows, vireos, and warblers. Even in the dead of winter, resident birds, including woodpeckers, chickadees, creepers, kinglets, and others, find sustenance in the form of overwintering insect larvae and pupae.

To garden for insects is to garden for birds. If encouraged, the balance of nature, refined over thousands of years, can exist and even flourish in urban and suburban landscapes. Installing native host plants for butterflies and moths will increase the biomass of food available for birds to thrive. Eliminating pesticides, retaining leaf litter, reducing turfgrass, diminishing excessive lighting, and researching targeted methods for controlling mosquitoes and other nuisance insects encourage insect-friendly habitats while minimizing negative human-insect interactions. Learning insect identification and behavior while observing the ecological connections made possible in residential landscapes is both educational and fun.


© M Topp

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Junco hyemalis
Dark-eyed Junco

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 5.5-6.5"
Habitat: open woodlands, fields, roadsides, parks, and gardens
Food: primarily seeds like chickweed, buckwheat, and sorrel
Nesting: nest north of Indiana, or at higher elevations
Fun Fact: one of the most common birds in North America, but has 15 subspecies. slate-colored is the one we typically see in Indiana


© Greg Neise

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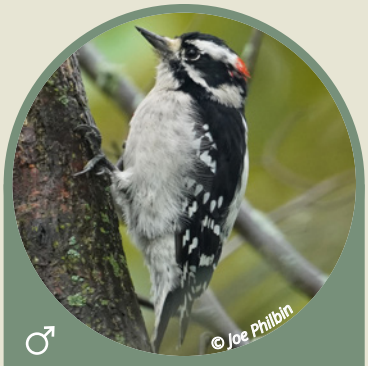
© Joe Philbin

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Dryobates pubescens
Downy Woodpecker

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 6-7"
Habitat: woodlands often near water, parks, suburban areas, and urban areas
Food: mostly insects, but also berries, nuts, grains, suet, and sunflowers
Nesting: excavates a cavity in a dead tree or a dead part of a tree
Fun Fact: woodpeckers do not sing songs, they drum loudly to attract mates and claim a territory


© Keshava Mysore

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© Keshava Mysore

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Sialia sialis
Eastern Bluebird

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 6-8"
Habitat: open areas near trees, forest openings, parks, prairies, and backyards
Food: mostly insects, but will eat fruits as needed, or berries in fall and winter
Nesting: natural cavities like old woopecker holes and nest boxes
Fun Fact: they can have multiple broods in a single season. young from the later nest will often stay with the parents all winter


© Keshava Mysore

♀


© Joe Philbin

Sayornis phoebe
Eastern Phoebe

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 5.5-6.5"
Habitat: wooded areas often near water
Food: primarily insects, and some small fruits and seeds
Nesting: build nests under overhangs—often on structures like building eaves, decks, and pavilions
Fun Fact: phoebes will often reuse nests year after year


© Keshava Mysore

The Sandhill Crane Population Resurgence


Illustration by Catherine Hu

The Sandhill Crane, *Antigone canadensis,* a tall, marsh-loving bird seen throughout the Indiana's Dunes Region, has made a remarkable comeback.

According to *Conservation Genetics* and *Handbook of Birds of the World*, by 1930, Sandhill Cranes were nearly extinct east of the Mississippi due to habitat loss, hunting, and competition with Snow Geese. Their numbers dropped below 1,000 by 1940. Today, thanks to conservation efforts and range expansion, breeding pairs thrive in Indiana!

These majestic birds, with wingspans reaching over 7 feet, migrate in massive "V" formations, gliding on thermals and filling the air with their distinctive rolled "r" calls.

Indiana celebrates their resurgence with events like the Marsh Madness Festival in Linton and the Jasper-Pulaski Open House, where thousands gather to witness their migration. From Wisconsin to Florida, their growing presence signals a conservation success and a renewed connection to Indiana's wild wetlands.

Phymer, Judith M., et al. "Mitochondrial phylogeography, subspecific taxonomy, and conservation genetics of sandhill cranes (Grus canadensis; Aves: Gruidae)." Conservation genetics 2.3 (2001): 203-218. 2.3 (2001): 203-218.


© Keshava Mysore

Vireo olivaceus
Eastern Warbling Vireo

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 4.5-5"
Habitat: mature deciduous forests often near water
Food: primarily invertebrates like caterpillars, moths, bees, and spiders, or fruits and berries like elderberry
Nesting: outer edges of deciduous trees and shrubs, from 3-140' high
Fun Fact: they can spot cowbird (a nest robber) eggs and remove them from their nests


© Keshava Mysore


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Dumetella carolinensis
Gray Catbird

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 8-9"
Habitat: scrubland and forest edges, shrubs and trees, or disturbed areas in neighborhoods
Food: mostly insects, also fruits and berries such as elderberry, poison ivy, cherry, and blackberry
Nesting: hidden in dense shrubs or small trees, usually ~4' above the ground
Fun Fact: they can sing for a long time—up to 10 minutes


© Keshava Mysore


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Cardinalis cardinalis
Northern Cardinal

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 8.5-9"
Habitat: dense vegetation like forest edges, backyards, and fields
Food: insects, or seeds and fruits from plants like grasses and sedges
Nesting: often hidden in the forked, smaller branches of dense trees and shrubs
Fun Fact: female cardinals are one of the few female songbirds that sing in North America


© Carlos Navarro Gonzalez ♀


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Troglodytes aedon
Northern House Wren

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 4-5"
Habitat: wide variety of habitats in shrubs and trees, suburban areas, urban areas, and parks
Food: spiders, aphids, and insects like beetles, caterpillars, and flies
Nesting: old woodpecker cavities, crevices, and nest boxes
Fun Fact: they compete with bluebirds, chickadees, warblers, and tree swallows for nesting cavities

