

Ecosystem Restoration: Improved quality of life for whom?



Erik Neidy
Director of Natural Resources



NATURAL RESOURCES

- 26,000 acres Total (12,000 under management)
- 933 native plant species
- 292 vertebrates
- 1,000 trees planted annually
- 1,000 pounds of native seeds collected
- 47 miles of rivers and streams



A photograph of a dense forest. The foreground is covered in green grass and small plants. Several tall, thin trees with dark bark stand prominently in the center. The background is filled with more trees, creating a deep, wooded atmosphere.

FORESTS

A photograph of a lush woodland. The foreground is filled with tall, vibrant green grass and several clusters of purple flowers, likely Joe-Pye weed. Behind them, a dense stand of tall, thin trees with light-colored bark and dark, sprawling branches creates a canopy. The sky is bright and visible through the gaps in the leaves.

WOODLANDS

A landscape photograph of a savanna. In the foreground, there is a grassy field with some fallen leaves. In the background, there is a line of large trees, likely acacias, with their characteristic spreading branches. The sky is clear and blue.

SAVANNAS



GRASSLANDS



PRAIRIES AND WETLANDS



RIVERS AND STREAMS

A landscape photograph showing a calm body of water in the foreground, reflecting the surrounding environment. Bare deciduous trees stand in the mid-ground, their reflections clear in the water. A dense line of evergreen trees marks the background. The sky above is filled with scattered, soft clouds.

LAKES AND PONDS



OUR MISSION

To acquire and hold lands for the purpose of preserving the flora, fauna and scenic beauty for the education, pleasure and recreation of DuPage County citizens

NATURAL RESOURCE GOALS

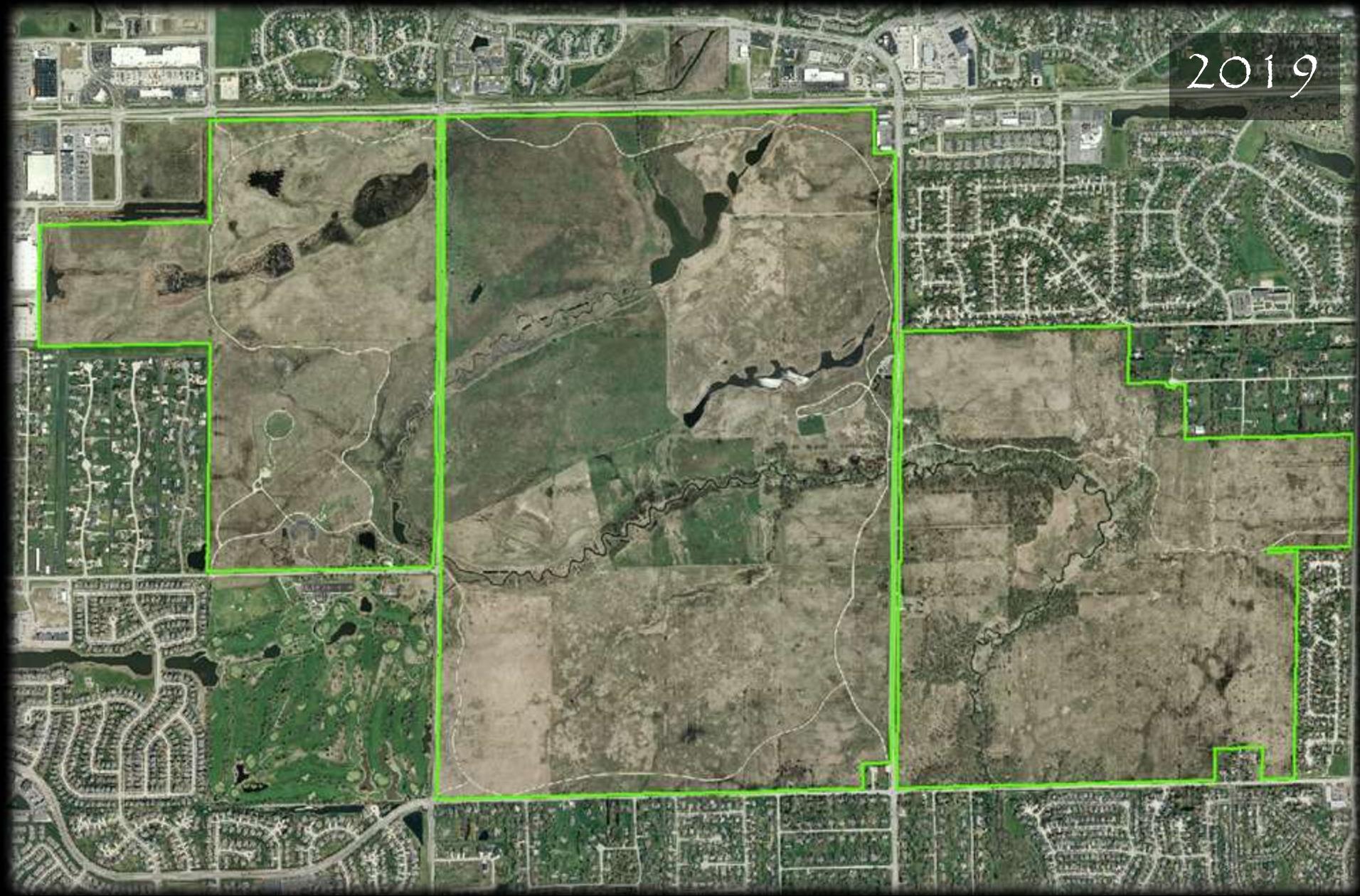
- Promote and support biodiversity
- Restore natural functions and processes
- Increase habitat quality
- Educate all ages
- Provide sustained quality-of-life



“...fragmented
preserve
islands amidst an
urbanized
landscape.”



