THE CONNECTICUT Audubon SOCIETY

Connecticut State of the Birds

Conservation Works: Building a Better Future for Birds



2025

CONNECTICUT STATE OF THE BIRDS

Conservation Works: Building a Better Future for Birds



PAUL J. FUSCO

American Oystercatchers gather at the Milford Point shorebird staging area.

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Connecticut State of the Birds

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Front cover:
Red Knots migrate through Connecticut. The population has fallen by 75 percent.
PHOTO: PAUL J. FUSCO

Back cover:
Least Terns, a tipping point species, nest on the state's beaches.
PHOTO: JULIAN HOUGH

Recovery's Building Blocks: New Ideas, Collaboration, Basic Fieldwork, Talking

by Kathryn Temple, Road to Recovery



ALL PHOTOS: JULIAN R. HOUGH

Prairie Warbler is among a handful of Connecticut shrub or field birds whose populations have declined by at least 50 percent over recent decades.

Within the avian conservation community, there is a growing movement to inspire hope through action and to highlight success stories that show conservation works. This same desire extends to the larger birding community. People want to hear not only about declines but also about recoveries and the birds that are thriving because of collective effort. At the American Ornithological Society meeting in St. Louis this past August, I saw firsthand how strong the demand was for these stories, even among those working daily to save the birds we all love. Again and again, scientists, conservationists, and birders emphasized that sharing examples of success is essential to sustain hope, maintain momentum, and build the collective energy needed to reverse avian declines.

Road to Recovery

Road to Recovery (R2R) emerged in response to the 2019 *Science* paper, "Decline of North American Avifauna," which revealed that nearly three billion birds have been lost since 1970 across the United States and Canada. Many common species are at a critical tipping point because they have already lost more than half their populations and are projected to lose another half by mid-century if no conservation action occurs. Working together, Road to Recovery, Partners in Flight, and the North American Bird Conservation Initiative have identified these "Tipping Point Species," grouping them into red, orange, and yellow alert levels. Today, 112 species fall into those categories. Wood Thrush, Lesser Yellowlegs, and American Oystercatcher—along with roughly two dozen other species regularly found in Connecticut—are among them.

Restoring these populations will take the best ecological practices and research, but it will also require more: a combination of cultural knowledge, social science, international partnerships, and community voices to create and carry out strategies that are both effective and enduring.

To advance this work, R2R supports species-focused working groups through a process built on co-production and collaboration, where scientists, land managers, and conservation partners work together to set goals, design monitoring, and shape recovery strategies. These groups draw on ecological research, social science, and cultural knowledge to ensure that approaches are practical and durable.

International partnerships are central to this process, linking breeding and nonbreeding sites across countries and bringing together people from different cultures who share responsibility for the same species. R2R strengthens this work by providing coordination, tools for planning and evaluation, hemispheric collaborations that connect stopover and wintering areas, and a forum where successes and lessons learned can be shared across species and regions.

The 2025 U.S. *State of the Birds* Report

In March 2025, a network of bird conservation groups published the U.S. *State of the Birds* report. It showed that declines remain widespread: one-third of U.S. species are now of high or moderate concern, with troubling trends documented across all 50 states. Yet the message is not one of despair. Conservation takes time, but results are beginning to appear. Examples from across

the continent show that investments and partnerships are making a difference and building toward the larger goal of reversing bird declines.

Work is already underway. Highstead, based in Redding, Connecticut, and the Cornell Lab of Ornithology are collaborating with landowners on their Northeast Bird Habitat Conservation Initiative projects. Cities in Canada are taking holistic approaches through Nature Canada's Bird-friendly Cities program. And conservationists throughout the country and beyond are studying every aspect of a species' life through full-cycle conservation.

Tracking Across Borders

To measure outcomes, scientists use a range of tools that track populations across their annual cycle. Many Tipping Point Species are long-distance migrants—Sanderlings and Semipalmated Sandpipers, for example—and their survival depends on breeding, stopover, and wintering sites across many countries. International cooperation is essential, and cross-border, cross-cultural science and conservation are increasingly the norm.

So what comes next for bird conservation? Targeted investments and partnerships are making a difference, as seen in three species that demonstrate progress in different ways.

Wood Thrush

The Wood Thrush, a hallmark of eastern forests, has lost more than half its population since 1970 and is in the yellow category of R2R's Tipping Point Species list, reflecting significant long-term declines. Its survival depends on healthy breeding forests in eastern North America, tropical wintering grounds in Central America, and safe migration stopovers.

Conservationists are working through the Range-wide Wood Thrush Motus Tagging Project to better understand and reverse these declines. By following birds across their full annual cycle, the project is uncovering connections between breeding and nonbreeding populations, identifying when migration occurs, and pinpointing where risks are greatest. These insights are shaping conservation priorities, and they emphasize how international cooperation is essential to ensuring the Wood Thrush remains a familiar presence in summer forests.

American Oystercatcher

Like Wood Thrush, the American Oystercatcher is in the yellow category of R2R's Tipping Point Species list. This shorebird relies on coastal beaches, salt marshes, islands, and intertidal flats, where it faces threats from habitat loss, human disturbance, predators, and rising seas.

Conservationists are working through the American Oystercatcher Working Group and the Recovery Campaign to turn the tide. Along the Atlantic and Gulf coasts, conservation groups safeguard nesting areas with fencing, reduce disturbance through public outreach, restore coastal habitats, and monitor survival and dispersal through banding and resighting studies.

According to the 2025 U.S. *State of the Birds* report, these combined efforts have stopped declines and sparked a 43 percent increase in the regional breeding population since 2008. This success underscores how coordinated conservation and habitat protection can keep this striking bird a visible part of coastal landscapes.



Conservationists are using Motus Tagging to better understand and reverse the long-term decline in Wood Thrush populations.



The breeding population of American Oystercatchers has risen by 43 percent.



The International Lesser Yellowlegs Working Group is building the cooperation needed to give the species a path to recovery.