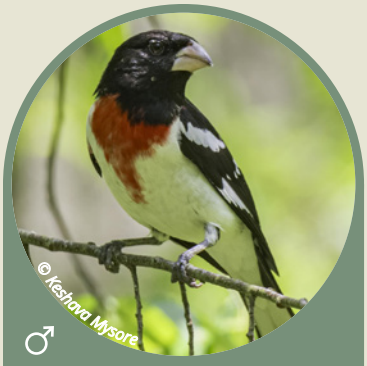

© Joe Philbin

Cats and Predatory Behavior

In North America, domestic house cats (*Felis catus*) represent one of the gravest threats to bird populations. Estimates vary, but the overall number of birds killed by domestic outdoor cats is in the billions annually. Imported to North America by European settlers, house cats did not coevolve with native wildlife. As a result, songbirds lack natural defense adaptations against cats. This makes them easy prey to the introduced predators who hunt not always for food, but by the instinct of the chase and kill. Predation by cats is particularly impactful during nesting season when clutches of baby birds depend on their parents for survival.

Feral populations aside, cat owners can help birds and pets alike by keeping cats inside and encouraging their friends, family members, and neighbors to do the same. Not only do indoor cats not pose a threat to songbirds and other wildlife, they also live longer, healthier lives (3 to 6 times longer than outdoor cats) without exposure to threats from cars, predation, disease, poisons, traps, and other potentially fatal elements.

Illustration by Catherine Hu



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Pheucticus ludovicianus

Rose-breasted Grosbeak

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 7-8″
Habitat: deciduous and mixed forests, forest edges, parks, and suburban areas
Food: primarily insects in summer, also fruits, seeds, and berries
Nesting: typically in a sapling placed on the fork of two branches
Fun Fact: grosbeaks seen in your backyard may travel as far south as Colombia in the winter

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Archilochus colubris

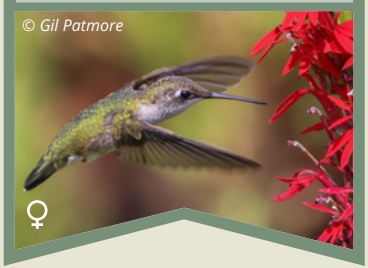
Ruby-throated Hummingbird

DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 3-4″
Habitat: deciduous forests, forest edges, and backyards
Food: flower nectar, insects, and spiders
Nesting: tiny cup nests made of spider silk and lichens, usually placed on small branches 10-40′ above the ground
Fun Fact: tiny hair-like structures on their tongues help them lap up nectar. can flick in and out 13 times per second



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Baeolophus bicolor

Tufted Titmouse

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 5.5-6.3″
Habitat: deciduous and mixed forests, areas with dense canopies, parks, and suburban areas
Food: mainly insects in the summer; also seeds, berries, and nuts
Nesting: use natural holes or old cavitites from woodpeckers
Fun Fact: they will take sunflower seeds and hammer them open while holding them with their feet

Zonotrichia albicollis

White-throated Sparrow

NON-DIMORPHIC

Present in the Region

J F M A M J J A S O N D

Size: 6-7″
Habitat: prefers dense, brushy vegetation, often near water
Food: fruits like sumac, cranberry, rose, blueberry, and dogwood, or insects in the summer
Nesting: nest north of Indiana
Fun Fact: there are two color forms not related to sex: white-striped (above) and tan-striped (below). pairs usually comprised of one of each color form

Effect of Windows on Birds

If you suspect a bird has sustained a glass collision, call a wildlife specialist or visit:
www.humaneindiana.org/i-found-an-injured-or-baby-animal

Every year, birds mistakenly fly into transparent glass that they cannot detect. Birds will also fly towards reflective glass mirroring the sky, plants, or themselves!

Window strikes increase during the spring and fall migration seasons. Many of these birds are passing through from natural habitats and have not learned to navigate the dangers presented by man-made structures.

A 2014 study by the US Fish and Wildlife Service and the Smithsonian Institution estimated that between 365 and 988 million birds are killed annually by building collisions in the United States (NABCI 2014). Almost 45% of all bird-glass deaths come from private residences.

You can reduce surface collisions by:

- Creating patterns on outside glass surfaces with vertical markings 4" apart or horizontal markings 2" apart
- Installing external screens on windows
- Closing blinds or curtains
- Moving interior plants away from windows

Products for home use:

www.collidescape.org
www.featherfriendly.com
www.windowalert.com

Illustration by Catherine Hu

(NABCI) North American Bird Conservation Initiative, U.S. Committee. "The State of the Birds 2014 Report." U.S. Department of Interior, Washington, D.C. (2014): 16 pp.

