All in to boost birds

Alarming drop in populations spurs actions around the state

LISA GAUMNITZ

Lynn Christiansen of Saukville traded the perennials in her flower beds for native species and added dogwood trees, native grasses, shrubs and a bur oak. When she moves to a 3-acre site near Grafton this year, she plans to double down on native landscaping for birds.

Cattle producer Jerry Marr uses rotational grazing, enrolls some of his family's 256 acres in northern Lafayette County in a federal program to conserve grasslands, and keeps plows off his hillsides so the eastern meadowlarks, bobolinks and Henslow's sparrows find plenty of insects to eat and places to nest.

Wausau Bird Club members are restoring native trees and shrubs and removing invasive buckthorn on Barker-Stewart Island, located in the Wisconsin River in downtown Wausau, and carefully tending the new plantings during the summer. Members scoop water out of the river in buckets and carry them to the middle of the island to water the trees.

"We're hoping to lure the migratory birds along the river with native plantings," says Susan Haug, the club's treasurer. "We hope they'll have more of the foods they like instead of getting trapped in downtown Wausau with all of the taller buildings and glass windows to collide with."

All across Wisconsin, people are adding native habitat and taking other steps to help the birds they love.

It's exactly what conservationists say must happen if we are to save the birds that delight our eyes and ears, serve as pollinators, seed dispersers, pest control and food for other wildlife, and anchor a birdwatching industry that generated $107 billion nationally in economic impact, 666,000 jobs and $13 billion in tax revenue in 2011.

National studies are revealing a steep loss of birdlife in North America since 1970 as science hammers home the concept that conserving birds means protecting them throughout their life cycle.

"Before the early 2000s, the focus of bird conservation in North America was very much on protecting and restoring breeding grounds," says Owen Boyle, species management chief for the DNR's Natural Heritage Conservation Program.

While breeding grounds are obviously critical for bird productivity, if migratory birds die on the wintering grounds in Central or South America or while returning to Wisconsin, it doesn't matter how good the breeding grounds are because there are fewer birds to use them, Boyle says.

Eastern bluebird populations have rebounded with the help of nest boxes put up by the Bluebird Restoration Association of Wisconsin and others.

PATRICK READY

"No matter where you live and no matter how much land you influence, you can have a positive impact for birds and the insect species that many of them depend on for food," he says.

NUMBERS CONFIRM WORST FEARS

Hard numbers now confirm what many bird lovers have noticed for years at their feeders, along roadsides and in fields and woods: Birds and birdsong are disappearing from our lives. North America has 2.9 billion fewer breeding birds than there were in 1970, representing a net loss of nearly 30%.

Those numbers, from a study published in Science magazine in September 2019, was based on long-term bird surveys and night radar showing spring migrations. Even common, beloved species have fallen off the cliff.

Evening grosbeak populations have plunged 90%, wood thrushes 60%, eastern meadowlarks 75% and dark-eyed juncos 50%, according to the research by seven leading bird conservation organizations including the Smithsonian Migratory Bird Center, Cornell University's Lab of Ornithology and the American Bird Conservancy.

The only groups of birds doing well are raptors, waterfowl and woodpeckers, all conservation success stories reflecting, respectively, the ban on DDT and Endangered Species Act protections, public and private investment in wetland protection and restoration, and the maturation and protection of woodlands.

Trends in the state generally track the

North American study results, based on data collected through the Wisconsin Breeding Bird Atlas II, a comprehensive five-year survey carried out by more than 2,000 volunteers partnering with the DNR, Wisconsin Society for Ornithology, the Western Great Lakes Bird and Bat Observatory and the Wisconsin Bird Conservation Partnership.

The only exception is that forest birds have fared better in Wisconsin, reflecting the rebound of our northern forests and their ability to provide important nesting areas for many species of warblers, thrushes, vireos and more.

HABITAT LOSS DRIVES DECLINE

While the North American study didn't look specifically at causes for the declines, research has zeroed in on habitat loss, followed by habitat degradation due to fragmentation, invasive species and declining water quality, as the top two causes driving the declines.

"Habitat loss is the silent killer," Boyle says.

Native landscapes have been cleared to make way for agriculture, development, resource extraction and other land uses, eliminating the native plants and natural communities that have evolved in Wisconsin over eons to support bird species that are year-round residents.

About 96% of all land birds feed their young insects, and native plants support a ready supply. Chickadees bring mostly caterpillars home to their young, one caterpillar every three minutes, according to Doug Tallamy, a University of Delaware entomologist and author of "Bringing Nature Home: How You Can Sustain Wildlife with Native Plants."

That's 350 to 570 caterpillars every day for each of the 16 to 18 days it takes the chicks to fledge.

Oak trees support 534 species of moths and butterflies, which in turn provide food for many birds including those migrating from neotropical wintering grounds to nesting sites in Wisconsin. Oaks also offer vital nesting cavities for owls, woodpeckers, nuthatches and bluebirds, Tallamy writes.

Native plants have evolved along with the insects that eat them, which are able to detoxify and digest the native plants. Most insects lack the enzymes necessary to eat non-native plants, like the ornamental trees and other plants so common in landscaping.

