What is Chicago Wilderness?

Chicago Wilderness is one of the most and most significant efforts in the conservation world. Built on the efforts of roughly 300,000 acres of protected natural lands harboring native plant and animal communities that are more rare—and their survival more globally threatened—than the tropical rain forests.

Chicago Wilderness is an unprecedented alliance of 111 public and private organizations working together to study and restore, protect, and manage the precious natural ecosystems of the Chicago region for the benefit of the public.

www.chicagowilderness.org

Chicago Wilderness is a quarterly magazine that celebrates the rich natural heritage of this region and tells the inspiring stories of the people and organizations working to heal and protect it. nature.

chicagowildernessmag.org

For a complete list of Chicago Wilderness members, please visit the Web site at www.chicagowilderness.org.
One Wild Decade

Welcome to this special 10th Anniversary Issue of Chicago WILDERNESS Magazine. It’s hard to believe we've been covering the biodiversity of the Chicago region for a full decade. We've traveled to the far ends of the region and discovered miracles in large preserves and small backyards; we've followed guides, scientists, canoists, seed collectors, and buckthorn-cutters in all kinds of weather.

In surveying all we've written about, it's tempting to look for signs of change, and especially of progress. There are, of course, many different ways to evaluate progress. One is by the numbers: How many rare birds are breeding each year? How many acres were acquired for protection? Compare those figures against a baseline, make a chart. If we pick the right numbers and they're going up, we're doing well.

But the goal of Chicago Wilderness—to identify, protect, restore, and appreciate the precious, rare biodiversity across this region—is a monumental and complex undertaking. Even after ten years, we are only beginning to be able to say: "This is where we are." Despite preventing some backsliding in key preserves and reviving others, the overall state of the ecosystem continues to worsen. The 2006 State of the Region Report Card reflects this, as does our "Trends" section on page 30 of this issue.

But we have made many steps forward. We're gradually getting better numbers, and are in a progressively stronger position to address questions such as how to best harness and prioritize collective resources.

Measurable results are, without a doubt, crucial. But one of the greatest successes of Chicago Wilderness is more simple, elemental, and personal: That people—no matter how many—have experienced profound awakenings, and then found the resources to continue learning and becoming actively engaged, often in life-altering ways.

Chicago Wilderness—the 213 member organizations as well as the broader community—has helped people more deeply penetrate the underlying fullness of this place in which we live. It has lifted a veil. The raccoons, rabbits, squirrels, and sparrows that most people notice everyday are just the tip of the iceberg. Where someone may have noticed only a gray squirrel yesterday, today she recognizes that in a preserve just a few blocks away there may also be a fox squirrel, a Franklin’s ground squirrel, or a flying squirrel, not to mention least and long-tailed weasels, river otters, woodchucks, and minks—each with its own set of mysteries.

That's a big part of what Chicago WILDERNESS has been reporting on for the last ten years—people who learn to see differently, and what they do when a new world has been opened to them. Jerry Sullivan once wrote, "For me, becoming a birder was like being cured of color blindness. Imagine seeing red and green after a lifetime of viewing the world in shades of gray." We're not just writing about this species or that ecosystem. We're writing about revolutions in consciousness.

So much has happened over the last ten years, yet much goes on as before. Nature, for one, beats its familiar themes, its patterns of blooming and burning and seeding, of mating and hunting. Unexpectedly, these ancient cycles continue most strongly not in the preserves where humans have kept out, but in places where we have become involved, where we have been unafraid to accept that we, too, are part of nature. In this most joyful relationship of learning and humility, we enter those cycles, and they enter us.

In our first issue, we asked the community to become a part of this magazine. Our appeal now is to grow that family. Please consider giving gift subscriptions of Chicago WILDERNESS to ten of your best friends. (Or give just one!) We’re confident it will pay you back richly. Visit chicagowildernessmag.org or call (708) 485-8622. And thanks for being such a great readership. It’s a joy to make this magazine for you.

Don Parker
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Cover: Oak seedlings such as this red oak have a long road ahead. But if they start life in a preserve where natural processes such as fire and deer predation still occur, they've got a good chance to become pillars of the community in a few hundred years.

Opposite: A mature white oak stretches its massive limbs in early fall at The Morton Arboretum.
Photo by Ron Dahlbarg.
Master's Degree in Plant Biology and Conservation
Northwestern University and the Chicago Botanic Garden have teamed up to offer the program in Plant Biology and Conservation focusing on preparing students for future leadership positions in plant conservation and the botanical sciences. In response to growing threats to biodiversity, the program is designed to train future scientists who have the skills to address this crisis. The program offers a Master of Science degree through the Graduate School at Northwestern University and research experience with scientists at the Chicago Botanic Garden. Study with top scientists on cutting-edge research in areas including conservation genetics, restoration ecology and genetics, soil and fungal ecology, ecosystem ecology, global climate change, rare species conservation, invasive biology, plant ecophysiology, habitat fragmentation, and plant evolution. Advanced courses are taught at both Northwestern and the Garden by eminent professors and scientists.

http://www.plantbiology.northwestern.edu/
What an opportunity!
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GIFT FOR CHANGE

Dear Editor,

A small gift goes a long way. For the past several years, I’ve been giving my sister a gift subscription of Chicago WILDERNESS. She and her husband are very active naturalists in the Arlington, Virginia, area.

The article in the Fall 2007 magazine, “New Life in East Chicago,” caught her eye. She was fascinated by the fact that treating wastewater with ultraviolet light could have the side benefit of creating a natural environment that would aid in the filtration process.

After she forwarded the article to the right people, the managers of their local wastewater treatment plant are now looking to see if they could do something equally beneficial.

The end of the article says that the proponent of the process, Peter Baranyai, is “excited to play such a large role in this natural process and believes it can be replicated in other treatment plants.”

He no longer needs to believe it can happen. It is happening.

Michael Lawler
Vernon Hills, IL

GLASS IS OUT

Editors:

My daughter was in the Loop walking home to the Metra last night. By the Board of Trade on Adams Street, I believe, was a dead bird on the sidewalk. An American woodcock, in magnificent plumage. A sad sight for her, yet beautiful. The juxtaposition of it in a metropolitan setting was jarring to say the least.

Steve Kiecker
Glenview, IL

Dear Editor,

In addition to the loss of habitat discussed by Arthur Melville Pearson in the latest issue (“Plight of the Common Bird,” Fall ’07), the number of birds that are killed or hurt by hitting windows is dismaying. Nothing I have tried prevents it. If anyone on staff or other subscriber of Chicago WILDERNESS knows of a solution, I, and no doubt others, would like to know about it.

Eleanor Frew
Flossmoor, IL

Editors’ note: A difficult window deserves a little study—glass causes many different problems for birds. Two common ones are images of adjacent landscaping in highly reflective windows, and transparent windows with a view through to a window on an opposite wall, but there are many others. Start by standing outside at different times of day and observing your window, imagining what a bird would see. At www.bcbirds.org/window.html, you can download a Window Collision Fact Sheet, which will help you to think through your particular problem and suggest solutions, including places to purchase helpful products.

TRAIL EMBRACES RIVER

Dear Editor,

This is to thank Ms. Kadin for the article about the Fox River Trail (Into the Wild, Fall ’07)—it’s my favorite place for biking. Though it can attract many people where it touches a town like Geneva or Elgin, for the most part it’s surprisingly open and uncrowded. I like that ten north of Elgin. Until I started riding there I didn’t know what a ten was. I used to live in Aurora from 1970 to 1972 and at that time you could smell the river and certainly wouldn’t fish in it. Now I see people fishing, boating, and picnicking on or near the river. And it’s notable that the service window at the Dairy Queen in East Dundee used to face south, looking out onto Route 72. Now it faces the bike trail.

The last couple of years I’ve particularly liked the Elgin-West Chicago spur that passes through Wayne Woods and connects with the Great Western in West Chicago.

I have one question: I used to ride through Fermilab, but maybe three years ago I was escorted off of the property by the guards who said that it was no longer open for bikers or walkers, due to the terrorism threat. Do you know if that’s still being done?

Curtis Mayfield
Buffalo Grove, IL

Editors’ note: Here’s a response from Judy Jackson, Director of Communication at Fermilab: “At one point, the Department of Energy closed Fermilab to public access for a couple of years. However, for the past two or three years, in response to the government’s lowering of the threat level, Fermilab has once again been open to visitors, including bicyclists. Most areas of the site are open. While a few areas are restricted, they are clearly marked. I hope you will come back!

“Find current site access information at www.fnal.gov/pub/about/communication/currentstatus.html.”

CHANGE OF ADDRESS?

Don’t miss an issue—remember to notify us of all address changes. The Postal Service will not forward Chicago WILDERNESS, and we cannot replace missed issues free of charge if you haven’t advised us of a change. Thanks!
Where the Wild Ones Are

Mention the words "Chicago" and "wilderness" in the same sentence, and chances are you'll draw an incredulous stare from many listeners.

How can the nation’s third-largest city possibly exist in conjunction with wild places, let alone in conjunction with particular constellations of wild animals and plants that have practically ceased to exist anywhere else on Earth?

by Peter Friederici
Yet that is precisely the case. The city and its suburbs support wild species and entire communities that have become rare—not just in northeastern Illinois, but globally. Threatened environments, including tallgrass prairies, oak savannas, and prairie marshes, survive in this region even within view of skyscrapers and shopping malls. And, unlike as it may seem at first glance, those rare and increasingly cherished natural areas remain in reasonable health today precisely because of their proximity to the city.

This area was biologically rich long before European and American settlers arrived. “We are in the middle of a convergence of major biomes here,” says Tim Sullivan, a conservation biologist at Brookfield Zoo who has worked extensively with the Chicago Wilderness project. “It’s the eastern extent of the tallgrass prairie, the southern edge of the north woods, the western extent of the eastern deciduous forest. It’s also overlaid with a very complex geological history, especially recent glaciation, that has left a diversity of soil types, topography, and wetlands. That’s led to a high diversity of native species, especially plants. Fifteen hundred native plant species occur in the Chicago Wilderness region. That’s an enormous number.”

Studies have shown that Indiana Dunes National Lakeshore, for instance, ranks seventh in biodiversity among all national parks—1,135 native plant species have been identified there as one measure—yet it is many times smaller than any of the parks that outrank it.

Early settlers in the region tended to think of this rich combination of grassland, forest, and wetland as the original Chicago wilderness. But it was not at all free of the marks of humanity, for the ecology of the continent, especially its coasts and the fertile midsection, had already been profoundly altered by its Native American inhabitants for millennia. They set fires that kept trees from encroaching on the prairies. They hunted bison and deer, elk and bear (some scholars think early Native Americans hunted many Ice Age-era animals to extinction). They collected wild plants and farmed crops, such as corn and squash, that were introduced from other areas. They influenced their surroundings and were influenced by them.