SPRINGBROOK PRAIRIE FOREST PRESERVE



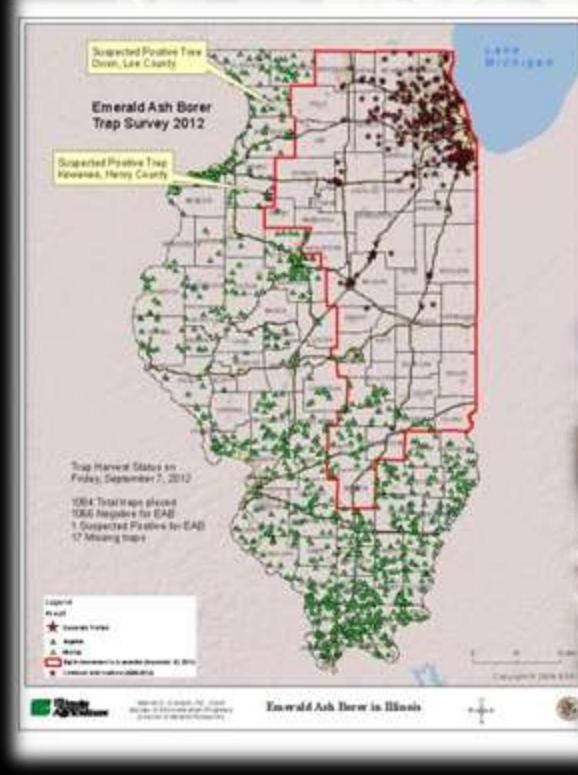
SUPPRESSION OF NATURAL FIRES



CHANGES IN HYDROLOGY

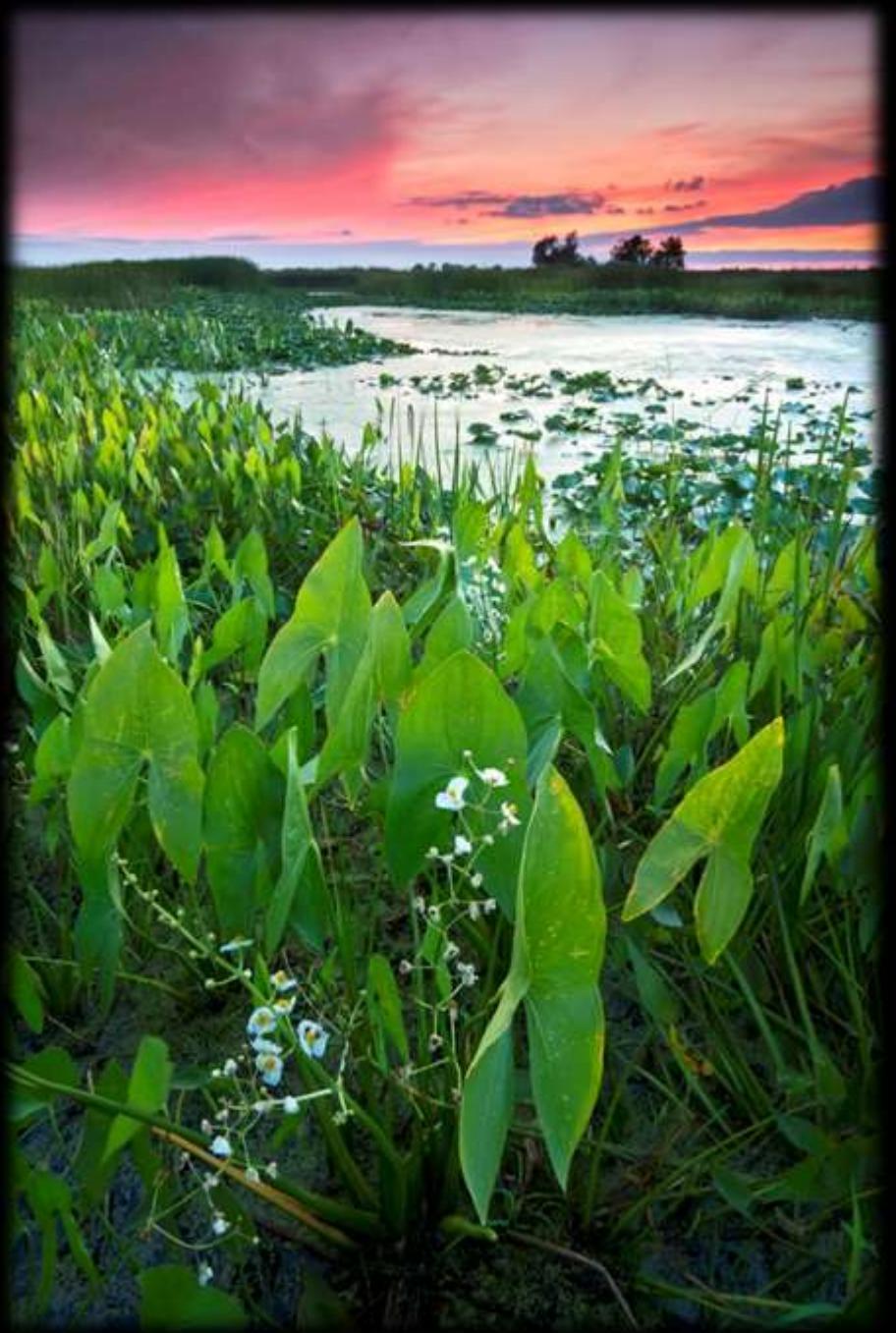


INVASIVE SPECIES MANAGEMENT



PREDATOR - PREY IMBALANCE





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NOW WHAT?



IS THIS OUR FUTURE?