Palm warbler

LINDA FRESHWATERS ARNDT

Eastern whip-poor-will

CYNTHIA BRIDGE

Eastern meadowlark

WADE DEMICHEN

Pileated woodpecker

RYAN BRADY

Orchard oriole

JAMES KINDERMAN

Warblers, finches and swallows have suffered staggering losses in North America, though Wisconsin declines have been less severe. Eastern whip-poor-wills and eastern meadowlarks are among big decliners in the state, while pileated woodpeckers and orchard orioles are big gainers thanks to conservation work and protections.

Up to 90% of the world's plant-eating insects can feed only on a small selection of plant species.

Research showed that in East Coast suburban neighborhoods where less than 70% of native vegetation remains — and that means most neighborhoods — the birds do not have the insects and seeds they need to eat and are having trouble reproducing, says the DNR's Craig Thompson, a migratory bird expert who leads the Natural Heritage Conservation Program's Integration Section.

"85% of Wisconsin is privately owned," Thompson says. "So what happens on private lands really matters for birds."

IMPORTANCE OF NATIVE PLANTS

Like her parents, Christiansen fed birds mainly at feeders until inspired by a 2011 "Grosbeaks Galore: Birds on Your Landscape" workshop put on by the DNR and partners in the Wisconsin Stopover Initiative. Tallamy was a featured speaker.

"That seminar was a complete eye-opener for me," Christiansen says. "It brought home that bird feeding isn't the end-all-be-all to support birds. Native plants are more important to supporting birds in the long run."

She still provides bird feeders but started adding as many native plants as she could to her Saukville yard and enrolled in landscaping classes at Milwaukee Area Technical College with a goal of creating a bird haven and beautiful native landscape at their new house. She's learned that landscaping isn't just about looks.

"Don't just plant something because that's what they sell at the store. Plant something to benefit insects and birds," she says. "It's a good thing when insects are eating your plants."

KEEPING A LEGACY ALIVE

Tallgrass prairies are among the most decimated and threatened natural communities in the Midwest and the world. In Wisconsin, less than 10,000 acres, or 0.5% remain.

Working farms like the one Marr and his family have farmed for three generations are vital for providing the open habitat grassland birds need. Together with remnant prairies, the pastures, hayfields and conservation lands of these farms form a growing patchwork of lands helping to stem — and hopefully reverse — a steep decline in grassland birds.

Marr is manager and part owner of the family farm and is proud to play a role in saving grassland birds. He credits his father, Robert, for teaching him and siblings Richard, Greg, Jim and Mary Jean to care for the land.

"My dad was a great conservationist," he says, noting that Robert received "about every county conservation award there is. His attitude was always, 'Do what's best for the land.'"

The elder Marr put some of his land into the USDA's Conservation Reserve Program to keep it as grassland, knowing the program would allow the family to maintain income but also reduce work. He never plowed the hillside, preserving the soils, reducing runoff and nurturing native plants that produced a bumper crop of insects for birds and other wildlife.

"We all worked very hard after my dad bought the land to plant trees and maintain the farm," Jerry Marr says. "To get it to this point was a huge family effort."

Robert passed away in 1992 and the farm was put into a trust. Richard Marr and his wife, Kitty, and their children ran the farm for 25 years before Jerry Marr started managing it.

All along, the family has followed the same grassland management practices benefiting their cattle operation and birds, even as many farms in the region switched to row crops. Jerry Marr takes pride in seeing the fields alive with bobolinks, eastern meadowlarks, upland sandpipers and Henslow's sparrows — all species declining precipitously.

"I can think of many times a meadowlark perched on the top wire of a bird wire fence with a beak full of insects," he says. "As I'm out there checking cattle and spending time in the grassland, just to hear the birds and see them … it's just good for the soul."

WAUSAU FLIES HIGH FOR BIRDS

The growing scientific understanding that urban areas could provide important habitat helped spur the creation in 2009 of Bird City Wisconsin to recognize municipalities for their bird conservation and education activities.

To date, 111 communities have attained Bird City status and 25 have qualified as "High Flyers." Wausau is one of them, thanks in large part to the Wausau Bird Club in cooperation with the Wausau and Marathon County Parks, Recreation and Forestry Department.

In addition to the habitat work on Barker-Stewart Island and a native plant garden at Monk Botanical Gardens, members have engaged youth groups in building nest boxes and planned a bluebird trail project with a local middle school (put on hold during the COVID-19 pandemic). They have participated in bird surveys and documented a state-threatened warbler species at Nine Mile County Forest, which Haug hopes can help protect the bird's habitat.

Also in Wausau, several golf courses host bluebird trails, one has obtained an exemption to the mowing ordinance to let areas go natural by adding native plantings, and still another is a "Certified Audubon Cooperative Sanctuary."

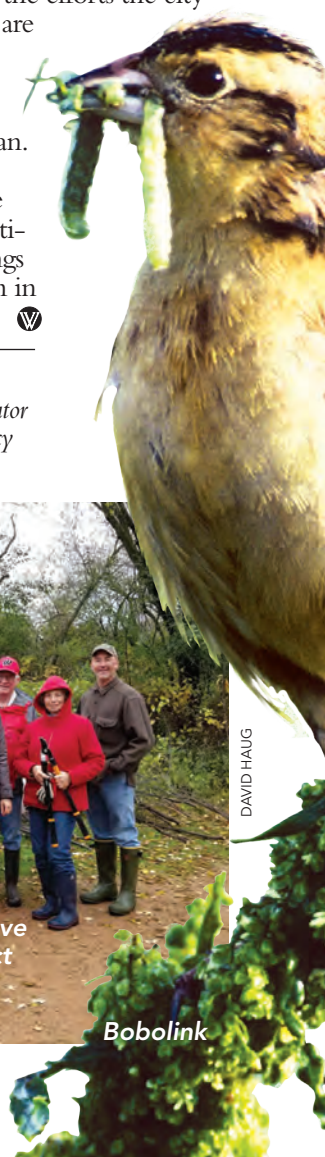
The city uses dark sky friendly outdoor light fixtures when possible to direct light to the ground, reducing light pollution and allowing birds to better see the stars needed for navigation.