When American settlers arrived in the Midwest, they dealt with their surroundings in less subtle ways. They plowed the prairies, sawed down forests, drained marshes, channeled rivers. And the new city of Chicago, situated where land and water travel routes met, became the transportation nexus where resources from the north and south, east and west, changed hands. Immigrants flocked in. From skyscrapers to the blues, many of the distinctive qualities they eventually lent to the city can be traced back to the place’s particular juncture of geology, geography, and climate.

Some of the effects that Western civilization had on the area’s natural diversity—the way it wiped out many native animals, for example—are well known. The herds of bison that covered the prairies like a brown tide were hunted out almost entirely a century ago; they survive in Illinois only as a few captive animals. Cougars and wolves are unlikely to stalk the oak savannas again. And some former residents are gone forever. Passenger pigeons will never again darken the skies over the woods nor will Carolina parakeets appear on someone’s bird list. They, too, are extinct.

What is less obvious is that the swelling human population of the Chicago region was the key to retaining much of the area’s natural legacy. “What happened was a combination of historical accident and wisdom,” says Jerry Sullivan, author of Chicago Wilderness, An Atlas of Biodiversity. “Because it was an urban area from the beginning, a lot of places that would have been turned into farmland elsewhere were kept as open land for speculation.” Failed subdivisions, extensive estates, and other patches of land that were never developed on a large scale helped preserve many wild places. Other effects of urbanization were even more unpredictable. “On the south side of Chicago and in Lake Forest, fine prairies and savannas survived because mischievous kids burned them on Halloween,” says Stephen Packard, conservation biologist for The Nature Conservancy in Chicago.

Other patches on the outskirts of the city were retained in a wild state by virtue of the simple fact that Chicago residents missed wild places. They set aside an extensive network of preserves that became the forest preserve system in Cook and neighboring counties. Throughout most of the rest of the tallgrass prairie, by contrast, farmers eventually converted almost
When Chicago's first European settlers arrived here, prairie grasses and wildflowers stretched as far as the eye could see.

Thanks to a century of major conservation efforts, the region's unique character and rich biological identity persist—if you know where to look.
all available land to agriculture. In many rural counties, fragments of original prairie exist today only in tiny patches in old cemeteries and along railroad rights-of-way.

Today 11 percent of Cook County consists of protected lands—a far larger proportion than in most counties in the prairie region. Now, in an impressive exercise in wisdom, a legion of professionals and volunteers is working to protect and restore the diversity of nature on public and private lands throughout the metropolitan area.

Part of the legacy of that accident and wisdom is this: a surprising number of rare creatures still live in the metro area. As a sort of index of that richness, consider just a few of the species whose presence in the area illustrates the importance of retaining and restoring Chicago’s diverse wildlands. Think of them as neighbors that represent many others:

LAKE SIDE DAISY (Hymenoxys acaulis). This extremely rare species lives only on dolomite prairies. One of the two known populations in the world is in the Chicago area—re-established thanks to a restorationist/gardener who grew the flowers after the original patch was destroyed in 1981.

LEAFY PRAIRIE CLOVER (Petalostemum foliosum). The largest remaining populations in the world of this flower survive on dolomite prairies in the area; the only others known are in Tennessee and Alabama.

ERYNGIUM ROOT-BORER MOTH (Papaipema eryngii). Insects have suffered a substantial but generally unheralded loss of diversity with the loss of extensive prairies. This lovely species survives on only a few remnant patches in the Chicago area.

HINE’S EMERALD DRAGONFLY (Somatochlora hineana). Named for its vivid eyes, this aerial predator is associated with a very particular geological formation, the dolomite rock of the Niagara Escarpment. In the Chicago area, that bedrock surfaces along the lower Des Plaines River, producing rugged cliffs and outcrops. Clean water seeping out between the rock and the glacial debris that overlies it supports marshes and wet meadows—and this globally endangered species, which elsewhere survives only in Door County, Wisconsin.

COOPER’S HAWK (Accipiter cooperi). In decline in many parts of North America, this woodland predator has come back nicely in restored woodlands in the Chicago area. It was recently taken off the state’s list of threatened and endangered species.

KIRTLAND’S SNAKE (Elaphe kirtlandii). Now absent from many former haunts throughout its range, this crayfish-eating snake requires high-quality wet savannas for hunting and wintering sites. The species is secretive and very difficult to monitor, but restoration efforts in the Chicago area are maintaining significant patches of its habitat.

MASSASAUGA RATTLE SNAKE (Sistrurus catenatus). These small rattlesnakes, rarely seen, prefer tallgrass prairies with scattered woody shrubs; in winter they hibernate in crayfish burrows in wet grasslands. Only three populations have been found in the Chicago area, and only a total of seven

### POPULATIONS OF ENDANGERED & THREATENED SPECIES IN ILLINOIS

In Illinois, the two highest concentrations of endangered species with surviving populations are in the Shawnee Hills and the Chicago metropolitan area. Much of the rest of the state was converted to corn and soybeans.
The Chicago region's 300,000 acres of protected natural lands are places of untold drama and richness. Today, such biodiversity depends on human understanding and stewardship.
statewide. Because most populations are too widely scattered to allow for dispersal between them, they are threatened by a loss of genetic diversity through inbreeding.

It is less individual species, though, that make the Chicago area unique than its fine examples of rare communities of species. These communities—the tallgrass prairies and oak woodlands, the diverse wetlands and Lake Michigan duneslands—have survived to this day with more of their original integrity intact than is the case throughout most of the rest of the Midwest.

“I tend to think in terms of communities rather than individual species,” says Jerry Sullivan. “Oak savannas are extremely endangered as an entire ecosystem. Our prairies are extremely small, but very high quality in terms of the number of species present in them.” A few examples of these fine remnant communities include West Chicago Prairie in DuPage County, Wolf Road Prairie in Cook County, Middlefork Savanna in Lake County, Chiswaukee Prairie in southeastern Wisconsin, and the dunes of Illinois Beach State Park, among others. Sullivan points out that this region has many high-quality wetland communities—marshes, bogs, sedge meadows, and fens—as well.

All these environments are indeed far smaller than they once were. Prairies that once extended for miles or tens of miles have been reduced to a handful of acres today. “These are almost museum-sized pieces we’re working with here,” says Tim Sullivan. “They’re not continental-sized ecosystems anymore.” Still, in some places it may be possible to get a sense of what it was like for the first American settlers who encountered the endless waving prairies of Illinois and the open marshes that rang with the calls of ducks and swans and cranes.

The Midewin Tallgrass Prairie Preserve at the former Joliet Army Arsenal is the largest tallgrass prairie restoration effort in the world. Sandhill cranes, after decades of absence, are nesting again in the Chain O’ Lakes marshes and several other locations in Lake County. Deer and Canada geese populations have rebounded to the point that they are often considered nuisances.

These advances have been possible only because of the Chicago region’s other great natural resource—its people. In large numbers, they are collecting and replanting the seeds of native plants, removing invasive species from the forest preserves, setting controlled fires on the oak savannas, and conducting groundbreaking scientific research.

They are finding that doing so is more than an abstract exercise in ecology: it is also a matter of connecting to one’s surroundings, a matter of understanding what home means.

It is the people working to reshape the area’s landscape in accord with its long and rich heritage who are defining the term “Chicago Wilderness” to mean: wilderness with people.

Peter Prinderici has written about nature for National Wildlife, Wild Earth, and the Chicago Reader.

He is the author of two books,

For more on Chicago Wilderness, or to get involved in other ways, turn to page 38.
Favorite Photos from 10 Years

A look back at some of the Chicago WILDERNESS images people still talk about.

01 Cecropia moth, Summer '99. Tropical rain forest? No. These gray cocoons and the richly brocaded moths that emerge every spring can be found in every Chicagoland neighborhood. Photo by Joe Nowak.

02 Bobcat, Winter '04. Bobcats are occasionally killed by cars in Cook, DuPage, and McHenry Counties. But seeing one of these stealthy prowlers in the wild is a lifetime experience. Photo by Joe Nowak.

03 Spears Woods, Summer '02. As with many of our most beautiful oak savannas, this scene at Spears Woods near Willow Springs has recovered its richness at the healing hand of volunteer stewards. Photo by Mike MacDonald / ChicagoNature.com.
04 Coyote, Winter '01. Frightening to some, exhilarating to others, the now common coyote is one of the wildest expressions of Chicago Wilderness. Photo by Alan G. Nelson/Root Resources.

05 Red dogwood and yellow maple, Fall '02. As fall leaves bow out with a flare, the lichens on tree bark are just coming into their own. Photo by Willard Clay.

06 Lesser scaup, Spring '99. One of the region's commonest ducks during migration, the lesser scaup is missed by most people, because it stays binocular-distance out from shore on our lakes and rivers. Photo by Art Morris/Birds as Art.
07 Frostweed, Winter ‘99. This remarkable ice sculpture of unknown purpose is the product of the slowly cozing sap of frostweed, a plant that takes its name from this mysterious phenomenon. Photo by Casey Galvin.

08 Flint Creek Savanna, Winter ‘99. A fine preserve near Barrington in the peacefulness of an old-fashioned winter. Most of the diverse ecosystem sleeps beneath the snow as roots, seeds, eggs, cocoons, or in hibernation. Photo by Donna Lee.

09 Long-tailed duck, Winter ‘99. The long-tailed duck (or “oldsquaw”) is a regular winter resident on Lake Michigan. They can “fly underwater,” using their wings to dive down as deep as 200 feet for a meal of fingernail clams. Photo by Art Morris/Birds as Art.

10 Red fox kit, Fall ‘00. Photographer Jason Lindsey spent the better part of a week observing this fox den on the land of a neighbor of Illinois Beach State Park in Lake County. Photo by Jason Lindsey.
11 Big bluestem, Fall '00. In late summer bloom, the three big toes of "turkey-foot" grass, aka big bluestem, become an attractive truss for a spider's dewy web.  *Photo by Walt Anderson/Root Resources.*

12 Purple prairie clover, Summer '00. Since this native legume grows only shin-high, many miss its brief but bright flower. Not so this pollinating flower fly.  *Photo by Pat Wadecki.*

13 Wood ducks, Fall '99. Not as common as mallards, but still a frequent sight in natural areas, wood ducks in breeding plumage are a work of art. Even the understated female is a treat to see.  *Photo by Rob Curtis/ The Early Birder.*

14 Poplar Creek Forest Preserve, Fall '97. We had been working on the magazine for well over six months planning an autumn launch, but by September we still did not have a cover photo. ( Crisis!) Finally, senior editor Stephen Packard went to Poplar Creek Forest Preserve in Cook County and recorded this magical, misty moment of Linda Masters amid majestic oaks and tall Joe Pye weed.
WHO WOULD’VE PREDICTED IT? That all this could happen in Chicago. Chicago! Who would have guessed that the city that played so powerful a role in laying low the pineries of Michigan and Wisconsin, in plowing under the prairies of Illinois and Iowa, in exhausting rangelands from Texas to the Dakotas—the city that reversed a river, built itself on top of marshes, and then jacked itself up above the mud—who would have guessed that Chicago would emerge as a global leader in environmental stewardship, redefining itself and conservation in the process?

