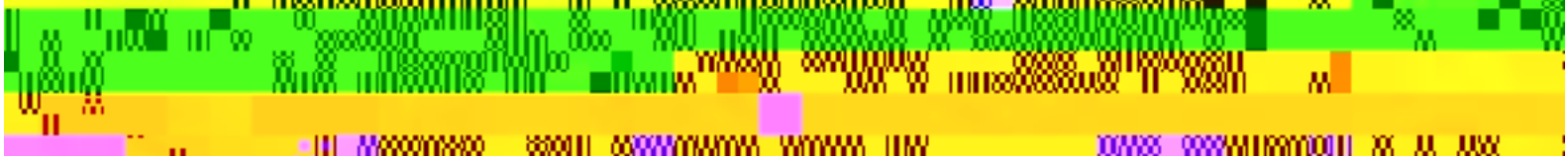
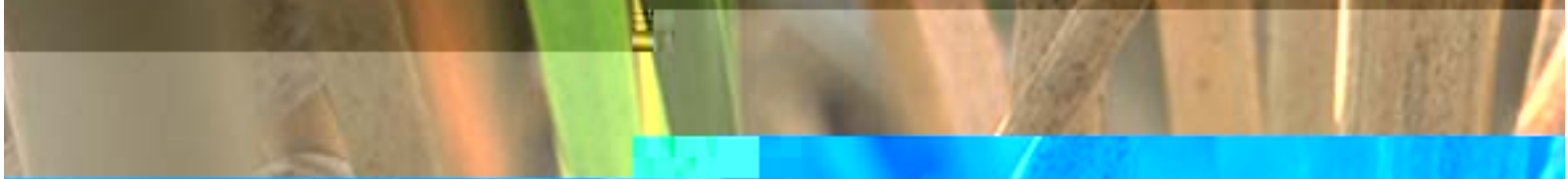
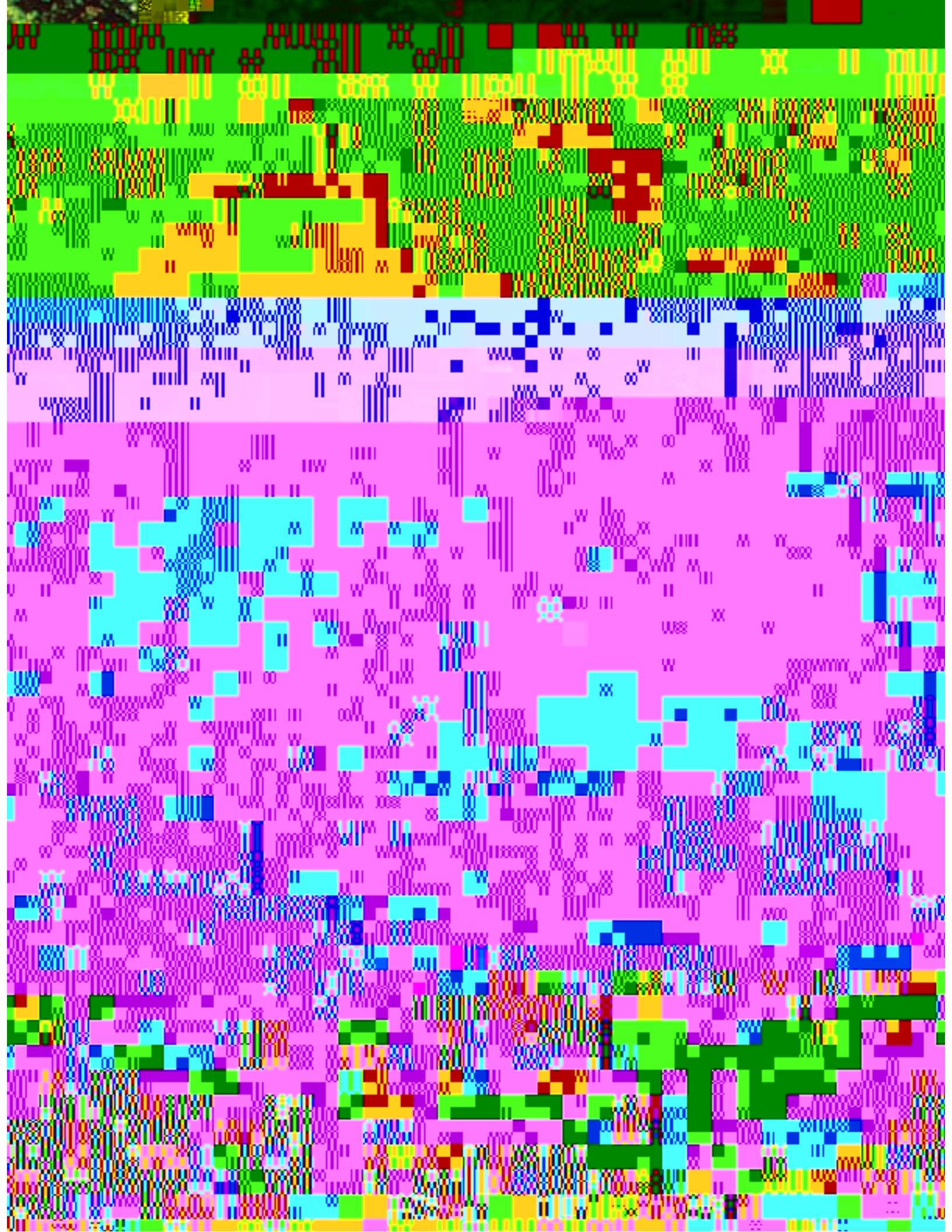


