



From wetlands to prairies, Openlands is creating spaces where nature and people can thrive together.



RESTORING

THE NATURE THAT RESTORES US

This Openlander highlights a remarkable restoration success story—the O’Hare Modernization Wetlands Mitigation Project.

Spanning five unique sites in the Des Plaines River watershed, this initiative showcases the depth and scale of Openlands’ efforts to restore and protect our region’s natural landscapes. By restoring over 530 acres of wetlands, Openlands created a rare model of large-scale, high-quality ecosystem restoration in an urban environment.

Illinois’ rich landscapes are vital for life.

Our region’s diverse ecosystems—wetlands, woodlands, prairies, and beyond—nurture vibrant communities of people and wildlife. Nature meets our essential needs, providing food, clean air, and water, while offering a sanctuary from the pressures of modern life. These landscapes are not just habitats; they are integral to creating a true sense of home.

Since the mid-19th century, and especially with the introduction of the steel plow, human activity has permanently altered and reduced our region’s native ecosystems.

- Over 90% of Illinois’ wetlands have been drained and lost to unchecked development and industrial agriculture.
- Less than 0.1% of Illinois prairies remain.
- More than 10 million acres of forests have been removed in Illinois.
- Habitat loss and invasive species are pushing ecosystems out of balance.

While protecting what we have left is of utmost importance, ecological restoration is a powerful and necessary solution in a highly developed region like the greater Chicago metropolitan area.

Think of restoration as healing—on a landscape scale. It’s how we nurture the land so it can continue to support us. It’s about understanding the land: what lives there, what it was prior to disturbance, and how to best ensure

its vitality in the future. For over 60 years, Openlands has been dedicated to conserving nature for life, and we have the expertise to lead this critical work. Our successful completion of the O’Hare Modernization Wetlands Mitigation Project demonstrates the power of significant investment and long-term stewardship for people and nature. Building on this experience, we are committed to ensuring that our ongoing restoration projects continue to create positive, lasting impacts across our region.

Celebrating Ballot Wins for Conservation

THE GREATER CHICAGO metropolitan area is home to a unique network of Forest Preserves and Conservation Districts that protect, expand, and steward the region’s natural areas. The Forest Preserves of Cook County, for example, is the nation’s first and largest forest preserve system, encompassing 70,000 acres.

In 1971, Openlands played a key role in the ballot measure campaign that established the McHenry County Conservation District. Since then, we have championed numerous campaigns encouraging voters to invest in their natural areas, including the landmark Vote Yes for Clean Air, Water, and

Wildlife ballot victory for the Forest Preserves of Cook County in 2022. Most recently, we celebrated four more significant ballot wins in DuPage, Kane, Lake, and McHenry Counties in 2024.

Like the landscapes we protect, Openlands takes a long view. Over the next two decades, these five ballot measures and a \$50 million board-approved bond in Will County will collectively channel an additional \$1.6 billion into the region’s natural areas. These investments will expand access to open spaces, restore ecosystems to good health, and connect more people to the outdoors, right where they live.

WELCOMING NATURE BACK:

THE O’HARE MODERNIZATION WETLANDS MITIGATION PROJECT

The Lay of the Land

In 2005, the City of Chicago entrusted Openlands with \$26 million to begin the largest restoration initiative the region had ever seen. The funding came as part of the \$8 billion O’Hare Modernization Program, which presented the city with a significant challenge: make up for the 280.14 acres of wetlands lost in the airport expansion. Because O’Hare Airport lies within the Des Plaines River watershed, the Clean Water Act required the City to mitigate this loss by restoring, creating, enhancing, or protecting wetlands within the same watershed. Openlands already had a track record of success restoring wetlands within the region and was the right partner to lead this work.

In 2024, Openlands officially completed the restoration and monitoring of five key sites. Working alongside volunteers and land management partners—the Forest Preserves of Cook and Will Counties and the U.S. Forest Service—Openlands nearly doubled mitigation requirements while staying within budget.

Together, we restored over 530 acres of wetlands and a total of 1,620 acres of protected natural area.

As wetlands naturally expand and contract with the seasons, restoring adjacent natural spaces is critical to ensuring these ecosystems can thrive long-term.

“It’s not often that restoration projects receive the time, financial investment, and dedication that Openlands gave to these five sites,” said **Linda Masters**, Openlands past Restoration Ecologist, who led the project. “The results show what can be achieved if we truly invest in restoration. Not just for nature, but for us and the enrichment of our lives.”