Who would have guessed that here in Chicago, the city would reimagine the very meaning of wilderness? That, here, amid the megalopolis, an appreciation of wild things and open space, biological diversity and ecological health, would lead conservationists to reconsider the very place and potential of the city?

Certainly not the earlier version of myself that grew up in and around Chicago. The suburbs and city neighborhoods that I knew seemed far removed from the wild places that I craved. the epicenter of environmental upheaval in the midcontinent, it became a proving ground for new ideas about the workings of the natural world and the place of people within it. One hundred and fifty years ago, a young naturalist named Robert Kennicott helped to found the Chicago Academy of Sciences and build it into one of the premier houses of natural history in the nation. Kennicott belonged to a passionate generation of Midwestern citizen-scientists that explored the opening West in the decades after the Civil War.

The disciplined studies of those 19th-century naturalists prepared the way for a new generation of scientists who would put that knowledge together in novel ways, and call it ecology. Ecology had varied points of origin around the world, but the Midwest’s native plant communities (as well as its young universities and museums) played a disproportionately important role in its development. In the low bogs, grassy ridges, and oak woods of the Indiana dunes, Henry C. Cowles and his students at the University of Chicago made ecology dynamic, revealing patterns of vegetation change in space and over time. As we try

Conservation, Chicago Style

Muir protected the giant redwoods. Roosevelt built the national parks of the West.

Who would have guessed that the city of Chicago would reimagine the very meaning of wilderness?

by Curt Meine

Wilderness, such as it was, was confined to the thinnest margins of urban life. Walking home from school along Dempster Street, I trained my eyes on the narrow ditch, all that remained of an erstwhile creek, watching for the mysterious “water rats” that swam in the shadows of Lutheran General Hospital. (Only later did I learn what a muskrat was). My “wilderness” was just a moment, a fleeting glimpse of an unknown creature in a neglected nothing of a remnant stream.

But, in retrospect, the potential was always there. It was there, not only in the persistence of water rats and other wildlife, but in the names on the landscape: the native glacier’s Park Ridge, the native vegetation’s Morton Grove and Des Plaines, and of course the native Miami-Illini’s shikakwa. The potential was in the nearby forest preserves where I took refuge behind the dense green wall of overgrown shrubs. The potential was there in the prairie remnants—Wentworth Prairie, Crabtree Preserve—where, even though I hadn’t yet learned any native plants, I could still connect to a different, older, venerable Illinois. That potential was only available because of the past.

I didn’t know it then, but I was—as all Chicagoans are—heir to a legacy of land conservation, scientific insight, and community commitment that stretched from the city’s core to its outermost prairie hinterlands. Even as Chicago emerged as

to understand how ecosystems from the local to the global are responding to the unprecedented impacts of human beings, we carry forward a way of interpreting the world that Cowles and his colleagues began in the 1890s.

As the national conservation movement emerged in the early 20th century, it in some ways left the Midwest behind. As the lumber barons exhausted the forests of the upper Great Lakes, conservationists aimed to protect the remaining extensive forests of the West. The national parks movement focused on the West’s dramatic and scenic landscapes, not the topographically challenged, understated flatlands of the Midwest. The conversion of the prairies to cropland extended as far as the railroads—and as deep as the moldboard plows—could reach. Ancient redwoods inspired awe, while ancient prairie roots were simply...in the way.

But in Chicago, conservation continued to advance along a quieter path, led by citizens’ groups such as the Prairie Club (founded in 1908) and Friends of the Native Landscape (1913). Both organizations helped secure protection for the vulnerable, quickly industrializing Indiana dunes. The spirit of the era’s City Beautiful movement and the progressive conservation movement also found unique expression in Chicago. Daniel Burnham’s 1909 Plan of Chicago, with its provisions for guided growth,
accessible parklands, and protected public space, was the first comprehensive plan for any American city. Burnham’s plan included a call to preserve forest lands in a green ring around the city, adding impetus to an earlier proposal by Jens Jensen, Dwight Perkins, and others to acquire and preserve a healthy proportion of “these outer areas” of the Chicago region.

The work of Jensen and Perkins came to fruition with passage in Springfield of the Forest Preserve District Act of 1913, and the approval of an enabling public referendum the following year. It was an extraordinary expression of civic responsibility. Under the act, the citizens of Cook County had committed themselves to “protecting and preserving the flora, fauna and scenic beauties” of the native landscape, and to conserving “said lands together with their flora and fauna, as nearly as may be, in their natural state and condition, for the purpose of the education, pleasure, and recreation of the public.”

The 1913 Act directed the county’s new Forest Preserve District to “restore, restock, protect, and preserve” the lands under its stewardship. For decades to come, the struggle to apply afford (as if we ever could) a fragmented conservation vision that separates and segregates the fate of our remaining wildlands, working agricultural lands, small towns, suburbs, and cities. Their fates, in the end, are connected. Either all belong to a whole and sustainable landscape, or none do. The future of conservation rests in building healthier connections across that entire spectrum of land use, and recognizing how our most vital natural assets and human needs—healthy food, water, air, climate, and communities—depend on those connections. Other cities around the world are evolving from an extractive relationship within their larger landscapes to a transformative one. Chicago Wilderness, with the epic environmental history of Chicago in its background, is providing an example to the world of a large metropolis transforming itself.

Above all, Chicago Wilderness has worked productively at the subtle interface of pragmatism and hope. It accepts its less-than-sublimely-scenic place (with its less-than-pure history), and goes about the steady work of restoration and education, stewardship and partnership. In tending the lands and waters

Left to right: Robert Kennicott, Henry C. Cowles, Jens Jensen, Dwight Perkins, Floyd Swink, Gerard Wilhelm

those verbs would reflect changing ideas in conservation. The forest preserves would serve not only as special places of renewal, but as sources for a still-expanding vision of ecological citizenship.

The full story of that growing vision remains untold and unwritten. When it is written, it will tell a story of evolving relationships between people and the land. It will reflect Aldo Leopold’s revolutionary plea that we regard the land ethically, not “as a commodity belonging to us,” but as “a community to which we belong.” It will show how a single volume, Floyd Swink and Gerard Wilhelm’s Plants of the Chicago Region, transformed the work of land restoration, and allowed new generations of stewards to see through that dense green wall that I knew as a kid in the 1970s.

Then, out of all this—Chicago Wilderness, the latest expression of the prairie’s legacy and potential. With its challenging name, its continually expanding membership, its confounding of traditional assumptions about what an “environmentalist” is and does, Chicago Wilderness has for the last decade again pursued conservation in new and surprising ways, ways that indicate where conservation needs to go.

Chicago Wilderness has shown how to put cities and collaboration back on the conservation map. We can no longer and wild things of the Chicago region, it brings the region’s people and institutions closer together. Its focus is local; its significance is global. These are essential qualities in a world that finally seems to be taking the future seriously. If the next generation is to make the hard and necessary steps toward a sustainable world, it will look to—and need—this continuing example.

Who would have predicted it? That the legacy of Kennicott and Cowles and Jensen and Perkins and Swink might stand alongside those of the timber barons and old industrialists and great merchants. That Sandburg’s Hog Butcher for the World and Player with Railroads would become Restorer of Savannas and Volunteer with Kids. That the city’s Big Shoulde would prove strong enough not only to have made tools and stacked wheat, but to build sustainable communities and bear the responsibilities of stewardship. I look at Chicago from across the Wisconsin border now. But I return to it differently. It is not just the traveler that has changed, but the destination.

Curt Meine is director for conservation biology and history at the Center for Humans and Nature, and senior fellow with the Aldo Leopold Foundation in Baraboo, Wisconsin. He is author of Aldo Leopold: His Life and Work (1988) and Correction Lines (2004).
Because Illinois is the prairie state, you'd think that most of us would be well versed in prairie-speak. However, not many of us have yet learned to discern the exotic and wily beautiful subtleties of our prairies.

The majority of the vast prairies of Illinois were converted into cornfields. But wherever the soil was too rocky, or too mucky, or was loved by an influential nature enthusiast, small pockets persist, from tiny remnants to massive restorations. Spread throughout the region, prairies can usually be found within a few minutes of home.

Each prairie's location shaped its own unique plant communities. The casual observer can learn to distinguish between moist black-soil prairies (formed on thick, flat beds of glacial till) and dry sandy prairies (formed on deposits from ancient glacial lakes). Taller vegetation means that the ground is wetter, says Bill Kleiman, project manager at The Nature Conservancy's Nachusa Grasslands. Plants often vailing westerly winds. Where fires could penetrate, the trees grew farther apart. Resultingly, our woods range from savannas—basically grasslands with some trees—to dense beech-maple forests.

Flatwoods developed in areas where underlying clay restricts drainage, and can be flooded for long periods during the year. Most common in Chicago Wilderness, however, are oak-hickory woodlands, with a relatively open canopy that favors an understory of shrubs and wildflowers.

Many of us have a favorite bit of woods—a nearby forest preserve perhaps, or just a scruffy half acre behind the house. You can best enjoy your woods by visiting often—at each season of the year, at all times of the day.

Woodland landscapes have been shaped by many factors, including climate, soil type, topography, and drainage. In our area, the densest woodlands often developed on the east side of rivers, where they were largely protected from prairie fires driven by the prevailing westerly winds. Where fires could penetrate, the trees grew farther apart. Resultingly, our woods range from savannas—basically grasslands with some trees—to dense beech-maple forests.

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The region also has a number of sedge meadows. These are saturated with groundwater, creating a mucky stew of peat and soil where sedges, grass-like plants, thrive. Tussocks, which are solid clumps of hummock sedge, roots, and rhizomes, can fill a sedge meadow from end to end.

Bogs, fens, pannes, seeps, and springs are rare wetlands in Chicago Wilderness, each arising from a particular set of conditions. The acidity of bogs, the alkalinity of fens, the constant disturbance of...
adapt to less moisture by staying shorter. White, rocky outcroppings might well be limestone scraped bare by the glaciers 10,000 years ago, giving rise to the very short dolomite prairie. Hilly areas suggest gravel deposits, the perfect home for dry hill prairies. And all prairies share a dependence on fire to keep them free of woody species.

Appreciating this rare ecosystem, an ocean of tallgrass and wildflowers that once rippled to the horizon, is a sensory experience. “You don’t have to

THE WINTER WOODS may look lifeless and barren, a montage of dull grays and browns. Find a place to stop, however, and let your senses take over. A woodpecker drums in the distance, and an unseen creature rustles through the leaf litter. A hint of musk in the air betrays a nearby fox den. A gravity-defying nuthatch hops headfirst down a tree trunk. Bare branches reveal abandoned nests—a bird’s delicate woven cup, a yellowjacket colony’s large papery orb.

pannes, and the cold temperature of springs provide just the right home for a diverse array of sensitive species in each, from the bluebell dragonfly to the northern cricket frog.