# Nature









# Chicago Nature and Wildlife Plan

a strategy to enhance natural habitats within the City of Chicago

# Plan

CHICAGO NATURE & WILDLIFE PLAN

Cover Photo - Cypripedium in Gompers Park (Jill Riddell)  
Inside Cover (in order of appearance) - Dune restoration at the South Shore  
Nature Sanctuary (Jin Lee), red-winged blackbird nestlings (Jim Nachel),  
great blue heron at the North Pond in Lincoln Park (Jin Lee)

01	08	10	14	18	22	26	132	142
<b>INTRODUCTION</b>	<b>OBJECTIVES</b>	<b>PROTECT</b>	<b>MANAGE</b>	<b>MONITOR</b>	<b>EDUCATE</b>	<b>DIRECTORY</b>	<b>APPENDICES</b>	<b>ACKNOWLEDGEMENTS</b>

**PREPARED AND PUBLISHED BY**

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Nature and Wildlife Committee

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Approved by Chicago Plan Commission on  
February 1, 2006, and adopted by the Chicago  
Park District on April 11, 2006. Approved by  
Cook County Forest Preserve District Board of  
Commissioners on June 11, 2006.



Chicago's natural environment has undergone many changes since glaciers retreated from the upper Midwest more than 12,000 years ago.

More than 90 percent of the land within the city limits was formerly Lake Michigan lakebed that over centuries evolved into gently rolling grasslands and marshes. At the time of European exploration in the late 17th century, tallgrass prairies and oak savannas characterized the area with dunes and marsh predominant near the lakeshore. Settlements were distinguished by tall grass and wild rice, and savannas with cord grass, sweet plantains



**S a \_g a**  
**T a d \_i \_i f L a d c a e**  
**C i e a i**

ore than a cent\_r\_ ago, t\_o progressi\_e  
landscape gardeners began e\_perimenting  
\_ith the se of nati\_e plants in Chicago  
In the late \_s, ssian Cole Simonds  
began sing transplanted nati\_e shr\_b\_s and  
trees at Graceland Cemeter\_ and, in \_ ,  
Jens Jensen designed one of North\_merica\_s  
first p\_blic nati\_e plant gardens in\_nion  
Park\_ heir efforts led to the creation of a  
Prairie St\_le\_ of landscape architect\_re  
oda\_ Jensen is considered one of the most  
infl\_ential fo\_nders of the conser\_ation  
mo\_ement in the id\_est. In addition to his  
nprecedented se\_of id\_estern plants for  
his man\_riatel\_ commissioned projects,

he infl\_enced the establishment of the  
orest Preser\_e District of Cook Co\_nt\_  
and he ad\_ocated protection efforts at  
Illinois\_ each State Park and the Indiana  
D\_nes\_ disciple of Jensen\_s, lfred Cald\_well,  
sed nat\_ral landscapes\_ith his earl\_  
th cent\_r\_ designs for lakefront attractions  
like Promontor\_ Point and Lincoln Park\_s  
ontrose Point and the Lil\_ Pool that no\_  
bears his name

The amount of city land that can be characterized as natural habitat as identified in the study as part of a Chicago Habitat Inventory project conducted by the Chicago Department of Planning and Development (DPD) through a grant from the U.S. Forest Service.

DPD staff used mapping tools, aerial imagery, on-site visits and previous studies to estimate total habitat space within the city. The study indicated that approximately 1,000 acres of the city, 1,000 acres within the city limits serves as habitat. Additionally, about 1,000 acres have been identified for habitat restoration. These acreages are distributed among individual sites that are predominantly located along the Chicago River and on the shorelines of Lake Michigan and Lake Calumet.

Although natural habitat comprises less than three percent of the entire city area, all basic types of northeastern Illinois natural areas are represented within Chicago, particularly

Chicago has much to offer the cause of nature conservation, especially the habitat it provides for birds—endangered and rare species, such as yellow-headed blackbirds and black-crowned night herons, nest in Chicago. Improved habitats could boost the numbers of these and possibly other bird numbers isn't clear, however.

## 01

### Prioritize natural areas



The plan will prioritize the following natural areas in the city's overall urban form, including efforts to

» Designate the city's natural areas with the newly created Parks and Open Space Natural Areas (P-OS) zoning district

»

## 02

### Manage green space



Manage green space critical for recreation and

The plan will manage green space through a range of actions

### 03

#### Mid- and long-term actions



The plan recommends continuing existing research and conducting new research where necessary to establish priorities for restoration and management efforts that are being addressed.

- » Produce baseline inventories of all existing natural areas and of all sites slated to undergo restoration
- » Set up programs for all endangered and threatened species to monitor how populations are faring now and over the long term
- » Compile a list of research needs

