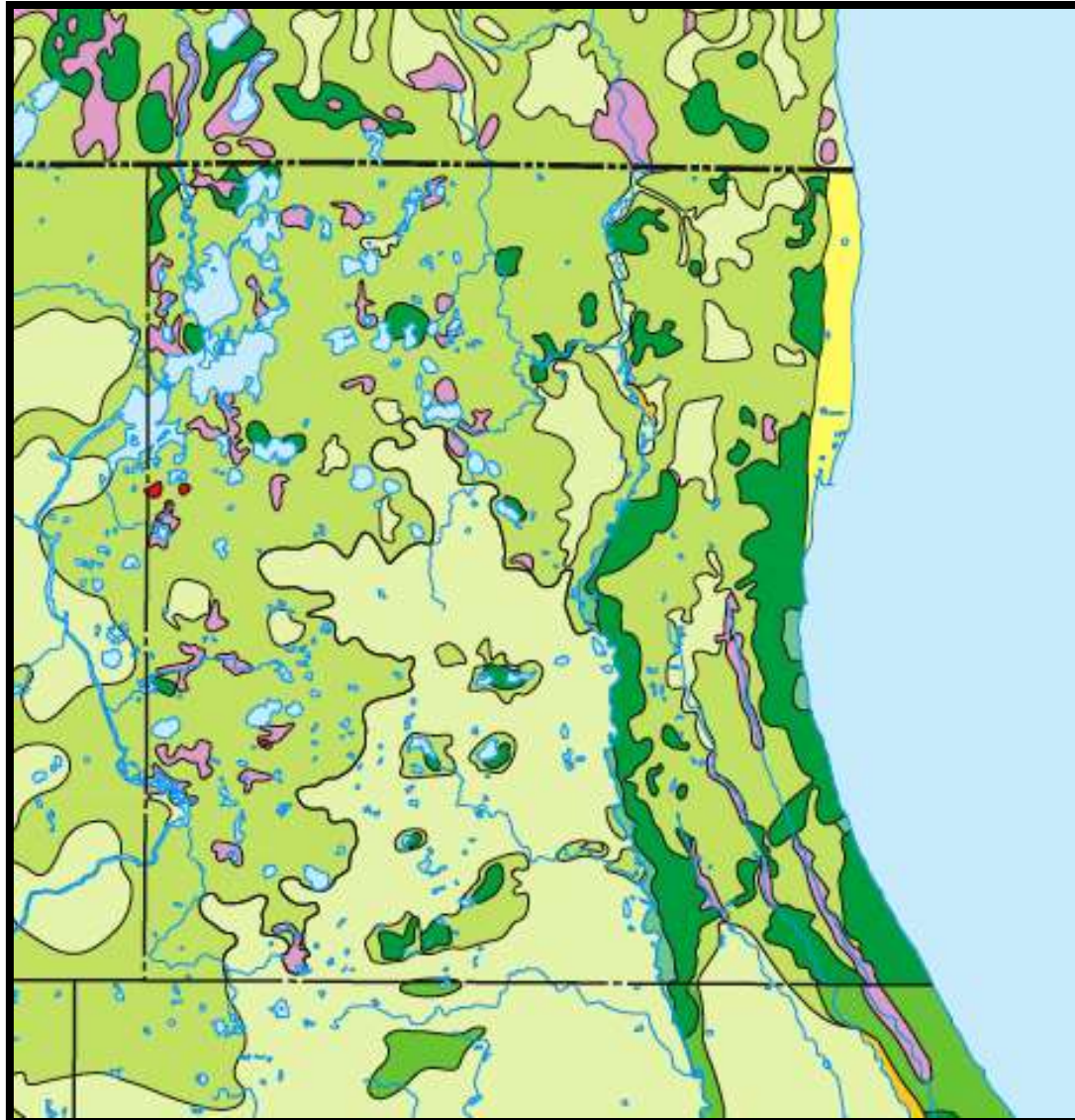




Natural Areas: Protection and Stewardship
LIBERTYVILLE TOWNSHIP BOARD OF COMMISSIONERS

Steven Byers
Illinois Nature Preserves Commission
December 2013

PRESETTLEMENT VEGETATION OF LAKE COUNTY, ILLINOIS



- PRAIRIE
- SAVANNA
- WOODED COMMUNITIES
- OAK WOODLAND
- UPLAND FOREST
- FLOODPLAIN FOREST
- DUNE COMPLEX
- WETLANDS
- SWAMP
- BOG
- LAKES