"We're proud of the efforts the city and other partners are doing," Haug says. "We feel it's important to do at least the little we can.

"People in the club just appreciate birds — their beautiful colors, their songs — just seeing them in their backyard."

Lisa Gaumnitz is a natural resources educator and program and policy analyst for the DNR.

Wausau Bird Club members remove invasive buckthorn to help protect native bird habitat.



Bobolink

DAVID HAUG

Partners tackle bird conservation near and far

LISA GAUMNITZ

Karen Etter Hale discovered the beauty and wonder of birds as a 4-year-old taking yard walks with her Aunt Peg in Lake Mills.

"Birds are captivating," she says. "They fire the imagination with their flight, diversity, beauty and fascinating behaviors. And because you can find them everywhere, birding is like a treasure hunt. Birds are our direct connection with nature."

Her early experiences launched a six-decade flight path of appreciating birds and working on their behalf, including 25 years as executive secretary for Madison Audubon and, for the last 18 years, as chair of a coalition of 180 partners committed to conserving Wisconsin's native birds.

Now, as study after study documents birds' declining fortunes globally and at home, Etter Hale finds hope in the comeback in Wisconsin of bald eagles, sandhill cranes, wild turkeys, eastern bluebirds, peregrine falcons and more — and in the growing partnerships of organizations and individuals working to save birds.

"In Wisconsin, we have all of these groups working very hard," she says. "We know what needs doing. By collaborating and not duplicating efforts, we will make more progress in bringing back our birds.

"None of us can do it alone. Focusing on that and on all the great people working on behalf of birds is what keeps me going."

The Wisconsin Bird Conservation Partnership, Southwest Wisconsin Grasslands Network and the Neotropical Flyways Project are some of the many partnership efforts working together to save Wisconsin birds.

Partners work at large geographic scales to better protect and restore bird habitat here and in the Central and South American lands where dozens of Wisconsin's migratory bird species winter.

Here's a look at each of these partners working on behalf of birds.

The Southwest Wisconsin Grasslands Network features places like Marbleseed Prairie, a unit of the York Prairie State Natural Area near New Glarus.

DAVID SAMPLE

Karen Etter Hale's work on behalf of birds includes establishing a new endowment to fund conservation projects, the Birds of Wisconsin Legacy Fund, held by the Natural Resources Foundation of Wisconsin.

COURTESY OF KAREN ETTER HALE

Colombian biologist Angela Caguazango assesses the age of a female cerulean warbler as part of the Neotropical Flyways Project.

NICK BAYLY

DNR FILES

WISCONSIN BIRD CONSERVATION PARTNERSHIP

More than 65 bird clubs, hunting and fishing groups, government agencies, land trusts, nature centers, environmental groups, universities and businesses came together in 2001 to create the Wisconsin Bird Conservation Initiative.

Members pledged to work collectively to assess bird populations, restore bird habitat, promote breeding bird populations, protect migrating species and help more people enjoy watching birds.

In the organization's first 18 years with Etter Hale at the helm, the number of partners grew to 180. Collectively, they identified and designated 93 Important Bird Areas, critical habitat sites for birds statewide, and developed the Wisconsin All-Bird Plan detailing actions to save 116 species most in need of help.

Partners actively engaged citizens in bird conservation through volunteer monitoring projects and establishing

A ban on DDT along with protections, captive rearing and nest box efforts have helped Wisconsin bring back peregrine falcons like this young bird being banded by Greg Septon of Muskego.

MELODY WALSH

the Bird City Wisconsin program. More than 110 communities are now recognized as Bird Cities for everything from installing nest boxes, to hosting bird festivals, to working with the Milwaukee Bucks to incorporate bird-friendly measures at Fiserv Forum.

In the last two years, the group released a new strategic plan, swapped the "Initiative" in its name to "Partnership" to better characterize the longstanding effort, and unveiled a new logo. They brought on board a project manager to evaluate the status of the 93 Important Bird Areas.

"Our goal is to determine which five to 15 would be highest priority to have conservation actions that can help keep common birds common and bring back those that are declining," Etter Hale says. "We'll partner with local stakeholders to develop strategies for each of these, which will serve as a catalyst for the rest."

Learn more: wisconsinbirds.org

GARY DINEEN/MILWAUKEE BUCKS

Bird City Wisconsin worked with the NBA's Milwaukee Bucks to make their new Fiserv Forum a bird-friendly building, including design efforts to help stem bird-window collisions.

SOUTHWEST WISCONSIN GRASSLANDS NETWORK

In 2009, the DNR completed a master plan for a nearly 500,000-acre area in southwestern Wisconsin as one of the best opportunities in the Upper Midwest to conserve the open grassland and savanna habitats eastern meadowlarks need — and to reverse their population decline, along with declines in Henslow's sparrows, bobolinks and many other grassland birds.