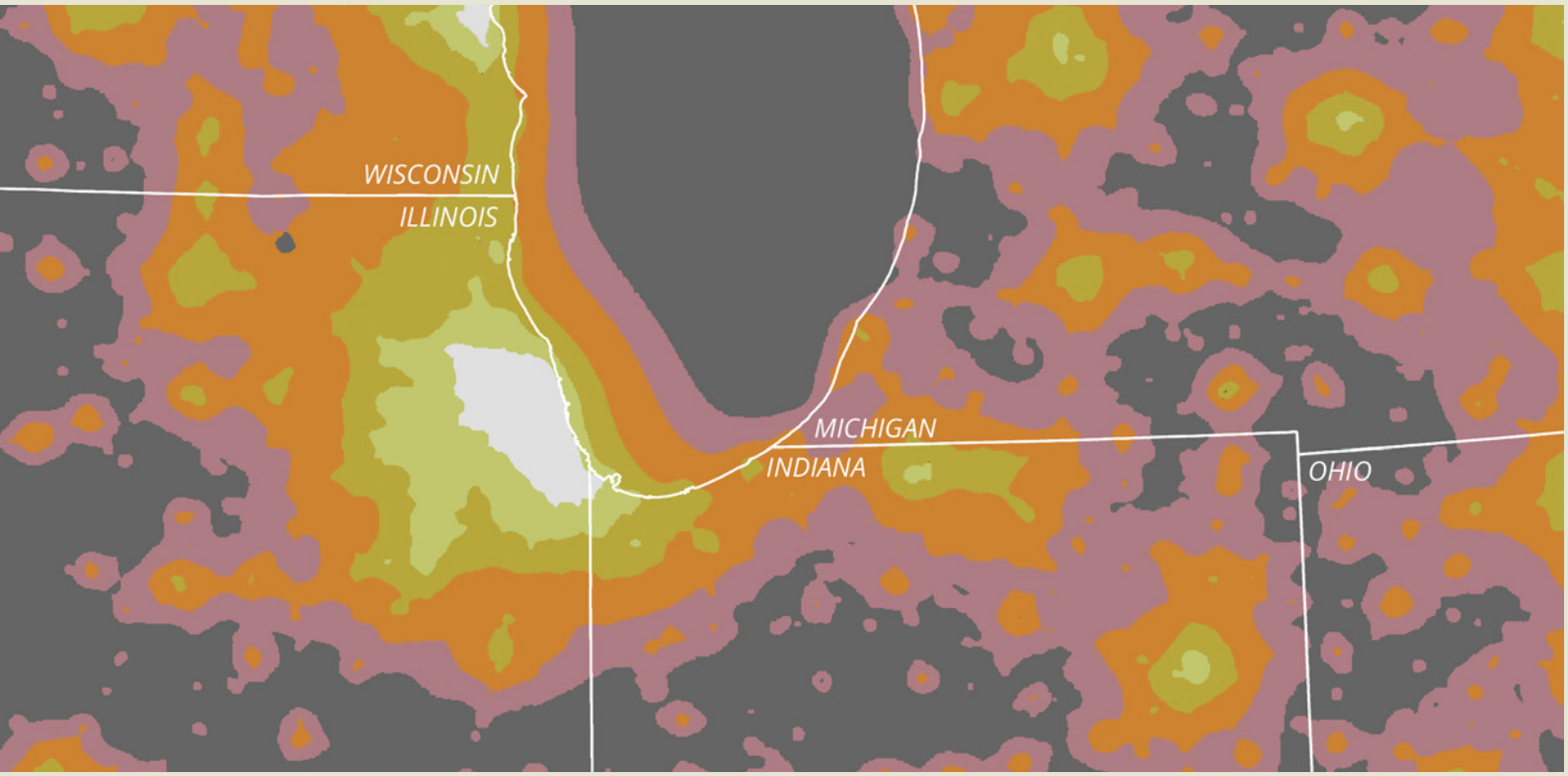
Effect of Light Pollution on Migrating Birds

Exterior artificial lights can disorient night migrating birds, increase building collisions, and even exhaust birds by keeping them in the light. Taller buildings near the lakefront that have bright display lighting are especially prone to bird collisions.

Lights Out is a national effort to reduce this problem by working with building owners and residents to turn off all unnecessary lights during Spring migration (March 15 to June 15) and Fall migration (August 15 to November 15).

Light pollution is a human-made phenomenon, altering naturally occurring outdoor light levels. Like water and air pollution, light pollution affects humans as much as birds, pollinators, or other mammals. By simply using fully shielded or timer based outdoor lights, the effects can be minimized. ***The map below shows levels of light pollution.***

LOW ◀ ▶ **HIGH**



Native Plants for Birds

Over evolutionary time, birds and insects have formed close, symbiotic relationships with native plants. Native trees, shrubs, sedges, grasses, and forbs all play vital ecological roles in supporting bird populations. Trees offer nesting sites, shrubs provide shelter, and native plants sustain the insects birds need to raise their young. Native plants also produce seeds, fruits, and sap—important food sources throughout the year. The plants featured here represent just a small selection of native species that can enhance your landscape while supporting birds year-round.

Illustration by Catherine Hu

Celtis occidentalis Hackberry

TREE

Size: up to 80' height, 40' spread
Benefits to Birds: provides winter fruits. hosts over 40 species of caterpillars which feed young birds. supports open-cup nesting songbirds
Birds Attracted: waxwings, robins, flickers, woodpeckers, bluebirds, catbirds, orioles, and thrushes
Feature: hackberry galls caused by plant lice are an important food source for birds, especially when the insects emerge in large numbers later in the season
Growing Tips: full sun. galls covering the leaves is normal
Bloom Time: April-May

Crataegus spp. Hawthorn species

TREE

Size: up to 30' height, 15-25' spread
Benefits to Birds: provides fruit and secure nesting sites
Birds Attracted: waxwings, robins, flickers, woodpeckers, bluebirds, catbirds, orioles, and thrushes
Feature: thorns on the trees can protect nests from predators such as raccoons
Growing Tips: full sun to partial shade and well-drained soil. young trees may need watering but older ones can be drought resistant
Bloom Time: April-June (depending on the species)

Betula papyrifera Paper Birch

TREE

Size: up to 50' height, 20' spread
Benefits to Birds: provides seeds and sap for food. hosts insects. bark used for shelter. Nest bearing cavities in older birches
Birds Attracted: chickadees, titmice, sparrows, and cardinals
Feature: sapsuckers drill holes that allow hummingbirds to access the sap early in the season. has distinct white, peeling bark
Growing Tips: full sun to part shade and acidic, sandy, well-drained soil
Bloom Time: April - May

