

Breeding Bird Trends in the Chicago Region 1999-2020

Introduction

Protected lands within the Chicago Wilderness area of northeastern Illinois are a stronghold for breeding birds of conservation concern, representing an impressive green space that is of global importance for key avian species and notable for a metropolitan area. This is the major finding of an analysis of breeding bird data collected over 22 years (1999-2020) by the Bird Conservation Network (BCN), a coalition of 21 conservation organizations dedicated to the preservation of birds and the habitats they need to survive. The detailed analysis is available at www.bcnbirds.org/trends21.

This report shares high-level BCN findings by habitat, suggests why certain trends are occurring, and cites topics for potential research. It is our belief that continued monitoring will provide further valuable insight and that collaboration with land managers and research partners will deliver the best results for our breeding birds. We invite your feedback and inquiries.



Photo by Jerry Goldner

About the Survey

Breeding Bird Trends in the Chicago Region 1990-2020 derives from BCN Survey data collected in managed lands within six counties in northeastern Illinois: Cook, Lake, McHenry, DuPage, Kane, and Will.

“The Bird Conservation Network has been a pioneer in using targeted surveys to better understand birds in a region and influence the way that areas are managed to ultimately increase the populations of species that are declining elsewhere.”

Chris Wood, Project Leader, eBird, Cornell Lab of Ornithology

Managed lands span 220,000 acres, or 344 square miles, and represent 9.5 % of the total land in these counties. The survey follows strict protocols for breeding bird point counts in target habitats in the months of June and early July. Habitats surveyed include grassland, shrubland, woodland, and wetland; some data on urban birds was collected incidentally. Over the 22-year analysis period, 29,724 surveys were conducted by volunteer monitors at 2,463 points using a standardized protocol for data collection—an awesome example of “community science” in the service of a long-term goal.

To review survey methodology in detail, visit www.bcnbirds.org/trends21/methods.html.

The BCN Survey design and protocols include a few limitations that should be noted. The results represent trends for sites primarily within managed lands and may not be representative of overall species trends in the region, specifically for species that breed primarily in agricultural and urban areas.

Species analyzed had a minimum of 10 sightings over the period, and important species that did not meet this threshold were therefore not included in survey results, although they remain of conservation interest in the region. Nocturnal birds, secretive wetland species, urban birds and species that do not vocalize in the mornings in June are not surveyed by BCN methods, which means that analysis on these species is unreliable.

In conjunction with the analysis results, we also released an updated list of 2021 *Birds of Concern in the Chicago Wilderness Region*, a report that draws from multiple research sources, including the *Breeding Bird Trends in the Chicago Region* and Partners in Flight (PIF) Special Assessment Database, to identify the species within our region and statewide that are in greatest need of conservation. Birds cited in the *Birds of Concern* depend on our habitats, and many show alarming declines. They are ranked by Levels 1-3, with Level 1 under most threat. To view this report, visit www.bcnbirds.org/trends21/concern.html.

Given the breadth and depth of coverage of the survey, it is a rich repository of historical data for researchers and land managers and a catalyst for action. It also delivers a unique regional view into the greater Chicago Wilderness, which includes protected land in Illinois, Wisconsin, Indiana and Michigan.

A Dynamic Landscape for Breeding Birds

Our findings reveal a dynamic landscape in which some breeding bird species are stable or expanding while others face declines. For example, birds becoming more common include Sandhill Cranes, Pileated



Photo by Jerry Goldner

Woodpeckers, and Northern Mockingbirds, while birds previously in decline appear to be stabilizing or showing growth, such as Red-headed Woodpeckers and Henslow's Sparrows.

At the same time, many species are showing distressing declines, such as Ovenbirds, Bobolinks, and certain other grassland species. Furthermore, the survey data suggests geographic range changes among some species including Acadian Flycatchers and Northern Mockingbirds. Clearly, a complex mix of influences is at work.

Interestingly, the Chicago Wilderness region is a stronghold for important breeding birds within the state.