Lesser Yellowlegs

The Lesser Yellowlegs is listed in the orange category of R2R's Tipping Point Species list. This long-distance migrant breeds in northern wetlands across Alaska and Canada and travels thousands of miles to spend the winter in South America. Its population is falling quickly because of wetland loss, changes to boreal breeding grounds, agricultural chemicals, and hunting on migration and wintering grounds in parts of the Caribbean.

The International Lesser Yellowlegs Working Group is bringing together researchers and managers from across the hemisphere to confront these challenges. In Alaska, scientists are fitting birds with tracking devices to follow their journeys and identify key refueling sites and wintering areas. Field studies on nesting ecology and adult survival add another layer of insight from the breeding grounds.

Combined with research on migration and wintering habitats, this work is helping to pinpoint when and where birds are most at risk. By connecting science with conservation planning across countries, the working group is building the international cooperation needed to give the Lesser Yellowlegs a path to recovery.

Celebrating Success

Beyond the work being done to stabilize and bring back the populations of Tipping Point Species, there are many other conservation successes. Habitat restoration has boosted nest survival on breeding grounds. Predator removal in Hawaii has improved the survival of critically endangered forest birds. Seabird translocations have established new breeding colonies, both in predator-free areas and in sites more resilient to climate change. These efforts demonstrate the power of persistence and creativity in conservation. The results are often overlooked in the news because they are considered small steps rather than wins. Yet reframing them as building blocks toward recovery shows how our efforts are working—or where they need to change. Even knowing when something is not working is, in itself, progress.

The Power of Simple Tools

When asked about cutting-edge conservation tools, I often argue that perhaps the most powerful approaches are also the most straightforward.

Continued monitoring—through banding, nest checks, and long-term presence or absence surveys—remains the foundation of adaptive management, even though these programs are often the hardest to fund. Grants tend to favor flashy technologies or experimental tools, yet without steady support for monitoring we cannot know whether conservation is working.

The same is true for another tool that may seem simple: talking with people. Engaging directly with communities, using regional names for birds, and respecting cultural knowledge are just as essential as new technologies. Social science helps us understand behavior, values, and barriers, while cross-disciplinary collaborations that link ecologists with ranchers, policymakers, educators, and Indigenous leaders show that conservation succeeds when human needs and bird needs align.

Bird Conservation Is Collaborative

Bird conservation at its core is collaborative and international. Saving birds requires people from many disciplines—scientists, land managers, educators, policymakers, and community members—working together.

Birds are not only shared across countries but also across cultures. A single species may be known by many different names, each carrying meaning, stories, and traditions that shape how people connect with it. Recognizing and honoring these cultural connections strengthens conservation by linking ecological science with human experience.

This is exactly the kind of work that Road to Recovery is advancing. By bringing these concepts together and supporting working groups dedicated to conserving birds, R2R is helping to turn collaboration into action. And perhaps most importantly, it offers something that is too often overlooked in conservation stories: hope.

Hope that the efforts we make today are not too late. Hope that declines can be reversed. And hope that recovery is possible when we act together.

It bears repeating: by combining ecological research with cultural knowledge, social science, and community voices, we create strategies that are both more effective and more enduring. For birders, this means that the species we know and love today have a far greater chance of still being here for future generations to experience in their own landscapes and languages. And for everyone, it shows that hope is not just an idea, but a result of action.

* * * *

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Sanderlings and Semipalmated Sandpipers seem common but they are among at least 16 shorebirds and waterbirds found in Connecticut that are considered Tipping Point Species.



Collaborative Conservation: Engaging Communities through Birds

By Katherine Blake, Highstead
Sara Barker, Cornell Lab of Ornithology
Connie Manes, Kent Land Trust



Birders at one newly-created eBird Hotspot on a Kent Land Trust trail in the Macedonia block helped guide habitat restoration by reporting which species were using the area.

In 2019, the "Decline of North American Avifauna" report, published in the journal *Science*, startled the conservation world with its conclusion that nearly two billion birds had disappeared from the continent since 1970. The news caused alarm and—crucially—a wave of fresh thinking about how to bring birds back.

The question was no longer whether birds were declining. The question became: what works?

One promising answer is taking shape in the Northeastern U.S. The Northeast Bird Habitat Conservation Initiative, led by Highstead Foundation in Redding and the Cornell Lab of Ornithology, is weaving together a network of land trusts, scientists, landowners, and conservation organizations from Virginia to Maine. Known as the NBHCI, the initiative provides tools and expertise to translate big, continental-scale bird population data into local action on the ground. In Connecticut, the Macedonia Forest Block, a 22,580-acre swath of largely unbroken woods in Kent and Sharon, is a testing ground for this approach.

Why Macedonia Matters

Macedonia is one of the largest remaining forest blocks in Connecticut, and it plays an outsized role in sustaining birds. Biologists and community scientists have documented more than 140 species there, including many species most imperiled by habitat loss.

Its fields still hold the bubbling songs of Bobolinks and the buzzy notes of Savannah Sparrows. In the deep woods, Wood Thrushes, Cerulean Warblers, and Scarlet Tanagers find the large, unbroken tracts of forest they require. In shrubby edges and regenerating fields, Prairie Warblers and Brown Thrashers nest in numbers that are increasingly rare elsewhere in the state.

In short, Macedonia provides a cross-section of the bird habitats Connecticut needs to sustain—grasslands, interior forests, and shrublands—at a time when all three are under pressure.

From Local to Regional: The Initiative at Work

What makes Macedonia more than just a haven for birds is the way local work is being connected to regional strategies through the Initiative.

Kent Land Trust is helping private landowners manage their woods in ways that are better for birds. With support from the Northeast Bird Habitat Conservation Initiative, it is testing a program based on one that has worked in Vermont. The idea is to bring neighboring woodland owners together instead of treating them as separate, isolated managers. Landowners get advice at workshops from forestry experts and also learn from each other. The program encourages people to care for their own land while also working with their neighbors to benefit the whole landscape.