Setting the Groundwork

At the time, most restoration efforts in the region focused on improving existing but degraded remnant habitats. The requirements of the O’Hare Mitigation Project, however, called for a different approach. The sites Openlands selected were areas where little to no habitat remained—former farm fields with straight-as-an-arrow drainage ditches, pine tree plantations, and overgrown turf-grass fields.

“There was a little skepticism when we first began the restoration,” recalled John McCabe, Director of Resource Management at the Forest Preserves of Cook County. “The FPCC had never really done a project like Deer Grove East where we created habitat from essentially nothing.”

Through research into the historical landscapes, Openlands identified areas with the greatest potential for ecological recovery and community benefit. Ultimately, we chose places located at the top of the watershed, where they could help clean water as it flows downstream. Additionally, these sites were already owned by our land management partners, maximizing the return on investment for restoration and ongoing care.

Project sites:

- Deer Grove Forest Preserve, Cook County
- Bobolink Meadow Land and Water Reserve, Cook County
- Hadley Valley Preserve, Will County
- Messenger Woods Nature Preserve, Will County
- Drummond Floodplain, Midewin National Tallgrass Prairie, Will County

The Restoration Toolbox

Our goal was to restore these sites into self-sustaining ecosystems.

Wetland restoration involves multiple phases, beginning with hydrologic restoration. This often includes re-meandering waterways and removing old drainage tiles, allowing water to flow naturally and support the ecosystem rather than being diverted to prevent flooding of farm fields.

With hydrology restored, teams focus on rebuilding the biological landscape, starting with seeding native grasses and sedges to establish a resilient plant community. Throughout the process, invasive species like European buckthorn and reed canary grass are actively managed to prevent their spread.

Once native plants are established, fire—a natural ecological process—is reintroduced to suppress invasive species and encourage the germination of fire-dependent native seeds. Teams then enhance the site ecology by planting plugs and distributing seed mixes of conservative native species, which thrive in the high-quality conditions created by earlier efforts. This final phase provides essential food and habitat for wildlife to quickly return and flourish, reconnecting them with the environment they have adapted to over thousands of years.

In an effort to create meaningful community ties to the land and ensure the long-term success of the projects, Openlands supported volunteers and “Friends of” groups early on in the restoration work. Now, 20 years later, these sites still host thriving volunteer communities that will maintain them into the future. “Openlands understands the power of adaptive management—that if we monitor the condition of our restoration lands over time and adjust our management actions according to conditions on the ground, we achieve outstanding, informed restoration outcomes,” said Karen Glennemeier, Ph.D. President, Habitat Research LLC, and restoration volunteer.

At Deer Grove East and Bobolink Meadow Land & Water Reserve, Openlands led efforts to install interpretive signage to deepen understanding of native ecology and inspire lasting connections to these restored landscapes. Trail development, educational programs, and community engagement continue to expand people’s access to the healing power of nature.

Investment Reaps Returns

The 2016 *Economic Valuation Study of Deer Grove East*, conducted by Stantec Consulting Services, highlights the economic benefits of restoration. While this study focuses on a single project, it demonstrates the potential for similar benefits across other restoration sites, providing a scalable model for impact. The study showed:

- \$2 return for every \$1 spent in the short-term from jobs and economic activity.
- \$6 return for every \$1 spent in the long-term from better recreation, water quality, and flood control.
- \$14 million yearly boost to local economies from recreation.
- 110 million gallons of additional stormwater absorbed annually by prairie plants and wetlands.
- 300% increase in native wetland plants and a top-tier floristic quality score of 94.7, significantly higher than the mid-30s average for good-quality areas.

Access the full report at [Openlands.org/ecovalue](https://openlands.org/ecovalue)

The Bottom Line

The O’Hare Modernization Wetlands Mitigation Project stands as a national model for large-scale, high-impact restoration.

By engaging community members in the process from the very beginning, it fostered lasting connections between people and the land. The project demonstrated how smart investment and effective management can not only meet but far exceed mitigation standards, achieving conservation excellence.

It also underscored the power of restoration to revitalize biodiversity, bringing back native plants, wildlife, and critical ecosystems that support a healthy environment. The rewards of this investment are immense—from economic benefits in surrounding communities to flood prevention savings and the priceless health benefits of spending time in nature.