The analysis shows that 56 percent, more than half of the 104 birds surveyed, are stable or expanding, compared to 37 percent for these same birds in other parts of Illinois, when comparing BCN trends with Illinois trends from the *North American Breeding Bird Survey*—a strongly encouraging finding.

The Power of Proactive Land Management

The proactive efforts to protect and restore habitat in our forest preserve districts, parks, and other natural areas appear to be working for many birds. Practitioners are working hard to understand how to manage habitats for the range of birds using them.

Our grasslands are a stronghold of vanishing habitat and globally important to the survival of some species, such as Henslow's Sparrow. According to Partners in Flight, 57% of all Henslow's Sparrows use

grasslands in Bird Conservation Region (BCR) 22, Eastern Tallgrass Prairie, of which our grasslands are a significant part. Habitat preservation and restoration efforts appear to have been successful as this species continues to expand in our region.

Efforts to restore savanna habitat likely contributed to the return of Red-headed Woodpeckers to our region in small numbers. They had previously shown alarming declines. Other species that use savannas are increasing in number as well.

We have also seen that practices beneficial for one species may be detrimental for other species. For example, clearing understory without replacing it with native plantings can have deleterious impacts on declining shrub- and ground-nesting birds such as Ovenbirds, Brown Thrashers, Field Sparrows, Yellow-breasted Chats, and Veeries. Similarly, throughout Illinois, conversion of fields of short-statured grasses, such as hayfields and fallow fields, to prairie that is dominated by a few tallgrass species has negatively impacted Bobolinks and Grasshopper, Vesper, and Savannah Sparrows, which all prefer short-statured grass. Shrubland and grassland areas present opportunities to explore the delicate balance between managing for invasive species and managing for the needs of the large number of bird species using the habitat. Our analysis illustrates all of these outcomes.



Our region can be a model for balancing overall habitat restoration goals with the needs of specific birds of concern. This can be accomplished through landowner planning efforts.

Findings by Habitat

Grasslands as a Stronghold

Findings

Of the 27 species with sufficient data in our grassland surveys to calculate trends, approximately half are stable or growing while the other half are experiencing declines. Our grasslands are a globally important landscape for the health of Henslow's Sparrows and are used by 13 species listed in the BCN *Birds of Concern*, including Bobolink, Grasshopper Sparrow, and Eastern Meadowlark.

PRIORITY SPECIES FOR CONSERVATION:

Level 1--Henslow's Sparrow, Bobolink

Level 2—Grasshopper Sparrow, Sedge Wren, Upland Sandpiper, Eastern Meadowlark

Level 3—Dickcissel, Northern Harrier, Swainson's Hawk, American Kestrel, Common Nighthawk, Horned Lark, Barn Owl (Rare)

Context

The large grasslands required by grassland birds have dramatically declined nationally and our region is a stronghold of highly concentrated habitat. For this reason, grassland habitat protection and restoration should continue to be a top priority in our region.

Grassland restoration is a relatively new science. Practitioners are still learning how to create the varied conditions tailored to a variety of grassland birds' needs. Many public land agencies have restored the large, unfragmented grasslands that these birds need. For example, some early grassland restorations became dominated with near-monocultures of tallgrass which were not used by grassland birds. Since then, many land managers have eliminated big bluestem and indiangrass from their mixes in favor of little bluestem and other shorter grasses and sedges, or they have experimented with mixing in shorter nonnative grasses in order to encourage grassland bird habitat.

Henslow's Sparrow and Dickcissel: Our Grassland Success Stories

Two important species are faring well in our grasslands: Henslow's Sparrow (Level 1) and Dickcissel (Level 3).

Only an estimated 410,000 Henslow's Sparrows remain in the world. They are declining nationally, but they are expanding in northeastern Illinois, up 3.4% per year in our analysis. Proactive land management in our region has delivered a positive impact; these species generally benefit from restoration efforts and creation of tallgrass prairie with dense thatch. It aligns with their preference for grasslands that are more or less undisturbed, with infrequent burning or grazing.