The idea is simple but powerful: birds don't recognize property boundaries. If Bobolinks are to survive, or if Wood Thrushes are to thrive, then stewardship must extend across fence lines and town lines. By connecting landowners to a community, the Initiative helps ensure that habitat patches add up to more than the sum of their parts.

The Role of Community Science

The NBHCI also relies heavily on eBird. The global bird observation platform, created by the Cornell Lab of Ornithology, is among the world's largest repositories of biodiversity data. It's a powerful tool for research, education, and conservation. It's essentially a large network of biodiversity "sensors"—1.2 million people have contributed over two billion bird observations. Every checklist submitted by a birder in the Macedonia region contributes to a real-time picture of what species are using the area, when, and in what numbers.

The eBird Science Team at the Cornell Lab uses bird checklists, environmental data, and satellite imagery. Then, through machine learning, it turns these into data products and visualizations of seasonal ranges, relative abundance, and population trends to help guide conservation decision-making and investments.The information is crucial. Conservation funding is limited, and data can help guide it to the places and species where it will make the most difference. The data have been used, for example, in collaboration with the U.S. Fish and Wildlife Service to identify low-risk eagle collision areas for siting wind energy projects during the permitting process, directly influencing federal policy decisions.

Kent Land Trust uses eBird data to inform its land management, taking note of birds throughout the seasons and what their presence might indicate about habitat improvement needs. It hosted workshops to show people how to use eBird and the Merlin app at the eBird Hotspots it created along its trails. The workshops emphasized the personal aspects of enjoying birdwatching and the benefits it has to conservation.

One eBird Hotspot at Kent Land Trust's home base is along a riverside trail where the land trust built a viewing platform. The Hotspot was created in 2020, and since then birders have submitted more than 150 checklists with 99 species (71 in 2025). These included increased sightings of Bald Eagles, Belted Kingfishers, and Green Herons. Double-crested Cormorants showed up in 2025. Waterfowl included Mallards, Common Mergansers, and Wood Ducks. In 2025, Kent Land Trust installed Wood Duck nestboxes and, while it has not confirmed their use, a family of 11

PHOTOS: PAUL J. FUSCO



Wood Thrush



Cerulean Warbler



Scarlet Tanager



Eastern Towhee



Chestnut-sided Warbler



Indigo Bunting

ducklings were raised in the oxbow pond adjoining the river over the summer. The eBird data has helped Kent Land Trust make other habitat restoration decisions as well, including the removal of invasive multiflora rose and privet thickets along the shore of the oxbow. The riverside trail also adjoins a small, organically-run farm, with open fields and many pollinators. The eBird checklists often included Cedar Waxwings, Baltimore Orioles, and Indigo Buntings (considered a species of greatest conservation need in Connecticut). To add to the farm's habitat, the land trust has planted native fruiting trees and shrubs in the areas cleared of invasives.

Connecting to the Bigger Picture

The work in Kent is not happening in isolation. The Northeast Bird Habitat Conservation Initiative is supporting a mosaic of local projects. In Maine, for example, the Ag Allies program works with farmers to implement bird-friendly practices (such as delaying mowing hayfields until birds have fledged) to protect grasslands for both birds and people. In New York and Vermont, Highstead's Regional Conservation Partnerships are restoring young and mature forest habitat to benefit species like Golden-winged Warbler and Wood Thrush.

These efforts demonstrate that the lessons of the 2019 bird decline report are being taken seriously. Conservationists are experimenting, collaborating, and finding new ways to link local stewardship with regional recovery.

The Northeast Bird Habitat Conservation Initiative is counting on local partners to help connect and educate communities and to monitor progress through programs such as The North American Breeding Bird Survey, Christmas and Summer Bird Counts, the Connecticut Bird Atlas, and of course eBird.

The Urgency of Now

The stakes could hardly be higher. Wood Thrushes—once a common voice of summer in Connecticut forests—have declined by more than 60 percent since 1970. Bobolink populations have fallen sharply as grasslands disappear. The beautiful Scarlet Tanager is slipping away—the population in Connecticut has fallen by about 65 percent—where large tracts of interior forest are broken up.

Macedonia is an attempt to show that with the right mix of habitat and human stewardship, these species can still find what they need. The challenge is ensuring that enough places like Macedonia remain—and that they are managed in ways that actively support bird life.

Conclusion: Building Hope Through Connection

When the "Decline of North American Avifauna" report was released, it was tempting to feel helpless in the face of staggering numbers. But the story unfolding in Kent, and across the Northeast, offers a different narrative. Through the NBHCI, local action— mowing fields at the right time for Bobolinks, protecting large forest blocks for Wood Thrushes, maintaining shrubland for Prairie Warblers—connects to a larger, coordinated strategy.

This is how birds will come back: not through a single sweeping policy or one heroic effort, but through hundreds of communities, thousands of landowners, and millions of data points, all pulling in the same direction.

Macedonia shows that when people rise to the challenge, birds respond. The task now is to multiply that success, so that the songs of Bobolinks, Wood Thrushes, and Scarlet Tanagers are not echoes of the past, but promises of a resilient future.

* * * * *

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Savannah Sparrow



Bobolink

PHOTOS: PAUL J. FUSCO



Common Merganser



Belted Kingfisher



Highstead, the Cornell Lab of Ornithology, and the Kent Land Trust are collaborating with private land owners to protect a cross section of key habitats in the Macedonia Forest Block along the Housatonic River.



Osprey rely heavily on Atlantic Menhaden.

Osprey at the Crossroads: Crisis in the Chesapeake, Opportunity in New England

By Jacob Steinberg

Watching an Osprey hover over the shoreline, eyes locked as it zeros in on a fish, is one of those moments that define summer along our coasts. For years, the Osprey has stood as a symbol of what's possible in conservation—a bird that clawed its way back from near extinction.

Here in Connecticut, the story remains bright. According to Connecticut Audubon's Osprey Nation data, 2024 was a record year, and 2025 was strong as well. But this is not the state of the Osprey everywhere.



The Osprey is a symbol of what's possible in conservation.