That Southwest Wisconsin Grassland and Stream Conservation Area is now embedded in an even larger partnership project, the Southwest Wisconsin Grasslands Network. The DNR and over a dozen federal, state and county agencies, land trusts and other nonprofit conservation organizations have joined to work with landowners and each other toward common goals of protecting and managing grasslands for the benefit of wildlife, water quality and working lands.

Cindy Becker is coordinating the effort. She has been involved in private lands outreach and education in the Driftless Area for 13 years and before that worked as an inventory botanist, surveying sites across the Midwest.

"We have a lot of people already doing amazing work," says Becker, who works for the Driftless Area Land Conservancy out of its Dodgeville office in a position mostly funded by the DNR's Natural Heritage Conservation Program and the U.S. Fish and Wildlife Service.

"There's a lot of energy around the issue of grassland birds and, more recently, pollinators."

The network area includes a high number of unplowed prairie remnants, concentrations of rare grassland plants and animals, and many landowners who already maintain open fields and pastures. Some have voluntarily enrolled their croplands and grassland fields in conservation programs that pay for erodible fields to be planted to grassland cover including prairie restorations, left uncropped or planted with cover crops.

Network partners are seeking new landowners who may be interested in preserving grasslands. Becker listens to their hopes for the land, talks about the rare and high-quality resources they may already have, and steers them to the agency or program that may be the best fit.

To aid those efforts, Becker and partners are writing a landowners' guide to agency partners and programs providing technical and financial help. They're also seeking out grant opportunities to expand funding sources and working to complete grassland restoration projects on private lands across the region.

In 2021, the network's "Celebrate Grasslands" exhibits funded by a Cornell Lab of Ornithology grant will rotate through local libraries including in New Glarus, Mount Horeb, Dodgeville and Mineral Point. Family field days will aim to introduce more landowners to grassland birds and opportunities to help them, Becker says.

"Our survey of landowners in the region shows grassland birds matter to people as an influence for their decision-making. That was surprising to me and inspiring," she says.

"We really all do have a common ground. Landowners do what they can individually to benefit wildlife and water, and collectively, all of these efforts are making a big difference."

Learn more: driftlessconservancy.org (under "What We Do" tab)

NEOTROPICAL FLYWAYS PROJECT

Half of Wisconsin's bird species are considered neotropical migrants, meaning they spend the winter in Mexico, Central and South America and return here in the spring to nest.

"So what happens in Nicaragua, Colombia, Panama, Mexico — really all of Central and South America — impacts our birds," says Craig Thompson, who leads the DNR's bird conservation efforts.

Forests in those places are declining, being converted to agriculture and degraded for fuel wood, which in turn reduces winter habitat for Wisconsin birds. One third of the 340 migratory bird species in the U.S. are declining in part due to habitat

ADRIAN DELGADO

NICK BAYLY

Biologist Yuly Caicedo extracts a migrant bird from a canopy net in Costa Rica as part of the Neotropical Flyways Project. The closeup shows blackpoll warblers captured in Colombia upon arrival in South America following trans-oceanic migratory flights.

loss and other threats in these lands.

"We have to have conservation strategies that are hemispheric in scope, and that is very challenging to do," Thompson says.

One challenge is a lack of knowledge about migration and critical stopover sites in the southern hemisphere. To help find answers, the DNR and the Natural Resources Foundation of Wisconsin are part of a partnership with the Cornell Lab of Ornithology and a nonprofit in Colombia called SELVA to identify critical migratory stopover regions and habitats.

Money raised through the Natural Resources Foundation's Great Wisconsin Birdathon, which continues through Oct. 15, helps to pay for this and eight other priority projects aiding Wisconsin birds.

New stopover sites will be identified and mapped, and mist netting and radio tracking will determine how birds use these sites. Study results will be used to develop conservation plans.

"The Neotropical Flyways Project is unlocking the secrets of hemispheric migration," Thompson says. "The effort will help ensure this avian phenomenon that has played out over eons will continue and thrill bird lovers well into the future."

Learn more: neotropicalflyways.com

Lisa Gaumnitz is a natural resources educator and program and policy analyst for the DNR.

BOOK HIGHLIGHTS LAKE MICHIGAN STOPOVER SITES

Weighing in at one-third of an ounce — roughly the same as two nickels — the beautiful sky-blue cerulean warbler flies 5,000 miles roundtrip between wintering grounds in South America's Andes Mountains and summer nesting grounds in Wisconsin's hardwood forests.

Stopover sites where the warbler and Wisconsin's other 200-plus migratory bird species can rest and refuel are crucial to their individual survival and to the overall fate of their species.

North American numbers of cerulean warblers have dropped 70% in the last half-century. The species is listed as threatened in Wisconsin, and disappearing habitat on nesting, wintering and migratory grounds imperil the bird.

Sites in Wisconsin's Lake Michigan coastal counties are particularly important as these warblers and other species tend to follow the shoreline and rely on coastal habitats, from sometimes just a few yards up to a few miles inland.

Now, the most important of these sites are identified in a book aimed at helping spur full protection and long-term conservation of sites. Stopovers are categorized as "fire escapes," "convenience stores" or "full-service hotels" based on their ability to shelter or refuel birds.