a mosaic of landscapes --

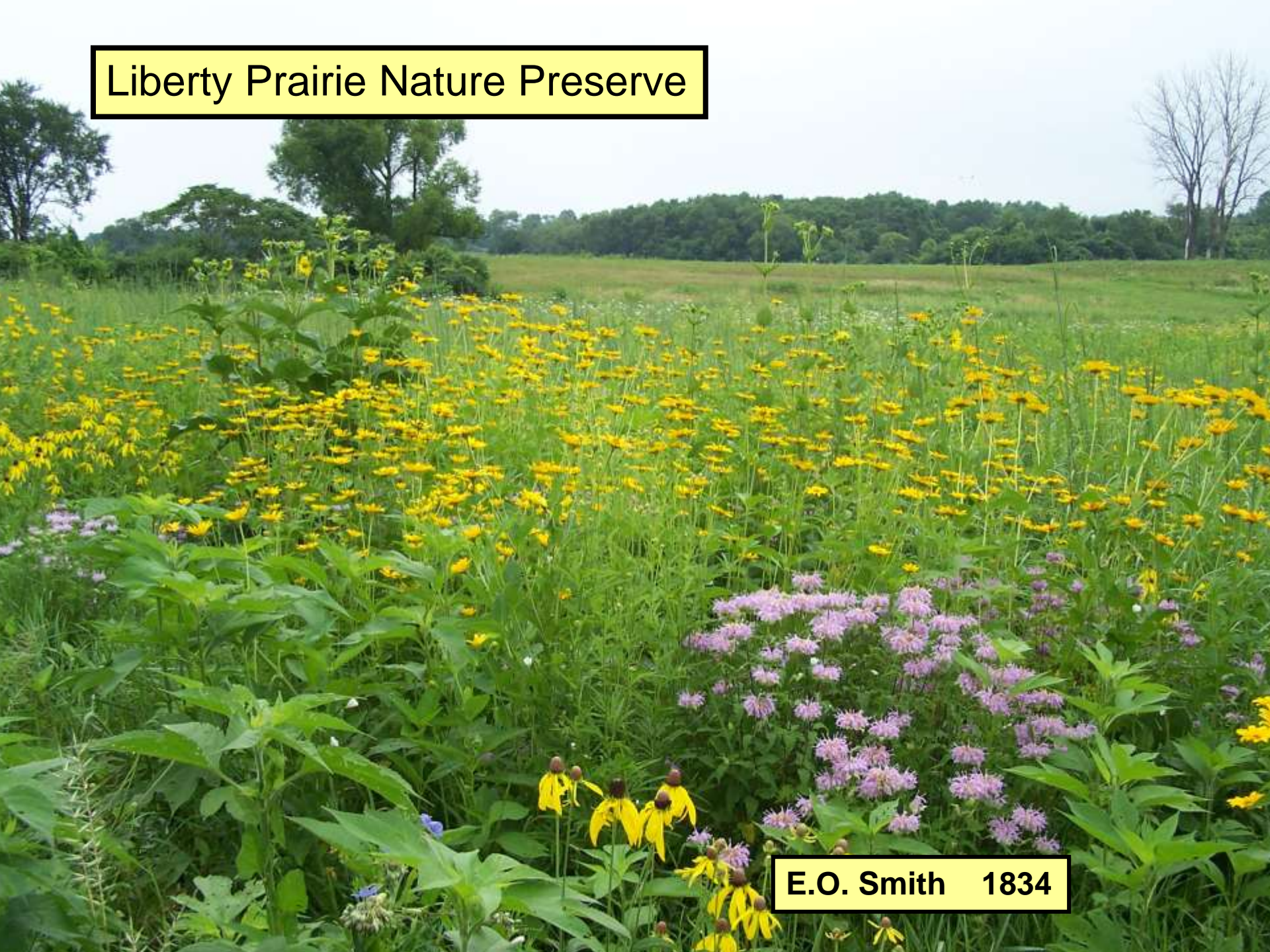


shaped by the advance and retreat of glaciers



and by landscape-scale fires

Liberty Prairie Nature Preserve

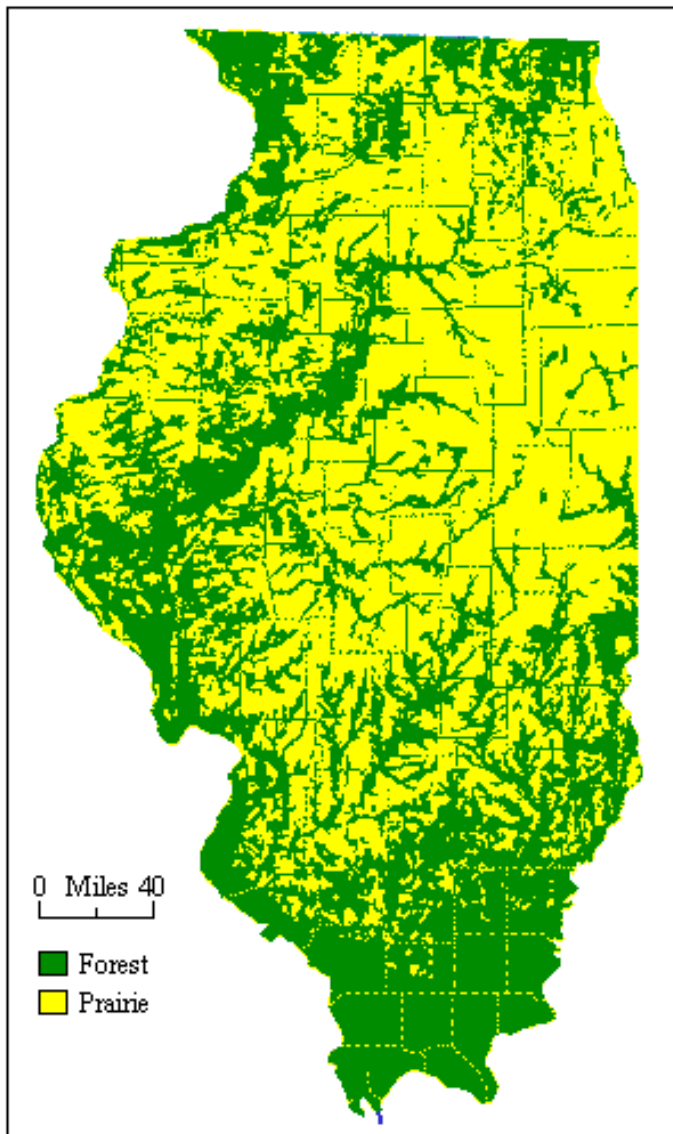
A wide-angle photograph of a prairie field. The foreground and middle ground are dominated by a dense carpet of yellow wildflowers, likely Black-eyed Susans, interspersed with clusters of purple flowers, possibly New England Aster. The plants are tall and green, with some yellow flowers in full bloom and others as buds. In the background, a line of trees stretches across the horizon under a grey, overcast sky. The overall scene is a lush, natural landscape.