In Chesapeake Bay—long the stronghold of East Coast Osprey, home to by far the largest concentration in the world (10,000 nesting pairs, nearly 20 percnt of the global population)—nest failures are piling up. Chicks are starving. And the consequences are beginning to ripple outward. For those who remember the DDT era, the moment feels eerily familiar.

Just as Ospreys once revealed the hidden damage of chemical contamination, they may now be warning us of another imbalance—one tied to the collapse of their primary prey and, more broadly, to the health of our coastal ecosystems. When "Decline of North American Avifauna" was published in *Science* in 2019, showing bird populations had fallen by about 30 percent since 1970, Ospreys were one of the few species bucking the trend. Their recovery was a success story. In 2025, that success feels precarious.

An Early Warning System in Feathers

Ospreys are more than birds; they are bioindicators. As fish-eating raptors perched at the top of the food chain, they provide vital clues to the health of the ecosystems beneath them. And because they nest in plain sight—on platforms, utility poles, and rooftops—changes in their behavior or reproductive success are especially visible.

In the 1950s and 60s, that visibility proved crucial. The collapse of the Great Island Osprey colony in Old Lyme provided the evidence linking DDT to eggshell thinning. The data collected there by Dr. Paul Spitzer and colleagues was so compelling it led to the nationwide ban on DDT—a turning point for both conservation and ecological awareness.

Today, parts of the Chesapeake are witnessing nest failure rates of 80–90 percent. Reproductive success in salty portions of the estuary is now lower than during the nadir of the DDT era. Coastal residents who once watched "their pairs" return each spring are seeing fewer and fewer birds. Watermen report empty channel markers once crowded with nests.



PHOTOS: PAUL J. FUSCO

In parts of the Chesapeake Bay region, too few young Ospreys are being produced to offset adult mortality.

Evidence Points to a Declining Fishery

The cause of this collapse is not a mystery. Too few young are being produced to offset adult mortality, resulting in what biologists call a population sink. The culprit? Starvation. Adults return empty-taloned or carrying fish too small to feed growing chicks.

Dr. Bryan Watts, director of the Center for Conservation Biology at William & Mary, has studied Osprey for more than three decades. He has collected data on more Ospreys than anyone in the world. His research shows that in higher-salinity parts of the Bay, Osprey diets rely heavily on Atlantic menhaden. And the problem is simple: there are no longer enough menhaden to feed the number of Osprey that historically depended on them.

The menhaden fishery itself has long been a source of conflict, pitting industrial harvesters against conservationists, bait fishermen, and coastal communities. Regulators often report that menhaden stocks are "healthy," yet the collapse of menhaden-dependent Osprey colonies in Virginia and southern New Jersey tells another story. Menhaden are, in truth, a saltwater commons—shared by predators, people, and entire ecosystems. Ospreys now provide the clearest evidence that this resource is out of balance, and their decline offers a rare chance to bring clarity to a debate that has raged for decades.

A Crisis with Regional Implications

It would be tempting to think this is just a Chesapeake problem. It isn't.

Menhaden are the foundation of the Atlantic marine food web. Sometimes called "the most important fish in the sea," these planktivorous forage fish form a vital link between plankton and the larger predators—from striped bass to whales—that depend on them. They are also migratory, providing this energy-rich food source to ecosystems up and down the coast.

When menhaden decline, the effects ripple widely: Osprey nests fail, striped bass numbers plummet, recreational fishing suffers, and the broader ecology of the Atlantic falters. What begins in the Chesapeake does not stay there. Already, declines are being reported in Maryland, Delaware, New Jersey, Long Island, and Massachusetts.

What We Don't Know

In Connecticut, we've celebrated a remarkable Osprey comeback: from just a handful of nests to more than 800 nesting pairs. Yet for all the attention Ospreys receive, large gaps remain in our knowledge. Dr. Alan Poole, author of several definitive books on Ospreys, notes that outside of the Chesapeake, we have surprisingly few data on what Ospreys actually eat. Are New England Osprey feeding primarily on menhaden, on alewives, on other local forage fish? How does diet vary between colonies, or from year to year?

These are not trivial questions. A clearer picture of Osprey diets within specific regions could strengthen their role as bioindicators, allowing us to track the health of forage fish populations before ecological stress cascades into crisis.



With Sea Robin



With Dogfish



With Black Sea Bass



With Atlantic Menhaden. Data on which species Osprey eat are extremely limited.

Full-Cycle Conservation: Protecting Ospreys Year-Round

Much of our attention focuses on Ospreys during nesting season. That's only part of the picture. After leaving New England in late summer, most Ospreys migrate to the Caribbean, Central America, or northern South America. Research using satellite transmitters has shown just how vital these wintering areas are—and how Ospreys that nest near each other may scatter across a vast geography. One bird might winter in Cuba, its nesting neighbor in Colombia, with a third neighbor in the mangrove estuaries of Brazil.

Most of Connecticut's Ospreys winter along the Amazon river's tributaries, and as such, their survival hinges on the quality of these habitats, which are increasingly threatened by chemical pollution from gold mining, loss of forests, mangrove clearing for shrimp farms, and unregulated gillnet fishing. Protecting Ospreys means protecting places thousands of miles away, linking the health of Connecticut's summer skies to conservation decisions made far beyond our borders.

Conservation efforts are underway in parts of the wintering range, though they are often aimed at broader coastal ecosystem health rather than Ospreys directly. In Ecuador, the World Wildlife Fund has worked with local fishing associations to protect about 371,000 acres of mangroves in the Gulf of Guayaquil, safeguarding key nursery habitat for fish. In Central America, a working group of scientists, wetland experts, and shrimp industry representatives is developing wildlife-friendly aquaculture practices to reduce habitat loss from shrimp farms. At a larger scale, the Americas Flyways Initiative links organizations across the hemisphere to identify and protect critical breeding, stopover, and wintering areas for migratory birds, including Ospreys. In Costa Rica, groups such as Osa Conservation are restoring tropical forests and coastal corridors, helping to sustain healthy ecosystems where Ospreys spend the non-breeding season.