"Birds are at greatest peril during long migrations, so the long-term conservation of the sites are critical for conserving the birds we love," says Sumner Matteson, a DNR avian ecologist and an author, along with now retired DNR colleague Kim Grveles and Kim Kreitinger, outreach coordinator for the Natural Resources Foundation of Wisconsin.

The book, "A Planning Tool for Migratory Bird Conservation Along Lake Michigan," includes maps and detailed information on more than 40 stopover sites. A full PDF of the book is available on the DNR website; go to dnr.wi.gov and search "birding" to find a link.

The book also has been provided to nearly 100 Lake Michigan coast city officials, conservation organizations, bird clubs and land managers.

"We hope that local and regional planners and conservation groups will use our document to factor in the importance of migratory bird habitat as they consider how best to manage and conserve landscapes along the Lake Michigan shore," Matteson says.

The book is a partnership of the DNR, Wisconsin Stopover Initiative, Natural Resources Foundation and Wisconsin Coastal Management Program.

"We've received a lot of positive feedback from our stakeholders about the publication," Kreitinger says. "We know that conservation partners are referencing it."

While the book is aimed at planners, land managers and local decision makers, it offers a wealth of information birders can use to guide their birdwatching and to advocate for long-term conservation of the sites, Matteson says.

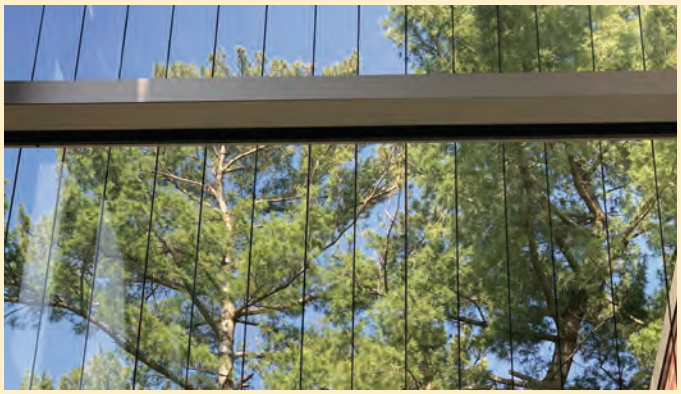
"Twice a year, one of the great natural spectacles occurs," he says of bird migration. "Go out this fall or spring to one or more of the sites in our book and observe the variety of birds passing through our state.

"You will marvel at what you see!"

— LISA GAUMNITZ

This cerulean warbler was photographed in May at Milwaukee's Whitnall Park, a migratory bird stopover site.

JEREMY MEYER



CATIE ANDERSON

RICHARD WUNSCH

The Leigh Yawkey Woodson Art Museum in Wausau has added parachute cord to the outside of a large window to help break up the reflection and prevent collisions by birds.

MUSEUM PULLS STRINGS TO SAVE BIRDS FROM WINDOW COLLISIONS

Visitors migrating to the Leigh Yawkey Woodson Art Museum this fall for the internationally renowned "Birds in Art" exhibition will find another new installation reflecting the museum's commitment to birds.

Museum staff took advantage of the building closure during the early months of the COVID-19 pandemic to turn a 40-foot-high glass window into an aesthetically pleasing example of how a few hours and a few simple, inexpensive materials can save birds from colliding with windows.

Up to 1 billion birds are estimated to die each year in the United States after hitting windows. By day, birds perceive reflections in glass as habitat they can fly into. By night, migratory birds drawn in by city lights are at high risk of colliding with buildings.

Breaking up window reflections by using film, paint or string can help reduce collisions and save birds.

At the Woodson Art Museum, migrating birds would occasionally fly into a glass-enclosed stairway in the museum's new wing, particularly during the spring. Curator of Education Catie Anderson mentioned the problem last fall to Craig Thompson, a DNR bird expert who was at the museum giving a presentation about steps people can take to help birds.

After the talk, Anderson showed Thompson the window. He suggested creating a curtain of cords running the length of the window and spaced a few inches apart to break up the reflection.

The museum director committed to doing the project, and the quarantine was the perfect time because there were no people on the grounds or in the building, says David Jones, the museum's facilities manager.

Jones purchased L-shaped angle irons and 1,100 feet of parachute cord. Following instructions found on the birdsavers.com website, Jones and Anderson drilled holes in the angle irons and threaded them with long lengths of paracord. They safely got on the roof and secured the angle irons with the paracord hanging down.

The paracord lengths could then be pulled tight and secured at ground level. All told, the materials cost $250 and the project took the two of them about six hours over two days.

"It's a very doable project for almost any facility or homeowner … and it has been wildly successful," Jones says. "Anybody concerned about a situation like that should just go ahead and do it. It's paid for itself."

Museum staff haven't found any stunned or dead birds beneath the window since the "bird savers" were installed in May. The museum has an appealing and accessible solution to share with visitors.

"We've had a long history of using an interdisciplinary approach and this year, the bird-friendly window is a great example of combining science, engineering and technology," she says. "For us, it was another teachable moment."

For Thompson, it's a compelling example of what can be done for birds. "It's a dandy conservation success story," he says. "Anyone, especially homeowners, can easily do this."