KUDZU

CMAP



ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

ILLINOIS STATE
WATER SURVEY

Sea Grant
ILLINOIS-INDIANA



Appendix A: Primary Impacts of Climate Change in the Chicago Region

Natural
Resources

Protecting our region's assets

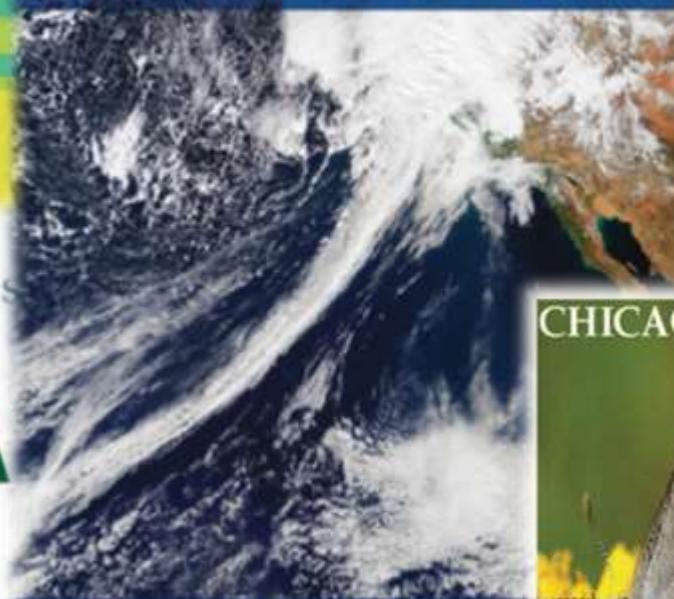
June 2017



CMAP

CLIMATE SCIENCE SPECIAL REPORT

U.S. Global Change
Research Program



Executive Summary
Fourth National Climate Assessment | Volume II

Chicago Wilderness
Climate Action Plan
for Nature



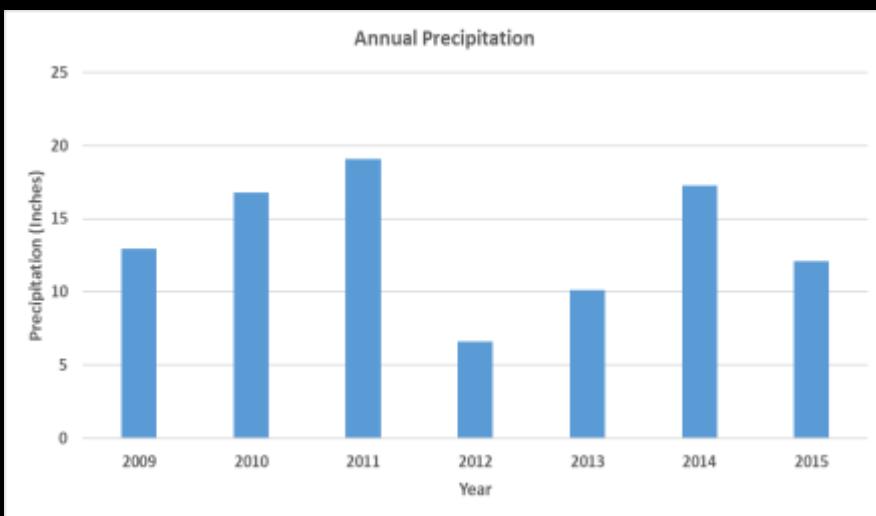
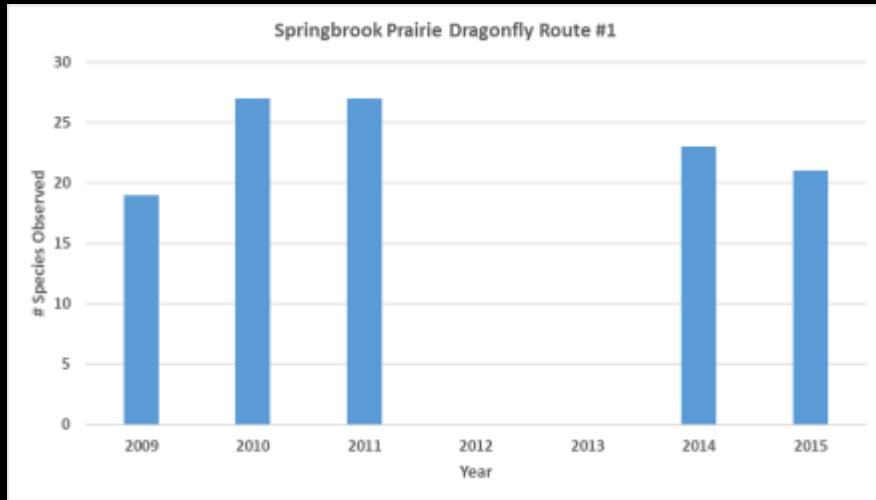
CHICAGO WILDERNESS



CLIMATE CHANGE AND
REGIONAL BIODIVERSITY:
A Preliminary Assessment and Recommendations
for Chicago Wilderness Member Organizations