The Power of People: Citizen Science and Osprey Nation

Ospreys are perfect ambassadors for citizen science. They are highly visible, tolerant of human observers, and easy to monitor without sophisticated tools. Connecticut Audubon's Osprey Nation has shown what's possible. Hundreds of volunteers monitor nests across the state, submit data, and together build a long-term picture of population health. This is citizen science at its best: precise, scalable, and deeply engaging.

Importantly, the success of Osprey Nation also points to the next frontier. By building on Dr. Watts's work in the Chesapeake, community scientists here could help fill critical knowledge gaps about diet, prey availability, and regional variation.

What makes Osprey so valuable in this broader debate is their ability to cut through the noise. For decades, the menhaden fishery has been clouded by conflicting models, politics, and economics. Ospreys simplify the question: either the chicks are fed, or they are not. Expanding the reach of monitoring programs like Osprey Nation offers a chance to ground this contentious issue in real-world biology and long-term data, providing the clarity needed to move toward lasting solutions.

This effort should be extended to monitoring diet. With careful



PHOTO: PAUL J. FUSCO

Data about Osprey prey could aid in the understanding of the forage fish community in general.

observation of prey deliveries, photo documentation, or even AI-assisted image recognition, communities could help fill the knowledge gap on localized Osprey diets and offer key insight into the health and abundance of their fish prey. Such efforts wouldn't replace professional science, but they could amplify it exponentially. And by scaling this approach, Osprey could serve as a gateway species—helping us understand not only their own survival, but also the status of entire forage fish communities, guiding conservation for whole ecosystems.

Alarm and Opportunity

The story unfolding in the Chesapeake is alarming. Yet within this alarm lies opportunity.

Just as the Osprey's decline during the DDT era catalyzed sweeping environmental reform, their struggles today could spark new awareness and action around forage fish, coastal ecosystems, and the tools we use to measure ecological health.

And this is the deeper promise: the Osprey collapse may finally provide the wake-up call needed to reframe a fishery that has been contested since the 1950s. As a sentinel species, Ospreys not only warn us when things go wrong, they also provide the very tools—long-term data, citizen science, ecological visibility—to chart a better path forward.

We have a choice: to dismiss the warnings until the collapse spreads, or to recognize the Osprey as the sentinel it has always been—a bird whose unique ecology both alerts us to hidden imbalances and provides us the means to act.

Reflecting on a Life with Osprey

I have spent countless hours watching Osprey: the emblematic hover, the striking plunge, the glint of a fish in the sun. As a natural history storyteller, I am drawn not only to their beauty but to their role as translators between human and natural worlds.

When I think about the Osprey today, I see both urgency and hope. Urgency, because the failures in the Chesapeake demand immediate attention. Hope, because we have the tools—science, community, passion—to respond. And perhaps most importantly, we have a model. The success of Osprey Nation shows how local action can ripple outward: building science, deepening public engagement, and informing decisions at a much larger scale.

If DDT was the Osprey's story in the 20th century, perhaps forage fish will be their story in the 21st. And perhaps, once again, the Osprey will lead us toward change.

* * * * *

Jacob Steinberg is the Emmy nominated director of "Season of the Osprey" for PBS NATURE. He lives in Stamford.

Glass, Cats, and Concrete: How Canada is Helping Bring Birds Back in Urban Environments

by Autumn Jordan, Bird Friendly City Organizer at Nature Canada



Canada's "Bird Friendly Design Guidelines" can provide a model for how Connecticut cities such as Bridgeport, Stamford, New Haven and Hartford can help prevent birds from crashing into windows, a big source of bird mortality.

The Problem: Urban Haa rds for Birds

Urban environments are full of hazards that prevent birds from thriving within and moving through them on their spring and fall migration journeys. Large cities are full of reflective glass buildings, pollution, and roaming outdoor cats, and habitats for birds are decreasing. The threats birds face are compounded as urbanization continues to grow. Currently, over 70 percent of Canadians live in large urban centers; in the United States, it's 80 percent and in Connecticut it's even higher — 86 percent. Now is the time to ensure our shared spaces in urban centers are safe havens for birds if we truly want to reverse the staggering loss of over three billion birds across North America since the 1970s.

In Canada, window collisions result in the deaths of between 16 and 42 million birds a year, while outdoor, free-roaming cats kill 100 to 350 million birds annually, according to Environment and Climate Change Canada studies published in 2013 and 2023 respectively. In North America as a whole, those numbers are above one billion and four billion, respectively. However, no-roam cat ordinances across Canadian municipalities, Bird Friendly Design Guidelines, and provincial pesticide regulations are just a few ways Canadian policymakers are protecting birds. Canada's achievements provide a model that could be adopted just as easily in American cities, including those in Connecticut.

The Program: Bird-Friendly Cities

Through Nature Canada's Bird Friendly City Certification Program, municipalities and passionate bird advocates are leading the way to take action together. As one of Canada's oldest national nature conservation charities, known from 1948 to 1971 as the Canadian Audubon Society, Nature Canada brings decades of experience in bird conservation to empower cities with the tools, policies, recognition, and community engagement needed to protect birds in urban areas. Thirty-two cities in Canada are currently certified in the program, including Toronto, Ontario; London, Ontario; Halifax, Nova Scotia; and Vancouver, British Columbia.

The lessons learned by each of these certified cities offer valuable insights for municipalities of all sizes in Connecticut and across the United States. Best practices in how to scale-up grassroots community engagement and implement local policy proven to protect birds are just a few of the creative ways councils and civic society groups have worked together to help bring birds back from the brink. Their successes provide inspiration and practical guidance on how local action sparks meaningful and effective change for bird conservation across North America.