Getting up close and personal to a wetland can be tricky, but not impossible. Some of our wetlands are accessible by boardwalks. A distance out, you almost float amongst the wildlife and swaying aquatic plants. You won’t get very far very fast—a boardwalk is for standing and peering.
be an expert," says John Elliott, education manager for the Forest Preserve District of Cook County. Elliott advises observing details, even if you can’t put a name to a single thing.

**IF IT’S SPRING**, get down on your knees and peer for early bloomers: the reddish and yellow ruffles of wood betony, the furry flowers of cat’s foot waving antenna-like. Watch for bobolinks and meadowlarks flirting over last year’s dried foliage. If the acrid scent of charcoal wrinkles your nose (and you see charred earth), you’ve likely entered a landscape that was recently burned to encourage native growth.

**IN SUMMER**, look for the numerous species of milkweed that come in a variety of colors. Monarch butterflies feed on their nectar, and a closer look may reveal their caterpillars feeding on the leaves. If you are lucky, you might see an orange-and-black hawk moth using its proboscis to feed on the lavender flowers of the fragrant wild bergamot. Keep following your nose: the scent of spearmint betrays mountain mint. A whiff of turpentine signifies a crushed prairie dock leaf.

**IN LATE SUMMER AND EARLY FALL**, the large, scratchy leaves of plants known as *Silphiums* are impossible to miss: those wide leaves with raspy, outspread fingers are that of a compass plant. Those chilly, sail-shaped leaves are prairie dock; they remain cool on even the hottest days because their deep roots pump water from far below the surface.

**IN FALL**, you might catch the essence of buttered popcorn. That’s prairie dropseed, a distinctive full-blooming grass with a mounded base that sprouts record your finds, then take your time identifying them at home.

Wood ducks in ponds are easily spooked, escaping with a loud, splashing commotion to a high perch nearby. Migrant birds are at their peak in mid-May, arriving in their finest plumage. Bring binoculars to bring them into focus. More experienced birders can often identify them by song.

**SUMMER WOODLANDS** are shady, green, and lush, but swarms of mosquitoes may quickly drive the unprepared visitor away. The young of many animals start to venture away from mother’s side; watch for deer fawns peering out of the brush or raccoon kits playing at trail’s edge.

Examine the great diversity of tree leaves, and remember tree shapes and bark types to help in winter identification. Look for galls on leaves and twigs where insect larvae are growing. Sulphur shelf fungi, emergent plants edge the icy water among exploded cattail heads. If there is no snow, you can look for critters lurking below the ice. “Once I saw a snapping turtle completely frozen and he blinked at me,” recalls Jack MacRae, naturalist for the Forest Preserve District of DuPage County.

**IN THE LATE WINTER AND EARLY SPRING**, splashes of color sneak back into the wetlands. Red-winged blackbirds return to set up territory. There are no leaves on the trees, the snowmelt glistens, and a wonderful surprise of brilliant green leaves and stunningly gold marsh marigold petals burst forth from the soil,” says Buckardt. A few weeks later, in the same swampy area, look for wild blue irises.

Peek into ephemeral woodland ponds full of snowmelt and spring rains to catch a glimpse of springtime’s bounty. Without the carnivorous fish that reside in permanent wetlands, smaller creatures
waving stems. The seedheads of yellow coneflower will leave your fingers with a lemony fragrance.

IN WINTER, listen for the clatter of dried foliage encrusted with ice on bitter days. Jack Shouba, a botany instructor at The Morton Arboretum, notes that many of the grasses and wildflowers retain distinctive characteristics—big bluestem, for example, mimics a turkey foot; little bluestem looks reddish in winter. Look up and you might find a hawk in search of voles or rabbits. Look down and you might find coyote scat that contains hair and bones of a recent supper.

While the most colorful time for the prairie is mid-August, prairie lovers generally agree that there’s no best time to visit. “What you saw two weeks ago will be different today,” says Shouba. “You need to go back again and again, and every time you will see something different.”

—LeAnn Spencer

brilliantly orange and yellow, light up the woods like small fires.

AUTUMN’S COLORS are best along the sunny edges of woodlands, but shrubs such as sassafras and vines such as poison ivy and Virginia creeper brighten the interior. Acorns litter the ground, and squirrels gather them for winter caches. Migrant birds return in September, but they are duller in color—a greater challenge to identify.

Monarch butterflies gather on the threshold of woodlands in advance of their long flight south. Look for “buck rubs” on tree saplings, where male deer have scraped the velvet from their antlers. Witch hazel flowers appear late in the season, emerging from bare branches like creepy, yellow fingers. Any time of year is a good time to explore your local woods. So get your boots on, and get going!

—Ron Trigg

can grow to maturity here: wood frogs, blue-spotted salamanders, and tiny fairy shrimp that swim upside-down. In May, watch for salamanders moving to higher ground.

WETLAND SUMMERS are ablaze with color and movement. Rose mallow, cardinal flower, and great blue lobelia provide a bright backdrop for a busily stirring scene—scan the water’s surface for water boatmen bugs paddling with ear-like legs, or the protruding head of a leopard frog or pied-billed grebe.

IN THE FALL, MacRae suggests keeping an eye out for turtle hatchlings “stumbling along a path looking for water.” The wetland plants respond to daylight’s narrowing window by turning tan and maroon, adds Buckardt, while, she says, “winds rattle the plants like a band’s rhythm section” to herald the year’s end.

—Alison Carney Brown
Great Local Prairies

Somme Prairie Nature Preserve
Northbrook, IL (Cook County)
High-quality remnant of Grade-A mesic black-soil prairie with rich flora. Also check out adjoining Somme Prairie Grove and Somme Woods.

Wolf Road Prairie
Westchester, IL (Cook County)
Large black-soil prairie remnant surrounded by bur oak savanna. Old sidewalks built for an abandoned development make it an easy stroll.

Goose Lake Prairie
Morris, IL (Grundy County)
Largest remnant east of the Mississippi, spared the plow by being too wet.

Belmont Prairie
Downers Grove, IL (DuPage)
Uncommon dry hill prairie with notably more broad-leaved plants and wildflowers than grasses.

Chicagoland Prairie
Kenosha, WI (Kenosha County)
Sandy prairie, ranging from wet to dry, along the Lake Michigan coast. Boasts impressive plant and animal species, including a popular spring display of shooting stars.

Powderhorn Prairie
Chicago, IL (Cook County)
Sand prairie formed on ancient dune ridges, interspersed with sand savanna.

Great Local Woodlands

Ilinois Beach State Park
Zion, IL (Lake County)
Strips of black oak savanna and woodland lining ancient dune ridges between sedgy swales.

Zanders Woods
Thornton, IL (Cook County)
Sandy black oak woodland with numerous fern species and sassafras, a fragrant-leaved understory tree.

Cullerton Woods
Hammond, IN (Lake County)
Dune-and-swale topography supporting black oak savanna and woodland; a survivor of the industrial development of northwest Indiana.

Middlefork Savanna
Lake Forest, IL (Lake County)
Large remnant of tallgrass bur oak savanna combined with prairie and sedge meadow.

Semmes Prairie Grove
Northbrook, IL (Cook County)
Patchwork of tallgrass savanna and bur oak woodland; once a weedy buckthorn thicket, now restored to good condition.

Moraine Hills State Park
McHenry, IL (McHenry County)
Majestic white and bur oak woodlands top glacial moraines and kames, overlooking expansive marshes, lakes, and sedge meadows.

Great Local Wetlands

Cuba Marsh
Barrington, IL (Lake County)
Large tract of former farmland, restored to become attractive habitat for nesting and migratory birds.

Bluff Spring Fen
Elgin, IL (Cook County)
Clear, cold-water streams flow through alkaline fen surrounded by hill prairie and bur oak woodland.

Lake in the Hills Fen
Lake in the Hills, IL (McHenry)
Glacial gravel deposits feed numerous seeps, hanging fens, and rare fen species.

Nelson Lake Marsh
Dundee Forest Preserve
Batavia, IL (Kane County)
The pristine glacially carved lake and marsh is recharged by groundwater from surrounding gravel hills, which historically prevented development.

Blackwell Forest Preserve
Wauconda, IL (DuPage County)
The glacial terrain gave rise to the preserve's McKee Marsh, and provided conditions that preserved remains of a woolly mammoth here.
FOR MAPS, DIRECTIONS, AND FULL SITE PROFILES, VISIT CHICAGOWILDERNESSMAG.ORG.

Burlington Prairie
Burlington, IL (Kane County)
An Illinois Nature Preserve, this undisturbed tract of dry to moist prairie has benefitted from prescribed burns.

Indian Boundary Prairies
Markham, IL (Cook County)
A cluster of four prairie remnants featuring black-soil prairie as well as sand prairie atop the deposits of ancient Lake Chicago.

Kankakee Sands
Monee, IL (Newton County)
Vast stretch of flat sand prairie undergoing intensive restoration; many grassland bird species call it home.

Theodore Stone Forest Preserve,
Mortdale, IL (Cook County)
A shallow-soiled dolomite prairie, set amongst hilly oak woodlands, featuring sparse vegetation and limestone outcrops.

Blue Factory Road Prairie
Neffman Estates, IL (Cook)
Part of Poplar Creek Forest Preserve, this restoration-in-progress includes a high-quality hill prairie on a large kame, from which visitors can survey the entire preserve.

Midewin National Tallgrass Prairie
Wilmington, IL (Will County)
Giant prairie restoration in progress on the former site of the Joliet Arsenal; official tours help locate prairie remnants and grassland birds.

Lockhart Prairie
Lockport, IL (Will County)
Long stretch of rare dolomite prairie along the Des Plaines River that hosts many unusual plant species and the endangered Hne's emerald dragonfly.

Hyersen Conservation Area
Deerfield, IL (Lake County)
A variety of oak and maple woods nestled in a curve on the east bank of the Des Plaines River.

Norris Woods
St. Charles, IL (Kane County)
Illinois Nature Preserve along the east bank of the Fox River, with intact red and white oak upland woods and many unusual plant species.

Freeman-Kane-Ed Meagher-Gilbert Woods
Lake County
Oak-hickory woodlands are perched atop tall gravel kames in this hilly, picturesque preserve.

Messenger Woods
Lockport, IL (Will County)
Rolling old-growth oak uplands and maple-dominated lowlands; famously showy spring wildflower display.

O'Hara Woods
Orono, IL (Will County)
Illinois Nature Preserve featuring maple and oak woods, historically protected from fire by ravines and springs.

Deer Grove Forest Preserve
Palmerton, IL (Cook County)
Vast complex of oak-hickory woodland, prairie and wetland, containing the first land purchased by the Forest Preserve District of Cook County.

Palos Region Preserves
Palos Hills, IL (Cook County)
Oak-hickory woodlands of all shapes and sizes cover the morainal preserves of the vast Palos area in southwestern Cook County, including Swallow Cliff Woods and Gap Sauers Holdings.

Harms Woods
Skokie, IL (Cook County)
Rich oak woodland on the west side of the North Branch of the Chicago River, and flatwoods with black ash and swamp white oak east of Harms Road.