Chicago
Wilderness

DRAGONFLIES

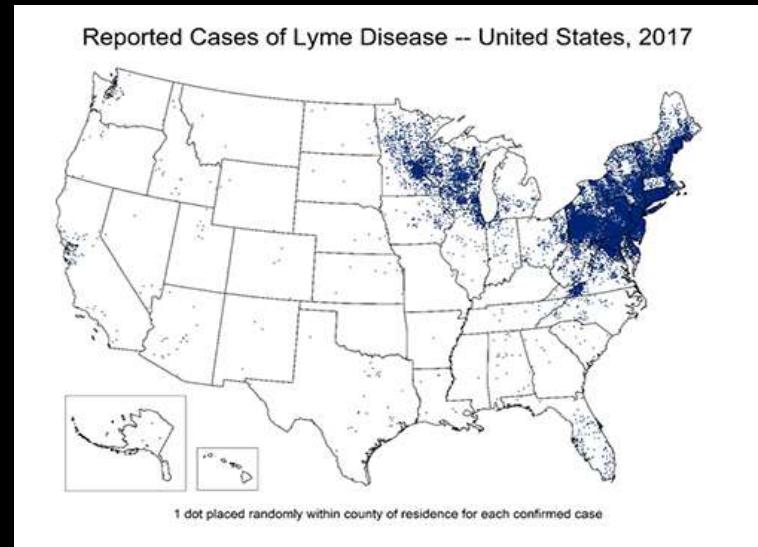
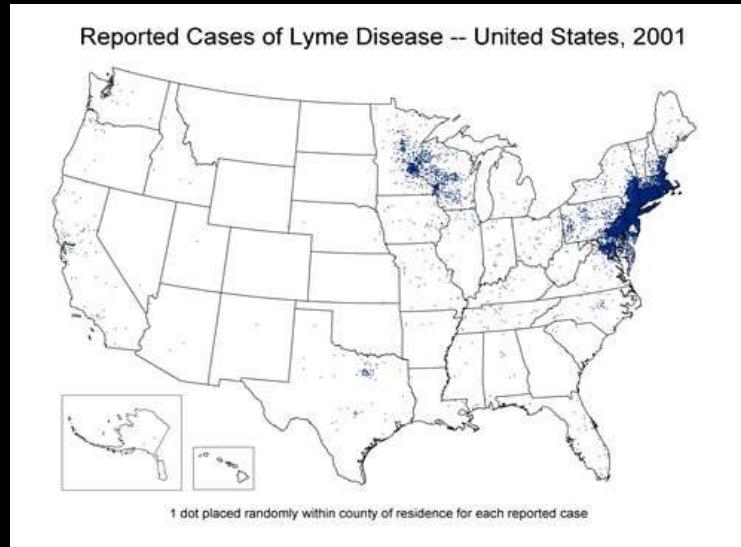


Odonates and Precipitation

Springbrook Prairie Route #1

- Monitored from 2009 to 2018
 - Same monitor every year
- Trend indicates that # species observed is positively correlated to precipitation
- Years with low rainfall/drought = fewer odonate species

LYME DISEASE - SPREAD



Illinois counties with established *I. scapularis* population 1996: 4
Illinois counties with established *I. scapularis* population 2015: 35

Source: Rebecca J. Eisen, Lars Eisen, Charles B. Beard; County-Scale Distribution of *Ixodes scapularis* and *Ixodes pacificus* (Acarina: Ixodidae) in the Continental United States , *Journal of Medical Entomology*, Volume 53, Issue 2, 1 March 2016, Pages 349–386

WHAT CAN WE DO ABOUT IT?



WHY PRESERVE BIODIVERSITY?

- Provide competition
- Potentially assist in arresting or slowing the effects
- Restore balance to dynamic systems
- Promote adaptability



STRUCTURE



Photo courtesy of Bob C. Roberts

COMPOSITION



FUNCTION



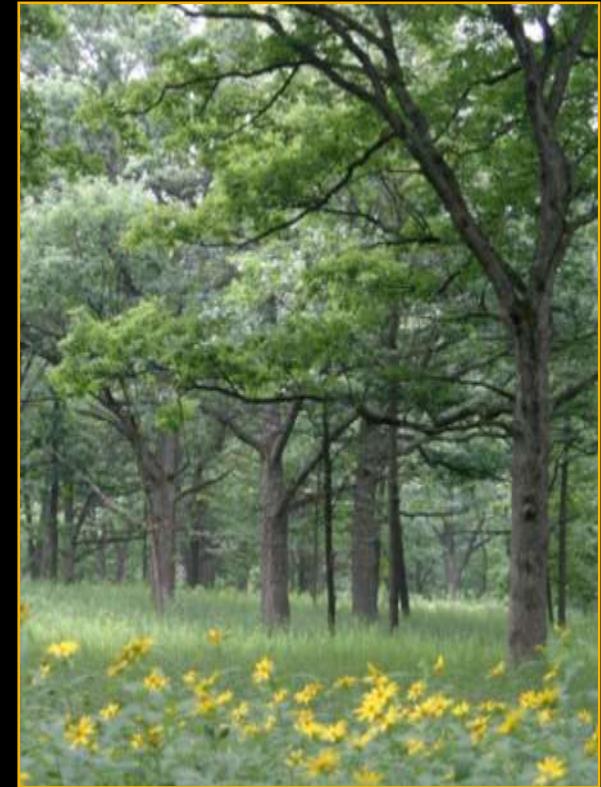
HOW?