Pinus strobus White Pine

TREE

Size: 50-80' tall, 20-40' spread
Benefits to Birds: provides seeds and insects for food. dense, year-round needles provide protection from harsh winter winds. soft needles can be used as nesting material. tree structure allows for safe roosting
Birds Attracted: grackles, raptors, crows, finches, jays, and woodpeckers
Feature: there were historically white pine savannas in the Indiana Dunes, but most were clear cut to rebuild Chicago after the legendary fire
Growing Tips: full sun, acidic soil
Bloom Time: March-April

Importance of Oaks: A Key Relationship with Blue Jays

Oaks are the dominant tree genus in the Indiana Dunes Region. Black oaks grow abundantly on the dry sand ridges, red oaks tower in the low swamp forests behind the dunes, and white oaks fill in the gaps. In addition to being one of the most common tree types in the region, oaks also hold an incredibly important place in the duneland ecosystem. Oaks provide food and habitat for a huge number of the region's fauna—from deer and turkeys to moth larvae.

However, one of the most conspicuous plant-animal relationships in the dunes is that between oaks and Blue Jays. Blue Jays play a crucial role in spreading acorns far and wide. Unlike squirrels, which bury acorns nearby, Blue Jays can carry multiple acorns at once, storing them up to a mile away. Their knack for caching acorns, often in spots they will later forget about, leads to new oak trees sprouting in places where they otherwise would not have grown. This relationship helps oaks expand their range, ensuring oak forests for future generations of duneland residents.

There are many other groups of trees native to the dunes. This includes maple, ash, birch, beech, cherry, and others. All play important roles in native ecosystems and provide food or shelter for native wildlife. But, if you had to choose just one tree to plant in your yard this year, an oak just might be the most impactful choice you can make.

Corylus americanus
American Hazelnut

SHRUB

Size: 8-15' height, 8-12' spread
Benefits to Birds: provides nuts and insects for food. mid-sized understory shrub provides height and form for nesting songbirds, providing protection from both predators and weather
Birds Attracted: jays, warblers, sparrows, cardinals, thrashers, vireos, orioles, and wrens
Growing Tips: full sun to partial shade. plant at least two different plants that are genetically different and can cross-pollinate to produce nuts. avoid fertilizing
Bloom Time: March-April

Viburnum prunifolium
Blackhaw

SHRUB

Size: 10-15' height, 6-12' spread
Benefits to Birds: provides berries and insects for food. dense clumps provide shelter for nesting and weather.
Birds Attracted: robins, cardinals, waxwings, thrashers, bluebirds, grosbeaks, vireos, and tanagers
Feature: viburnums support up to 100 different species of native caterpillars
Growing Tips: full sun to partial shade. trim/prune for height maintenance
Bloom Time: May-June

Sambucus canadensis
Elderberry

SHRUB

Size: 5-12' height, 5-12' spread
Benefits to Birds: provides berries and insects for food. dense clumps provide shelter for nesting and inclement weather
Birds Attracted: buntings, tanagers, waxwings, robins, catbirds, bluebirds, chickadees, and sparrows
Feature: the soft central pith of young stems can be hollowed out to make whistles. flowers are very aromatic
Growing Tips: partial to full sun. fast growing and prefers moist, fertile soil
Bloom Time: May-July

Aronia spp.
Glossy Chokeberry

SHRUB

Size: up to 7' height, 6' spread
Benefits to Birds: provides dense cover for escape against predators or weather. provides understory height for songbird nests
Birds Attracted: waxwings, robins, flickers, woodpeckers, bluebirds, catbirds, orioles, thrushes, grosbeaks, jays, and crows
Feature: birds leave berries until later in the season when they are sweet and less tart
Growing Tips: full sun to part shade. trim/prune for height maintenance
Bloom Time: April - May

Lonicera reticulata
Grape Honeysuckle

SHRUB

Size: up to 12' height, 4-12' spread
Benefits to Birds: nutritious berries for overwintering birds. provides escape cover and winter shelter for small birds
Birds Attracted: hummingbirds, waxwings, robins, catbirds, orioles, thrushes, thrashers, and juncos
Feature: the native honeysuckles offer a more nutrient rich fruit unlike the non-native asiatic bush honeysuckles
Growing Tips: full sun to partial shade. support the leggy branches using a trellis or fence. prune overly long or dead branches in late winter/early spring
Bloom Time: May-July

Salix humilis
Prairie Willow

SHRUB

Size: 3-12' height, 3-12' spread
Benefits to Birds: early food source for insect eaters. dense clumps provide escape cover and winter shelter for many small birds
Birds Attracted: sparrows, chickadees, warblers, kinglets, catbirds, and flycatchers
Feature: fluff from the flower cluster, or 'catkin', is used by hummingbirds, kingbirds, orioles, and warblers
Growing Tips: full sun. once established, it can be drought tolerant and is highly adaptable in dry soils
Bloom Time: April-May

Carex vulpinoidea
Fox Sedge

SEDGE

Size: 1' height, 1' spread
Benefits to Birds: provides seeds and insects for food. long and sturdy blades used for nests. can cover ground-built nests from weather or predators
Birds Attracted: wrens, cardinals, sparrows, and sora
Fun Fact: vulpinoidea translates to its inflorescence, or flower clusters, looking like a foxtail
Growing Tips: full sun to part shade. can handle wet or mesic soils. great for bioswales and rain gardens
Bloom Time: May - July