— LISA GAUMNITZ

ABOUT THE EXHIBITION

Artwork from 114 artists worldwide will be featured in the 45th annual "Birds in Art" exhibition, on view Sept. 12 to Nov. 29 at the Leigh Yawkey Woodson Art Museum, 700 N. 12th St., Wausau. "Birds in Art" presents original paintings, sculptures and graphics created within the last three years. In light of COVID-19, check the museum's website for the latest visitor information: lywam.com.

"Chickadee & Strawberries," oil, Rebecca Korth

BIRDWATCHING TAKES FLIGHT, PROMOTES DIVERSITY

Birds' brilliant colors, beautiful songs and feats of flight impress even the most casual outdoor enthusiasts and draw many outside to connect with nature.

Never were these attributes more valued than during the COVID-19 impacts of spring, when many people found themselves at home, unable to enjoy typical social activities and eager to find relief outdoors. Birdwatching was a solution.

Nationally, downloads of popular bird identification apps like those from the Cornell Lab of Ornithology and National Audubon Society reportedly doubled this spring compared to last year. According to one source, sales of bird feeders, nesting boxes and birdseed jumped 10% to 15%, even as demand for other nonessential goods plummeted.

The popular online bird reporting system, eBird, declared May 2020 the most active usage month in its 15-plus years, including a 37% increase in submitted sightings compared to the same time last year. In Wisconsin, the number of eBird checklists submitted in spring 2020 increased 27% over 2019, far outgaining annual jumps of 4%, 15% and 16% recorded over the three previous years.

Subscribers to the DNR's weekly birding report grew 18% since spring 2019, and 48% more teams joined the Great Wisconsin Birdathon. Through mid-summer, $17,000 more had already been raised for priority birds than the previous year, with donations still being collected through Oct. 15. Check wibirdathon.dojiggy.com for details.

Finally, an informal poll of nearly 40,000 Wisconsin-based birding-oriented social media users seemed to validate anecdotal accounts of increased birdwatching activity in the state this spring.

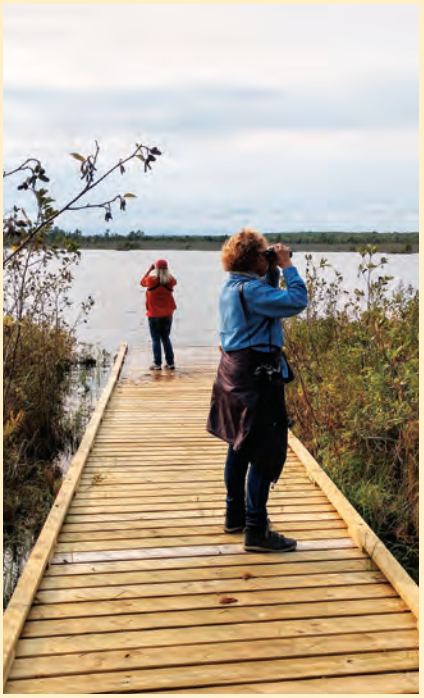
Of more than 750 respondents, about 62% indicated they birdwatched more often in spring 2020 compared to previous years, while only about 7% said less often. A recurring theme among established birders was spending more time watching birds at or close to home than past years, with many citing the joy of discovering nearby public spaces they had not previously explored.

Another bit of birdwatching news also came this spring: the celebration of Black Birders Week. The virtual initiative developed in late May and early June via social media after a racist incident in New York's Central Park involving a Black man falsely reported to 911 while birdwatching.

Coming alongside nationwide demonstrations for racial justice, Black Birders Week featured hashtags such as #BlackInNature, #AskABlackBirder and #BlackWomenWhoBird to promote events on Twitter and encourage Black birdwatchers and others to join the conversation about their own experiences and diversity in the outdoors.

With birdwatching in the news and gaining popularity, a significant number of new birders found the time and motivation to take up the hobby — discovering the relief from stress, gateway to nature and genuine entertainment birding can provide.

— RYAN BRADY, DNR CONSERVATION BIOLOGIST



MELODY WALSH

LISA GAUMNITZ

From expansive wildlife areas to urban settings, birdwatching offers a way for all ages and experience levels to connect with nature.

LEARN MORE ABOUT SIMPLE WAYS TO HELP BIRDS

3 Billion Birds Gone is the simple, stark name of a website — a cooperative effort of bird conservation groups — designed to draw attention to the dire challenges facing many bird populations today.

The website offers details on the billions of birds lost since 1970, a video looking at "What's Behind the Declines?" in bird populations and ways everyone can help be part of the solution. The latter includes "7 Simple Actions to Help Birds." In short:

- Make windows safer;
- Reduce plastic use;
- Keep cats indoors;
- Plant native plants;
- Do citizen science;
- Drink shade-grown coffee; and
- Avoid pesticides.

Philadelphia vireo

RYAN BRADY

For more on bird declines and ways to help, check 3billionbirds.org. For bird habitat and conservation information from the DNR, go to dnr.wi.gov and search "birding."

A FAVOR FOR THE 'FALCON OF SPARROWS'

Nesting box project aids American kestrel, smallest raptor in North America

PATRICK READY

CHRISTOPHER TALL
AND BRENNA MARSICEK

Imagine you are driving along an old, dusty farmland gravel road and notice a little bird perched on a telephone wire.

As you pass by, you notice the shape of the bird is not one of a blue jay or mourning dove, but of a predator bird with talons and a hawk-like head. As it takes flight, you notice the distinct barring color pattern on its tail feathers.