Illinois Beach State Park
Zion, IL (Lake County)
In addition to expansive marshes and sedge meadows, features globally rare panne (sandy interdunal wetland), with many unusual plants that make for a showy late summer and fall.

Elizabeth Lake Nature Preserve
Richmond, IL (McHenry County)
One of the highest-quality lakes in Illinois, surrounded by graminoid bog and fen, calcareous floating mats, and sedge meadow.

Glacial Park
Ringwood, IL (McHenry County)
Large, hilly preserve containing restored marsh and sedge meadow, the remained Nippersink Creek, and an unusual leatherleaf bog.

Cowles Bog
Dune Acres, IN (Porter County)
Calcium-rich floating mat fen in Indiana Dunes supports tamaracks and white pines, surrounded by locally rare red maple and birch forest.

Trout Park
Elgin, IL (Kane County)
Contains a rare wooded fen, with seeps and springs issuing from ravine banks; harbors many species unusual to Illinois.

Volo Bog
Ingleside, IL (Lake County)
The only acid bog in Illinois featuring all stages of bog succession—marsh, tamarack woods, shrubland, sphagnum bog, and open water.
Natural Events, Revealed

FOR THE PAST DECADE I HAVE WRITTEN ABOUT COYOTE POO, COTTONTAIL PEE, AND VULTURE VOMIT, AND I OWE IT ALL TO AUNT LEONA.

IT WAS TEN YEARS AGO, after reading the premier issue of Chicago WILDERNESS, that I sent an unsolicited article in which I listed the destinations of various animals that migrate away from our region. Trying to be a wise guy, I mentioned that my wife’s Aunt Leona migrates from downtown Chicago to Boca Raton, Florida, every November. Not long after, editor Debra Shore called me at home and told me she liked my “writing voice.” I think it was that Leona line. She asked if I would like to write the Natural Events Calendar for the magazine. Following my typical approach to work of “how hard can it be?” I told her yes.

Writing the Natural Events Calendar—a listing of “what’s debuting on nature’s stage in Chicago Wilderness”—hasn’t been hard at all. On the contrary, there is never a shortage when one considers the magnificent biodiversity of this region. In the past ten years I have written about 85 bird species, 37 mammals, 21 reptiles, 17 invertebrates, 35 plants, 13 amphibians, 10 fish, and 1 jellyfish. And this is only a fraction of the infinitely interesting life around us.

That is, of course, if we share the same taste in “interesting.” I find it fascinating that when white-footed mice eat the seeds of jewelweed, their stomach contents turn turquoise blue. I get excited to learn northern cardinals often fall victim to long-eared owls because they are bright red and still active at dusk. I can’t even describe my emotions when I learned the two-lined salamanders that live along Rayz’s Creek represent the extreme northwest edge of their range, almost 150 miles away from their main population.

Even though few people will ever see some of our rarest species, I think it is important to spotlight them on occasion. I get a real kick reporting the details of bobcats in Barrington Hills, the legless lizards that live in my co-worker Wendy’s yard, or the lone lake sturgeon captured and released in Wolf Lake.

Every so often I like to include events that virtually no one will ever see. For example, the developing lake trout eggs located 100 feet deep in Lake Michigan, and burbot (our only member of the cod family!) having orgies under the ice. On two occasions I mentioned extinct animals of the Pleistocene.

Growing up and working in the Chicago Wilderness has provided me, my friends, and my siblings with endless opportunities to explore our wild places, and I’ve greatly enjoyed sharing my personal encounters with local fauna. I remember the commotion when a common egret was spotted at Baker’s Lake for the first time in many, many years. I stood with my mother and many of the blue-haired Brahmins of Barrington as we watched the tall white bird cautiously wade through my swimming hole. The time I watched an enormous long-nosed gar being whacked with oars on a Bang’s Lake dock made such an impression on my five-year-old mind that I can still recall the sight, sound, and smell. The extreme close-up view of the snowy owl on the roof of The Field Museum—seen out the same fourth-floor window on the same date two years...
How a Wildlife Column Consumed a Decade of My Life
by Jack MacRae

in a row — was magical, as was seeing the kettle of broad-winged hawks lifting off from an old black oak on a serene September morning in the Braidwood Savanna.

My most gratifying “natural event” was my prediction of a bona fide sighting of a wolf in the Chicago Wilderness (Fall 2003) only 14 months before a wild eastern timber wolf was killed on Route 173 near the entrance of Chain O’ Lakes State Park. The young male probably entered the region through the Fox River corridor from Wisconsin. Similarly, but entirely coincidentally, I wrote about freshwater jellyfish (Summer 2001) several months before they were spotted in a local quarry and made the Chicago papers.

One reason the writing of the Natural Events Calendar has been such a pleasurable undertaking is the intelligent yet gentle approach of the editors. They let me use big words and scientific jargon such as hibernaculum and RLUs (a term used by wolf researchers for raised leg urinations). More important, they have never failed to make me sound smart while still allowing me to write in my own voice.

When I wanted to convey that the red-bellied snake is restricted to moraines, they permitted me to refer to it as morainal retentive. They have let me use the term hork because it’s funnier than regurgitate. They did not, however, let me say that female meadow voles spit out babies like a Pez dispenser, lest I offend female meadow voles.

I certainly appreciate the editors allowing me to give nods to Chicago institutions and favorite hang outs, such as Bubbly Creek, the Uptown Theater, the Wild Hare and Singing Armadillo Frog Sanctuary, Heartland Café, and Bob Koester’s Jazz Record Mart. Over the past 36 columns I have made 43 references to rock-and-roll songs, including one to the Rolling Stones’ stunningly un-radio-friendly love song “Star Star.”

One time, I offered a beer to any reader who could answer a question: what were barn owls called before there were barns? Disappointedly, no one took me up on it.

Of course, “natural events” happen whether they are celebrated in a magazine or not. Our bobolinks will still winter in Argentina, Aunt Leona will still migrate to Florida, and buck whitetails will still grow big, bony, secondary sex organs on top of their head to impress the ladies and intimidate their rivals. These things certainly don’t need to be listed in print to occur, but as the one lucky enough to do the listing, I must say it sure has been a gas, gas, gas.

Random office items from the desk of Jack MacRae, naturalist with the Forest Preserve District of DuPage County. Catch his “Natural Events” column in every issue of Chicago WILDERNESS.
Looking Back
A Decade with Chicago Wilderness

As those in the field know, the work of conservation is most often a world of gradual changes, the accumulated accomplishments of hundreds of projects. Still, the last ten years have seen many mileposts—and their effects are still felt today.

▶ Chicago WILDERNESS Magazine pokes its head out from the still shifting sands of the consortium. It runs for its first three years out of the home of founding editor Debra Shore.

▶ In June, the Asian longhorned beetle, an exotic bug with a taste for our native trees, is discovered in Chicago.

▶ A small handful of conservationists outline the vision and then invite their bosses, the CEOs of 34 agencies and organizations, to gather around a big table at The Field Museum, founding the Chicago Wilderness consortium. They create a loose affiliation to bring collective resources to regional conservation challenges.

▶ The Joliet Arsenal begins its transformation from army weapons depot to the first National Tallgrass Prairie in the country and Chicago Wilderness' single largest grassland. “Midewin,” which means “healing,” sets the tone for the next decade of ambitious restoration.

Photos clockwise from bottom left: Field Museum, GN90079_10d, John Weinstein; Beetle, Rob Curtis; Common tern, Garth McElroy; Nipperlink, David Schweigler; Peregrine falcon, Rob Curtis
The 142-year-old Chicago Academy of Sciences opens the Peggy Notebaert Nature Museum in the heart of Lincoln Park.

Chicago Wilderness releases the Biodiversity Recovery Plan. The document guides conservation efforts of the 100 Chicago Wilderness partners.

Plants of Concern launches, sending volunteer monitors—sworn to secrecy—to sites where rare plants occur in the wild.

For violation of wetland laws, the Material Service Corporation contributes $7.5 million to regional habitat conservation.

At the Great Lakes Naval Training Center, conservationists protect a breeding common tern colony, the first in Illinois since 1983.

In September, West Nile virus arrives in Chicago. Crows, jays, and chickadees die in large numbers.

Lights Out Chicago first asks all high-rises to dim their lights at night during migration. The program now saves over 10,000 birds annually.

Officials install an electric barrier in the Sanitary and Ship Canal north of Joliet to keep the round goby, an invasive fish, from entering the Mississippi River. (It also keeps Asian carp from reaching Lake Michigan.)

In October, Chicago elects the peregrine falcon as official city bird. After recovering from a long battle with DDT, the falcon wins on the strength of its platform: "ridding the city of pests and other vermin."

McHenry County Conservation District opens the channel into Nippersink Creek following a multi-year effort to return the stream to its original, natural course.

The Orchid Recovery Project announces white fringed orchids are up from 199 individuals to more than 1,000.

Biologists resurvey 62 Chicago-region sites identified by the Illinois Natural Areas Inventory in 1976 as high-quality ecosystems. Twenty-two percent of the sites were "either developed or completely overgrown with brush since the 1976 survey."
In May, researchers show dramatic genetic differences between white-footed mice in northeastern Illinois today and those from 150 years ago.

In July, Chicago Wilderness Woods Audit monitors survey 246 random woodland plots in eight counties to find only 18 percent in good or excellent condition.

In August, scientists and volunteers find more than 2,200 species in 24 hours ("an average of 15 species every ten minutes") at the Calumet BioBlitz at Wolf Lake.

In October, Notebaert Nature Museum biologists reintroduce Aphrodite fritillary butterfly to Glacial Park in McHenry County.

In April, Houston Wilderness launches in Texas, based on the model of Chicago Wilderness.

In March, Mayor Daley bulldozes airplane runways of Meigs Field under cover of darkness. The drama stirs controversy, but also (un)paves the way for a possible natural area in the heart of Chicago.

In April, whooping cranes land in a Cook County preserve, the endangered species' first recorded Chicago Wilderness stopover in over a century.

In July, buckthorn—an ecologically destructive invasive shrub—is added to the Illinois Noxious Weeds Act, rendering its purchase, sale, and distribution illegal.

In February, Illinois removes the river otter and three birds—the red-shouldered hawk, pied-billed grebe, and brown creeper—from the state threatened species list due to increased populations.

Volunteers and naturalists begin to regularly find tan clusters of gypsy moth eggs as the invaders reach Chicago Wilderness. Gypsy moth caterpillars can defoliate large acreages, with a particular taste for oaks.
Partners for Parks and Wildlife forms to defend critical state funding for open space and natural areas.

August: Spring Brook Nature Center introduces ten state-endangered barn owls into DuPage County.

In January, Illinois elects state reptile (painted turtle) and amphibian (tiger salamander), both common to Chicago Wilderness.

In April, Asian long-horned beetle quarantine is lifted from Chicago's Ravenswood neighborhood after two years without a sighting (and the removal of 1,770 trees).

Chicago becomes first of the largest US cities with a biodiversity plan, the Chicago Nature and Wildlife Plan.