"In no place in the world will you find a greater concentration of Henslows than in northeastern Illinois; it is a globally important landscape for this bird."

--Jim Herkert
Executive Director, Illinois Audubon Society

The Conservation Reserve Program (CRP), a Farm Bill subsidy which creates habitat on private land, greatly helped Henslow's Sparrows in Illinois in the 1990s by creating new habitat. Should CRP funding decline, the habitat on public lands in the Chicago Wilderness region will become even more important. An estimated 57% of Henslow's Sparrows nationally use BCR 22's tallgrass prairies and grasslands, which includes our grasslands, so protecting their habitat is important for the recovery of the species.



Photo by Eric Secker

Dickcissels show a 5.5% per year increase, perhaps benefiting from restoration efforts aimed at Henslow's Sparrows—they like the same dense prairie. However, according to *Cornell's Birds of the World* ([link](#)), Dickcissels do well in our region when the Great Plains states have droughts. This finding is supported by other studies, including one from the Texas Breeding Bird Atlas ([link](#)), showing that Dickcissel populations vary year to year depending on winter and spring precipitation.

A Few Species Faring Better than National Trends

Field Sparrows (Level 2) are trending negatively nationally but are holding steady in our region. They like grasslands with widely scattered shrubs, a frequent outcome of restoration work in Chicagoland, and they are flexible, using both grasslands and shrublands.

Many aerial insectivores are doing poorly nationally, but some species are doing well in our region's managed lands. Aerial insectivores may be more concentrated in our preserved lands, where insects are likely more prevalent. Tree Swallows may be helped by Eastern Bluebird nest boxes, while Barn Swallows frequently nest in picnic shelters and other structures on managed land.

Notable Species Become More Common

Sandhill Cranes show a positive 7.4% per year growth as they find suitable nesting habitat in our restored grasslands. Overhunting greatly reduced crane populations throughout the Midwest in the early 20th century, but they are no longer hunted in Illinois. They are also acclimating to being around people.

Northern Mockingbirds are also being more frequently sighted and may be experiencing a geographic range change.



The Flip Side: Traditional Grassland Species in Decline

Many traditional grassland species in our area are declining: Bobolink (Level 1), Grasshopper Sparrow (Level 2), Eastern Meadowlark (Level 2), Sedge Wren (Level 2), and Savannah Sparrow are examples.



Bobolinks prefer wetter fields, while our practices on some managed land convert hayfields and fallow fields to monocultures of tall prairie species and associated drier environments over time. That said, we still have more wet grasslands and short-statured grass fields in the Chicago Wilderness region than elsewhere in Illinois. The most successful Bobolink nesting area in Cook County, the Bobolink Land and Water Reserve and Bartel Grassland complex, is a restored prairie/wetland complex where tall-statured grasses were eliminated from the planting mix.

Some farmers delay their hayfield harvests until late summer to give ground-nesting grassland birds such as Henslow's Sparrows and Bobolinks time to nest. Grassland managers in our area also help grassland birds by delaying mowing until after August 1. This practice could be adopted in other unconventional habitats such as landfills or mitigation land.

Bobolinks face threats on their wintering grounds in South America where they are poisoned as agricultural pests. Bobolinks may also be moving north out of our range due to effects of climate change, according to Audubon's *Survival by Degrees*.

RESEARCH QUESTIONS:

- Why are Bobolinks declining in Chicago Wilderness?
- Why do some insectivores appear to be doing better in our grasslands than national trends indicate (such as Tree Swallow and Barn Swallow)?
- What is the impact of declining insect populations on breeding birds?
- What is the right balance of short grass vs. tallgrass to support the largest number of grassland species?
- What is driving the increase of Dickcissels in the survey?
- How are Kestrels doing statewide? How much are they using ag fields?
- Why are Upland Sandpipers disappearing from our grasslands?
- What are best practices for managing invasive sweet clover and tall goldenrod?