The Program Has Three Pillars:

1. Reducing Key Threats to Birds (such as window collisions and cat predation)

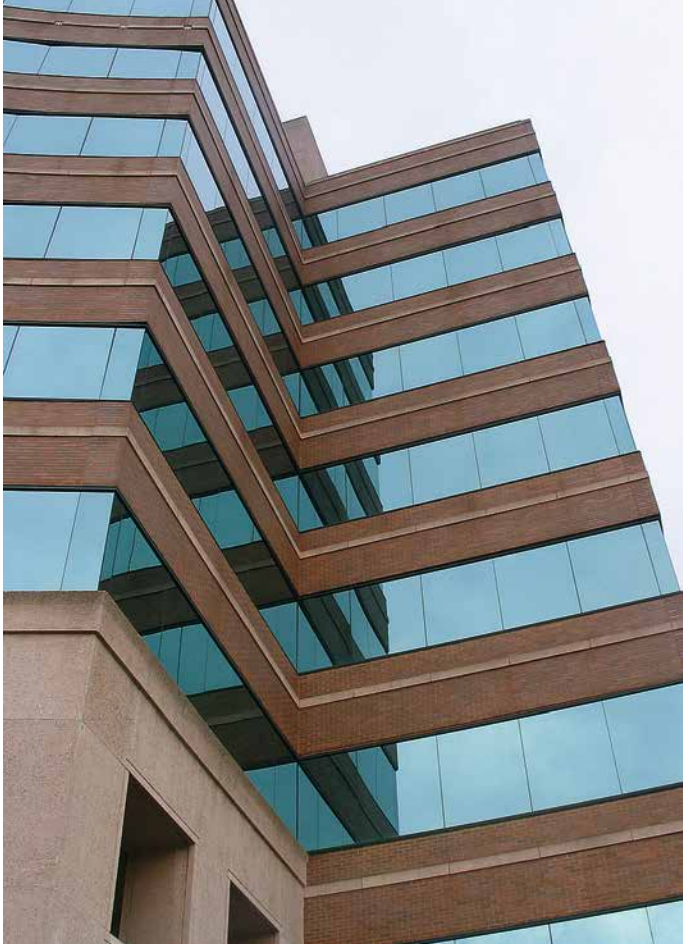
2. Habitat Restoration and Climate Resilience

3. Community Outreach and Education (engaging with youth and residents on how they can take action in their own lives to protect and conserve birds)

A Canadian Example: London, Ontario

So, what exactly are these cities doing to become Bird Friendly City Certified? London, Ontario, is a shining example of the hard work and dedication of city staff, council, passionate volunteers, businesses, and local non-profits working together to make a truly livable, biodiverse, and bird friendly city. London, Ontario, is known as the province's "Forest City," with a population of over 448,000, located north of Lake Erie. In London, you can find a variety of habitats, including bogs, marshlands, forests, creeks, rivers, forested valleys, and meadows. London has 21

ALL PHOTOS: JULIAN R. HOUGH



Well over one billion birds die in North America each year when they crash into buildings.

"Environmentally Significant Areas" which provide added protection to these habitats. The city's meadows are home to Bobolinks, Grasshopper Sparrows, and Eastern Meadowlarks. Bald Eagles and Ospreys are common again, just as they are in Connecticut. Chimney Swifts, Barn Swallows, and Bank Swallows soar above open areas. Acadian Flycatchers, Red-headed Woodpeckers, and Great Horned Owls nest in the forests. Canada Geese are abundant along the river shoreline and university campus. Killdeer, Turkey Vulture, Wild Turkey, Ruby-throated Hummingbird, and more call London, Ontario, home.



With support from their local council and staff, the London Bird Team is a dedicated grassroots coalition within Nature Canada's Bird Friendly City Program, ensuring their city is truly Bird Friendly. They are currently the only city to have attained the Bird Friendly City program's highest level of certification (at least 80 percent of actions completed).

To support bird populations in the city, the London Bird team first came together in 2020. Its members include representatives of the non-profit London Environmental Network, Nature London, Upper Thames River Conservation Authority, Salthaven Wildlife Rehabilitation & Education Centre, Friends of Stoney Creek, and The Advanced Facility for Avian Research at Western Ontario University, alongside resident birders. London is one of the first four cities in Canada to be certified as a Bird Friendly City. Since then, the team has collaborated with its local government to pass a variety of policies to reduce urban threats to birds.

Those include:

- Green Building Standards for Light Pollution and Bird Friendly Design using the Canadian Standards Association requirements for new construction to prevent bird-window fatalities
- A Yard and Lot Maintenance ordinance that allows residential native pollinator gardens that support birds and biodiversity, and limits neighbors' ability to file complaints.
- A Responsible Pest Management Pilot Program to encourage owl nesting near businesses to reduce the use of rat poison; the program includes public bus advertising campaigns educating about the harms bait-boxes cause.
- An Animal Control ordinance which prevents outdoor cats from free-roaming outside of their owners' private property, helping to reduce predation and the number of birds killed by cats.







London, Ontario's, 21 "Environmentally Significant Areas" include habitat for Great Horned Owls, Killdeers, and Chimney Swifts.





London, Ontario, residents supported restrictions on outdoor cats and chose the Northern Cardinal as the official city bird. A local brewery created a "Northern Cardin-ale" beer.

The Bird Team has also taken several actions to reduce key threats to birds in London. Our voluntary Bird Friendly Certification program requires residents to help birds in ways beyond what the municipal policies can do. The Bird Team has done tremendous work educating and mobilizing the community on how individuals can conserve and celebrate birds..

Residents can visit *www.birdfriendlylondon.ca/education* to find free resources to help inform conversations about human-caused bird declines. The website includes guides and letter templates for help asking a landlord or business to turn off outdoor lights and treat their windows to mitigate collision risk, pamphlets to download for new cat owners on the importance of keeping cats indoors, leashed or in an enclosed outdoor structure such as "Catios," and even a request to delay yard work to be outside of bird nesting and breeding season. Residents can request lawn signs celebrating London as a Bird Friendly City. The signs feature simple actions to help birds, along with a QR code to learn more. Each of these individual actions, along with education and bird-positive local policies, has helped support London's High-level Bird Friendly City Certification.