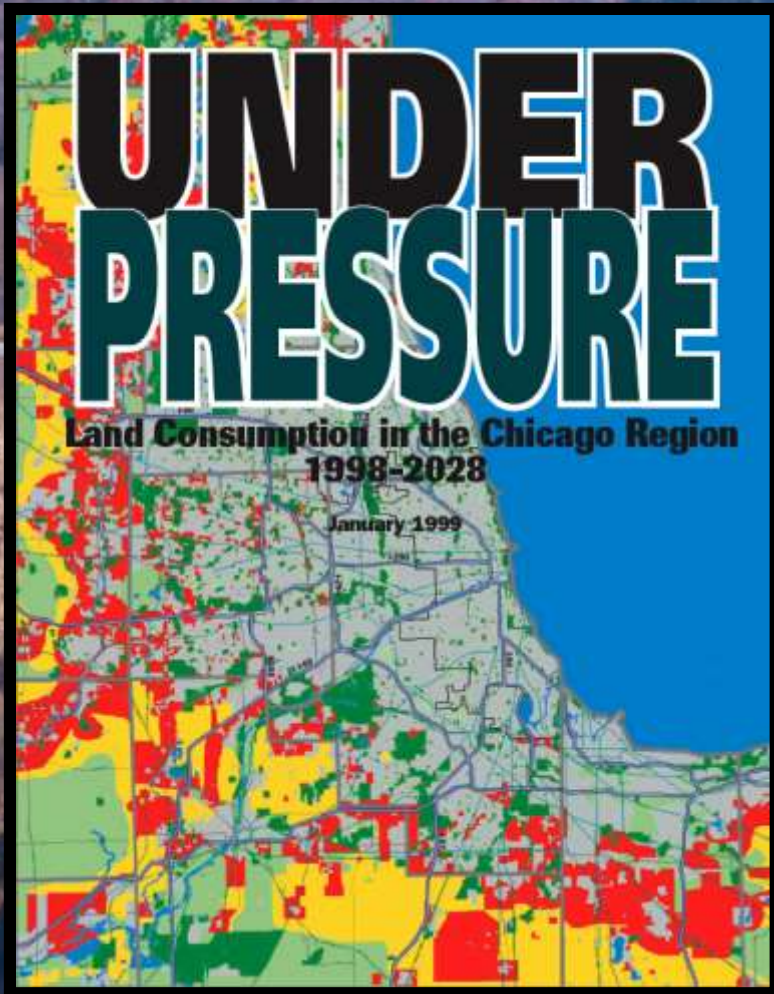
E.O. Smith 1834



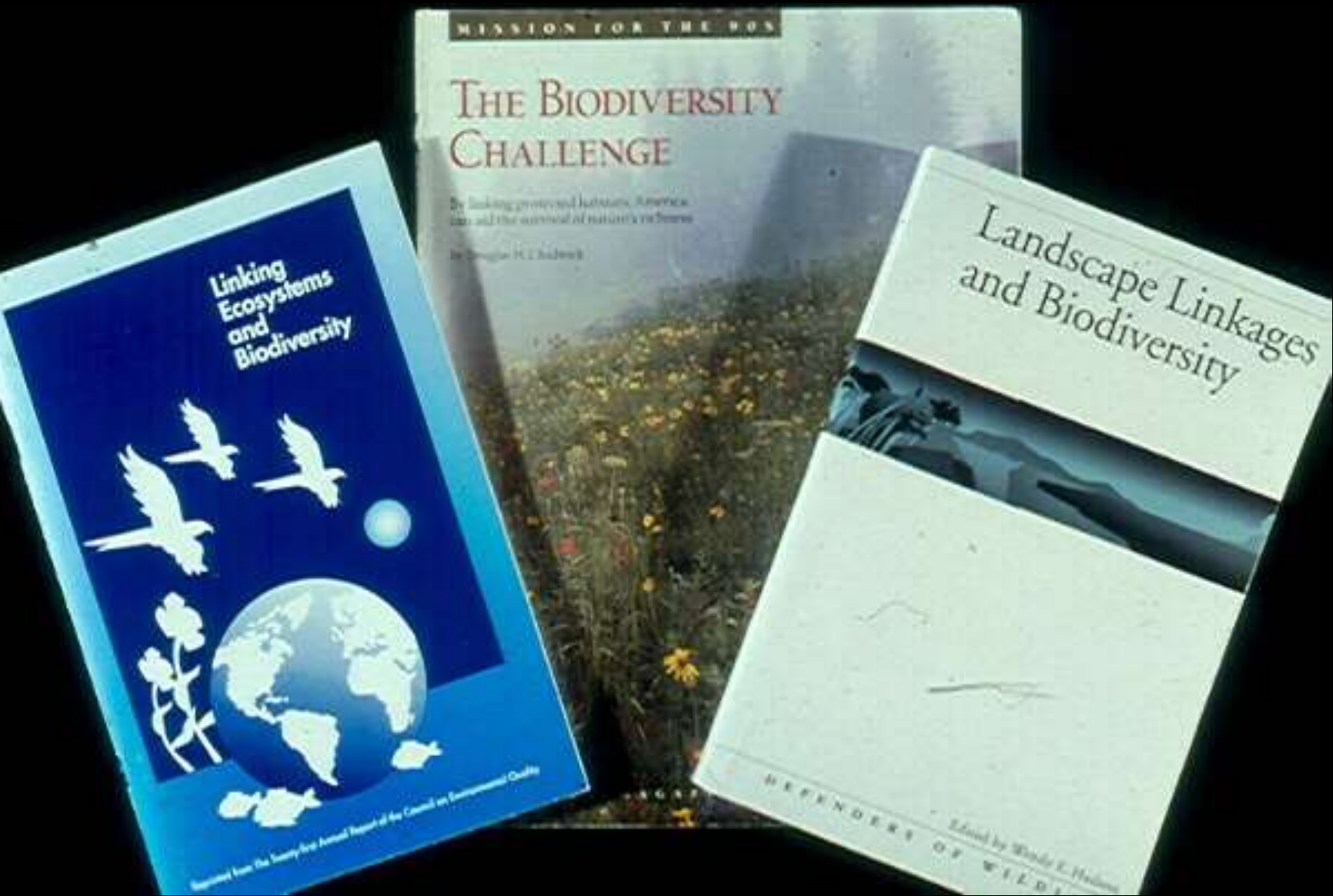
Unknown traveler between Chicago and Madison (1835)

Illinois' original landscape was nearly irreversibly lost during the course of only 5 generations; and remains under threat today.





natural resources remain vulnerable to changing land uses that further fragment the landscape



fragmentation is now considered by conservation biologists as the leading cause for local extinctions of plants and animals.