Grant Creek Watershed restoration breaks ground at the Midewin National Tallgrass Prairie

Openlands, the Wetlands Initiative, and the U.S. Forest Service are working together to continue the restoration and expansion of grassland habitats at Midewin National Tallgrass Prairie. This project is supported by a \$1.5 million grant from the National Fish and Wildlife Foundation’s America the Beautiful Challenge. It builds on Openlands’ previous restoration work in Midewin,

including the Drummond Floodplain area. The focus is Grant Creek, a priority watershed for the Forest Service. Once completed, it will set the stage to transform an area the size of 1,000 football fields into healthy native habitats. This site, which borders the 1,200-acre bison pasture grassland, is a unique opportunity to restore an entire stream corridor and expand future recreation opportunities.

THEN & NOW



DEER GROVE FOREST PRESERVE, COOK COUNTY



Deer Grove Forest Preserve is the oldest protected land in the Forest Preserves of Cook County system, first acquired in 1916. The preserve is divided into two sections: East and West. The East side features more wetlands, while the West is characterized by woodlands and rolling prairies. Openlands initially focused restoration efforts on Deer Grove East (pictured) and later expanded to Deer Grove West, thanks to our exceptional stewardship of restoration funding.

Total Acres Restored: 589.4
Wetland Acres Restored: 41.68
Restoration Activities: Hydrological restoration, invasive species removal, native seeding and planting, prescribed burns, interpretive signage installation
Permanent Protection: Illinois Land and Water Reserve (East), Illinois Nature Preserve (West)



BOBOLINK MEADOW LAND AND WATER RESERVE, COOK COUNTY



Bobolink Meadow Land and Water Reserve has been recognized as an Important Bird Area, particularly for its critical role in supporting imperiled grassland birds. Of the 93 bird species of conservation concern in the Chicago region, 50 have been observed at this preserve.

Total Acres Restored: 534.9
Wetland Acres Restored: 302.88
Restoration Activities: Hydrological restoration, bird monitoring, invasive species removal, native seeding and planting, interpretive signage installation
Permanent Protection: Illinois Land and Water Reserve



HADLEY VALLEY PRESERVE, WILL COUNTY



Hadley Valley Preserve hosts the largest restoration project in the history of the Will County Forest Preserve District and has received numerous awards for its conservation excellence.

Total Acres Restored: 192.8
Wetland Acres Restored: 60.05
Restoration Activities: Hydrological restoration, habitat restoration, re-meandering Spring Creek
Permanent Protection: Openlands conservation easement



MESSINGER WOODS NATURE PRESERVE, WILL COUNTY



Messenger Woods Nature Preserve, acquired in 1930, was the first property purchased by the Will County Forest Preserve District. It includes one of the county's earliest dedicated nature preserves and remains one of the most popular sites in the forest preserve system.

Total Acres Restored: 100.9
Wetland Acres Restored: 25.77
Restoration Activities: Hydrological restoration, erosion control, invasive species removal, native planting, savanna restoration, weed management
Permanent Protection: Openlands conservation easement, Illinois Nature Preserve



DRUMMOND FLOODPLAIN AT MIDEWIN NATIONAL TALLGRASS PRAIRIE, WILL COUNTY



The Drummond Floodplain project within the Midewin National Tallgrass Prairie is an integral part of a larger landscape plan to restore dolomite prairie—some of the rarest habitats in the world and home to federally and state-listed endangered species.

Total Acres Restored: 202
Wetland Acres Restored: 107.7
Restoration Activities: Hydrological restoration, parking pad removal, invasive species removal, native seeding and planting, prescribed burns
Permanent Protection: U.S. Forest Service

All in for Nature

Restoration is a monumental undertaking that takes many hands, years of effort, and careful planning. Openlands is deeply grateful for the the O'Hare Modernization Wetlands Mitigation Project collaborators: the Chicago District of the U.S. Army Corps of Engineers, the Federal Aviation District—Great Lakes Region, the Forest Preserve Districts of Cook and Will Counties, the Illinois Environmental Protection Agency, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the volunteers who make this work possible and lasting.

2024 OPENLANDS ANNUAL LUNCHEON

OPENLANDS EXTENDS HEARTFELT THANKS to all who attended the 2024 Annual Luncheon. Nearly 800 attendees gathered to support our mission and rally under this year’s luncheon theme and our tagline, “Conserving Nature for Life.”

Your generosity made this luncheon a success. Every contribution plays a vital role in advancing our efforts to preserve and protect nature throughout the greater Chicago metropolitan area.

More than just a fundraiser, the Annual Luncheon is one of the largest gatherings of the conservation community in our region each year. It serves as a powerful reminder of the strength of collective action in tackling the most pressing conservation challenges of our time.