Grassland species in decline may also be impacted by their differing preferences. Many grassland birds prefer recently burned areas. An exception is Henslow's Sparrows, which like a deep leaf litter. Grasshopper Sparrows use drier grasslands. Savannah Sparrows thrive in old field habitat, which may be declining in our area as we demand more productivity from our land. Eastern Meadowlarks also like less dense grasslands. These varied preferences make it hard for land managers to manage for all species.

One final positive note: despite the fact that our grassland species are declining in the Chicago Wilderness region, they are declining less rapidly here than elsewhere in Illinois.

Note: Eight other species show declines, but the number of sightings is so low as to prevent analysis. The low number of sightings may suggest these species are in trouble. Species of concern like Upland Sandpiper, American Kestrel, Northern Harrier, and Vesper Sparrow are important priority species not discussed in this report.

Challenge and Opportunity in Ephemeral Shrublands

Findings

Species use of shrublands tells a mixed story, with 20 species—a little more than half of the total of 37— showing stable or increasing trends, while the rest are in decline or have insufficient data. Eleven species appear on the *Birds of Concern* list. Shrubland birds are doing better in

PRIORITY SPECIES FOR CONSERVATION:

Level 1—Black-billed Cuckoo

Level 2—Brown Thrasher, Field Sparrow, Willow Flycatcher, Northern Bobwhite

Level 3—Blue-winged Warbler, Loggerhead Shrike, Yellow-breasted Chat, Bell's Vireo, Eastern Towhee, Prairie Warbler (Rare), Golden-winged Warbler (Rare)

our region than elsewhere in Illinois, when BCN trends are compared with Illinois trends from the *North American Breeding Bird Survey*.

Context

Shrublands are challenging to manage, in part because they are ephemeral, constantly shifting, and essentially successional habitat. Many shrublands have become overrun by invasive plant species which are then cleared; some of these areas merit consideration for replanting with native shrubs since shrublands are used by three dozen species of nesting birds in our region. Phased restoration and maintenance should be practiced at sites with important breeding shrubland birds. Improved understanding of how shrublands are used by birds can especially help species in trouble. As an example, one study showed that Willow Flycatchers prefer wet grasslands with shrubs—great guidance for land managers [link](#).

Shrubland and Edge Species Doing Well

Populations of shrubland and edge species such as Ruby-throated Hummingbird, Warbling Vireo, Common Yellowthroat, and Eastern Towhee (Level 3) show significant increases. These birds and others that are successful in shrublands may be using adjacent habitats too.

Field Sparrows (Level 2) and Brown Thrashers (Level 2) are declining nationally but holding steady in our shrublands. Both species prefer shrublands with adjacent grassland. As formerly cleared forest openings fill in on the East Coast, their habitat there shrinks, making our habitat more important for them.

Other Species Merit Further Study

Of concern is the Willow Flycatcher (Level 2), a specialist needing shrubby clumps in wet grasslands. It is showing a decline of 3.4% per year. In addition, Black-billed Cuckoo (Level 1, declining throughout Illinois) and other species like Loggerhead Shrike show declines, but the BCN Survey had insufficient data to produce reliable trends for these species. They warrant future study.



Photo by Jerry Goldner

RESEARCH QUESTIONS:

- What is the best way to monitor secretive and hard-to-detect species like Black-billed Cuckoo? Is conspecific playback necessary to adequately sample these species?
- Are there habitat changes we can make to bring back Loggerhead Shrikes?
- What is the ideal amount of burning and clearing to support shrubland birds? What are the best configurations of shrubby clumps?
- Does re-creating uneven terrain in restored shrublands that were farmed and tilled help promote wet shrublands and species like Willow Flycatcher?
- What habitats are Blue-winged Warblers and Brown Thrashers using?