The landscape has been fragmented

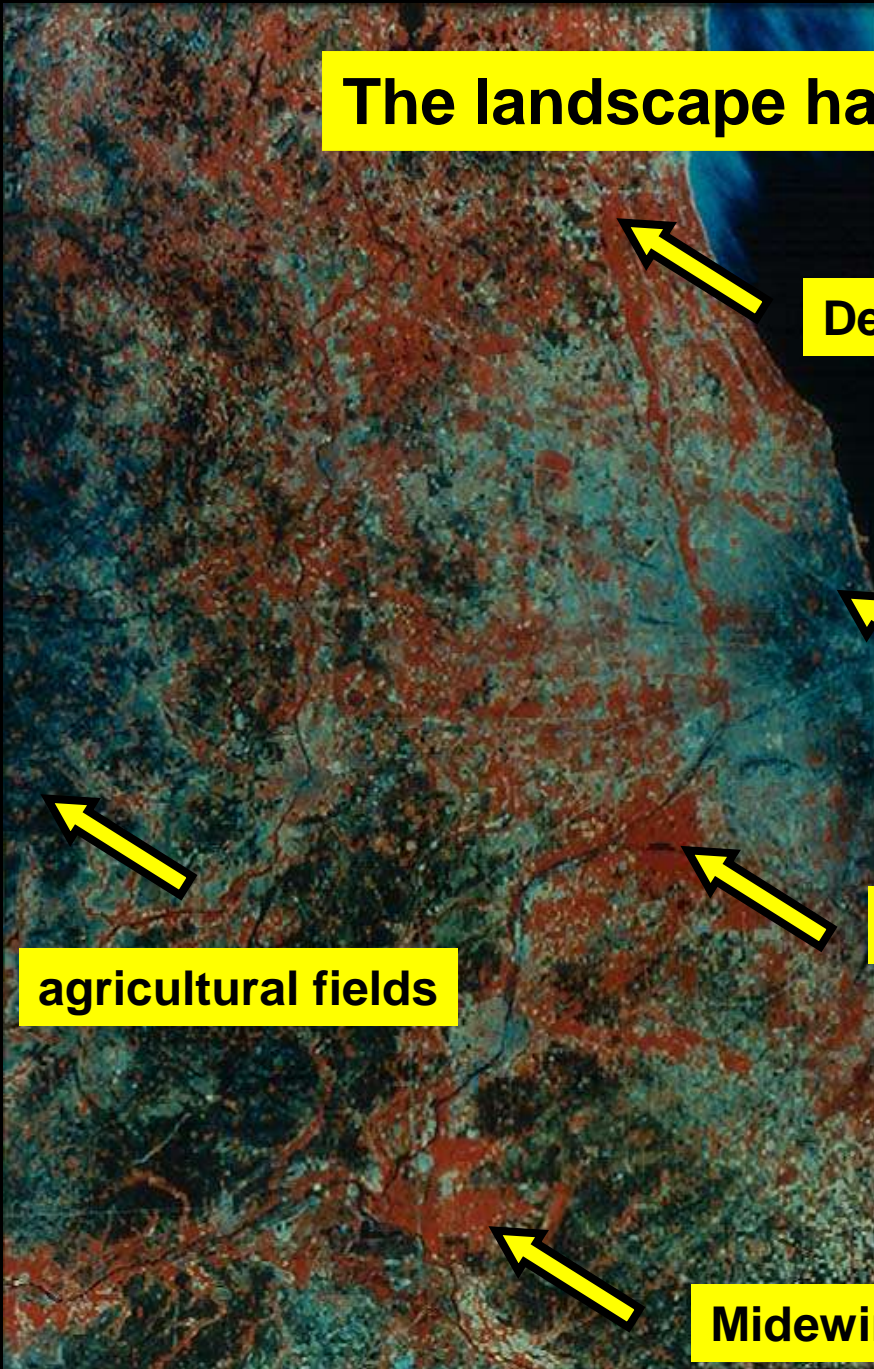
Des Plaines river corridor

Chicago

15,000 acre Palos region

agricultural fields

Midewin National Tallgrass Prairie



The Illinois
Natural
Areas Plan

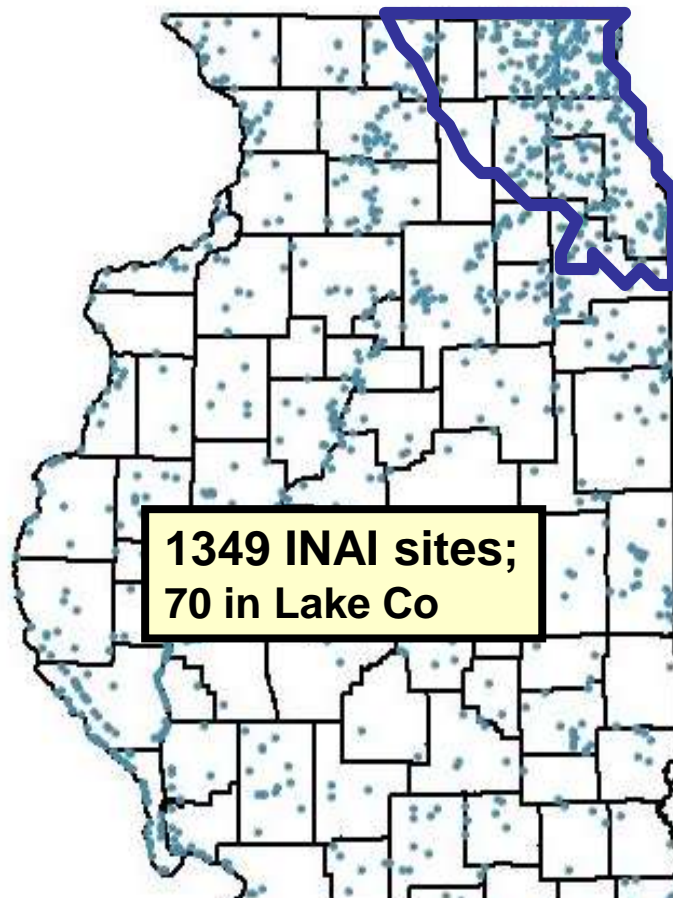
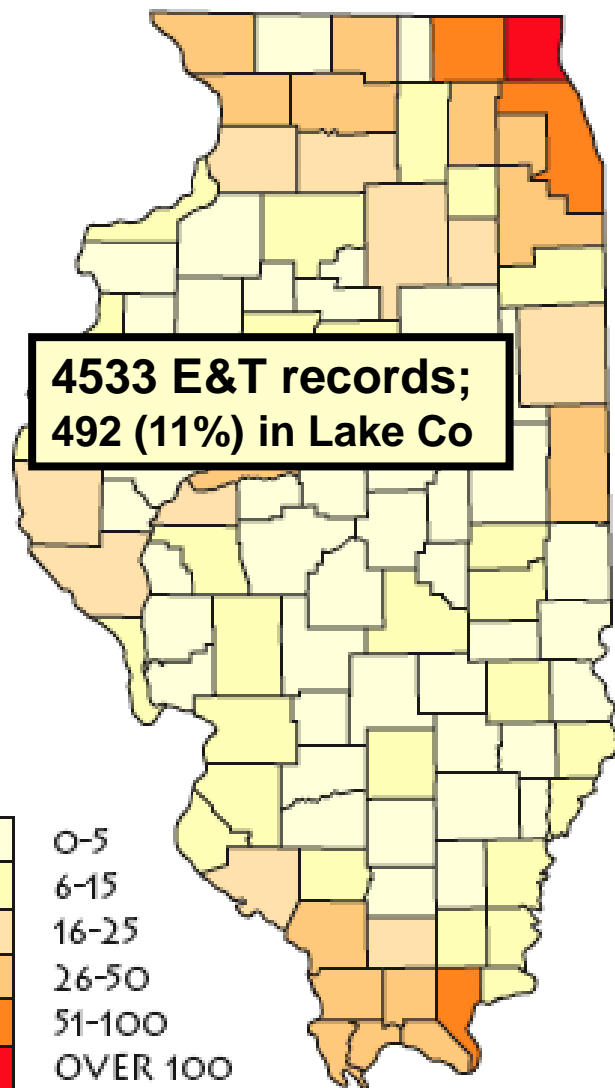
To Preserve
and Protect
Our Heritage

ILLINOIS NATURAL AREAS INVENTORY

- the first inventory to focus on natural plant communities,
- statewide survey conducted 1976-1978,
- used a grading system (A-B-C-D),
- less than 7/100 of 1% of our original landscape survives



ENDANGERED AND THREATENED SPECIES IN ILLINOIS



Many INA sites survive in the NE Morainal Natural Division

- a land of gravel hills and wetlands that was far more difficult to “work” than the level prairies of central Illinois -