Referenda pass to fund land acquisition and restoration in McHenry, Kane, and Kendall Counties, bringing the Chicago region's ten-year total of public funding approval to more than $1 billion.

Bald eagles build a nest in the Chicago region for the first time in a century, on the Little Calumet River.

In May, Al Gore's An Inconvenient Truth hits theaters.

Chicago Wilderness reaches 200 member organizations.

The Chicago Wilderness Grassland Audit finds only 25 percent of surveyed areas in good ecological condition. "Of the 20 most abundant species in Chicago-region grasslands, 13 were nonnative and 6 were species that require active control through restoration and management," researchers report.

Whooping cranes now regular, though infrequent, visitors in regional preserves.

In June, Leave No Child Inside brings attention to the growing disconnect between kids and nature, calling all kids and parents outside.
10 Years
10 Trends

The ten biggest trends in biodiversity across Chicago Wilderness over the last ten years: how a decade changed our thinking, the landscape, and the future.

1 NATURAL COMMUNITIES DECLINE

Only a tiny percentage of our plant species survive in random “open space.” The majority live in high-quality woodlands, prairies, and wetlands. Most rare animals, from fish to butterflies, also require quality habitats. According to Dr. Ron Panzer of Northern Illinois University, biodiversity is 90 percent dependent on these relatively few high-quality natural areas.

Given that our richness in biodiversity was the original impetus for Chicago Wilderness, one might expect that quality natural areas would have gotten sufficient attention during the past decade. But researchers say that isn’t the case.

Studies by Morton Arboretum botanist Marlin Bowles found that most of the region’s highest-quality woodlands, wetlands, and prairies are declining due to inadequate management.

Bowles found that even wetlands (including fens, sedge meadows, and marshes) need to be burned at least one out of every five years to maintain species richness. Most sites experienced much less frequent burning, losing species richness and increasing in exotic species, woody species, and narrow-leaved cattail. “The cattail is particularly critical,” says Bowles, “as there is a direct negative relationship between its abundance and species richness. As cattails increase, we lose species.”

Simply put, most open lands are in bad ecological shape and getting worse. Chicago Wilderness Habitat Project director Dr. Karen Glennemeier has supervised region-wide “audits” of woodlands and grasslands. She sampled 238 random plots in the forests and found 82 percent were only fair or poor in quality. Only 4 percent of our oak woodlands were in excellent shape. Nor did the prairies do any better. When rated for floristic quality, 90 percent were “fair or poor.” Such sites rarely support high-quality, “conservative” species.

In addition to anemic burn regimens, says Panzer, one of the biggest problems has been invasive species, both native and nonnative. Purple loosestrife and cattails are choking out the wetlands. In the woods, buckthorn and maple shade out oak seedlings as well as increasingly rare grasses, wildflowers, salamanders, native bees, and other species. In the prairies, reed canary grass and tall goldenrod are “running rampant.”

“Tall goldenrod is overrunning most sites,” says Panzer, “Teasel has absolutely exploded... and almost certainly cannot be checked” without substantial work.

Panzer said that most insect species of conservation concern are becoming less common, with roughly half—about 200 species—persisting on fewer than ten sites, most of which are declining rapidly (for example, West Chicago Prairie, Grant Creek Prairie, Hoosier Prairie, Clark and Pine Prairie, Goose Lake Prairie, Romeoville Prairie, Illinois Beach State Park, et cetera). Managers need to master a more impressive balancing act, since too-frequent fire may kill off many rare insect species, while too little will eliminate the very ecosystem these same species depend on. In the oak woods, an occasional light burn on a cool day that toasts a few understory trees seems not to be sufficient. The problem? In more than 100 years of fire suppression the larger trees have grown too dense. “Larger trees are also quite fire-resistant,” points out Bowles, so researchers and managers “may have to look at methods of thinning tree canopies, either by mechanical means, or hotter fires.”

Bowles, Glennemeier, and Panzer all agree that the critical need for the next decade is dramatically more management staff and more resources of all types. According to Panzer, “We need five to six times more volunteers working on the high-quality remnants that actually support the scores of conservative species that we will otherwise lose.”

2 COLLABORATIVE CONSERVATION RESPONDS

Ready for some good news? Over the last ten years, all of the region’s forest preserve and conservation districts have
substantially increased their land management staffs. And every county can point to success stories with restoration of the woodlands, wetlands, and prairies where they have enough resources to manage intensively. The forest preserve districts (especially Cook and Lake Counties) have shown particular success in restoring habitat for rare grassland birds (see Trend #3).

Much of that positive work has been forged in an atmosphere of increased collaboration. While collaboration isn’t new, the Chicago Wilderness Consortium, founded in part to spur synergies across its broad partnership, has added considerable oxygen to the fire. As executive director Melinda Pratt-Jones wrote, “we are joined in an effort that is larger than any one organization or group... and together, we can achieve so much more than we can alone.” Over ten years, the consortium has drawn in diverse stakeholders and experts. Consortium grants explicitly encourage partnerships, so in planning every project—from restoration to outreach—groups first ask: who can we partner with? Major projects now number above 240.

“I’m always amazed, and thinking this was exactly what was meant to happen,” says Ken Klick, an ecologist with the Lake County Forest Preserves. “When organizations like Northeastern Illinois Planning Commission and Center for Neighborhood Technology became involved in things like GIS mapping of endangered and threatened species and rare habitats, from a science perspective it’s wonderful that there’s been a multidisciplinary approach. There have been great strides in that.”

After ten years of thinking across boundaries, it has become commonplace that the community at large should also be a part of conservation work. “There are many more corporate partners now, corporations reaching out to do service projects,” says Jane Balaban, a volunteer steward of roughly 30 years at Harms Woods in Glenview, “Goldman Sachs has come to North Branch workdays for five or six years. There’s also Allstate, Shedd Aquarium.”

Faith-based efforts, such as Faith in Place, which was launched in 1999, now bring members of various religions to work on the preserves. The Unitarian Universalist Church in Elgin attracts the general public to its Prairie Fest each year, and has planted a small prairie on its grounds.

“Lots more schools have gotten involved in a regular way,” says Balaban. “We’ve had several different groups from Northwestern University coming, and have been seeing more ‘alternative spring break’ groups.” She also named high schools, Boy and Girl Scouts, and city youth programs.

Anyone can visit the preserves where volunteer and professional restoration efforts have taken place. These sites are evidence that damaged landscapes can indeed recover. But while the restorations that reestablish habitat on former farmland and vacant land may someday be able to support all the rare butterflies, bees, orchids, and fungi that characterize original natural communities, that’s a long way off. There is still no substitute for protecting remnant habitats wherever they hang on.

Perhaps the biggest change in our bird populations over the last decade came with West Nile virus in 2002, which wiped out local populations of crows, chickadees, and other species. Some areas have yet to see the return of breeding populations. In the decade’s other national bad-news story, Audubon found that 20 once-common birds have declined severely. While habitat disappears, one encouraging trend in Chicago...
Wilderness has been successful projects in every county to increase grassland birds on protected lands by reducing habitat fragmentation and degradation. In many cases these birds, declining elsewhere, are up, anywhere from 300 to 1,200 percent.

The decade has seen a number of birds long absent from the local scene return to breed. A first osprey nest in the Palos Preserves seems to have been the vanguard of a local colony, with several pairs now finding homes in preserves of Cook and DuPage Counties. Clay-colored sparrows, first spotted at Poplar Creek Forest Preserve and Springbrook Prairie, can now be found in a number of preserves. Chicago’s Calumet area has had more than its fair share of firsts, speaking well of the efforts underway to preserve and restore the wetlands there. Returning species include the little blue heron and the bald eagle.

The northwestern part of Chicago Wilderness is dotted by glacial wetlands that are one of the state’s biggest population centers for wetland birds. A comprehensive 30-year study there reveals that wetland birds such as common moorhen, black tern, Virginia rail, and others have fared very poorly. Only two wetland birds are increasing: the mute swan (an aggressive introduced species) and the sandhill crane, which is happily returning after decades of absence and now nests in many large restored wetlands.

A number of birds have had their “endangered or threatened” designation lessened or removed. Of most interest to our region is the Henslow’s sparrow, which has increased tremendously in the state due to various conservation programs, including habitat restoration and agricultural set-asides; the peregrine falcon, which has been helped by projects like Chicago’s Peregrine Release program; and the Cooper’s hawk—sufficiently recovered after the DDT ban to become a common resident of our woods.

For a few birds, the decade has been a long struggle to hold on. Our only Illinois population of Swainson’s hawks, in Kane and McHenry Counties, maintains its tiny numbers, and this development which threatened their habitat has been slowed by the downturn in the housing market. Our state’s last breeding Forster’s terns persist in the Chain O’ Lakes area, despite lack of nesting success due to recreational boating as well as a predator, the great horned owl. Herculean efforts, led by the Illinois Department of Natural Resources, have successfully defended our one common tern nesting colony, in Waukegan.

A happy milestone was the publication of a Chicago Wilderness-wide study of bird trends based on data collected by birders. The Bird Conservation Network Census showed some increases, such as the blue-gray gnatcatcher, which seems to like our woodland restorations. Strong decreases were found in willow flycatcher populations, echoing troubling national declines in shurbland bird populations.

—Judy Pollock
entire region is expected to grow by 2 million people, placing even greater pressure on limited resources, such as farmland, water, and natural areas.

Many wonder how we can accommodate so many new people and also protect our embattled biodiversity. One answer lies in the Chicago Wilderness Green Infrastructure Vision. Published in 2004, it maps existing protected natural areas, as well as “opportunities for expansion, restoration, and connection.” If realized, it would increase the amount of protected natural areas from roughly 300,000 to 1.8 million acres.

Recent efforts in McHenry County, which experienced a population surge of 41 percent during the 1990s, epitomizes how a combination of land protection measures can help achieve such an ambitious vision. The McHenry County Conservation District and the Illinois Department of Natural Resources teamed up to buy 300-plus acres to protect the headwaters of Boone Creek. Just downstream, eight private landowners within the 465-acre Boone Creek Fen and Seep Natural Areas Inventory Site dedicated large parcels as Illinois Nature Preserves or placed them under conservation easement. These parcels comprise a nucleus of permanently protected land that regional officials expect will expand and protect the entire inventory area.

Perhaps most innovative of all, two new subdivisions within the watershed, the Sanctuary at Bull Valley and McAndrews Glen, employ conservation design principles that allow for the building of new housing but also protect natural resources. One subdivision is restoring prairie and oak savanna habitat as a key groundwater recharge zone.

It’s too early to call such conservation communities a trend, but they’ve definitely got the NAMIBES on their side.

—Arthur Melville Pearson

is protected as “natural” open space. High-quality natural areas represent an even smaller fraction: less than one-tenth of one percent.

Taking Twain to heart, voters throughout northeastern Illinois have approved 29 open space bond referenda, totaling $1.05 billion, over the past decade. By the time this money is fully spent, park districts, forest preserve districts, townships, and municipalities will have acquired about 35,000 acres of additional protected open space.