Woodlands: Our Most Intact Ecosystem

Findings

Woodlands represent more than half of the survey points in *Breeding Bird Trends in the Chicago Region 1999-2020*. Woodland species are impressively diverse, with 66 species recorded breeding in our region.

PRIORITY SPECIES FOR CONSERVATION:

Level 1—Red-headed Woodpecker, Cerulean Warbler, Eastern Whip-poor-will

Level 2—Yellow-billed Cuckoo, Chimney Swift, American Woodcock, Wood Thrush

Level 3—Northern Flicker, Broad-winged Hawk, Kentucky Warbler, Prothonotary Warbler, Hooded Warbler, Acadian Flycatcher, Ovenbird, Red-shouldered Hawk, Yellow-throated Warbler

Of these, 60 percent are showing stable or increasing trends. The *Birds of Concern* list includes 15 species that rely on woodlands.

Context

Woodlands are our most intact ecosystem because we have retained the oak trees and other trees that form the base of habitat for many species. A century-long absence of burning has greatly affected tree composition. Land managers have begun to address the takeover by fast-growing fire-sensitive and invasive trees (maple, cherry, silver poplar, and

others) that are threatening our woodlands—and birds seem to be responding ([link](#)). The recent focus on savanna restoration likely benefited Red-headed Woodpeckers in particular.

Moderate to Strong Expansion for 22 Breeding Species

Most exciting among expanding populations in our region are Pileated Woodpeckers and Red-headed Woodpeckers (Level 1). Pileated Woodpeckers prefer old woods and their numbers are rising as our



Photo by Jerry Goldner

woodlands are maturing (though the number of records is still low). Red-headed Woodpeckers were in serious decline but appear to be responding well to land management practices that have cleared invasive species, restored open oak woodlands, and restored savanna habitat. They are declining elsewhere in Illinois, possibly because of an insufficient supply of acorns in winter as oak woodlands disappear.

Downy, Hairy, Red-bellied, and Pileated Woodpeckers have been shown to benefit from the bountiful food supply of Emerald Ash Borer larvae. They (and others) also benefit when dead trees are left in place after burning and clearing, where possible.

Northern Flickers (Level 3) are doing well here but declining elsewhere in Illinois, possibly because of the decreased number of soil invertebrates and the impact of agricultural insecticide use.

The BCN analysis results show increasing trends for Acadian Flycatcher (Level 3, note low number of records), Summer Tanager, Orchard Oriole, Red-bellied Woodpecker, Great Crested Flycatcher, Eastern Phoebe, Eastern Wood-Pewee, and others. Species that hawk in the air to catch insects, such as Eastern Wood-Pewees, Eastern Phoebes, and Great Crested Flycatchers, may benefit from open understory that results from open woodland and savanna restoration. Due to climate change, we may also be seeing possible range expansions of Acadian Flycatchers, Summer Tanagers, and Orchard Orioles. Red-bellied Woodpeckers are increasing in our maturing woodlands and have become frequent visitors to backyard feeders.



Chimney Swifts show a 6.8% per year increase though they are declining elsewhere in Illinois. Studies have found that Chimney Swifts feed in natural areas where insect populations are not suffering the large declines that are affecting agricultural lands. BCN does not survey urban areas where these birds frequently nest so BCN trends may not be indicative of trends in the region. That said, Chimney Swifts may be benefiting from construction of swift towers and use of chimneys as artificial roosts. Property owners with chimneys should be encouraged to leave their chimneys uncapped.

The population trend for Wood Thrushes is up considerably compared to our 2013 analysis, though the reasons are not understood well. A number of woodland species including Wood Thrush are very susceptible to the habitat fragmentation that characterizes many of our woodlands.

17 Species are Stable

A quarter of our woodland species are stable, including significantly increasing trends for many of our summer regulars. Among them is the Cooper's Hawk, which has recovered from severe declines due to DDT and is now a common bird in backyards and woodlands.