One highlight of Bird Friendly London's work was a community vote on an official emblem bird to represent their city. Candidates included Bank Swallow, Chimney Swift, Mourning Dove, Northern Cardinal, Great Horned Owl, Red-tailed Hawk, Black-capped Chickadee, and Peregrine Falcon. With 6,000 votes, the Northern Cardinal won and was crowned London's City Bird! To celebrate, the Bird Team collaborated with London Brewery to create the first "Northern Cardin-Ale" beer to be purchased and sold in their community.

London Bird Team volunteers have retrofitted numerous local businesses with bird-deterrent collision markers, distributed thousands of native seeds for free to the residents, monitored high-risk buildings for bird-window collisions to support future retrofits, and hosted community birding events and a Spring Migration Festival.

Proven Policies and Practices to Protect Birds

Nature Canada's Bird Friendly City Certification program is designed to add up to measurable, lasting change for birds in the built environment and beyond. The criteria are based on rigorous science proven to help conserve birds alongside community engagement and policy change to protect them. Each certified city is reducing its negative impact on birds to help its populations rebound—whether that is by ensuring buildings prevent fatal glass collisions, decreasing outdoor cat predation, providing new habitat for birds, or banning harmful pesticides. A Bird Friendly City connects more people to nature in their daily lives, increases bird monitoring through citizen science, and ensures local councils have the tools they need for new projects to keep birds, their habitats, and ecosystem services in mind. A Bird Friendly City is a vibrant, livable, and biodiverse space that addresses and mitigates conservation challenges while enhancing bird protection within urban environments.

Why This Matters for the U.S. and Connecticut

The 30-plus municipalities and bird advocates across Canada demonstrate the strength of small collective actions in helping to bring birds back from the brink. Most if not all of these actions can be implemented in your community too. Building your own bird conservation success stories, advocating for similar policies, and raising awareness about urban threats to birds will ensure that you can continue to enjoy a healthier natural environment and the beauty of birds every day.

* * * *



Canada encourages Green Building Standards for light pollution and bird-friendly design to prevent bird-window fatalities.

Autumn Jordan has worked at Nature Canada as their Bird Friendly City Organizer since May 2021.

If Government Abandons Conservation, Birds and a Generation of Scientists Will Both Suffer

by The Connecticut Audubon Society



For decades, scientists could count on a stable base of federal support for conservation science, including shorebird research.

The decline of North America's bird populations unfolded over decades, and the recovery will take decades as well. The conservation scientists who documented the decline are working on solutions but the bulk of the work is going to fall on younger generations.

The question is: will they have the government support that conservation scientists have relied on for decades? And if they don't, will it create a gap not just in the science but in the cohort of young scientists needed to carry out the work? Will it stall the work needed to bring birds back?

Those questions are especially important because of the scale of the problem and the solutions.

In 2019, the landmark paper "Decline of North American Avifauna," published in the journal *Science*, documented the loss of three billion birds since 1970—a staggering 30 percent. Shorebirds, grassland birds, forest birds, shrubland birds were all disappearing, and many had lost more than half their population.



Peter P. Marra, one of the authors of "Decline of North American Avifauna," said, "You don't publish a paper like that and then go back to your day job doing science. You start scratching your head and thinking, what do we do to help these species recover? We came to the conclusion that conservation and the way we're doing it, it's not enough. It's not working. And we need to reimagine what we're doing for bird conservation."

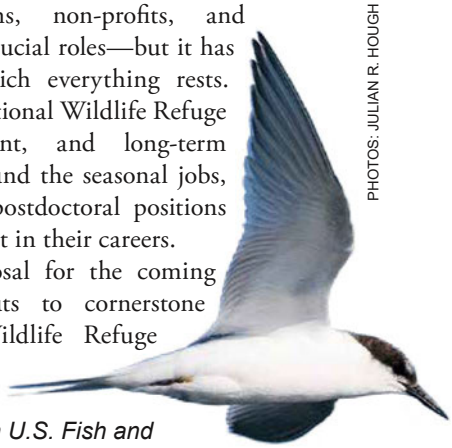
For decades, scientists could count on a stable base of federal support for conservation science. Federal funding has never been the only source of money for bird research—private foundations, non-profits, and individuals have also played crucial roles—but it has been the foundation on which everything rests. Federal dollars support the National Wildlife Refuge System, habitat management, and long-term monitoring programs. They fund the seasonal jobs, graduate assistantships, and postdoctoral positions that give young scientists a start in their careers.



PHOTO: MATTHEW WILSON

More than 34,000 birds of 135-plus species have been banded at Birdcraft in Fairfield.

The federal budget proposal for the coming fiscal year includes big cuts to cornerstone programs. The National Wildlife Refuge



PHOTOS: JULIAN R. HOUGH (3)

Endangered Roseate Terns have a breeding stronghold on U.S. Fish and Wildlife Service's Stewart B. McKinney Refuge.



Records for more than 79 million birds dating from the early 1900s and have been sent to the Bird Banding Lab in Maryland.



Proposed budget cuts would mean layoffs of almost the entire Bird Banding Lab staff in Laurel, Maryland.

PHOTOS: JULIAN R. HOUGH (4)

System faces a 22 percent budget reduction, threatening not just habitat management and staffing but also the basic conservation science that happens on refuge lands. U.S. Fish and Wildlife Service grants—funding that flows to both domestic and international bird conservation projects—have been frozen in some cases, delaying fieldwork and jeopardizing collaborations. Even the North American Wetlands Conservation Act, a bipartisan program that has funded habitat restoration for decades, now faces an uncertain future.

Perhaps most alarming, the U.S. Geological Survey's Ecosystems Mission Area—which houses both the North American Breeding Bird Survey and the federal Bird Banding Laboratory—is facing a budget cut of 90 percent, including layoffs of almost the entire Bird Banding Lab staff. Bird banding has been central to bird conservation for more than a century, producing data that helps scientists track survival, migration routes, and habitat use. The Bird Banding Lab in Laurel, Maryland, holds records for more than 79 million birds going back to the early 1900s. It's not only a national issue: volunteers and staff at Connecticut Audubon's Birdcraft Sanctuary in Fairfield have been banding birds for over 50 years, attaching tiny aluminum bands to the legs of more than 34,000 birds of more than 135 species. Every band recovered adds to the scientific record and tells the story of that individual bird's life.