This year’s luncheon featured keynote speaker Dr. J. Drew Lanham (*pictured at right*), whose inspiring spoken-word presentation celebrated the beauty of

nature and the power of coming together. We also honored Arnold L. Randall, Executive Director of the Gaylord and Dorothy Donnelley Foundation and the former General Superintendent of the Forest Preserves of Cook County, with the Gerald W. Adelmann Conservation Leadership Award (*in group photo below, seated at far right*). This marked the first presentation of the award since its renaming in honor of Openlands’ immediate past President and CEO.

Save the date for the 2025 Openlands Annual Luncheon, taking place on Friday, October 17, 2025, at the Hilton Chicago. **For more information, please contact development@openlands.org.**



Welcome New Openlands Board Member

JOE FERGUSON is the president of the Civic Federation and previously served as inspector general for the City of Chicago.

What brought you to Openlands?

A longstanding intuitive admiration of the work of Openlands under visionary President Emeritus Jerry Adelmann crystalized during direct engagement around local government policy and program issues during my time in Chicago city government. I experienced an organization that in word and deed manifested an ethos oriented to the both/and, rather than the either/or, respecting the integration of the natural and built environments, with an intention to promote physical and social well-being. Once I understood Openlands’ work as healing people and community by protecting and healing nature, I was hooked.

Where is your favorite place to get outside in the region?

The shortlist would be different each time I answered, but a constant is the Ft. Sheridan Forest Preserve. Back in the day, when I was an undergrad at Lake Forest College, Ft. Sheridan demanded respect while prohibiting exploration. As a preserve, through the work of Openlands, it is now a diverse coastal ecosystem that fuses opportunities for immersion in nature with outdoor recreation. As a native of New England, it makes Ft. Sheridan something of a home away from ancestral home, and exemplifies Openlands’ understanding of nature as a critical part of human existence.



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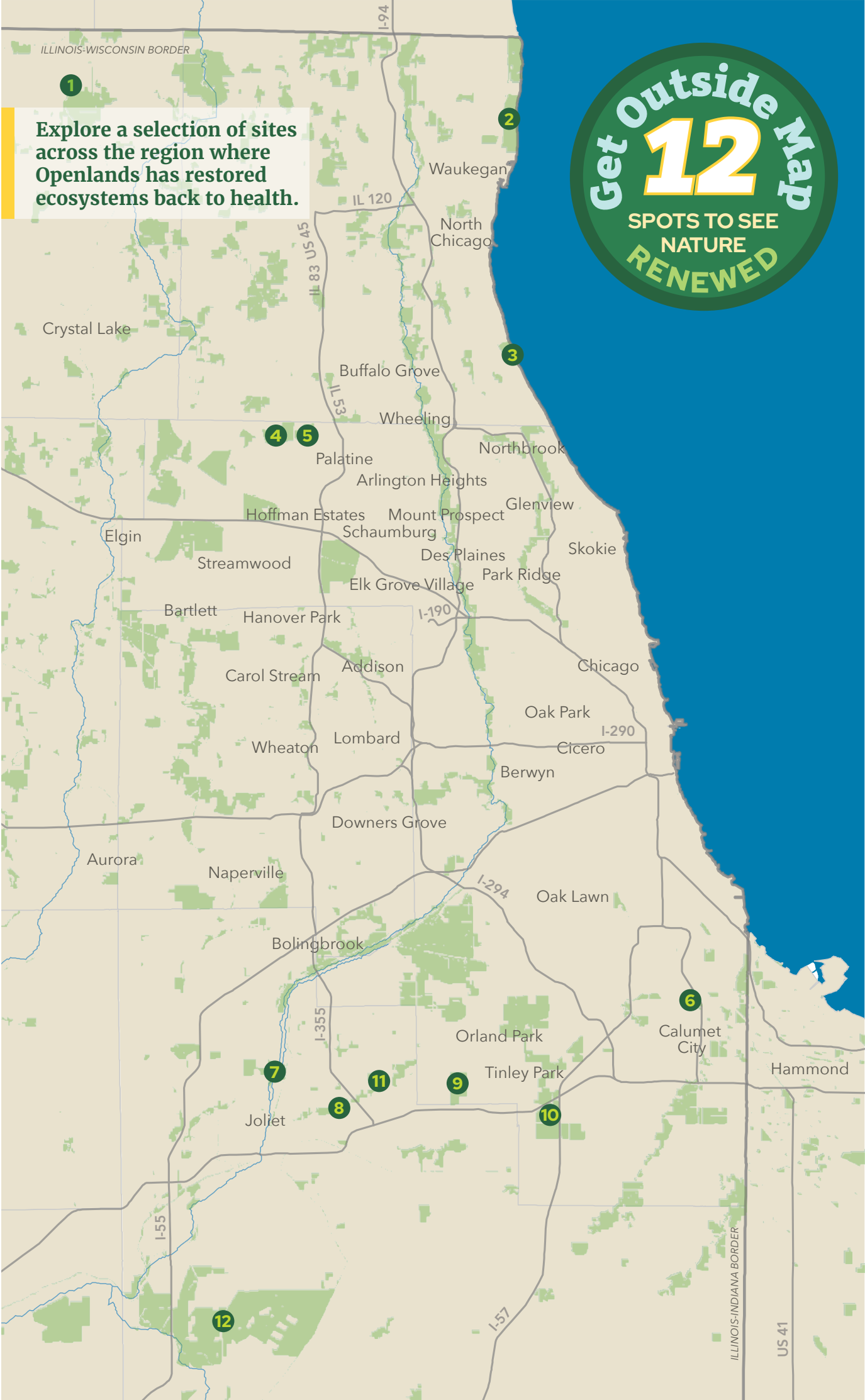
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We can't have a healthy society without healthy ecosystems.
Your support matters.
Every restoration project is a step toward a more resilient home. Together, we can restore our region to health—for nature, for people, and for generations to come. Support our work today at Openlands.org/restore