ECOSYSTEM RESTORATIONS



TOOLS OF RESTORATION

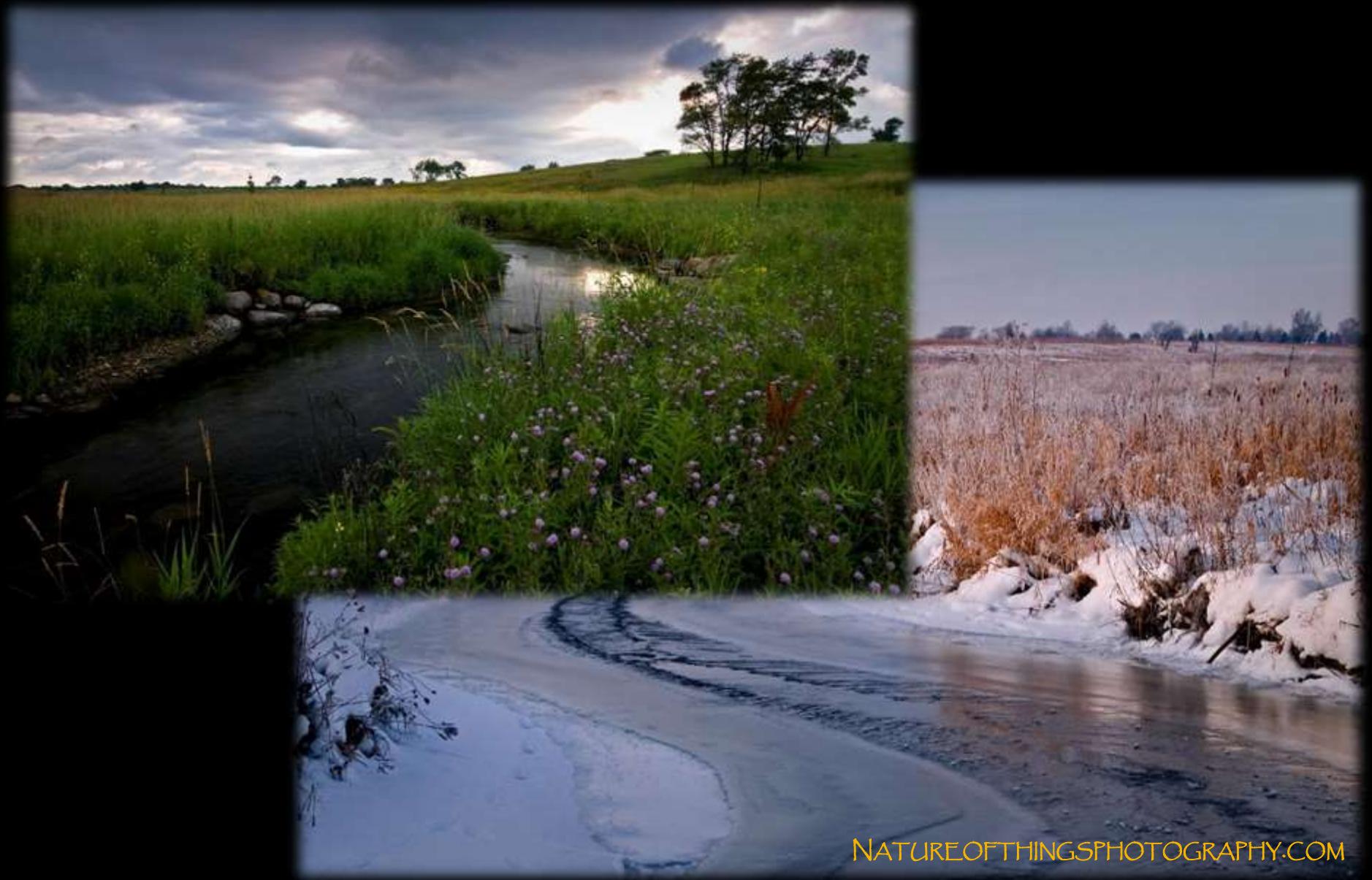
- Ecological inventories
- Wildlife management and monitoring
- Invasive species control
- Selective woody removal
- Prescribed burns
- Seeding, planting and restocking
- Creation, Re-creation, and “construction”