15 Species Show Declines, Inviting Further Study

A good number of species show declines. For example, Ovenbirds (Level 3) rely on heavy leaf litter and may be declining due to clearing and burning. American Crows continue to suffer impacts from West Nile

RESEARCH QUESTIONS:

- Why are we seeing increasing numbers of Chimney Swifts in our managed lands compared to statewide figures? How are the populations of swifts in our urban areas doing?
- Are Wood Thrushes successfully nesting in our region given their susceptibility to predation and nest parasitism? Should we look at key individual sites to determine why we might be seeing positive and dramatic change from 2013 to 2020?
- How is clearing of understory and growth of invasive species impacting Ovenbird populations?
- What factors are contributing to the range expansion [northward?] of woodland birds?
- Which birds are telling the best stories about factors other than climate change (e.g., Emerald Ash Borer and woodpeckers, Cooper's Hawks and DDT/feeders)?

Virus; slow recovery continues, but this species is doing better in the rest of Illinois. These and other species in decline are subjects for further study.

More to Learn in our Wetlands

Findings

Wetlands are not as extensively surveyed by BCN as other habitats. While we show many species stable or increasing, we have insufficient data on 16 species, a large number due to lack of coverage, difficulty hearing or seeing wetland species, and low numbers of nesting birds. That number increases more when including species not detected by the BCN Survey, such as Piping Plover, Black Rail, King Rail, Common Tern, Forster's Tern, and Caspian Tern, all of which are cited in BCN's *Birds of Concern*.

Context

Other organizations in our region conduct studies that focus exclusively on wetlands, use playbacks, and do a better job of producing trends for some of these birds. Their results give a fuller picture of wetland species in the region. Reference Audubon's Marsh Bird Monitoring Protocol and Data Hub [link](#).

Conservation efforts should include restoration of functional wetlands to places where they once were. A few species have been nearly extirpated in the Chicago region, such as the Yellow-headed Blackbird.

Of note is the great response of wetland birds to conservation efforts in the Calumet region.



Photo by Jerry Goldner

Also, although Black-crowned Night-Herons (Level 2) show the steepest declines, trends of colony-nesting birds like herons and cormorants may be heavily skewed by the relocation of nesting colonies to

PRIORITY SPECIES FOR CONSERVATION:

Level 1—Piping Plover, Black Rail, King Rail, American Bittern, Common Tern, Black Tern

Level 2—Black-crowned Night-Heron, Least Bittern, Wilson's Snipe

Level 3—Yellow-headed Blackbird, Common Gallinule, Virginia Rail, Pied-billed Grebe, Marsh Wren, Sora, Osprey, Caspian Tern, Great Egret, Bald Eagle, Yellow-crowned Night-Heron (Rare), Little Blue Heron (Rare), Snowy Egret (Rare), Forster's Tern (Rare), Wilson's Phalarope (Rare), Trumpeter Swan (Rare)

Wetland Observations

Sora (Level 3), Swamp Sparrow, Sandhill Crane, and Marsh Wren (Level 3) all show increasing trends, though Soras and Sandhill Cranes are not well sampled by the BCN Survey. Although we are doing better than the rest of Illinois, where wetlands are disappearing even faster, positive trends in our region may be influenced by birds concentrating in the shrinking number of remaining wetlands.

areas not sampled by the BCN Survey. Birds observed in our study may be using the habitat to forage but nesting elsewhere.

Bald Eagles and Ospreys are not present in big enough numbers yet to show up on our surveys, but they are very successfully rebounding from the negative impacts of DDT, hunting, and the draining of wetlands.

RESEARCH QUESTIONS:

- What does weather history of dry vs. wet years tell us about weather impact on wetlands?
- What is happening with Black-crowned Night-Herons in our region?

Incidental Findings Among Urban Birds

Findings

The BCN Survey does not adequately sample urban birds because our survey points are located almost exclusively in preserved and protected areas.

Urban areas remain an area for additional study, as we see more species adapting to urban settings, such as Peregrine Falcon, Great Horned Owl, American Crow, White-breasted Nuthatch, Blue-gray Gnatcatcher, Chimney Swift, Red-bellied Woodpecker, and Cooper's Hawk.