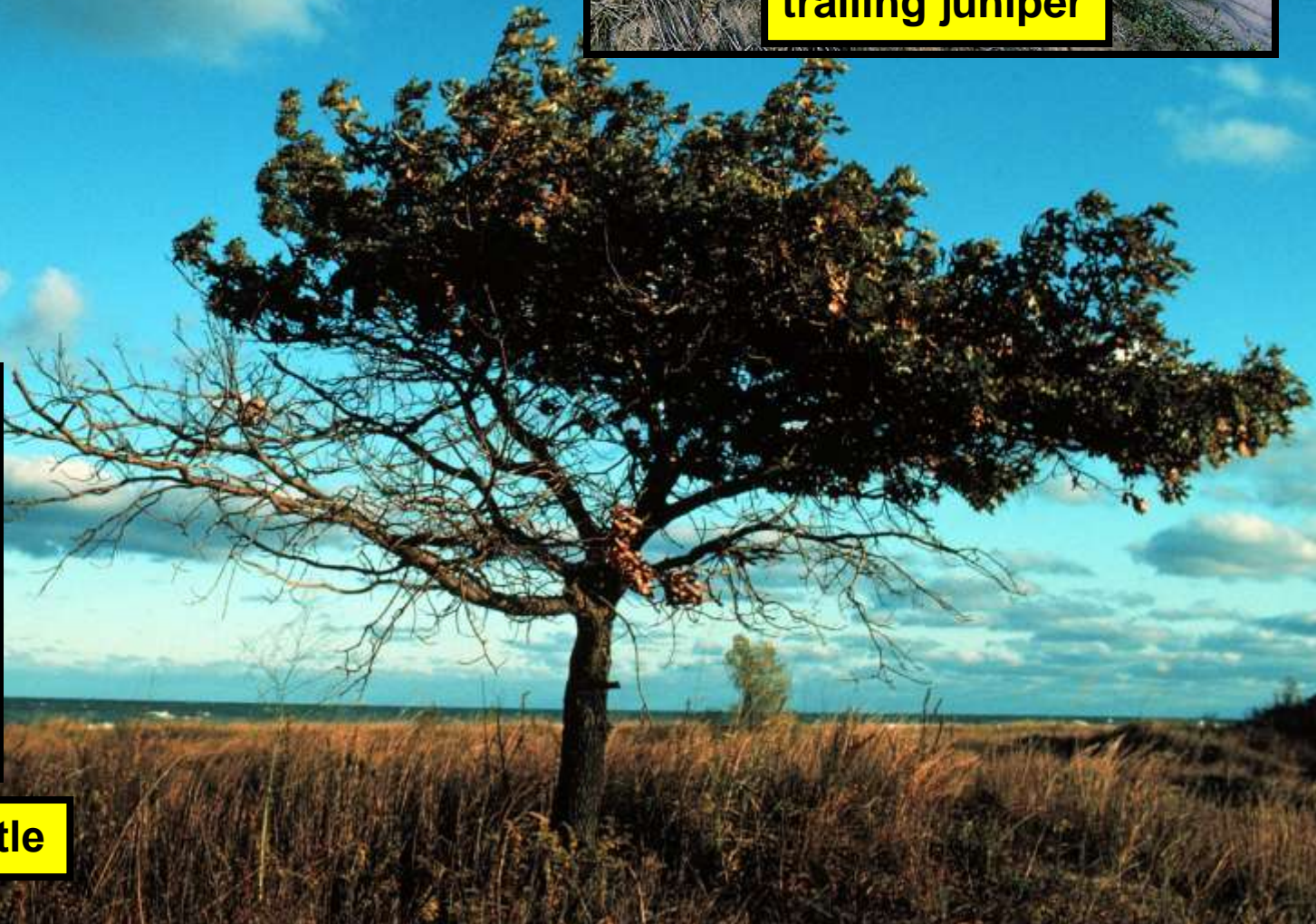
dunes



trailing juniper



pitcher's thistle



bogs

grass pink



Liberty Prairie Nature Preserve



eastern meadowlark

< than 1/100th of 1 % of our Illinois prairies survive

Oak Openings Nature Preserve



red-headed woodpecker



Chicago Wilderness

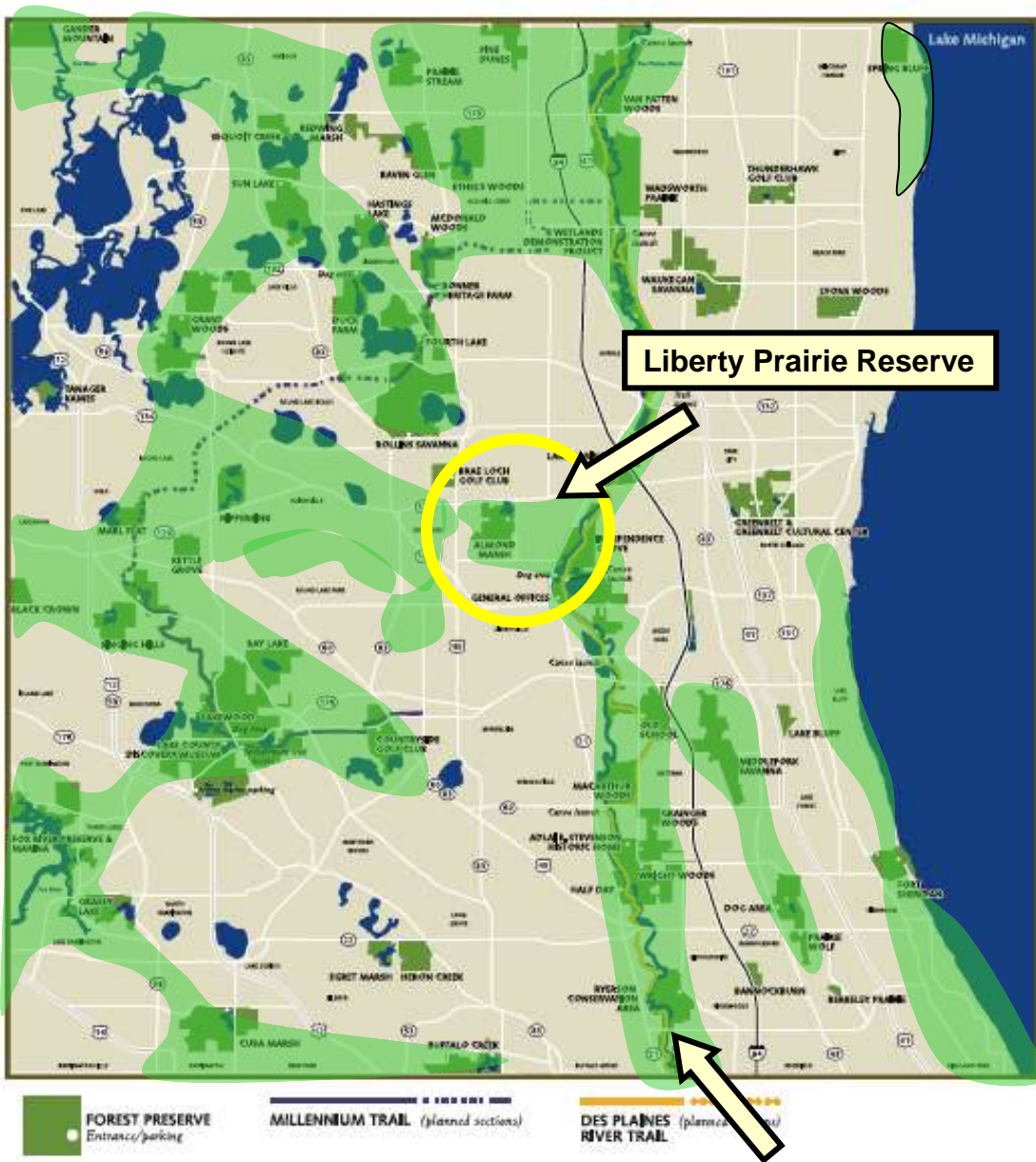
Green Infrastructure

The Green Infrastructure Vision represents a protected landscape totaling 1.8 million acres in 140 resource protection areas that implements the goals of the CW Biodiversity Recovery Plan.

CW – alliance of more than 300 Organizations pledged to support the region's biodiversity.

Chicago Wilderness GIV

1. Based upon input from local experts, not intended to be an acquisition map,
2. To identify areas with natural resource value and does provide recommendations for protection of land (including land protection by organizations such as Libertyville Township) on different spatial scales.