With proceeds from a $75 million bond referendum passed in 2005, the Forest Preserve District of Kane County expanded several existing preserves and established a number of new ones, including the 1,139-acre Virgil Forest Preserve. Now one of the largest preserves in the county, it is comprised of land that had been slated for a 1,600-unit subdivision. Successful efforts such as this helped spur Kane County voters to pass a second referendum in April 2007, providing an additional $85 million for open space acquisition.

If Twain were still with us, he might be surprised to learn that buying land isn’t the only way to preserve a finite resource. During the past two years, several of the region’s land trusts experienced sharp spikes in conservation easements (voluntary agreements not to develop private land). The spikes were in response to the federal government’s extension and expansion of easement-related tax breaks. Brook McDonald, president and CEO of The Conservation Foundation, reported that his organization has nearly doubled the number of acres held in conservation easements to more than 1,000.

Whether the increased rate of easements will continue is anyone’s guess, but McDonald knows one thing for sure: “people are sick and tired of sprawl.” That’s why they have overwhelmingly supported so many referenda to buy more natural land, and are likely to support yet more as development pressure casts an ever-widening net across the region.

—Arthur Melville Pearson

While Chicago-area residents were channeling substantial funds toward nature, state and federal government prioritized spending elsewhere, forcing local conservation and nature programs to tighten their belts.

The last decade saw federal sources of funding for conservation and nature drop across the board. “Chicago Wilderness has made a conscious effort to diversify our funding sources,” says consortium vice chair Laurel Ross. “We began with 100 percent federal support, but as our annual spending needs increase, Fish & Wildlife Service and Forest Service budgets are being cut. Now less than half of our support comes from federal sources. The rest comes from foundations, private individuals, and corporations.”

Some attribute the federal funding drop to military spending on the war in Iraq. The Forest Service budget also has

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5 CITIZENS SUPPORT BIG LAND SAVES

"Buy land," Mark Twain advised. "They're not making any more of it." If Twain were living today, he might have added, "especially natural land." Within the more than 7-million-acre boundary of Chicago Wilderness, only five percent, or roughly 300,000 acres,
been stressed by several years of fighting long-suppressed wildfires in the West.

On the state level, Governor Rod Blagojevich looked to nature funds to patch a gaping hole in the Illinois budget. A March 2007 report by the Illinois Environmental Council warned that "as the state's fiscal crisis and debt issues have intensified...the amount the state has dedicated to open space acquisition has dropped drastically." The report pointed to a $60 million decline in yearly spending by the Illinois Department of Natural Resources between 2002 and 2006, major backups in Illinois' two biggest open space funding tools (known as OSLAD and NAAF), a roughly $10.62 million drop in Conservation 2000 fund annual levels from 2002 to 2007, and a complete discontinuation of the Open Land Trust program, "which provided $200 million for open space acquisitions from 1999 to 2003."

But not all the news is bad, says Ross. "In the earliest days," she said, "the thing we told prospective members and supporters was that we would bring in dollars for conservation that wouldn't otherwise have been there. We aimed to enlarge the 'conservation pie' in this region, rather than dividing it up further. That has happened in many instances. The fact that there is so much positive attention on conservation has also influenced local decision makers like cities and park districts to distribute resources differently than they previously did."

Over the past decade, concern has increased markedly about global warming, a climate trend scientists have known about for decades.

The film An Inconvenient Truth made global warming a hot topic in 2006, spurring governments, environmental groups, and others around the world to mobilize. And in the last few years, Chicago-region organizations have themselves begun to discuss how climate change might affect regional biodiversity conservation.
Given the complex, global nature of climate change, scientists have only recently developed reliable models for predicting its impacts on a regional scale. In 2003, the Union of Concerned Scientists reported on impacts in the Great Lakes Region. They predicted that by the end of the century, a summer in Illinois will feel like a summer in east Texas today.

Local naturalists are already seeing changes, though they acknowledge that natural year-to-year fluctuations play a role. In recent years, plants have flowered earlier and frosts have occurred later in the fall. Average temperatures are increasing, and less ice is forming on lakes. Dropping lake levels and warmer water threaten cold-water fish such as lake trout and whitefish. Meanwhile, more frequent heavy rainstorms are causing short-term flooding. All of these changes stress local ecosystems, and could have dire results for some species.

Bob Sullivan, an environmental scientist at Argonne National Laboratory, chairs the Chicago Wilderness Climate Change Task Force. “Many of our existing conservation strategies assume generally stable climate conditions,” says Sullivan. “That is no longer the case. In many cases, changing climate will change habitat suitability despite our best efforts to maintain the status quo.”

Sullivan says natural resource managers are beginning to develop conservation strategies that take climate change into account. These new strategies could increasingly emphasize north-south bridges of preserved land, or “corridors,” between natural areas. Such corridors allow species to move in search of suitable conditions, though their effects are still being studied. Sullivan says it may be necessary to move threatened species to more suitable habitat, or to manage preserves more like ecosystems from farther south. (While many of the prevalent habitat types of Chicago Wilderness also occur much farther south, the greatest challenge may be preserving the cold-dependent “relict” habitats reminiscent of northern climates.)

Of course, reducing the impacts of climate change also requires global action to curb greenhouse gas emissions. Organizations such as the Center for Neighborhood Technology and the Chicago Park District have invested in energy efficiency and renewable energy. Zoos and museums are educating visitors about how they can reduce their carbon footprint, and the City of Chicago is developing its own climate action plan. Individuals are also pitching in by conserving energy, choosing fuel-efficient vehicles, and bicycling or using public transportation.

Regardless of the success of these efforts, global warming can’t be reversed overnight and average temperatures are expected to continue to increase in the decade ahead. Increased awareness and action will be needed to preserve biodiversity in a changing climate.

—Stephanie Folk

8

ANIMALS ADAPT TO SPRAWL

With suburban sprawl increasingly encroaching on wildlife habitat over the last decade, animals that require large areas of high-quality habitat have declined. Other animals have adapted to life in the suburbs and expanded their range into the widening expanse of subdivisions and office parks.

Species such as white-tailed deer, Canada geese, raccoons, and coyotes have proved highly adaptable to suburban living. Dan Thompson, an ecologist with the Forest Preserve District of DuPage County, says white-tailed deer have become so abundant that they are upsetting local ecosystems by gobbling every plant in reach. Coyotes have been spotted with increasing frequency in suburban settings, and in April a young coyote made the news after seeking refuge in a downtown Chicago sandwich shop. Meanwhile, raccoons boldly raid city
garbage cans, and geese wander among tourists in Millennium Park.

Other species have declined due to fragmented or poor-quality habitat. Gray and red fox populations have been reduced by habitat loss and competition from the more adaptable and larger coyotes. Similarly, blue-spotted salamanders have decreased in numbers, while tiger salamanders, which can tolerate more habitat disturbance, have fared better.

The state-threatened Blanding's turtle has also struggled over the past decade, says Thompson. Unlike the still-common painted turtles, Blanding's turtles move over large areas. This means they can be easily hit by cars or picked off by predators as they attempt to travel through fragmented natural habitats.

Local conservation groups are working hard to help species such as the Blanding's turtle cope with their changed environment. The Forest Preserve District of DuPage County raises Blanding's hatchlings in a protected environment, and then releases them to help increase their numbers in the wild. The district is also looking into options such as creating turtle crossings or underpasses to facilitate movement.

Doug Taron, curator of biology at the Notebaert Nature Museum, says that there have also been some interesting developments in the insect world. Adaptability has been a key to success. One example is a butterfly called the Baptisia duskywing. The caterpillars once fed only on the prairie plant Baptisia, but in the 1970s they started feeding on crown vetch, a weed common on roadides. Since then the butterfly...
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has become increasingly common in the Chicago region.

Taron says some changes in butterfly populations over the past decade could be related to global warming. Since the 1990s, species typically found farther south have appeared in the Chicago region with increasing frequency. For example, the buckeye and the fiery skipper were uncommon in northern Illinois, but are now seen every summer in increasing numbers.

Taron says several other butterfly species have declined, but conservation efforts offer hope. Nature Museum staff members are keeping close tabs on the declining purplish copper, and are working to restore populations of the imperiled swamp metalmark.

Over the next decade, protecting the more sensitive species in the Chicago region will be a growing challenge. For species that are home in the suburbs, the challenge could be keeping their growing numbers from upsetting the balance in local ecosystems.

—Stephanie Folk

There’s an old adage that says if you can’t measure it, you can’t manage it. Within the past decade, an expansion of volunteer monitoring efforts has helped many Chicago Wilderness partners better steward the region’s flora and fauna—be it grassland birds or grasspink orchids.

For decades, the region’s legions of birdwatchers faithfully recorded the species they saw. What they lacked, however, was a consistent methodology for collecting their data. In 1998, the Bird Conservation Network led a team effort to develop standard protocols and an online database.

A recent analysis of more than 100,000 eBird records (see them by Googling “eBird”) reveals that populations of many bird species, particularly grassland birds, are trending downward precipitously. Adjusting management practices based on such data, land managers around the region are witnessing dramatic, site-specific recoveries of some of our most imperiled birds.

Professionals have partnered with citizen-scientists in other realms as well.

Susanne Masi, coordinator of the Plants of Concern program, can’t tell you where her volunteers are monitoring rare plants, for fear of tipping off poachers. What she can reveal is that since the program started in 2001, the number of volunteer monitors has increased from 51 to 160; the number of sites monitored has grown from 58 to 192; and the number of different plant species monitored has risen from 44 to 176. Ninety-nine of those are threatened or endangered.

"But the really important thing," Masi said, "is that in addition to recording the number of plants at each site, monitors identify threats." In response, land managers have caged plants to keep away deer, altered mowing regimes, and removed invasive species—by far the largest threat to our region’s rare plants.

The region also has monitors focused on frogs, dragonflies, and other groups (see page 38). The growing number of volunteer monitors—nearly 600 at last count—are the collective eyes and ears of our region. As such, they are often the first line of defense for protecting our native flora and fauna. Here’s to them, looking out on behalf of all of us.

—Arthur Melville Pearson

Over the past decade, the field of environmental education has continued its shift from limited, esoteric coursework to mainstream, interdisciplinary programs. Even a casual survey of high schools and colleges reveals increased courses and degrees in environmental subjects.

Chicago-area institutions are playing their part in this national trend, with the conservation community already feeling the beneficial effects. In 1995, the University of Chicago introduced a B.A. degree program in environmental studies. Northwestern University introduced an interdisciplinary program in environmental science, engineering, and policy in the 1990s, and as of 2005 its students could pursue the nation’s first Master’s of Science degree in plant biology and conservation, contributing directly to conservation projects with the Chicago Botanic Garden.

Universities throughout the Great Lakes are also expanding environmental programs. Graduate students at the University of Michigan’s School of Natural Resources and Environment can specialize in areas such as aquatic sciences or policy and planning, while pursuing dual degrees in fields such as law, business, engineering, or public health. At the University of Wisconsin, students in the department of Life Sciences Communications learn to effectively spread the word on conservation.