After your vehicle passes and you continue on your way, the raptor takes flight and hovers above the prairie, scouring the ground for prey, perhaps an unsuspecting mouse, grasshopper or a thirteen-lined ground squirrel.

The bird spots a European house sparrow that has ventured above the safety of its barn home. Instantly, the unsuspecting sparrow becomes a mid-air prize for the hungry falcon, which brings the meal back to a large, wooden nesting box and feeds its chicks.

This compact but effective bird of prey is the American kestrel, North America's smallest falcon. It also is the continent's most prevalent falcon.

If current trends continue, however, that could soon change.

HELP FOR DECLINING POPULATIONS

According to the North American Breeding Bird Survey, which provides reliable population data and trend analyses for more than 500 bird species, American kestrel populations in the U.S. have been steadily falling over the past 50 years.

The drop is estimated at an annual rate of 1.39% and means there are more than 51% fewer kestrels nationwide than there were 50 years ago, according to the survey. In the Wisconsin region, populations have declined by 41%.

Research indicates it's difficult to pinpoint an exact cause of the kestrel's decline. Many environmental factors may be at play, including increasing challenges in finding nesting habitat across the landscape. That's where conservation work may provide a boost.

In Wisconsin, efforts to help conserve these small-sized birds of prey have been underway for more than 50 years. Dedicated volunteers have spent many hours building nest boxes, gathering data and documenting kestrel activity to reverse the species decline.

To help support kestrel populations, community members, bird conservation organizations and citizen-science programs began constructing wooden nest boxes within the kestrel's breeding habitat. Kestrels are cavity nesters and take readily to human-made nest boxes, though good nest boxes are built with the ideal specifications to attract kestrels and facilitate their successful nesting.

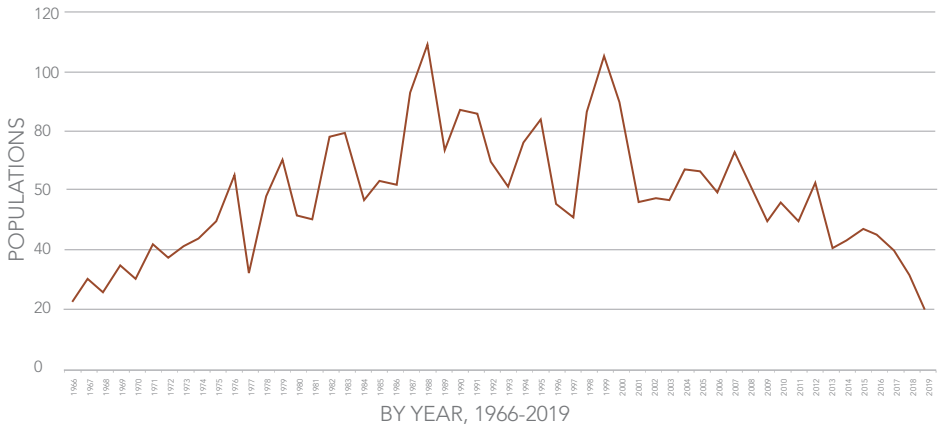
In some cases, volunteers help monitor the nest boxes and record several observations such as nest occupation, number of eggs, number of chicks and how many fledge, adults equipped with a leg band and other vital statistics.

In a few cases, volunteers also help scientists capture kestrels using mist nets, a process that allows scientists to record an individual bird's health and estimate population numbers. Biologists also can wrap a lightweight metal band around the falcon's leg to allow wildlife biologists to track the bird over its lifetime.

TIMOTHY HANSEL

North America's smallest falcon is found in open areas such as prairies and farm fields, but also can be seen nabbing prey in cities and suburbs.

AMERICAN KESTREL BREEDING SURVEY



Cameras mounted on nest boxes provide an unobtrusive way to peek inside at any occupants, large and small. Average clutch size for the American kestrel is four to five eggs.

PATRICK READY

GOOSE POND PROVIDES REFUGE

In Wisconsin, near Arlington, one kestrel monitoring project has been ongoing for 35 years, started by Mark Martin and Sue Foote-Martin at Madison Audubon's Goose Pond Sanctuary. This ecological preserve provides refuge for many bird and wildlife species throughout the year.

In 1985, a local power company was removing electric lines along the roadway. The Martins realized there was a unique opportunity to aid the American kestrel, and Sue asked the utility if it could leave up some power line poles as a place to erect kestrel boxes.

When the project began, 10 nest boxes were installed and checked for activity at the end of each year. In 2009, the program got an infusion of attention from volunteer Brand Smith, who worked to increase the data collection frequency and nest boxes across south-central Wisconsin.

Smith monitored over 70 nest boxes himself at that time, logging more than 500 miles of travel between nest boxes each summer. He worked to recruit more volunteers to help, and with support from Madison Audubon, the efforts grew into a full-fledged Kestrel Nest Box Monitoring Program with volunteer involvement and nest box counts.

In 2012, Smith trained volunteers to use an unobtrusive technique employing camera mounts to observe eggs and chicks while they were in the nest boxes. He continues to lead the program today.

As a bonus, this work can be done independently, making it a wonderful and useful pastime during a global pandemic.

BANDING BOOSTS MONITORING EFFORTS

In addition to installing and monitoring nest boxes, Madison Audubon also partners with Central Wisconsin Kestrel Research (CWKR), a program in Stevens Point, to band kestrel adults and chicks. The program has been supported and revitalized in the past by the Department of Natural Resources in partnership with the Aldo Leopold Audubon Society.