Koeleria macrantha
June Grass

GRASS

Size: 1' height, 1' spread
Benefits to Birds: provides seeds and insects for food. blades can be woven together to support nest building. seed fluff can be used for nest lining
Birds Attracted: finches, sparrows, juncos, and doves
Feature: as a cool season grass, it blooms early providing nice structure to your landscape
Growing Tips: full sun and well drained soil. does well in sand or gravel
Bloom Time: May-June

Schizachyrium scoparium
Little Bluestem

GRASS

Size: 2-4' height, 1-3' spread
Benefits to Birds: provides seeds and insects for food. leaf blades can be woven together to support nest building
Birds Attracted: finches, sparrows, juncos, and other songbird seed eaters
Feature: due to its dense, clump forming stature, it provides great habitat for ground nesting birds
Growing Tips: full sun, avoid fertilization, especially nitrogen, and only water sparingly once established
Bloom Time: August-September

Eragrostis spectabilis
Purple Love Grass

GRASS

Size: 1.5' height, 1' spread
Benefits to Birds: provides seeds for food. blades can be woven together to support nest building. seed fluff can be used for nest lining
Birds Attracted: finches, sparrows, juncos, and doves
Feature: adds an airy, reddish-purple, cloudy structure to your landscape
Growing Tips: full sun and well drained soil. does well in sand or gravel. can be used as a border planting, green roof, xeric garden, and in cut-flower arrangements
Bloom Time: July-September

Illustration by Catherine Hu

Solidago caesia
Blue-stemmed Goldenrod

FORB

Size: 1-2.5′ height, 1-2′ spread
Benefits to Birds: provides seeds and insects for food. seed fluff can be used for lining nests
Birds Attracted: cardinals, chickadees, titmice, sparrows, juncos, and other seed eaters
Feature: visually stunning with its wreath-like, yellow flowering, oftentimes bluish and waxy stems
Growing Tips: naturally grows in filtered shade. in full shade it will not bloom as full. can handle full sun, but will require more water
Bloom Time: August-October

Amorpha canescens
Leadplant

FORB

Size: 2′-3′ height, 2′-3′ spread
Benefits to Birds: host to various protein-rich insects such as grasshoppers. provides seeds for food. shrub-like growing habit allows birds to perch
Birds Attracted: goldfinches, titmice, sparrows, juncos, and other seed eaters
Feature: the taproot can grow up to 15′ straight underground
Growing Tips: full sun. slow growing and can take 2-3 years to flower. does not tolerate heavy, wet, water-logged conditions
Bloom Time: June - July

Lespedeza capitata
Many-headed Bushclover

FORB

Size: 2-4′ height, 1-3′ spread
Benefits to Birds: seeds are an important part of game birds' winter diet as well as for songbirds. host to various nutrient rich caterpillars
Birds Attracted: upland game birds, doves, juncos, titmice, finches, and sparrows
Feature: keeps its fruit up all winter, giving a nice winter aesthetic for seasonal landscapes
Growing Tips: full sun. once established, it can be drought tolerant and is highly adaptable in dry soils
Bloom Time: July-August

Liatris aspera
Rough Blazing Star

FORB

Size: 2-4′ height, 1-2′ spread
Benefits to Birds: provides nectar, seeds, and insects for food. persistent stems could offer structural support for low to ground nest builders
Birds Attracted: hummingbirds, finches, titmice, juncos, and sparrows
Feature: a magnet for nectar feeding bees, butterflies, moths, and hummingbirds. gorgeous purple flowerheads bloom from the top of the stem downward
Growing Tips: full sun and well-drained soil
Bloom Time: August-October

Native vs. Non-native Plants: Do Birds Care?

Many non-native plants, like bush honeysuckle and burning bush, produce abundant berries which can make them seem like ideal food sources for birds. While invasive shrubs do provide quantity, they fall short in nutritional value. Research shows that fruits from non-native plants contain far lower energy density and fat content than those from native species—nutrients birds critically need during migration and breeding.

A bird relying on non-native fruit is like a person fueling up on candy bars before a marathon. This creates a harmful cycle. Birds that eat nutrient-poor fruits from readily available non-native shrubs spread these seeds which helps invasive plants multiply. As they spread, they displace native plants—the very species that offer birds the high-quality food they need.

The impacts go beyond berries. According to a 2019 study (M. Richard et al.), there is up to 96% less caterpillar biomass and 68% fewer caterpillar species on thickets of non-native shrubs when compared to native shrubs. Fewer caterpillars mean fewer nutritious meals for birds—not to mention impacts on moth and butterfly populations!

By removing non-native invasive plants from your yard and replacing them with native species, you can help restore these vital food webs.

Plant Native. Support Wildlife. Break the Cycle!

Richard, M., Tallamy, D.W. & Mitchell, A.B. Introduced plants reduce species interactions. Biol Invasions 21, 983–992 (2019).

Polygonatum biflorum
Smooth Solomon's Seal

FORB

Size: 1-3′ height, 1′ spread
Benefits to Birds: provides berries for woodland and ground-feeding birds
Birds Attracted: jays, doves, robins, and thrushes
Feature: attractive foliage and structure. Native Americans used the thick, underground stems as a food source
Growing Tips: partial to full shade. once established can be drought tolerant
Bloom Time: May-July