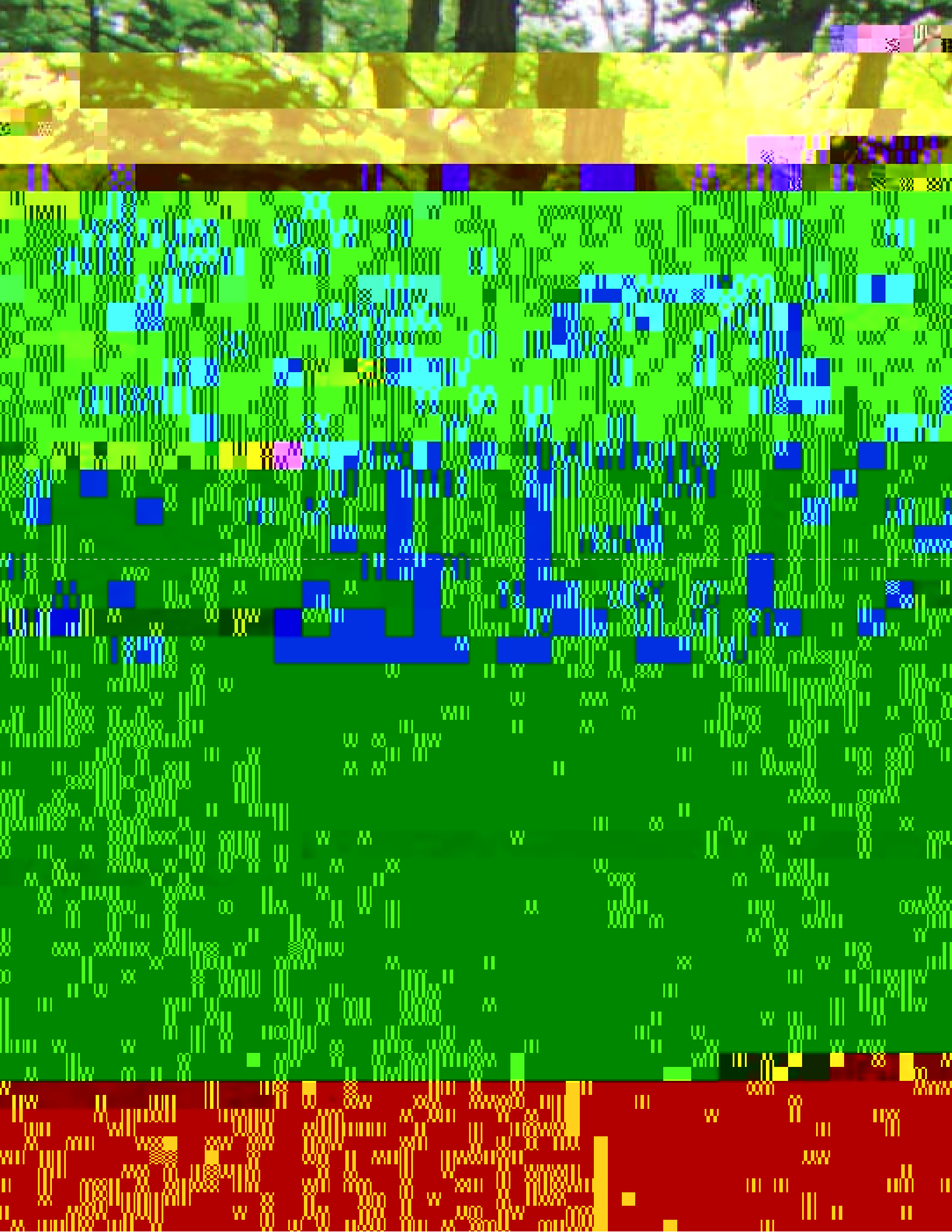
### 04

#### Education and outreach



The plan calls for increasing information about the role of habitat in an area where they are located. The plan includes recommendations to:

- » Increase public awareness of the importance of biodiversity conservation to the environment
- » Coordinate partner organizations to focus on specific goals in the Chicago Nature Wildlife Plan
- » Develop outreach plans to particular population groups, such as homeowners, pet owners, gardeners and others





**T'ée C'á e ge:** In abundance of habitat sites and other natural areas in jeopardy of being degraded or used for purposes other than supporting wildlife

**T'ée V'í :** Permanent preservation of all natural lands in public ownership, the acquisition or leasing of other areas where possible, and physical improvements that make natural and manmade structures friendlier to wildlife