Bullfrog at Messenger Woods Nature Preserve
courtesy of the Forest Preserve District of Will County



- Map key
- 1

Hackmatack National Wildlife Refuge – Tryon Grove
7008 East Tryon Grove Rd, Richmond, IL 60071
This is a publicly accessible natural area within the core Hackmatack National Wildlife Refuge.
- 2

Illinois Beach State Park
1 Lake Front Dr, Zion, IL 60099
This park spans 6.5 miles of Lake Michigan shoreline, hosting 650+ plant species and diverse wildlife in its dunes, marshes, and oak ecosystems.
- 3

Openlands Lakeshore Preserve
24256 Patten Rd, Highwood, IL 60040
This preserve features unique ravines, bluffs, and lakefront ecosystems. Owned and restored by Openlands, it was gifted to Lake County Forest Preserves in 2023.
- 4

Deer Grove Forest Preserve (West)
W Dundee Rd, east of Northwest Hwy, Cook County, IL 60010
Deer Grove is one of the oldest preserves in the Cook County forest preserve system, with the western section being a part of the initial land acquisition in 1916. This heavily wooded area, with wetlands and a Salt Creek tributary, hosts 300+ native plants and diverse wildlife, including birds, mammals, reptiles, and amphibians.
- 5

Deer Grove Forest Preserve (East)*
W Dundee Rd, west of N Hicks Rd, Cook County, IL 60074
This area of the preserve includes open prairie and wetlands, shaded savannas, and a system of interpretive trails.
- 6

Beaubien Woods Forest Preserve
W Doty Ave S, southeast of E 130th St &, S Ellis Ave, Chicago, IL 60633
This Chicago preserve features prairie, woodland, and wetland habitats and serves as an access point to the African American Heritage Water Trail. Openlands has ongoing restoration efforts at the Beaubien Woods boat launch and prairie area.
- 7

Lockport Prairie Preserve
Broadway St, Lockport, IL 60441
Lockport Prairie contains the globally rare and high-quality remnant dolomite prairie and protects federally endangered species.
- 8

Hadley Valley Preserve*
18304 Gougar Rd, Joliet, IL 60432
Native plants and wildlife flourish in Hadley Valley’s prairies, savannas, and woodlands, making it a prime spot for birding and wildlife viewing.
- 9

Orland Grassland
W 167th St, west of S La Grange Rd, Cook County, IL 60467
One of Cook County’s largest grasslands, this area supports grassland birds with its prairies, wetlands, marshes, and woodlands.
- 10

Bobolink Meadow Land and Water Reserve*
Cook County, IL 60477 (near Tinley Park)
Once an agricultural area, this reserve is now regarded as one of the best birdwatching destinations in the region.
- 11

Messenger Woods Nature Preserve*
13800 W Bruce Rd, Homer Glen, IL 60491
As one of the few forests in the region that has never been grazed, cut, farmed, or developed, this preserve is a unique old grove environment of oaks, maples, elms, and wildflowers.
- 12

Midewin National Tallgrass Prairie*
30239 S. State Route 53, Wilmington, IL 60481
Home to over 20 miles of trails, historic ruins, sweeping prairie landscapes, plus a herd of bison, our county’s first National Tallgrass Prairie is one of the best natural treasures in our region.
- * Denotes sites with wetland restoration completed as part of the O’Hare Modernization Wetlands Mitigation Project.