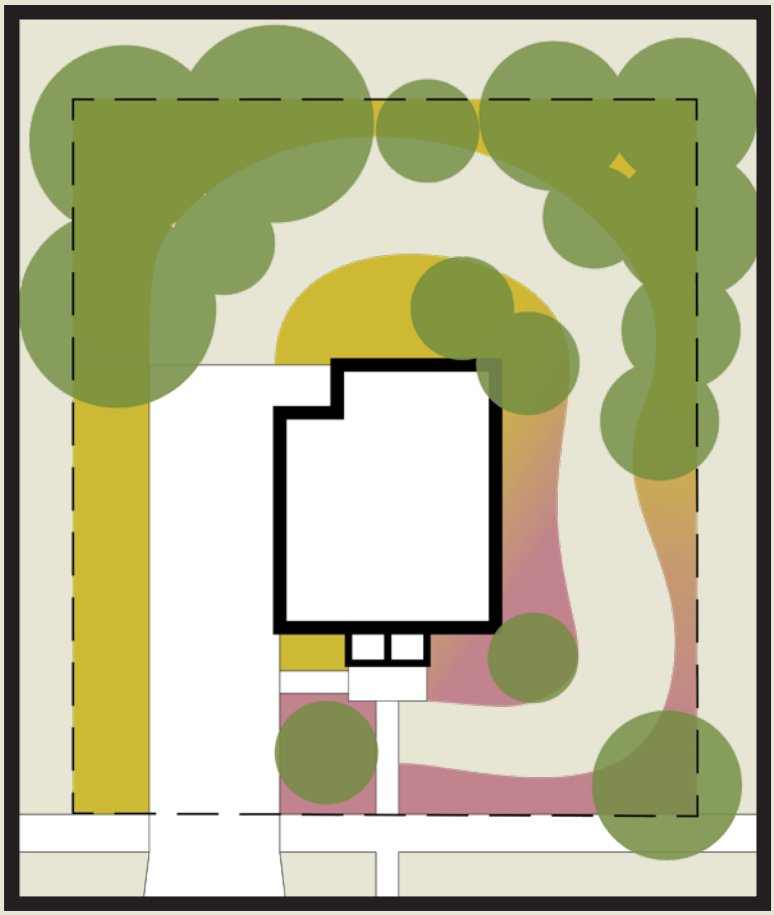
Silene stellata
Starry Campion

FORB

Size: 1.5-3′ height, 1-2′ spread
Benefits to Birds: provides insects for food
Birds Attracted: insect eating birds such as chickadees, wrens, and titmice
Feature: the rare Campion Coronet Moth gets its nectar from the starry campion while helping pollinate it. its caterpillars feed on some of the seeds, striking a careful balance between their own survival and the plant's ability to reproduce
Growing Tips: partial shade to full sun and dry soil
Bloom Time: July-August

Example Garden Design

Adding several layers of vegetation is key when you are designing a garden for birds. As you use this guide to help arrange your own garden, be sure to review each native plant's height, bloom season, and use for birds. All specified plants can also tolerate a variety of sun exposure and soil types within the region. Refer to pages 10-13 to help choose the best plants for your specific conditions.



Understanding the Guide:

Layering plants of different heights and types creates a garden full of vertical habitats for birds. Trees provide high perches for observing surroundings and building nests, while dense shrubs and grasses offer shelter from predators and harsh weather. Native forbs attract insects rich in protein. Fallen sticks, dried plants, and grass blades can be used by birds for nesting materials.

In residential landscapes, shrubs can also screen neighbors and dampen sound, forming a comfortable mid-layer. Trees add shade and height that draw your eyes upward towards the sky - and the birds! Sedges, grasses, and forbs bring seasonal color and movement, making gardens lively year-round.

Unlike previous volumes that focused on plants for specific ecosystems, these examples show how a mix of native plants can provide the essential food, shelter, and protection birds need to feel safe, whether they are passing through during migration or living in your yard full-time.

- **Tree Layer**
- **Shrub Layer**
- **Sedge, Grass, and Forb Layer**

Landscape Vision

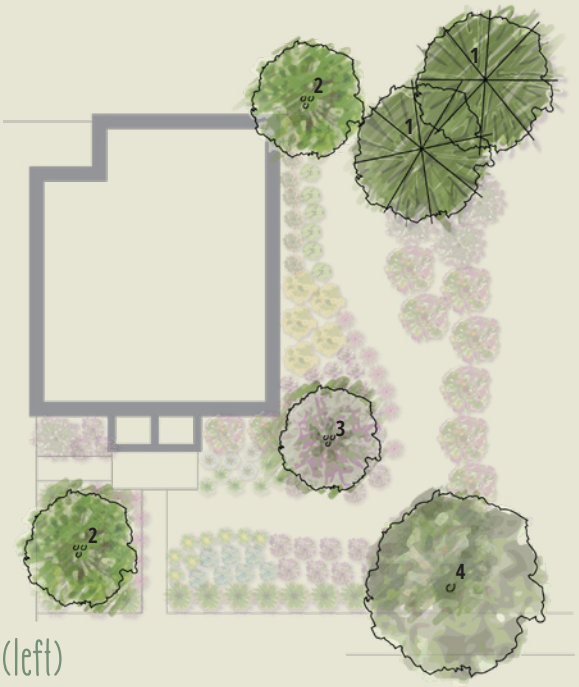
The layering of your garden can be very simple by following the basic rules of landscaping: tall in the back and short in the front. The visual to the right shows, at real scale, the effects of layering plant types—from forbs and grasses to low and tall shrubs, and on to understory and shade trees. This layering provides birds with a one-stop shop for their needs. When mom and babies are safely in their nest in the hackberry tree, dad is out scoping the forbs for insects to bring home.