DesPlaines River corridor

Liberty Prairie Reserve

5,800 Acres Total
3,311 Acres Protected

To Rollins Savanna

Des Plaines River Trail

Almond Marsh Nature Preserve – 157.6 acres

Oak Openings Nature Preserve – 73.29 acres

Liberty Prairie Nature Preserve – 77.1 acres

Grayslake

Gurnee

Prairie Crossing

Almond Marsh
Forest Preserve

Merit Club
Golf Course

Oak Openings
Nature Preserve

Liberty Prairie
Nature Preserve

Independence Grove
Forest Preserve

Legend

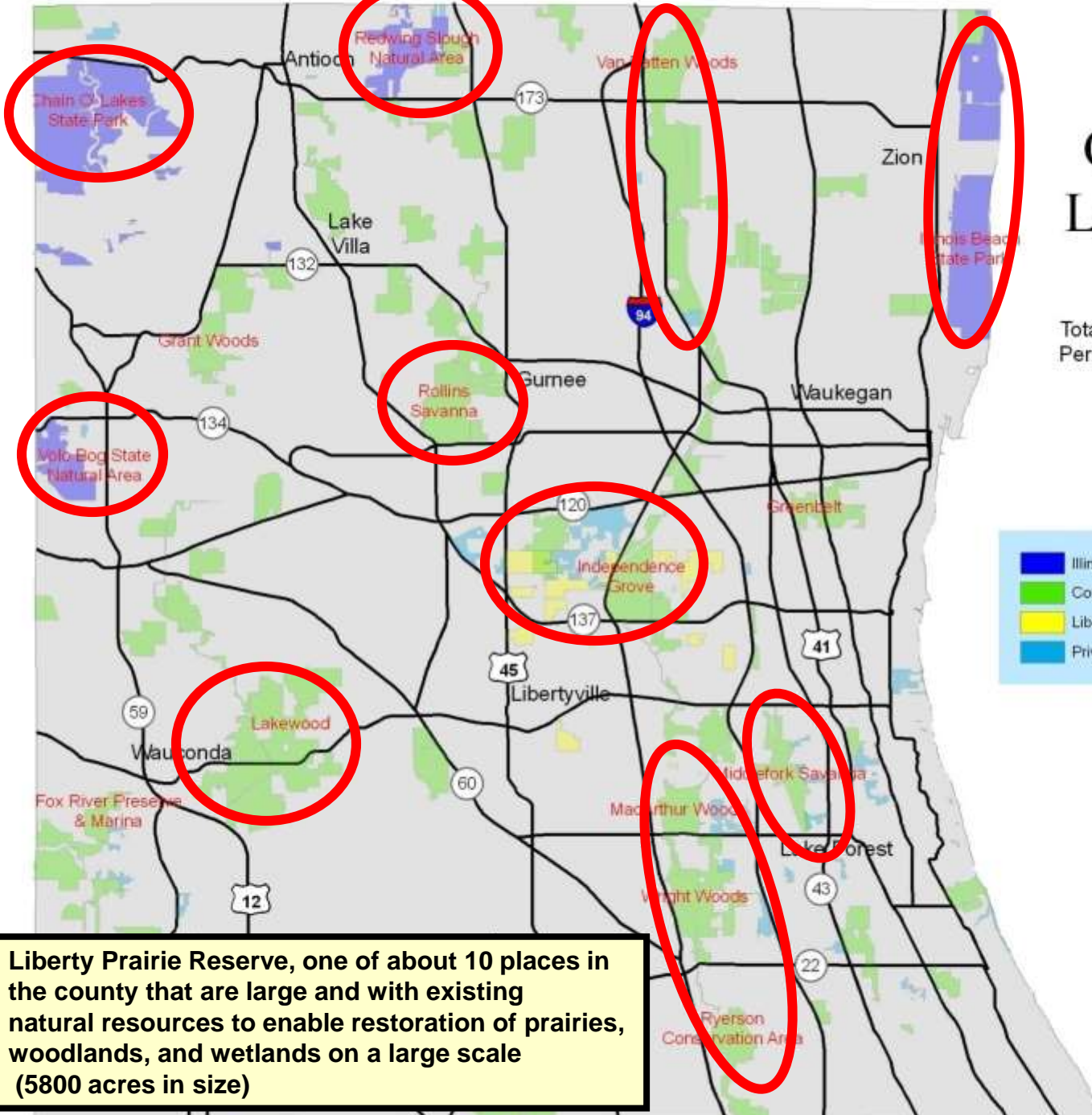
-  LPR Boundary 5,800 acres
-  Lake County Forest Preserve District 1,410 acres
-  Libertyville Township Open Space District 759 acres
-  Liberty Prairie Conservancy (LPC) 45 acres
-  Privately Protected 1,097 acres
-  Illinois Nature Preserves 312 acres
-  Regional Trails 10.8 miles
-  Trail Access Parking

0 0.25 0.5 1 1.5 2 Miles

Des Plaines River Trail 1/2008

Lake County Current State of Land Preservation

Total Area of Lake County* ~ 294,361 acre
Permanently Protected Area ~ 39,415 acre
13.39% Permanently Protected



Liberty Prairie Reserve, one of about 10 places in the county that are large and with existing natural resources to enable restoration of prairies, woodlands, and wetlands on a large scale (5800 acres in size)



Liberty Prairie Reserve Master Plan

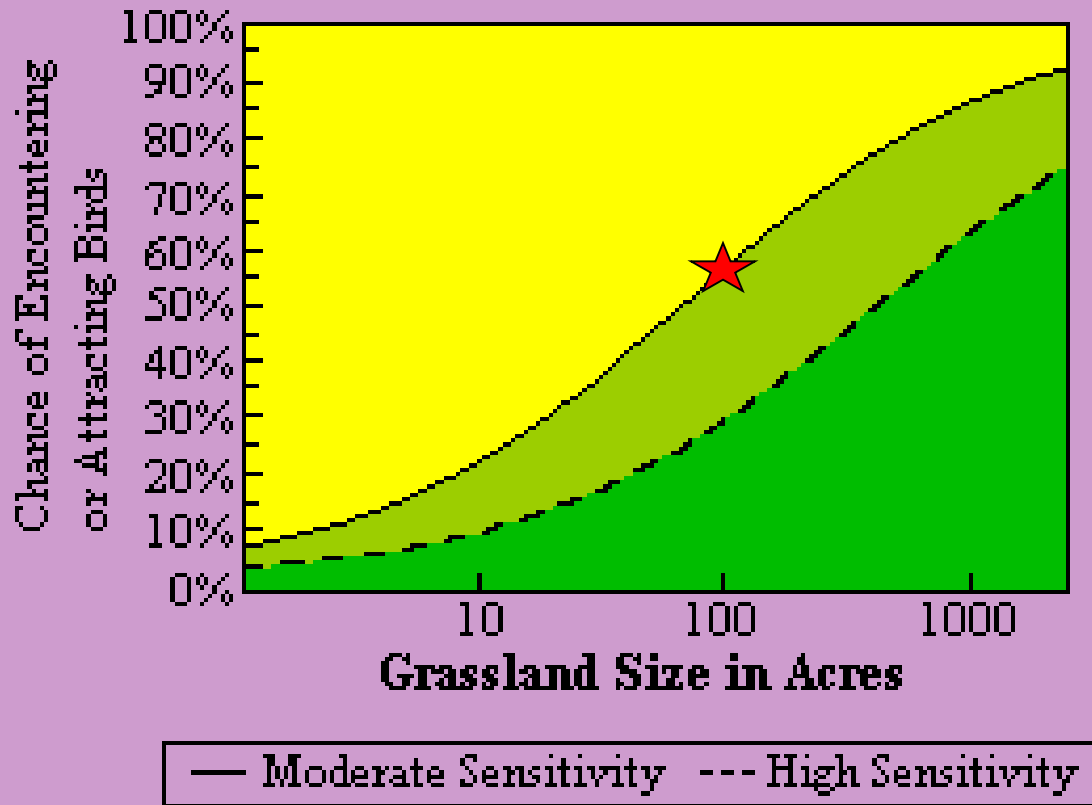
SUMMARY BROCHURE

June 2013

Recommendations:

- **Identify, expand and connect core habitats, building upon the existing Nature Preserves and natural habitats (250 acres of grassland),**
- **Support management/restoration,**
- **Preserve more open space,**
- **Transition agriculture to more sustainable practices,**
- **Improve public access,**
- **Establish a planning council**

Grassland Birds



Eastern meadowlark, moderately sensitive to fragmentation, 60% likely to occur in 100 acre grassland. A bird that was highly sensitive to fragmentation is only 25% likely to occur there.

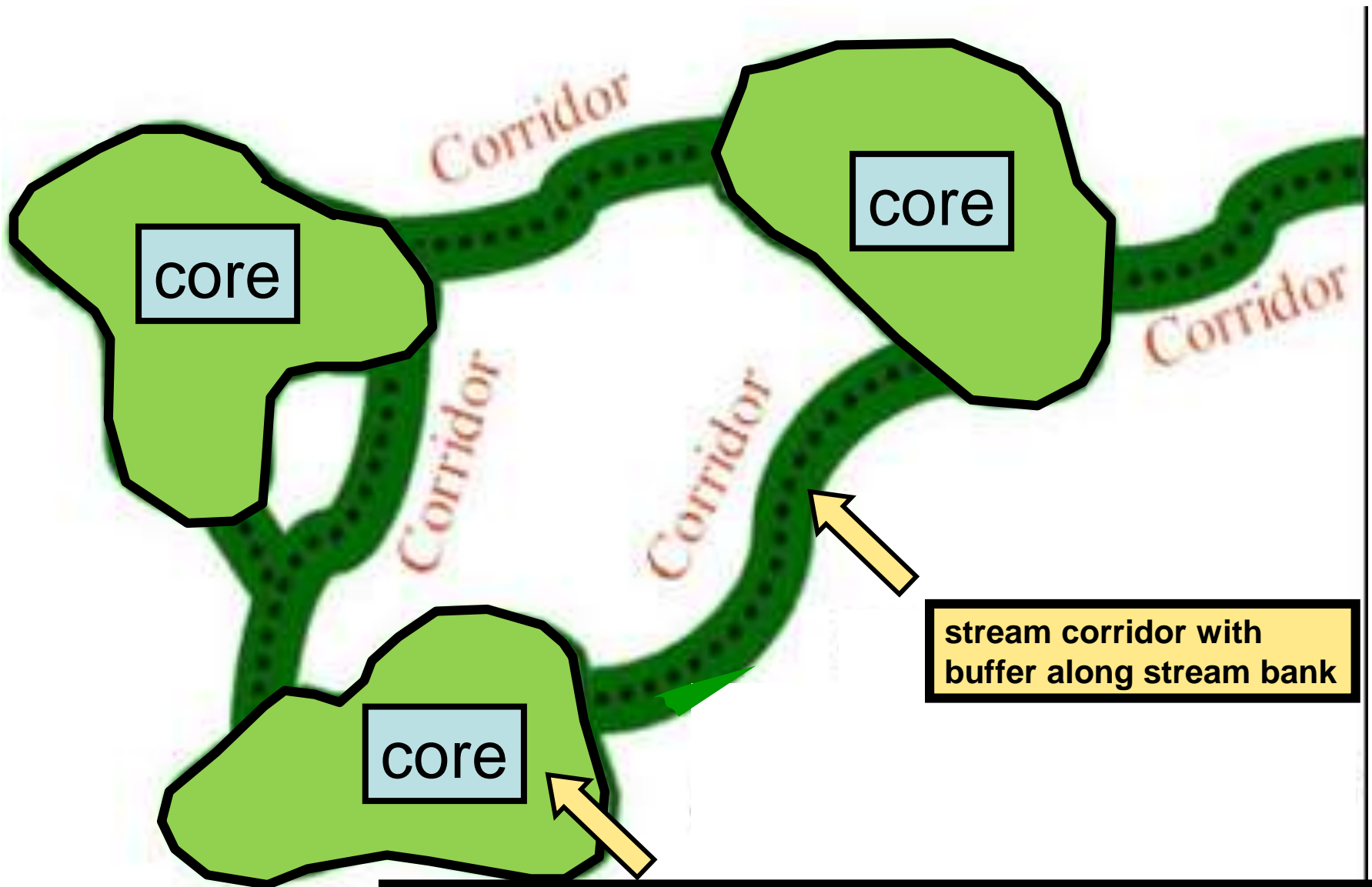


**Reed Noss. 1987. Natural Areas Journal 7:2-13.
*Protecting natural areas in fragmented landscapes.***

***Fragmentation is the leading cause of local
Extinctions of plants and animals --***

Recommendations:

- 1. Make the islands bigger,**
- 2. Provide compatible buffers,**
- 3. Maintain/create landscape linkages.**



**stream corridor with
buffer along stream bank**

**core consisting of Liberty Prairie Nature Preserve surrounded
a compatible buffer of restored prairie**

Bull Creek–Bull's Brook Watershed-Based Plan

A Strategy for Protecting and Restoring the Watershed

Bulls Creek-Bull's Brook Watershed Goals

- A. Protect and restore natural resources
- B. Improve water quality
- C. Reduce flood damage
- D. Enhance and restore stream health
- E. Guide new development to benefit watershed goals
- F. Preserve green infrastructure
- G. Enhance education and stewardship
- H. Improve watershed coordination and collaboration