# Protect Natural Habitat

RCNDINS

## Immediate

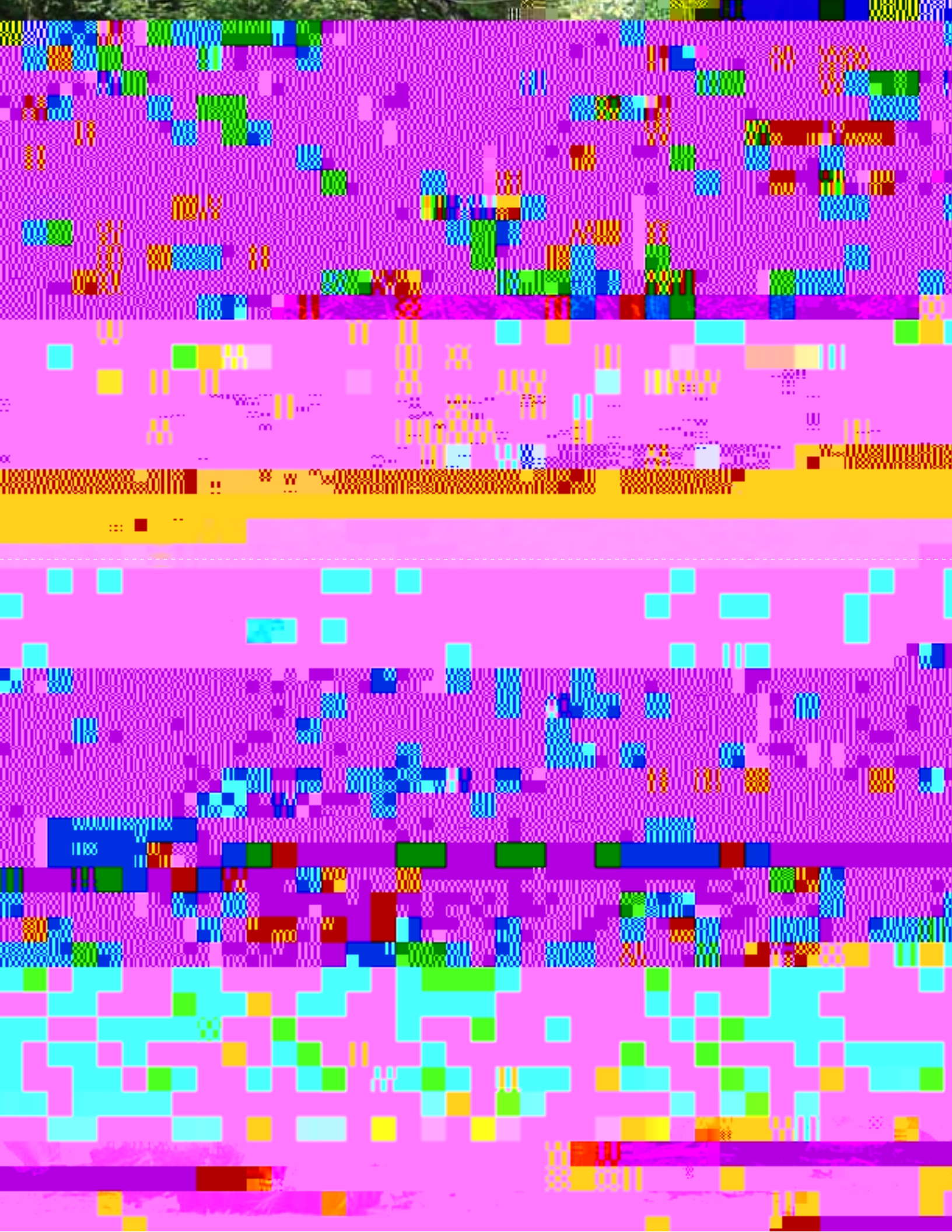
The City of Chicago's new zoning designation for public open space (P-S-) should be applied to habitat sites to prevent their redevelopment for other uses. Site owners, most notably the Chicago Park District, the Forest Preserve District of Cook County and the Illinois Department of Natural Resources, should adopt resolutions or other agreements that designate and preserve the natural area habitats within Chicago that the various natural areas that these agencies do not own should be acquired or leased. The State of Illinois Land and Water Reserve designation should also be applied to select parcels to further reinforce their roles in support of wildlife.

## Within 5 years

- » Circumvent protected natural areas in the Calmet Open Space Reserve and along the western edge of Rosehill Cemetery.
- » Amend the city's 5-foot river setback requirement and the Chicago River Corridor Design Guidelines to require a naturalized riverbank wherever possible.
- » Promote riparian areas along the Chicago River through shoreline enhancements, specifically at Wolf Point, the North, South and Dearborn turning basins, at the West Park Remnant, along the North Branch and sections of the Chicago Sanitary and Ship Canal.
- » Reestablish in-stream habitats by prohibiting the use of motorized vessels along the Upper North Branch, North Branch Canal, Mill Creek, Collateral Channel and certain private slips.
- » Increase the number of areas along the lakefront where the primary use is natural habitat and recreation and wetlands in these areas.









## MANAGE

**T'ê C'á e ge:** degraded city-side habitat in entor\_ that falls short of its potential to serve local wildlife

**T'ê V\_i :** the implementation of management techniques that sustain and expand the viability of native plants, animals and aquatic systems in natural areas across the city\_



Managing Open Spaces

RCNDINS

Immediate

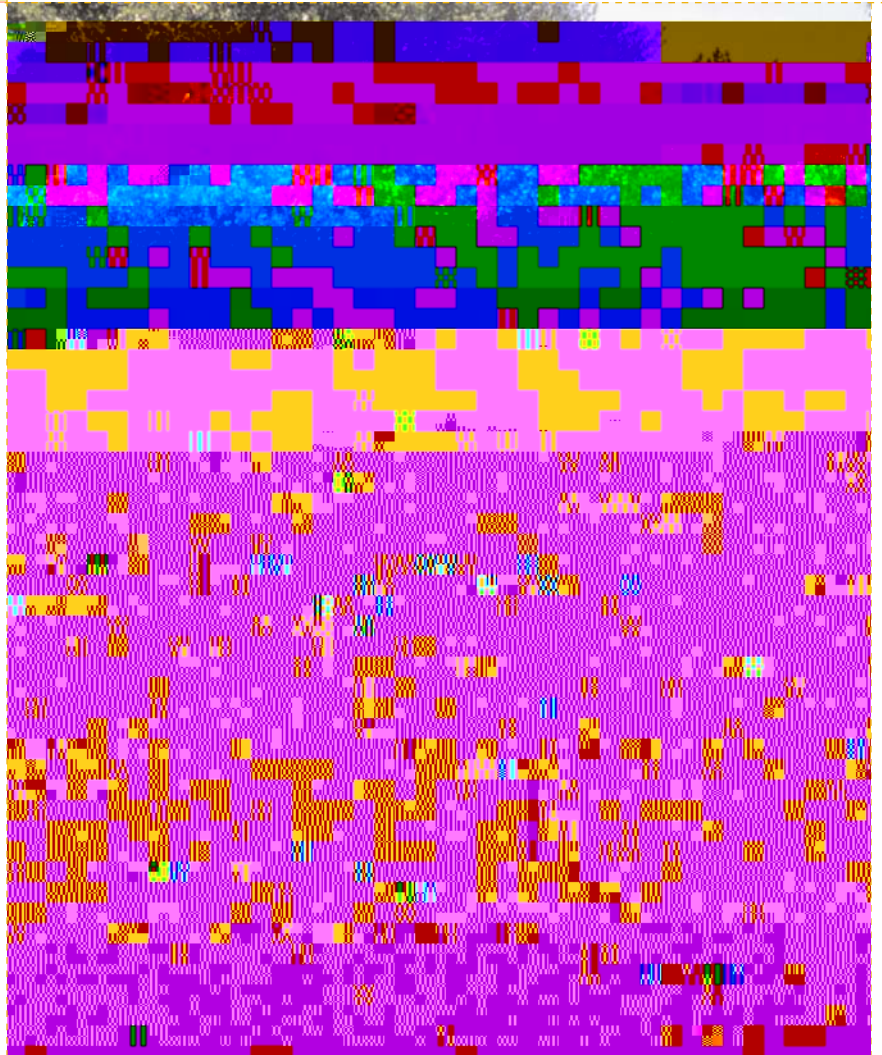
Existing management plans for habitat sites should be implemented while priorities, goals and plans for other habitat locations are developed through a collaboration of landowners, volunteers, community members and civic organizations. Management activities should be coordinated where possible, especially where several sites are in close proximity to each other, such as around Lake Calumet and along the North Branch of the Chicago River.