The comeback for grassland birds

The Bird Monitoring Results 2020, published by Judy Pollock, highlight the significant achievements in bird conservation at Bobolink Meadow Land and Water Reserve and Bartel Grasslands following Openlands’ restoration efforts. Since restoration began, this area has supported 59 bird species of conservation concern, nine Illinois–endangered species, and one Illinois–threatened species, showcasing remarkable biodiversity recovery. While this study focuses on a single area, it is a beacon of hope the restoration of other local grasslands.

Access the full report at [Openlands.org/birdmonitoring](https://openlands.org/birdmonitoring)



On the lookout: *Iconic species from restored ecosystems*

We live in an interconnected system where our health and future depend on the biodiversity around us. Unfortunately, biodiversity in our region and across the globe is declining due to habitat loss, invasive species, and unchecked development. One measure of successful restoration is the return and growth of native wildlife. Northeastern Illinois and the surrounding region boast rich biodiversity thanks to its varied microclimates and habitats. Openlands and our partners conduct ongoing species inventories, monitoring, and research to ensure native species are rebounding.

The following is a selection of iconic species found in restored ecosystems in our region. However, much more work is still needed to bring species off endangered lists and secure their future.

BOBOLINK (*Dolichonyx oryzivorus*) I

Habitat: Grasslands, tallgrass prairie, agricultural fields
Distinguishing features: Females have yellow feathers with dark stripes on the head and males have black and white plumage and often described as wearing a “backward tuxedo”; known for their bubbly, complex song

HENSLOW’S SPARROW (*Centronyx henslowii*) I

Habitat: Restored grasslands and wet meadows with dense vegetation
Distinguishing features: Small sparrow with olive-colored head, streaked back, and a short tail; truncated chirp

SANDHILL CRANE (*Antigone canadensis*) I

Habitat: Wetlands, marshes, and wet meadows
Distinguishing Features: Large gray bird with a red crown; known for their loud, trumpeting call and elegant courtship dances

NORTHERN LONG-EARED BAT (*Myotis septentrionalis*) F

Habitat: Forested areas and caves for roosting and hibernation
Distinguishing features: Medium-sized bat with long ears and brown fur; adept at foraging in dense forests

BLANDING’S TURTLE (*Emydoidea blandingii*) S

Habitat: Wetlands, marshes, and shallow ponds with ample aquatic vegetation
Distinguishing features: Bright yellow chin and throat; domed shell with dark coloring and yellow speckles

SLENDER GLASS LIZARD (*Ophisaurus attenuatus*) I

Habitat: Open prairies, grasslands, and sandy habitats
Distinguishing features: Legless lizard resembling a snake; smooth, shiny scales and a long, fragile tail

WOOD FROG (*Lithobates sylvaticus*) I

Habitat: Forested wetlands and vernal pools
Distinguishing features: Brown or tan body with a dark “mask” extending from the eye to the eardrum

HINE’S EMERALD DRAGONFLY (*Somatochlora hineana*) F

Habitat: Wetlands with shallow, flowing water and calcareous soils
Distinguishing features: Metallic green body with emerald eyes and clear wings

BLACK SANDSHELL MUSSEL (*Ligumia recta*) I

Habitat: Clean, fast-flowing rivers and streams
Distinguishing features: Elongated black shell with greenish streaks; vital for filtering water and improving aquatic ecosystems

LEAFY PRAIRIE CLOVER (*Dalea foliosa*) F

Habitat: Limestone prairies and open grasslands
Distinguishing features: Upright plant with delicate purple flowers and narrow, leafy stems

OKLAHOMA GRASS PINK ORCHID (*Calopogon oklahomensis*) S

Habitat: Wet prairies and marshes
Distinguishing features: Delicate pink flowers with a unique “lip” resembling a bearded tongue

WHITE OAK (*Quercus alba*) D

Habitat: Upland forests and savannas
Distinguishing features: Majestic tree with light gray bark, lobed leaves, and a critical role in oak ecosystem recovery efforts; Illinois state tree

CONSERVATION STATUS

- I Illinois Species of Greatest Conservation Need
- F Federally endangered
- S State endangered
- D Abundant but regionally declining