Trees (right)

Example Tree Options

1. **White Pine,** *Pinus strobus*
2. **Paper Birch,** *Betula papyrifera*
3. **Hawthorn,** *Crataegus spp.*
4. **Hackberry,** *Celtis occidentalis*

Alternatives
White Oak, *Quercus alba*
Sugar Maple, *Acer saccharum*
Common Pawpaw, *Asimina triloba*
River Birch, *Betula nigra*
Tulip Tree, *Liriodendron tulipifera*
Common Serviceberry, *Amelanchier arborea*



Shrubs (left)

Example Shrub Options

1. **Blackhaw,** *Viburnum prunifolium*
2. **Elderberry,** *Sambucus canadensis*
3. **Grape Honeysuckle,** *Lonicera reticulata*
4. **Glossy Chokeberry,** *Aronia spp.*
5. **American Hazelnut,** *Corylus americanus*
6. **Prairie Willow,** *Salix humilis*

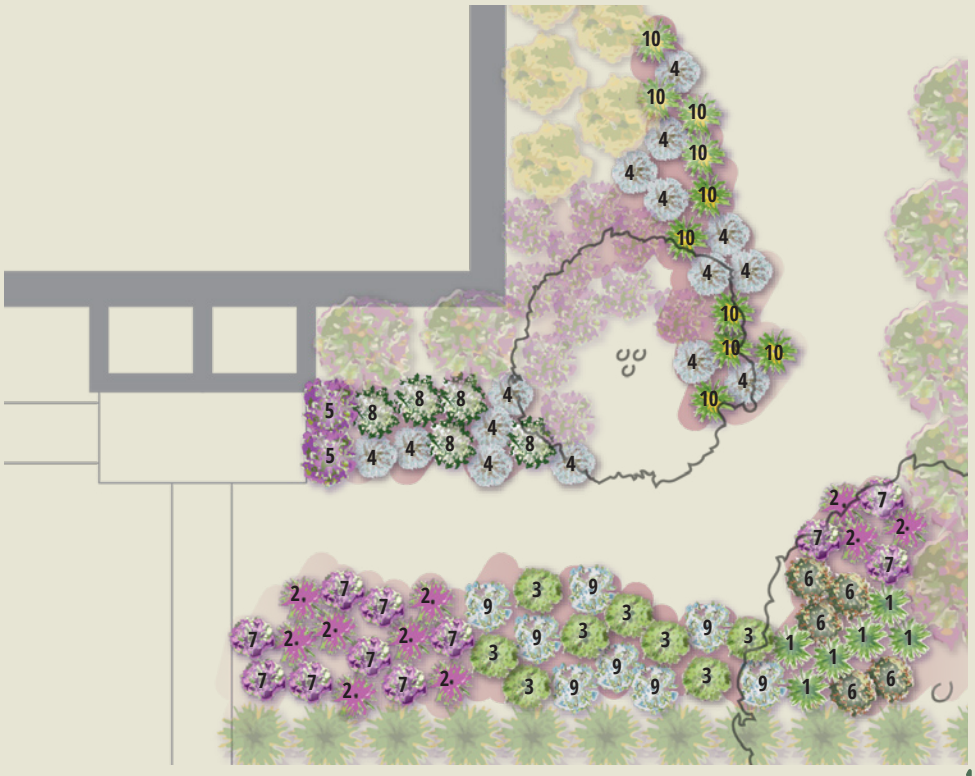
Alternatives
Pagoda Dogwood, *Cornus alternifolia*
Northern Bush Honeysuckle, *Diervilla lonicera*
Winterberry, *Ilex verticillata*
Sand Cherry, *Prunus pumila*
Fragrant Sumac, *Rhus aromatica*
Lowbush Blueberry, *Vaccinium angustifolium*
Mapleleaf Viburnum, *Viburnum acerifolium*

Sedges, Grasses, and Forbs (right)

Example Sedge, Grass, and Forb Options

1. **Fox Sedge,** *Carex vulpinoidea*
2. **Purple Love Grass,** *Eragrostis spectabilis*
3. **June Grass,** *Koeleria macrantha*
4. **Little Bluestem,** *Schizachyrium scoparium*
5. **Leadplant,** *Amorpha canescens*
6. **Many-headed Bushclover,** *Lespedeza capitata*
7. **Rough Blazing Star,** *Liatris aspera*
8. **Smooth Solomon's Seal,** *Polygonatum biflorum*
9. **Starry Campion,** *Silene stellata*
10. **Blue-stemmed Goldenrod,** *Solidago caesia*

Alternatives
Pennsylvania Sedge, *Carex pensylvanica*
Switchgrass, *Panicum virgatum*
Indiangrass, *Sorghastrum nutans*
Canadian Wild Ginger, *Asarum canadense*
Purple Milkweed, *Asclepias purpurascens*
White Wild Indigo, *Baptisia lactea*
Western Sunflower, *Helianthus occidentalis*
Eastern Prickly Pear, *Opuntia cespitosa*
Hoary Vervain, *Verbena stricta*



Getting Started

Creating a bird-friendly backyard begins with observing what you already have—your existing plants and wildlife, as well as conditions like sunlight, shade, and soil moisture. Start small by focusing on essential features, replacing non-native plants with native species, and reducing chemical use. As native plants mature, insects increase, and birds soon follow. You can replace a portion of lawn or add a tree or shrub, and you will notice which plants birds use most. Visit other backyards, gardens, or nurseries for inspiration and ideas. As you update your space, enjoy creating a beautiful and sustainable backyard that supports birds year-round.

Essential Features of a Bird-Centric Garden

Food

Berry-producing shrubs or trees and native plants that produce seeds, support insects, and supply nectar

Water

Shallow, clean, moving water such as bird baths, drippers, solar bubblers, fountains, and ponds

Shelter

Places to hide, rest, nest, and stay warm, including native shrubs, evergreens, layered plantings, and areas with brush and natural debris

Places to Rear Young

Nesting sites, nearby food, and protection from predators and disturbances, provided through dense plantings or nesting boxes

Implementing Your Bird-Centric Garden

Focus on Layering

As you provide canopy, shrub, and ground layers in your garden, more birds will be attracted to safe nesting sites, insect abundance, and protection from predators and weather. You may observe more natural bird behavior as your garden allows foraging for spiders on branches, escaping danger by using evergreens, and hiding nests in dense shrubs.