Within 5 years

- » Implement existing management plans for the largest, high quality natural areas, such as Porterhorn Marsh, Sauganash Prairie, Nankin Hill Prairie and Degebrook Wetlands
- » Implement solutions to fish migration impediments caused by the North Branch Dam and Chicago Lock
- » Utilize the Calumet Regional Management Strategy as a model for wetland restoration across the city
- » Utilize recommendations in the Chicago River Master Plan to improve habitat in and along the Chicago River
- » Increase and improve garbage pickup at beaches to discourage excessive litter populations that contribute to poor water quality
- » Use the city's built infrastructure to improve biodiversity where possible and encourage architects to create designs that are safe for birds and other wildlife
- » Ensure that sources for local seeds and plants are in place from suppliers, volunteer growers or a seed-sharing network. Also participate in and help publicize plant giveaways to community groups

- » Help non-profit organizations continue to work with owners of public natural areas that do not have conservation as a part of their missions
- » Provide management training manuals for volunteers through the cooperation of the Nature Conservancy, Chicago Wilderness, Wetlands Project, Chicago Park District, Forest Preserve District of Cook County, and other appropriate partners
- » Increase participation in Clean Air County's Neighborhood Wetlands Project's Neighborhood Open Space Planning and Acknowledgment programs
- » Encourage owners of private buildings to install green roofs, bat boxes, nesting poles, nesting pads, artificial chimneys and other structural residues for various species for nesting purposes
- » Encourage owners of public buildings that are commonly used by birds, such as bridge houses and beach structures, to maintain and design them in ways that are conducive to nesting
- » Investigate the reintroduction of appropriate species to suitable water and lands

- » Look for ways to encourage landowners adjacent to natural areas, both public and private, to use natural landscaping
- » Establish environmental support teams that can help select plants, disconnect downspouts and perform projects related to improving biodiversity
- » Assess the viability of local sources used for the translocation of native species, such as butterflies and frogs, by coordinating with government authorities to create a stocking program or through other means
- » Explore ways to reduce the negative effects of Chicago's ambient light on nocturnal animals and insects
- » Consider measures that discourage local activities that reduce biodiversity in other parts of the world, such as an ordinance that prohibits the use of rainforest hardwoods or other imported materials that aren't sustainable
- » Launch a citywide campaign focused on how homeowners can improve the case of biodiversity
- »



is an essential ingredient to healthy habitats, Chicago's water resources should be improved according to the recommendations of Chicago's Water Agenda. As part of the process, landowners and agencies that regulate public waters should work together to incorporate habitat improvement practices into programs that remove debris and stabilize the banks of area waterways. They should also study the effects of regional dams and locks on fish migration, and whether in-stream obstructions warrant additional aeration to promote fish and other aquatic populations. Legislation that prohibits the sale of invasive and nuisance species should be coordinated through ordinances and publicized through informational materials printed in numerous languages. The Metropolitan Water Reclamation District should also include biodiversity in its ongoing study on the effects of aging water lines.