PRIORITY SPECIES FOR CONSERVATION:

Level 3—Common Nighthawk, Peregrine Falcon

RESEARCH QUESTIONS:

- Are Common Nighthawks declining in our region, and if so, why?
- How are birds adapting to urban/suburban settings in the Chicago region (e.g., Red-bellied Woodpeckers and Cooper's Hawks and feeders, Chimney Swift use of old chimneys).
- Which species are most affected by window kills?

Leadership as a Bird-Friendly Region

Our results show that more than half of our breeding birds are stable or expanding in protected lands within the Chicago region—an encouraging finding and a testament to the hard work and support of land managers, conservation groups, policy makers, and ordinary citizens who care about the greenspace around them.

Our leadership as a bird-friendly region is even more important considering national trends showing that birds are facing precipitous declines and increasing threats to their survival. There has been a loss of 3 billion birds in the last 50 years, representing a 30% decline in the number of birds flying our skies, as reported in the journal *Science* in 2019. Many individual species have suffered catastrophic declines. Multiple factors are negatively impacting bird populations:

- Habitat loss and degradation on nesting and wintering grounds and at key stopover sites.
- Use of highly reflective glass windows.
- Invasive plants and animals.
- Viruses and diseases.
- Decline of insect populations due to pesticide use and other causes.
- Pollution.

The impact of climate change creates additional perils, some potentially devastating, such as severe summer storms and droughts that impact nesting success.



Photo by Jerry Goldner

Not only do we have important habitat that we need to protect for breeding birds, but many migrant species also travel through the Midwest, which is dominated by agriculture. The green spaces of the Chicago Wilderness area provide important stopover habitat for birds that would otherwise find themselves over farmland, heavily urbanized areas, or Lake Michigan when dawn arrives and they are looking for food and shelter. These birds are not mentioned in this study, but they are equally deserving of attention and planning. A list of migrant birds of concern can be found at the end of the BCN *Birds of Concern* list at [link](#).

Some of the threats these migrants face are addressed by regional bird-friendly programs and initiatives including Chicago Bird Collision Monitors, Lights Out Chicago, Cats Indoors, and Bird-friendly Building Ordinances—but we know there is much more to do.

Many questions remain, and BCN is eager to partner with regional organizations to leverage our data. We are eager to collaborate with other organizations to:

- Facilitate the use of our data by researchers. (It is freely available.)
- Partner with land managers to manage habitat for birds as well as healthy plant communities.
- Engage with policymakers and building managers for more bird-friendly policies.
- Advocate for good homeowner practices.

CORNELL'S "7 SIMPLE ACTIONS TO HELP BIRDS"

- Landscape for birds and wildlife, even in a small city lot.
- Limit use of pesticides.
- Reduce window kills in highly reflective areas.
- Consume shade-grown coffee.
- Keep your cats indoors.
- Reduce use of plastics that pollute our landfills and oceans.
- Get involved in community science.

About the Bird Conservation Network

The Bird Conservation Network (BCN) is a coalition of 21 conservation groups, including Audubon chapters, bird clubs, ornithological societies, and conservation organizations sharing an interest in the preservation of birds and the habitats they need to survive. The groups' members total more than 35,000 people living primarily in the Chicago area but also throughout Illinois, northeastern Indiana, and southern Wisconsin.

BCN is an active advocate for bird-friendly policy change and a resource for researchers, land managers, and conservation partners in the Chicago Wilderness region. Its flagship initiative is the annual BCN Survey of breeding birds in the region and the resulting trends analysis of this data spanning the last 22 years. BCN also publishes the *Birds of Concern* to highlight species of the greatest conservation concern.

For more information about BCN and the 2021 Analysis of Breeding Bird Trends in the Chicago Region 1999-2020, visit www.bcnbirds.org or contact a member of the leadership team for the BCN Analysis:

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