SPRINGBROOK PRAIRIE



SPRINGBROOK PRAIRIE



WEST BRANCH - SUPERFUND



THE PRESERVE AT OAK MEADOWS



SPRINGBROOK CREEK PHASE 1 AND 2

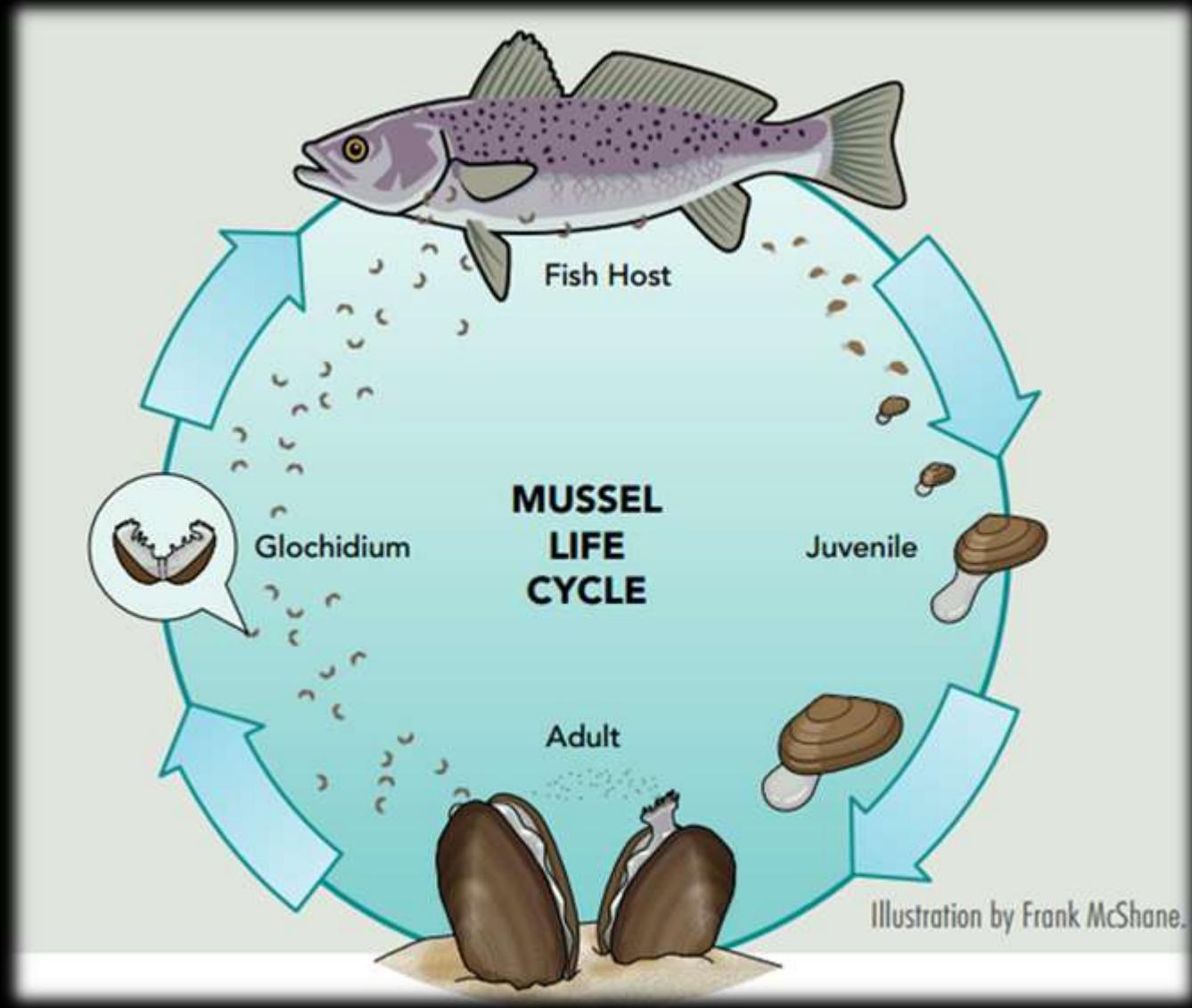


Aquatic Species Recovery Program