Under the proposed cuts, this vital infrastructure would be gutted. Without a functioning Bird Banding Lab, scientists would lose the ability to monitor changes in bird populations and migration at the very moment when such data is most needed. Similar threats loom over the Breeding Bird Survey, which has provided decades-long records of population trends and underpins much of what we know about bird declines and recoveries.

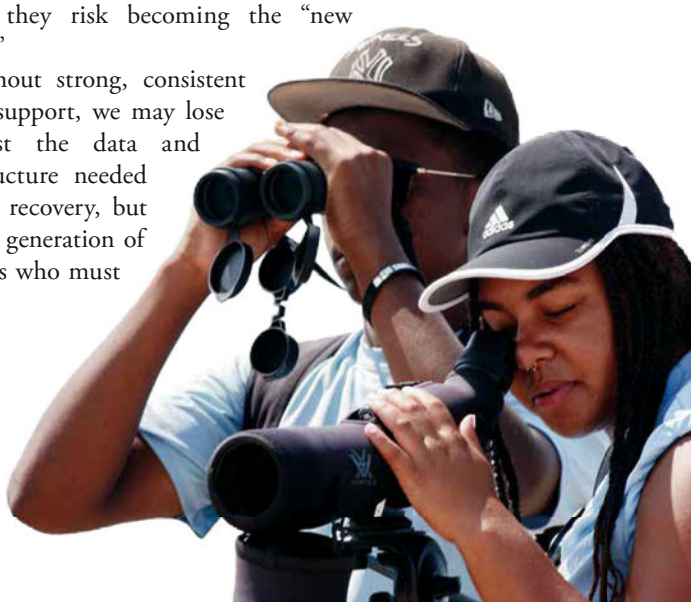
The damage would extend beyond the science itself. If field stations can't hire seasonal staff, if graduate students can't secure federally funded assistantships, if postdocs can't find research positions tied to federal grants, young scientists will have fewer ways to gain the experience to become conservation leaders. Many might leave the field entirely. That kind of brain drain would create a gap that would be hard to bridge later. It might also stall critical long-term projects, because early-career researchers are often the ones who carry out the day-to-day fieldwork and data collection.

Research and recovery efforts require stability and planning. When funding freezes or disappears, it disrupts not just current projects but the continuity of decades-long datasets and partnerships. And if the cuts are enacted and then allowed to persist, they risk becoming the "new normal."

Without strong, consistent federal support, we may lose not just the data and infrastructure needed for that recovery, but also the generation of scientists who must lead it.



Young scientists will lack the exp erience to become conservation leaders.



RECOMMENDATIONS

Bird conservation after the landmark 2019 study "Decline of North American Avifauna" requires effective local work in coordination with regional and national efforts. This report has highlighted what is working and where the challenges remain. Based on these lessons, we recommend the following:

Use Ospreys as Sentinel Species

Connecticut Audubon will launch a pilot project in 2026 to identify the fish species the state's Ospreys depend on. Connecticut's Ospreys are doing well but populations in parts of Chesapeake Bay are collapsing because of food shortages. Understanding why will require better data on regional diets.

We urge fisheries and coastal ecosystem managers to incorporate Osprey data—reproductive success, diet, and population trends—into decision-making. Ospreys are ideal ecological indicators. Leveraging their role as bioindicators can help transform long-standing fishery debates into transparent, science-driven conservation.

Strengthen Piping Plover Protection



Since being listed as threatened in 1986, the Atlantic Coast population of Piping Plovers has increased from fewer than 800 pairs to over 2,000, including more than 80 in Connecticut. Much of this progress comes from coordinated efforts led by the U.S. Fish and Wildlife Service and carried out locally by the Audubon Alliance for Coastal Waterbirds.

Approximately one-third of the state's Piping Plovers nest at Milford Point. Connecticut Audubon will continue to make protection of that habitat the highest priority. The success there shows the value of day-to-day monitoring, and collaboration among agencies, conservation groups, and the public.

Protect Other Vulnerable Shorebirds

More than a dozen regularly occurring Connecticut shorebirds—including Black-bellied Plover, Sanderling, Red Knot, and Greater and Lesser Yellowlegs—are "Tipping Point species," having lost over half their populations since 1970.

Protection efforts must be strengthened beyond Milford Point and Sandy Point, New Haven, to other key sites such as Long Beach, Hammonassett, Griswold Point, Bluff Point, and Barn Island. Outreach strategies tested by Virginia Tech and Audubon—including walks for the public, community meetings, signs and fencing, and shorebird viewing areas—can be carried out elsewhere to reduce human disturbance.



Maintain Federal Conservation Funding

Congress must reject proposed cuts to essential programs such as the Bird Banding Laboratory, the North American Breeding Bird Survey, and National Wildlife Refuge funding. These provide irreplaceable data, infrastructure, and training for bird conservation nationwide. The cost of losing them far outweighs the savings.



Make Connecticut Cities Bird-Friendly

Urban habitats are critical for Connecticut's birds. We encourage conservation groups, land trusts, and municipalities to collaborate on initiatives modeled on Nature Canada's Bird Friendly City program. Priorities include reducing glass collisions, light pollution, pesticide and rodenticide use, and outdoor cat predation.

We also urge adoption of bird-friendly building standards at state and municipal levels, modeled on New York City's Local Law 15 and Canadian Standards Association guidelines.

These actions can help ensure that Connecticut contributes meaningfully to the recovery of North American birds—linking local conservation to regional and hemispheric success.

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Trail Wood *(Hampton)* | **Coastal Center at Milford Point** (*Milford)*
Roger Tory Peterson Estuary Center *(Old Lyme)* | **Center at Pomfret** *(Pomfret)*
Stratford Point *(Stratford)* | **Greater Hartford Area** *(Hartford)* | **Deer Pond Farm** *(Sherman)*