This interdisciplinary approach has spread to education of the public as well. The Madison, Wisconsin-based Biodiversity Project, founded in 1995, applies public opinion and social science research to building public support for biodiversity conservation. The Chicago Wilderness consortium has used Biodiversity Project materials to train conservation professionals and volunteers.

Conservation groups in the Chicago region have also started to apply psychology to their communication and education efforts. At the Brookfield Zoo, psychologists have participated in the design of exhibits intended to help visitors build a caring relationship with animals and the natural world.

If such trends continue, the next generation of conservation leaders—and the public at large—will have a better chance to bring the passion, knowledge, and tools necessary to take on future environmental challenges.

—Stephanie Folk
GETTING OUT THERE: Opportunities & Resources

**RECREATION**

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**FINDING NATURAL AREAS**

Chicago WILDERNESS Magazine. We've spent the last ten years profiling every great local natural area we come across (maps and directions included) and have compiled them on our Web site. The current tally is over 150, including paddling and birdwatching destinations. Visit chicagowilderness.org (click on "Into the Wild") and see page 18 of this issue.

Chicago Wilderness Consortium. Use the "Site Finder" to search by site, amenity, county, activity, and habitat type. (Easy to search, but less detailed than magazine site.) Also check out "Things to Do" and "Things to See." www.chicagowilderness.org/explore/sites.

Forest Preserve Districts, Park Districts, State Departments of Natural Resources. Many counties' forest preserve district Web sites also have interactive site maps. And don't forget your park district, as many have parks with great natural habitat.

Forest preserve districts also offer a wide array of programs. They can be a great resource for all kinds of activities and volunteer opportunities. Find yours at chicagowilderness.org/links.

**CANOEING/KAYAKING**

Openlands Water Trails Map. Regional map highlighting paddling trails and related amenities. openlands.org/watertrails.asp. (312) 427-4256.

**HIKING**

Sierra Club. Sierra Club's many local chapters in all four Chicago-region states organize regular organized hikes, both to local and distant destinations. sierraclub.org.

The Prairie Club. This hundred-year-old club includes pioneering conservationist Jens Jensen in its original membership. prairieclub.org. (630) 516-1277.

**BIRDING**

Bird Conservation Network. There are many local birding groups, engaged in everything from Christmas Counts to Dunes Hikes. Most are BCN members—find them here. bcnbirds.org. (847) 965-1150.

Illinois Birders Exchanging Thoughts. This Web-based group posts bird sighting accounts, updated daily. birdingothe.net/mailinglists/IBET.html.

**BIKING**

Chicago Area Mountain Bikers. Responsible trail use, habitat restoration, and local news and trail conditions. cambr.org.

**KIDS' ACTIVITIES**

Leave No Child Inside. A central resource for kids' activities, publications, and ideas. kidsoutside.info.

**HABITAT RESTORATION**

Save biodiversity with your own two hands.

Volunteer Stewardship Network. Hundreds of groups are actively restoring habitat in the Chicago region (doing hands-on things like sowing native seed, planting, and brush clearing). This hub is a useful clearinghouse for finding a group near you. Visit nature.org/wherewework/northamerica/states/illinois/volunteer, cal (630) 876-5463, or e-mail ktharp@nc.org. Forest preserves also coordinate volunteer opportunities.

Chicago Wilderness Grassroots Task Force. Volunteer group promotes restoration projects and helps recruit new volunteers. (847) 965-1150 ext. 20.

**MONITORING & CITIZEN SCIENCE**

Count and record for science and future work.

Chicago Wilderness Habitat Project. Join major monitoring projects by recording species in the field. They rely on everyday people, from beginners to experts. (847) 724-6226 or kglennei@audubon.org.

Plants of Concern. Monitor rare and endangered plants. (847) 835-8269 or ssmasl@chicagobotanic.org.

Bird Monitoring. Join the BCN Survey. (847) 501-6683 or leeramsey@comcast.net.

Dragonfly Monitoring Network. Monitor dragonflies and damselflies. (847) 925-6214, or ccetembe@harpercollege.edu.

Illinois Butterfly Monitoring Network. Get your own butterfly monitoring route. (847) 464-4426 or ibnn@sbglobal.net.

**Calling Frog Survey.** Train your ears to identify local frog calls. (847) 965-1150 ext. 20 or kglennei@audubon.org.

**ADVOCACY**

Learn about the issues, write, meet, organize.

Friends of the Forest Preserves. Cook County advocacy group encourages wise land stewardship. totfp.org. (312) 356-9990.

Sierra Club. Get involved in a wide range of environmental issues. Look up local chapters at sierra.org, or call Midwest Field Office at (800) 257-4994.

Environmental Law and Policy Center. Find information on environmental issues and legislation affecting the Midwest. elpc.org. (312) 673-6500.


**COOLEST MAPS**

Learn the landscape in new ways.

Natural Connections. Download this hyper-detailed map of the region's "green infrastructure." greenmapping.org.

Illinois Land Survey maps. Browse presentement land survey maps, and find out what your neighborhood might have looked like 200 years ago. landplats.ilsos.net.
Look it up. Dig deeper.

**Libraries & Reference**

Lenhardt Library. At the Chicago Botanic Garden, offers a wide variety of books, periodicals, and other plant pubs.

**Chicago Wild**

Y-Plants. This "virtual herbarium" features descriptions and photos of live and herbarium specimens of local plants and fungi.

Learn from the experts for your community projects.

**Community Resources**

Protecting Nature In Your Community. Working with your local government to help "green" your community? This guidebook provides tools for including nature in the planning process. Call (312) 454-0400.


Read more, learn more, do more.

**Publications**

Chicago WILDERNESS Magazine. We wouldn't be very good salespeople if we didn't list ourselves here, would we? Subscribe at chicagowildernessmag.org, (708) 485-8622.

Outdoor Illinois, Outdoor Indiana, and Wisconsin Natural Resources. Produced by the state Departments of Natural Resources, these maps include more on fishing and hunting.

Illinois Steward Magazine. University of Illinois publication works to acquaint residents with their natural surroundings.

Atlas of Biodiversity. Colorful (and free!) atlas of maps and photos illustrating the region's natural communities.

Enjoying Chicago Wilderness with your Family. This activity guide is full of ideas to encourage children in nature-based activities.

Become an expert in your favorite subject.

**Continuing Education**

Habitat Clinics. Field workshops highlight conservation and restoration in local preserves. habitatproject.org, (847) 965-9239.

Master Gardener Classes. Become a certified master gardener at the Chicago Botanic Garden. chicagobotanic.org/school/mastergardener, (847) 835-8261.

Master Naturalist Classes. Learn to interpret nature for others at the Morton Arboretum. mortonarb.org, (830) 725-2468.


Make the scene, network, make change.

**Events**

Wild Things Conference. A gathering of nature-friendly folks and organizations, held every other March. habitatproject.org/WildThings.

National Public Lands Day. A day to clean up and restore public lands, usually the last Saturday in September. Find local activities at publiclandsday.org.

Chicago Green Festival. The traveling environmental expo will visit Chicago in May 2008 at Navy Pier. greenfestivals.org.

Chicago River Day. Every May, volunteers clean up the river and then celebrate.


Do it for a living.

**Jobs & Volunteering**

Chicagoland Environmental Network. Find local environmental jobs, events, and volunteer opportunities all in one place.

Green Drinks. Network and socialize with other green-minded people at this monthly happening.

Express your natural self.

**Art**

Botanical Illustration. Learn how to capture plants on paper. Offered at the Chicago Botanic Garden, chicagobotanic.org, (847) 835-8261, and Morton Arboretum, mortonarb.org, (830) 725-2468.


Unwind. Beautify your home and neighborhood.

**Sustainability**

Wild Ones. Nonprofit group promotes and teaches native landscaping. Find local chapters at for-wild.org, (877) 394-9453.


Support the habits that support nature.

Civic Footprint. Get involved in your Cook County community by searching online for your elected officials.

Green Map. Find businesses and groups in your Chicago neighborhood that promote sustainable living.

Center for Green Technology. City of Chicago facility provides seminars, a library, and other resources for a more sustainable home.

Stay plugged in daily.

- afreshsqueezed.com
- megogreen.com
- idealbite.com
- greenexchange.com
Oh Say, Can You See?

Once, when the prairie stretched as far as the sky, a person or a buffalo could roll around in a patch of pink and white shooting stars without a thought, other than: “This is my beautiful world.”

Today we’d have to bring back the buffalo for that, as thoughtful people wouldn’t want to massage their backs on even one body’s length of this rare ecosystem.

Yet this photo shows a struggle. The brush hungered to accomplish a much more profound obliteration than a buffalo’s hide could deliver. The brush can’t help itself; it’s in its genes.

Here, in early spring, we can see through those sticks of brush to tens of thousands more shooting stars on the other side, only because a fire has top-killed the shrubs. This little patch of dogwood brush had been on a mission to overwhelm hundreds of acres of highest-quality prairie. Shooting star is actually one species that survives for some years under the brush, because it finishes its photosynthesizing and goes dormant early in the year. (If you look close, you can see some blooming where the brush grew last year.)

Not so the yellow plant, hoary puccoon. It doesn’t recover from even a little shade. It would probably have to seed itself back in, a process likely requiring many years, or decades, in the heavy competition of a diverse and crowded ecosystem.

Actually, the fire top-killed only the outermost shrubs. Notice the leafy ones deeper in the patch to the left. Shrub clones like this advance many feet during periods of fireless years, only to recede many feet during a good fire. Those who’ve been following “Reading Pictures” for ten years will know that, beyond the reach of the brush, this ancient prairie is an incomparably rich ecosystem. The white, pink, and yellow prairie flowers are just the advanced guard of more than one hundred rare wildflower species (and a dozen noble grasses) that will rise here and bloom in turn as the season unfolds. Long may they wave!

Photo by Donald Bolak. Chiwaukee Prairie owned and burned by the Wisconsin Nature Conservancy. Words by Stephen Packard.
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— Arthur Frommer’s Budget Travel

“All hotels were excellent! There is no way I would have stayed in such superior and sophisticated hotels for the price I paid. I am looking forward to another Caravan!”

— (Client), Salinas, California

“Caravan is ... very reasonably priced”

— New York Times

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Thanks to thousands of dedicated volunteers, some of Illinois' prairies, forests and wetlands are being restored to their former glory.

Today, most of Illinois' natural areas are either gone—converted to agricultural lands or urban areas—or severely degraded.

But happily, this story doesn't end here. In the Chicago region and across Illinois, thousands of volunteers have joined with public agencies and private landowners to protect prairie remnants, reconstruct wetlands and restore forests.

To aid their efforts, The Nature Conservancy and Illinois Nature Preserves Commission coordinate the Volunteer Stewardship Network. The Network supports more than 5,000 volunteers by providing tools, training and conservation expertise to help maintain and restore more than 300 high-quality natural areas throughout Illinois.

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