for the Water

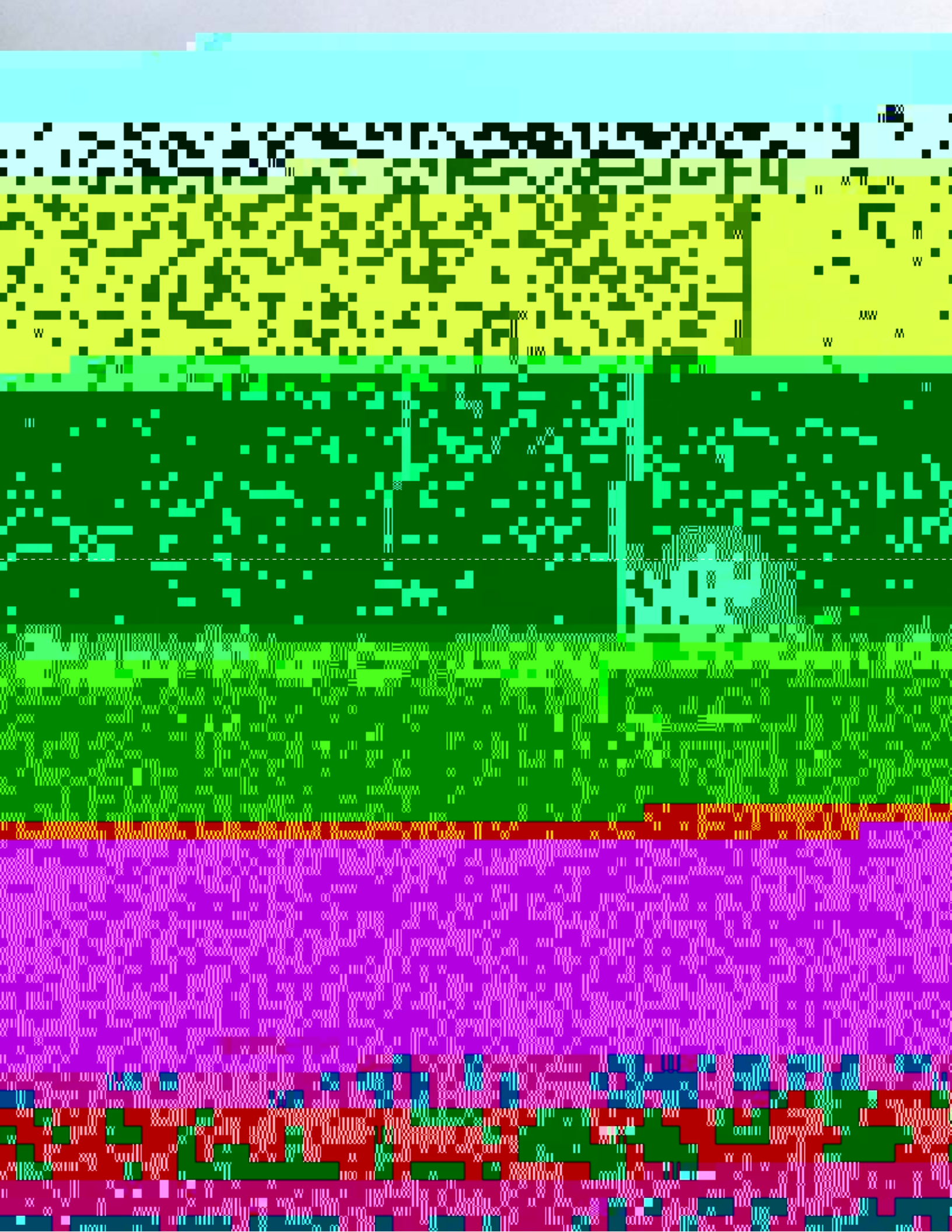
Chicago's resident and transient bird population can be protected and enhanced through the implementation of techniques that foster their survival in an urban area. Among the most important are methods to diminish bird collisions with high-rise buildings.

for the Birds

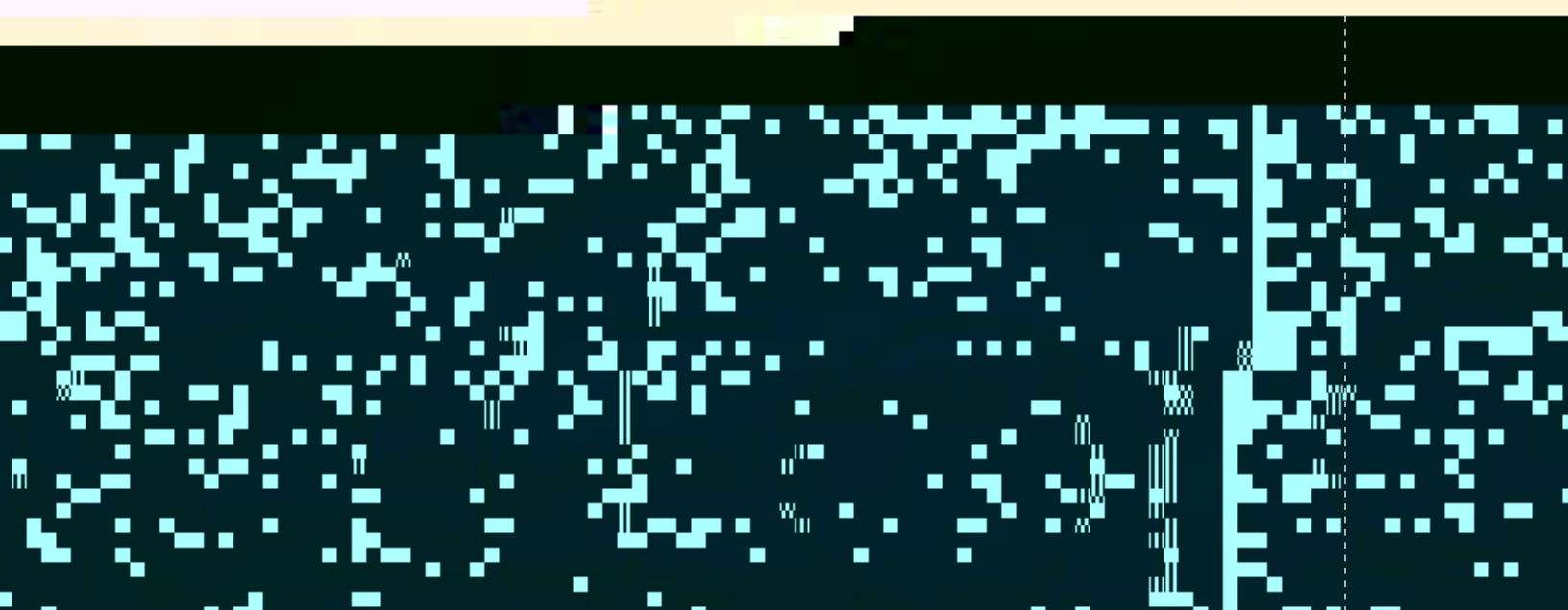
While the number of annual bird collisions with Chicago high-rises is undetermined, it is well known that skyscraper windows pose a significant threat to birds that mistake reflections for air space. Existing data on fatal bird collisions, including the time and locations of strikes, along with related building features, should be analyzed and addressed in connection with ongoing research by the State Wildlife Service and Chicago Department of Environment.