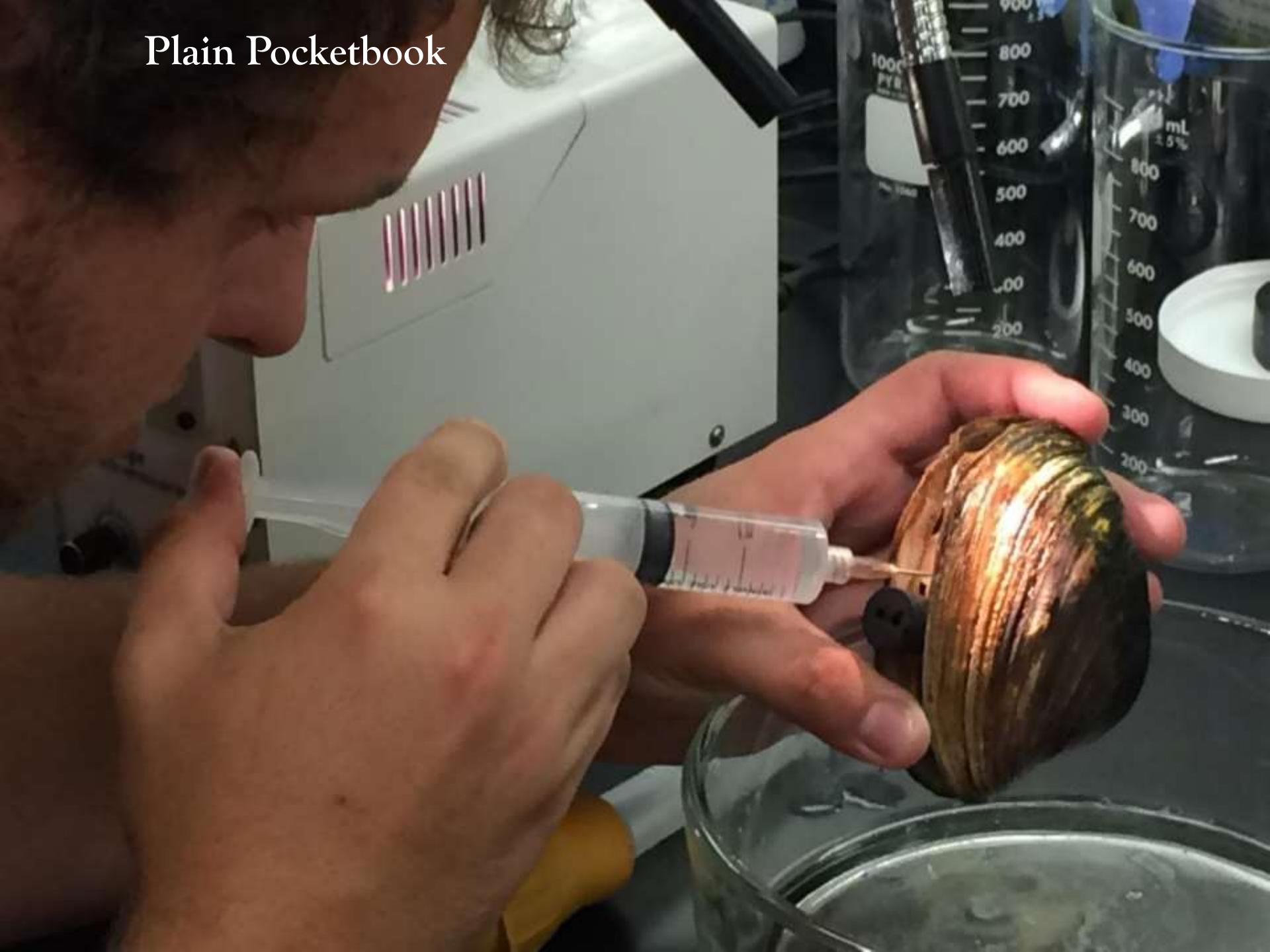


Urban Stream Research Center
Forest Preserve District of DuPage County

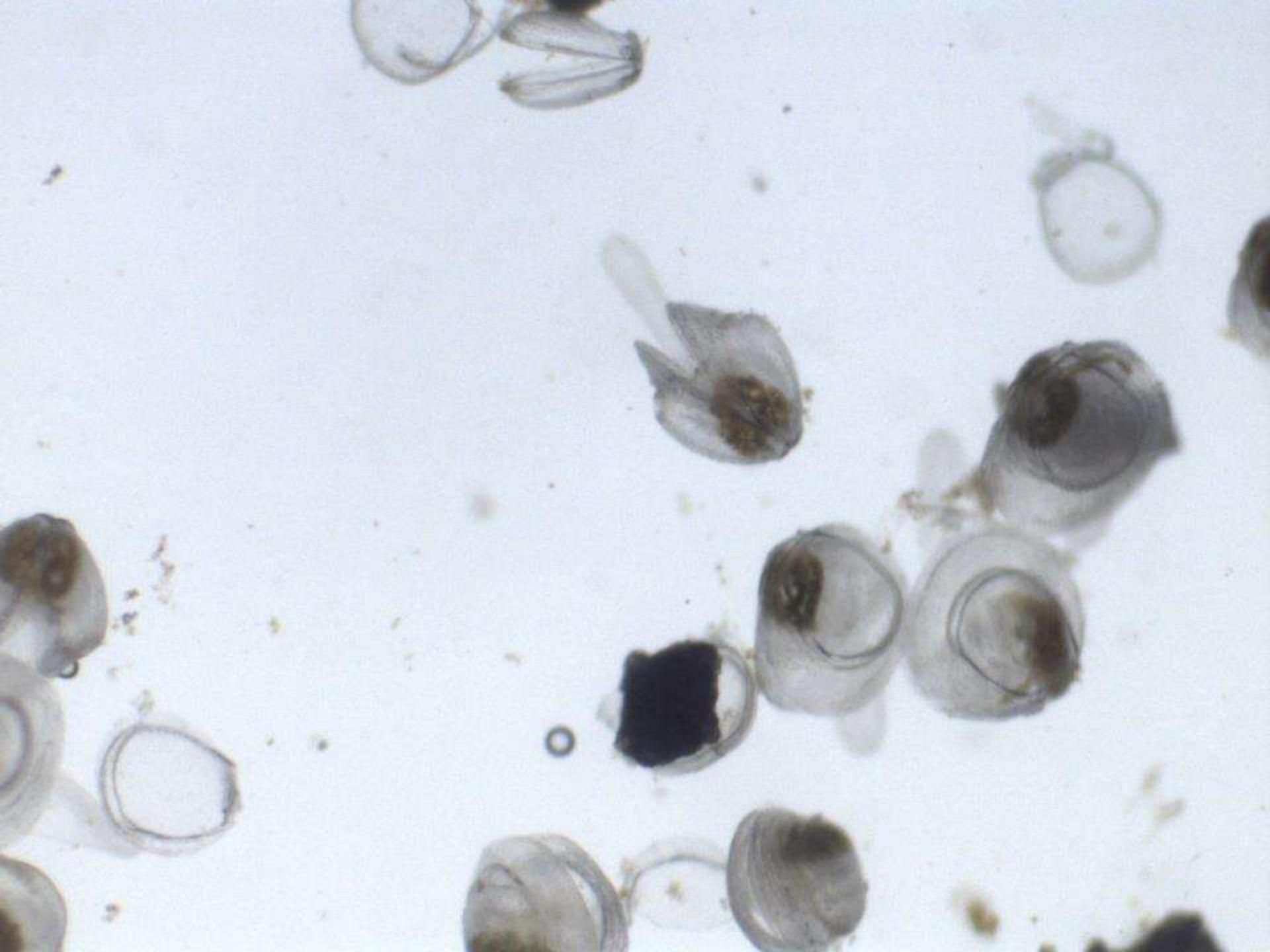




Plain Pocketbook







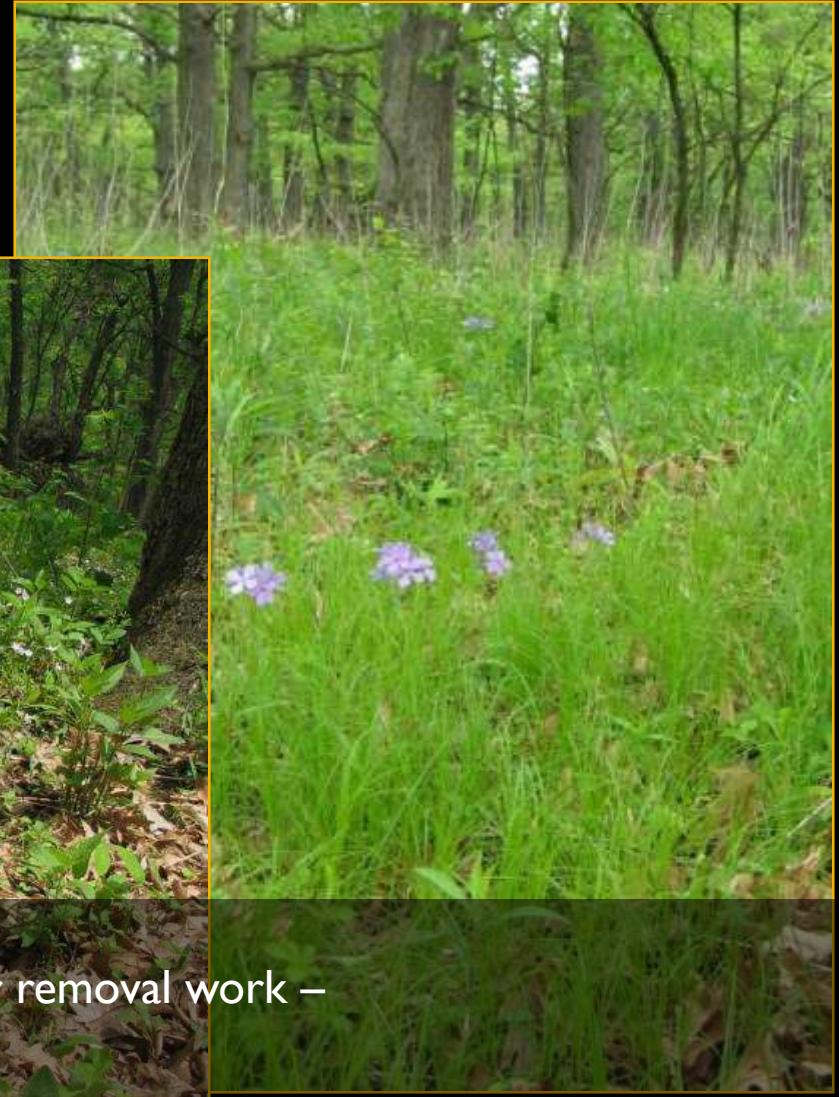




SUCCESS STORIES