Add More Water

Birds need water for everyday hydration and temperature regulation, especially when raising young. Bathing supports feather care which helps remove parasites and improves insulation. Natural sources are scarce in developed areas and many birds choose to nest and feed near water.

Think Outside the Feeder

About 90% of terrestrial bird species are insectivorous at least part of the year. Nestlings require insects, especially caterpillars, rich in protein, fats, and moisture. A garden full of insects is not "neglected;" it is a functioning habitat and one of the most powerful things you can do for birds.

Responsible Bird Feeding

A garden designed with native plants provides the essential foods birds need—seeds, berries, and plenty of insects.

In these landscapes, bird feeders are not necessary for survival. However, feeders can offer an enjoyable way to observe birds up close and may help spark curiosity and care for wildlife.

If you choose to use feeders, keep them clean and well-maintained. Wash them regularly and replace old seed to prevent mold and disease. Limit feeding during warm months when natural foods are abundant. Instead focus on creating diverse, native plantings that sustain birds year-round.

Garden Clean Up and Maintenance

Spring Clean-Up

Spring is a time of renewal—for plants, insects, and the birds that depend on them. Before cutting back last year's growth, wait until daytime temperatures are consistently above 50°F, when wintering insects begin to emerge. Old stems and leaves provide shelter for beneficial insects and nesting material for birds. As new shoots appear, gently rake away excess debris to let sunlight reach the soil. This is also a good time to deep clean any bird feeders to prevent disease.

Fall Clean-Up

In fall, less is more. Leave most plant stems and seed heads standing as they offer food and cover for birds through winter. Fallen leaves act as natural mulch, insulating roots, suppressing weeds, and sheltering insect larvae and pupae. Move leaves from lawns into garden beds or around shrubs and trees instead of bagging them. Fallen branches can be stacked into a brush pile to give birds refuge from cold and predators. Autumn is also an ideal time to plant trees and shrubs or sow native seeds that need winter's chill to germinate naturally in spring.

Photo © Susan Kirt

Effects of Garden Chemicals

Healthy bird populations depend on healthy ecosystems. Chemicals used in yards can unintentionally disrupt the food webs birds rely on. Fertilizers, pesticides, and rodenticides affect birds in different ways, but each greatly reduce the quality of habitat in your own backyard.

Synthetic fertilizers may green up a lawn, but they also reduce the beneficial microbes that help native plants thrive. When soil becomes unbalanced non-native plants often dominate. These decrease the diversity of flowers and insects available to birds.

Pesticides reduce food for birds. They kill insects, leaving fewer caterpillars and other invertebrates for birds to feed their young. Because insects are critical for raising chicks, even small reductions can affect breeding success. Mosquito fogging also removes far more than mosquitoes. These broad-spectrum treatments kill a wide range of insects that birds depend on during breeding and migration, when high-protein food is most essential.

Rodenticides secondarily poison many owls, hawks, and other predators when they eat rodents that have consumed these toxic baits, thus weakening or killing the very wildlife that helps keep rodent populations in balance.

Every yard is part of a larger ecosystem, and the choices we make reverberate well beyond our property lines. Reducing chemical inputs allows soil communities to recover, insects to flourish, and predators to stay healthy—all of which help sustain bird populations. By working with nature instead of against it, every homeowner can help rebuild the vibrant, interconnected habitats birds need to survive and thrive.

Native Plant Sales, Resources, and More

Annual Native Plant Sales:

- Chicago Bird Alliance **chicagobirdalliance.org**
- Dunes-Calumet Audubon Society **dunescalaudubon.org**
- Friends of Indiana Dunes **dunefriends.org**
- Friends of (Kankakee) Sands **friends-of-the-sands.com**
- Gabis Arboretum **pnw.edu/gabis-arboretum**
- Indiana Wildlife Federation **indianawildlife.org**
- Wild Ones Gibson Woods **gibsonwoods.wildones.org**

Plant & Birding Resources:

- Audubon Bird Guide **audubon.org/app**
  Free app helps you ID birds
- Indiana Dunes Birding Festival **indunesbirdingfestival.com**
- Merlin Bird ID by Cornell Lab **merlin.allaboutbirds.org**
  Free app helps you ID birds by sound

Garden Centers & Nurseries:

- Bernacchi's Greenhouses, LaPorte, Indiana **bernacchisoakvalleyshop.com**
- Chesterton Feed & Garden Center, Chesterton, Indiana **chestertonfeed.com**
- Native Plants Unlimited, Fishers, Indiana **nativeplantsunlimitedshop.com**
- Possibility Place, Monee, Illinois **possibilityplace.com**
- Prairie Moon Nursery, Winona, Minnesota **prairiemoon.com**

Native Garden Certification & Award Opportunities:

- Indiana Native Plants Society - Grow Indiana Natives **indiananativeplants.org**
- Indiana Wildlife Federation - Certified Wildlife Habitat **indianawildlife.org**
- Shirley Heinze Land Trust - Bringing Nature Home **heinzetrust.org**

To download your copy of our other *Living in the Dunes* guides, visit savedunes.org

Volume 1

A Homeowner's Guide to Landscaping in Indiana's Dune Communities

Features invasive species and native plant identification, template garden designs, resources, and more!

Volume 2

A Homeowner's Guide to Pollinator Garden Landscaping in Indiana's Coastal Communities

Explores local ecosystems, native plants that support pollinators, stunning illustrations, and more!

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