As part of the effort, the City of Chicago's Lights Out program should be more vigorously publicized to communicate environmental benefits from turning off decorative exterior lighting and tilting interior shades. High-rises should be monitored and recognized for complying with efforts to reduce the problem.

Additionally, city lighting codes for high-rise construction sites, along with Leadership in Energy and Environmental Design (LEED) standards, should be reviewed and possibly amended to further promote design elements that protect birds, such as the use of frosted or fritted glass, downward-angled panes, decorative markings, and boldly-colored interiors and decorations.



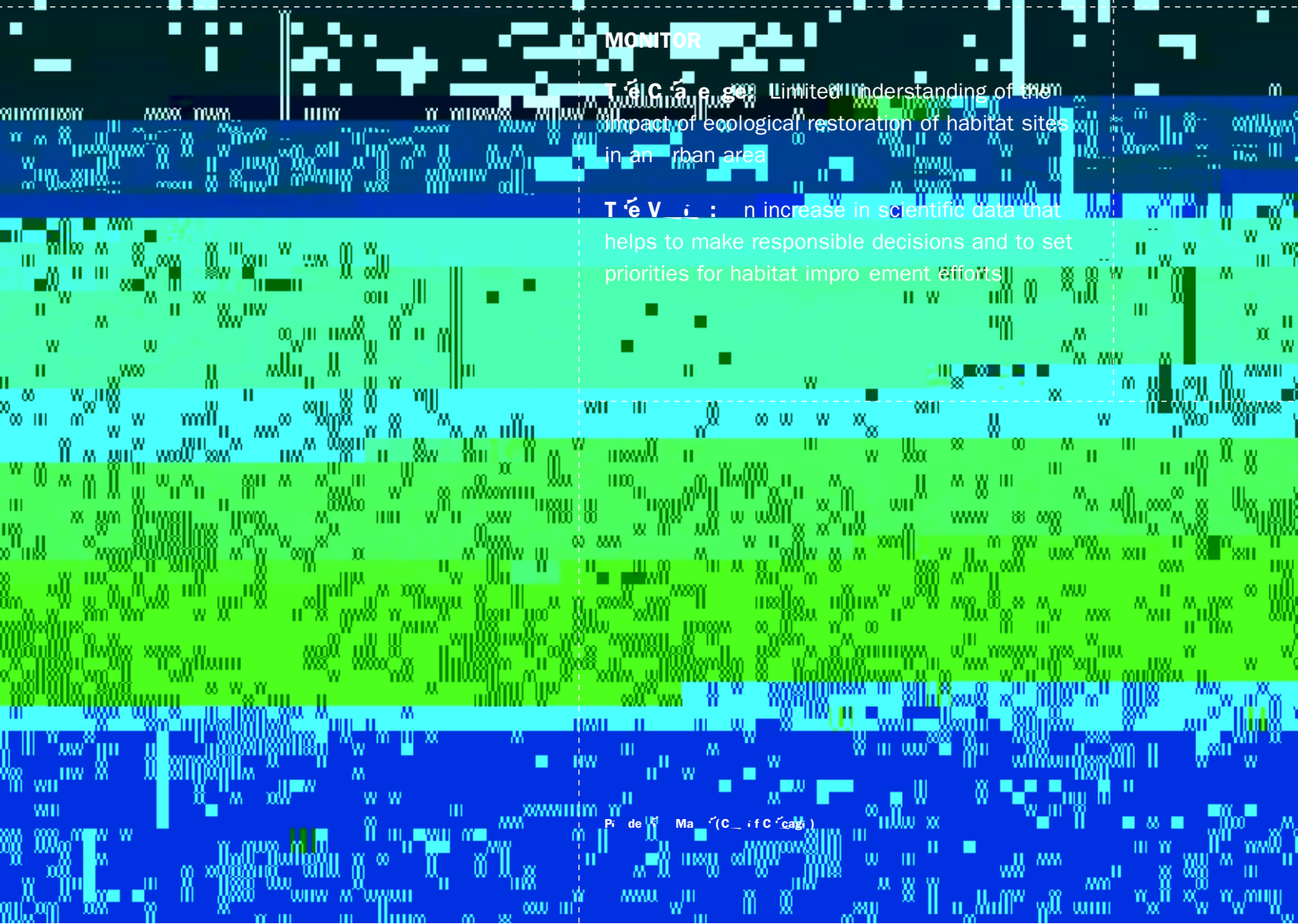




**MONITOR**

**T**he case goes beyond limited understanding of the impact of ecological restoration of habitat sites in an urban area

**T**he value is an increase in scientific data that helps to make responsible decisions and to set priorities for habitat improvement efforts