Biodiversity RECOVERY PLAN

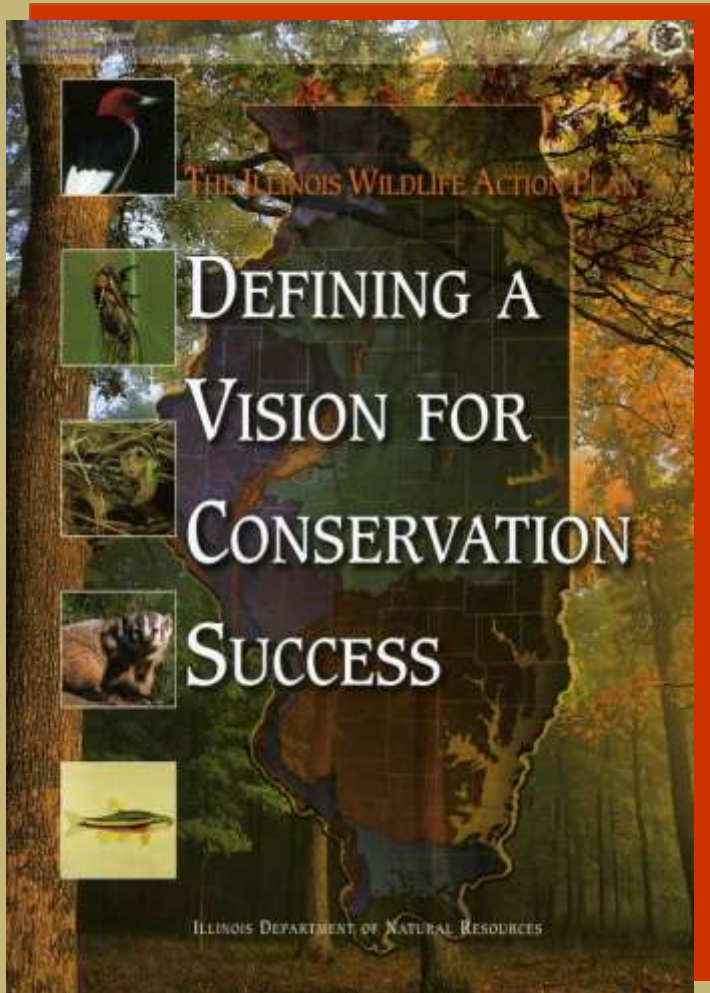


CHICAGO WILDERNESSSM
A Regional Nature Reserve



Key recommendations:

1. Preserve more land, (assemble and connect blocks of habitat); goals established for specific habitat types
2. Manage more land to protect and restore biodiversity, and
3. Protect high-quality streams/lakes.



The Illinois Wildlife Action Plan provides a framework and set of goals for protection and stewardship of our natural resources. The plan supports those species of wildlife in Illinois that are “*in greatest need of conservation*”.

Several of the recommendations for establishment of core blocks of habitat at Liberty Prairie Reserve support several of the goals/action items identified in the plan.



Liberty Prairie Reserve Master Plan

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- SUPERVISOR
- ASSESSOR
- CLERK
- HIGHWAY COMMISSIONER
- TRUSTEES
- STAFF
- OPEN SPACE**
- SERVICES
- CURRENT EVENTS
- CONTACT US
- NEWS & INFORMATION
- LINKS





control of invasive species; judicious use of herbicide





Liberty Prairie Reserve Master Plan

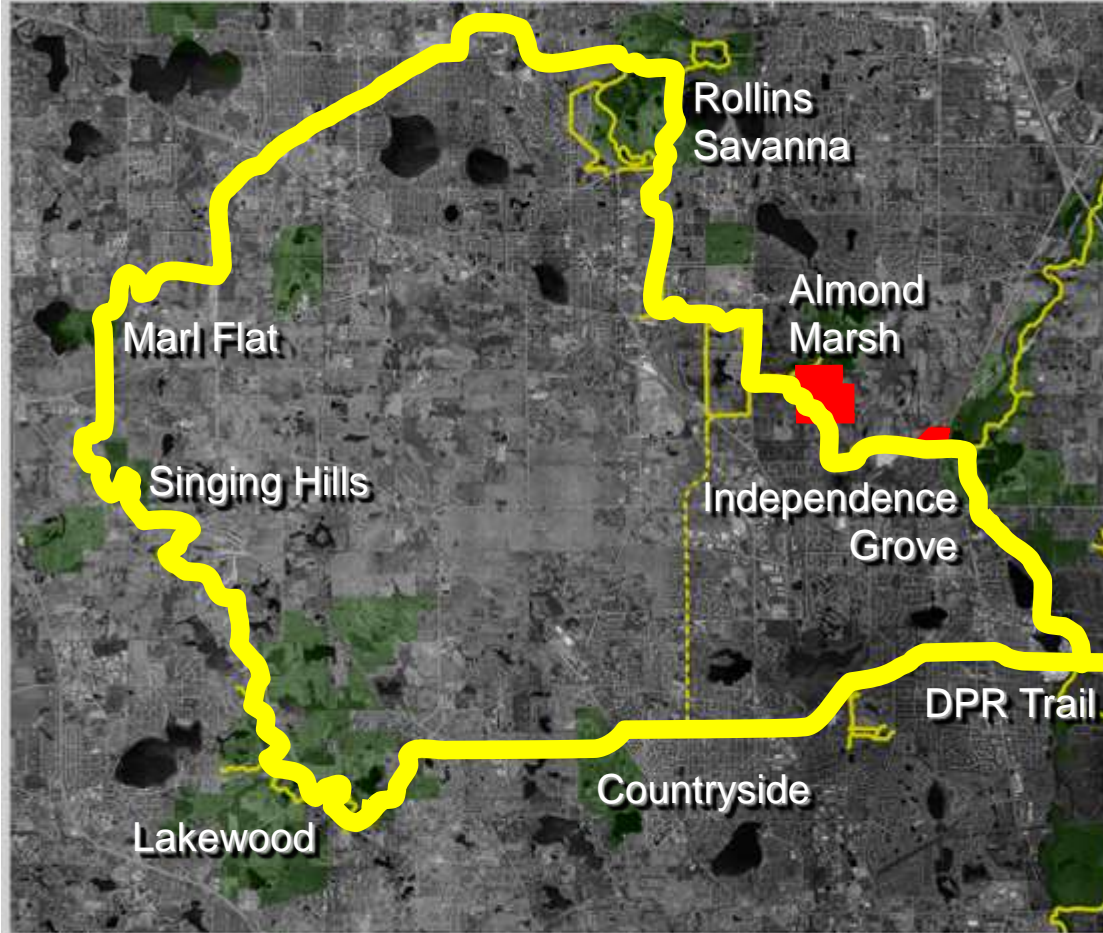
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Regional Trail System



Lake County Forest Preserve District
 Department of Land Preservation and Special Projects
 2500 Remondale Road
 Dunedin, Florida 34614
 887-969-0001



- Legend**
- Regional Trail System - Completed
 - Regional Trail System - Planned
 - Conserved Easement: 135 Acres
 - Casey Farms
 - District Casey Farms: 11.3 Acres
 - Forest Preserve Property

Copyright © 2007
 Property boundaries established are provided for general location purposes. District and Rollins Savanna are approximate and should not be used to determine liability for structure or as a basis for purchasing property.
 2007 Aerial Photo

Prepared using information from:
 Lake County Department of Information and Technology
 GIS/Mapping Unit
 45 South County Street
 Palatka, Florida 32909-4007
 887-360-0073
 06g Prepared 5 November 2007



The Commission worked closely with Libertyville Township Board and your staff on a trail realignment at Liberty Prairie that will accommodate more trail users and will have less impact upon natural resources.

ILLINOIS NATURE PRESERVES COMMISSION



Mission is to provide an enduring resource of natural areas...for the citizens of Illinois... through a system of Nature Preserves