Janet and Amber Eschenbauch are coordinators for the CWKR program and hold a master banding permit. Each spring near Goose Pond, the two offer a hands-on experience with kestrels, teaching participants why and how the birds are banded.

This year's public banding activities were canceled due to COVID-19, but Madison Audubon members Bob and Sue Volenec attended a similar field trip to Goose Pond in 2017. They became enthralled with the opportunity to help with kestrel banding and soon began monitoring kestrel boxes near their home in Jefferson County.

"(Kestrel monitoring) has gotten us involved with Scout troops building and installing more boxes and science fair exhibitions where we have introduced school kids and adults to what kestrels are," the Volenecs note. "All of this, along with the experience of facilitating successful kestrel reproduction, is quite rewarding."

They now bring their grandchildren to kestrel monitoring activities and banding field trips and are happy to learn new things every time they volunteer at events to support kestrels.

MADISON AUDUBON

A total of 179 kestrel nest boxes are included in the Madison Audubon monitoring program this year.

Another volunteer, Terri Bleck, signed up for Madison Audubon's Kestrel Nest Box Monitoring Program in 2020.

"I witnessed the whole nesting process of an American kestrel, from mauve speckled eggs that hatched into white fluff balls, then developed dark feathers on their backs and wings, and finally morphed into a beautiful fledgling kestrel," Bleck said. "What a grand experience!"

This year, the monitoring program has a total of 179 kestrel nest boxes, including on state lands such as Poynette's MacKenzie Center, making it the second largest program in the country. More than 60 volunteers are signed up to help.

In 2019, the program had 171 kestrel nest boxes and monitoring showed that 55 were occupied. In the past four years, from 2016-19, a total of 338 chicks and 55 adults have been successfully banded by the program, and an estimated 662 kestrel chicks have fledged.

OTHER VOLUNTEER OPPORTUNITIES

Madison Audubon continues to seek volunteers for the Kestrel Nest Box Monitoring Program and offers many other citizen science activities available to the public. Opportunities include: Bald Eagle Nest Watch, monitoring eagle nest success and productivity; Bird Collision Corps, a bird-window strike monitoring program; and monarch tagging, an effort to track monarch butterflies when they migrate to Mexico in the fall.

Other programs, such as maintaining songbird nest boxes and recording butterfly and orchid counts, have been occurring at Madison Audubon sanctuaries for many years. Such programs create opportunities for community members to engage with birds and conservation in an up-close and memorable way while also addressing important research needs in local communities.

To learn more about volunteer opportunities, visit madisonaudubon.org/citizen-science.

The American kestrel may be slight and its future unclear, but scientists and citizens alike are learning more about these birds every day. As work continues to provide better kestrel habitat, the hope is it may improve the chances for a resurgence in population of these small but beautiful falcons.

Christopher Tall is a communications specialist with the DNR. Brenna Marsicek is Madison Audubon's director of communications and outreach.

ABOUT THE AMERICAN KESTREL

The scientific name of the American kestrel, *Falco sparverius*, means "falcon of the sparrows." They can be found in wide-open areas such as prairies, grasslands and farm fields but also are noted in cities and suburbs.

Kestrels nest in tree cavities and rely on unoccupied woodpecker holes, tree hollows and nooks in human-built structures to make a home. Suitable nesting cavities are scarce due to competition from other animals. Kestrels may evict bluebirds, northern flickers or even small squirrels to acquire a habitable nesting location.

A few relevant numbers regarding kestrel breeding:

- Number of broods — one (two in the South), when prey is abundant.
- Clutch size — four to five eggs.
- Nesting period — 28 to 31 days.
- Time to fledge after hatching — 30 to 31 days.

HERBERT LANGE

Kestrels are cavity nesters, readily taking to human-made nest boxes.

A kestrel's diet includes insects, grasshoppers, beetles, dragonflies, spiders, butterflies and moths. They also eat mice, shrews, voles, bats, small songbirds and occasionally small snakes, lizards and frogs. They capture their prey by pouncing on them, using talons on their feet to seize them. Kestrels may be seen hovering in mid-air before diving to catch their prey.

A kestrel's key identifying features include pale feathers with dark barring when seen from below and warm, rusty brown spotted with black when seen from above, with a black band near the tip of the tail. Males have slate-blue wings, while females' wings are reddish-brown. Both sexes have pairs of black vertical "mustache" marks on the sides of their faces.

To learn more about American kestrels and their habitat, check these websites.

- Madison Audubon's Kestrel Nest Box Monitoring Program: **madisonaudubon.org/kestrels**
- Madison Audubon's Goose Pond Sanctuary: **madisonaudubon.org/goose-pond**
- Wisconsin Kestrel Research Program: **wisconsinkestrels.org**
- Audubon Field Guide to Kestrels: **audubon.org/field-guide/bird/american-kestrel**
- All About Birds (Cornell Lab of Ornithology) American kestrel Information: **allaboutbirds.org/guide/American_Kestrel**
- American Kestrel Partnership, a project of The Peregrine Fund: **kestrel.peregrinefund.org**
- Wisconsin Breeding Bird Atlas II statistics at eBird.org (Cornell Lab of Ornithology): **ebird.org/species/amekes**