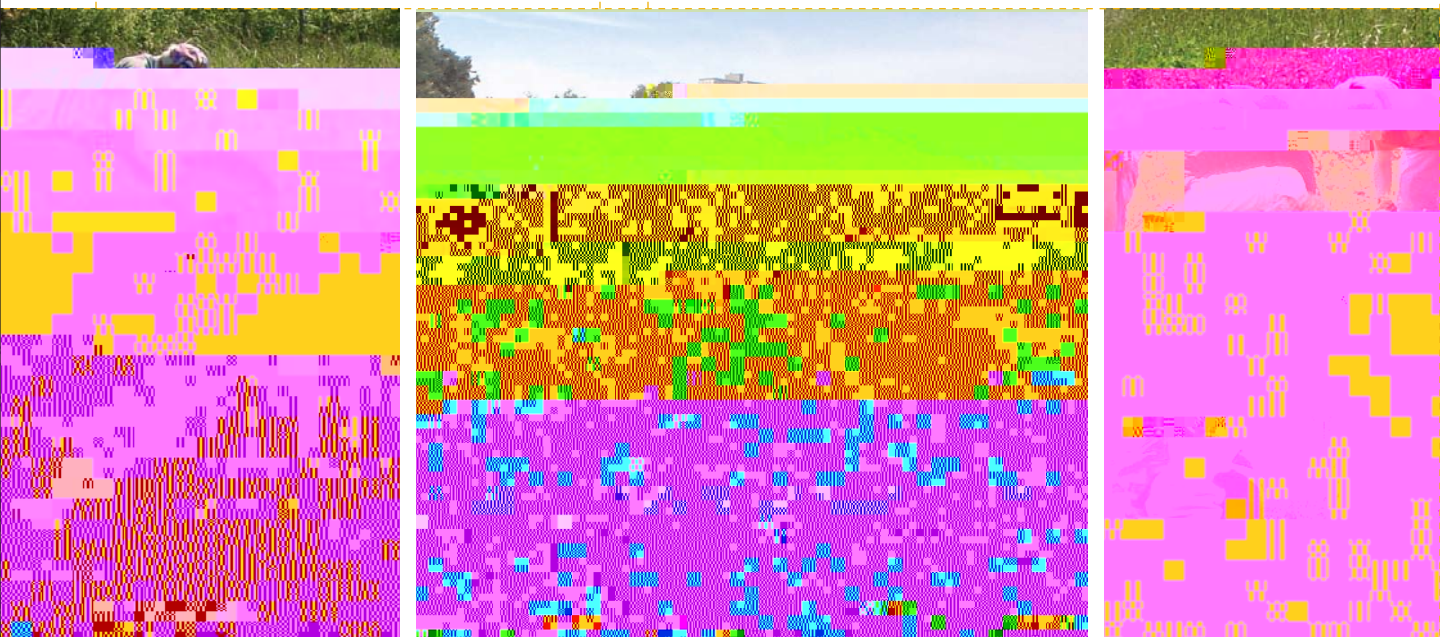


- » Participate in regional, national and international studies, such as monitoring species or groups of animals that are not endangered or threatened but susceptible to global concern
- » Determine how pollutants in and around Lake Calumet impact birds that feed in the area
- » Research how water and sewage treatment processes could better benefit wildlife, particularly shorebirds
- » Explore how restoration efforts benefit migratory birds
- » Compare how isolated natural areas compare with those near a cluster of small sites like private yards and school habitat gardens
- » Determine habitat site requirements for certain targeted animal species

- » Determine risks to the genetics of native plants when seeds and plants from other areas are introduced
- » Determine what effect natural areas have on invasive species and icebergs
- » Study how use by people and domesticated animals affects the biodiversity of selected natural areas
- » Study the relationship between colonies and diminishing populations of invasive species
- » Determine how water and sediments can be safely remediated
- » Assess the knowledge and attitudes of Chicago residents regarding biodiversity and landscape issues

Long-term

Volunteers at Montrose Point Bird Sanctuary (Chicago Park District)







Tré C'á e ge: lack of comprehension

dedicate the Public

RC ND INS

<p>Immediate</p>	<p>Non-profits, government agencies, non-profit organizations and educational institutions that already promote the roles of city natural areas could be more effective through new and expanded public-private partnerships. While education needs are numerous, priorities center on an increased awareness among students regarding the importance of biodiversity conservation to the local, regional and global environment. Kids should be enlightened about how their behavior and consumption habits affect wildlife and how relatively simple efforts around the home and workplace can benefit nature, such as eliminating harmful pesticides and invasive plants, replacing pavement with more porous surfaces, and controlling pets that threaten wildlife.</p>	
<p>Within 3 years</p>	<ul style="list-style-type: none"> <li>» Appoint a liaison to work with Chicago Public Schools to promote outdoor nature activities and provide service learning credits to students that take part in these activities</li> <li>» Reach out to the Catholic Archdiocese and other parochial, private, and independent schools to promote outdoor nature activities</li> <li>» Improve teacher access to existing habitat curriculum and develop a new teacher certificate or endorsement for use of such curriculum</li> </ul>	<ul style="list-style-type: none"> <li>» Improve and expand Chicago Wilderness teacher training both on the Internet including gardening, biodiversity and related information</li> <li>» Work with the City of Chicago's after-school after-school after-school and gallery programs to include workshops that focus high school students' attention on local nature, biodiversity, greening and gardening</li> <li>» Use the Calmet Stewardship Initiative as a model for focusing partner organizations on a specific goal in a certain location. The effort should serve to concentrate resources for quick demonstrated environmental benefits</li> </ul>
<p>Long-term</p>	<ul style="list-style-type: none"> <li>» Create a resource center where teachers can locate educational materials and participate in workshops. Possible locations include North Park Village Nature Center, the proposed Ord Calmet Environmental Center, the Chicago Center for Green Technology, and the Chicago River Center at the Michigan Avenue Corridor</li> <li>» Target information to owners of large tracts of land, homeowners, landscape and garden-related businesses, elected</li> </ul>	<p>officials, religious organizations, community gardeners, and pet owners about the importance of biodiversity conservation</p> <ul style="list-style-type: none"> <li>» Increase awareness of Chicago's visitors about urban habitats and the importance of biodiversity conservation through media outreach and informational materials placed at select tourist destinations</li> <li>» Build on existing educational programs at Chicago public libraries</li> </ul>

Interpretive signage at Michigan Park Nature Sanctuary (Jill Riddell), Wetland restoration at Montrose Point Bird Sanctuary in Lincoln Park (Chicago Park District)