Woodridge Forest Preserve

Increased ground cover and native plant diversity

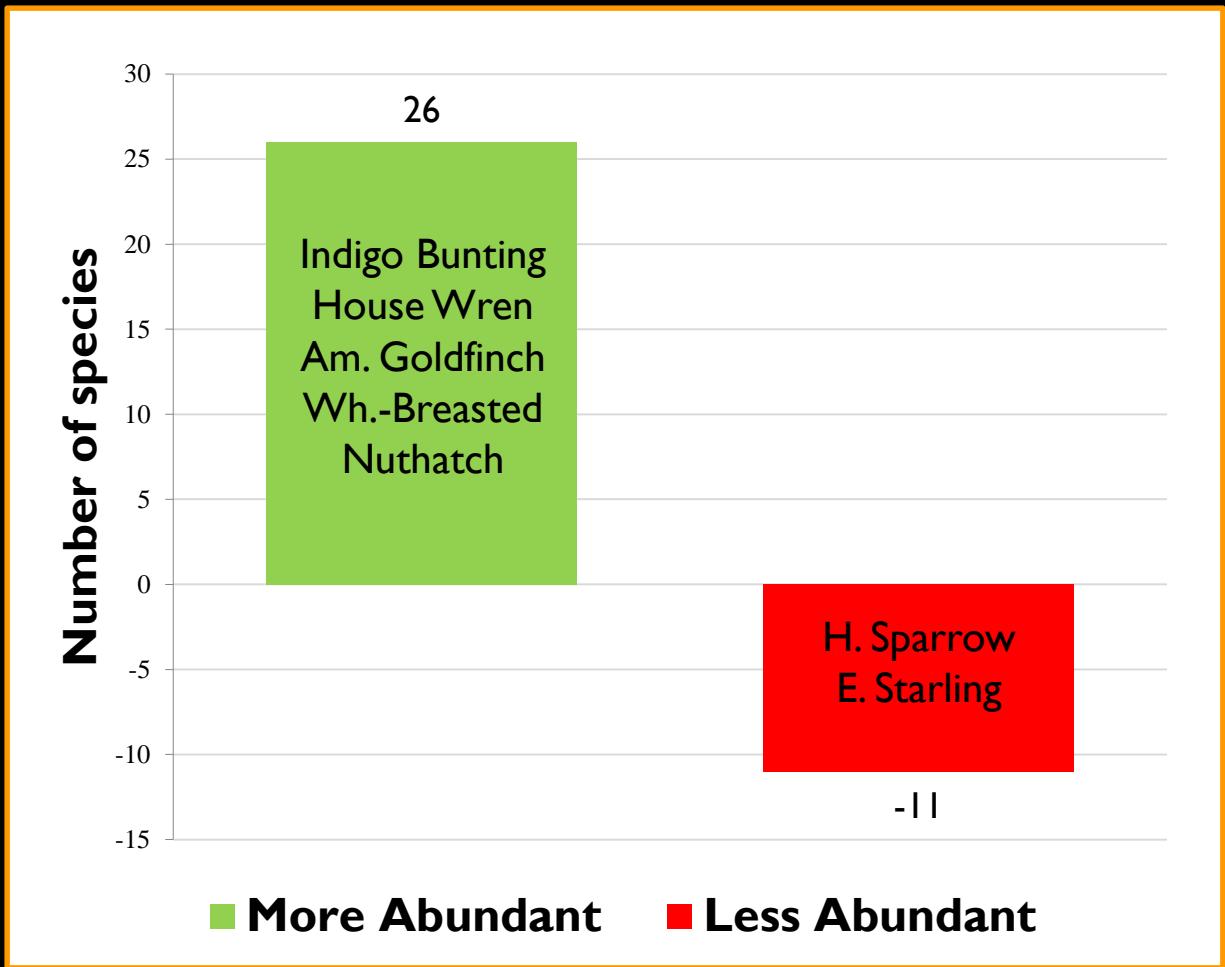


SUCCESS STORIES

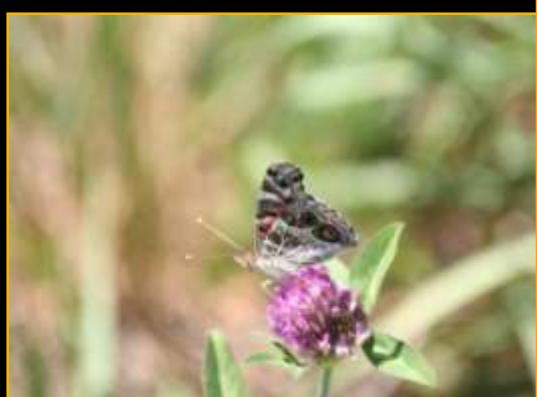
CHANGE IN ABUNDANCE - POST MANAGEMENT



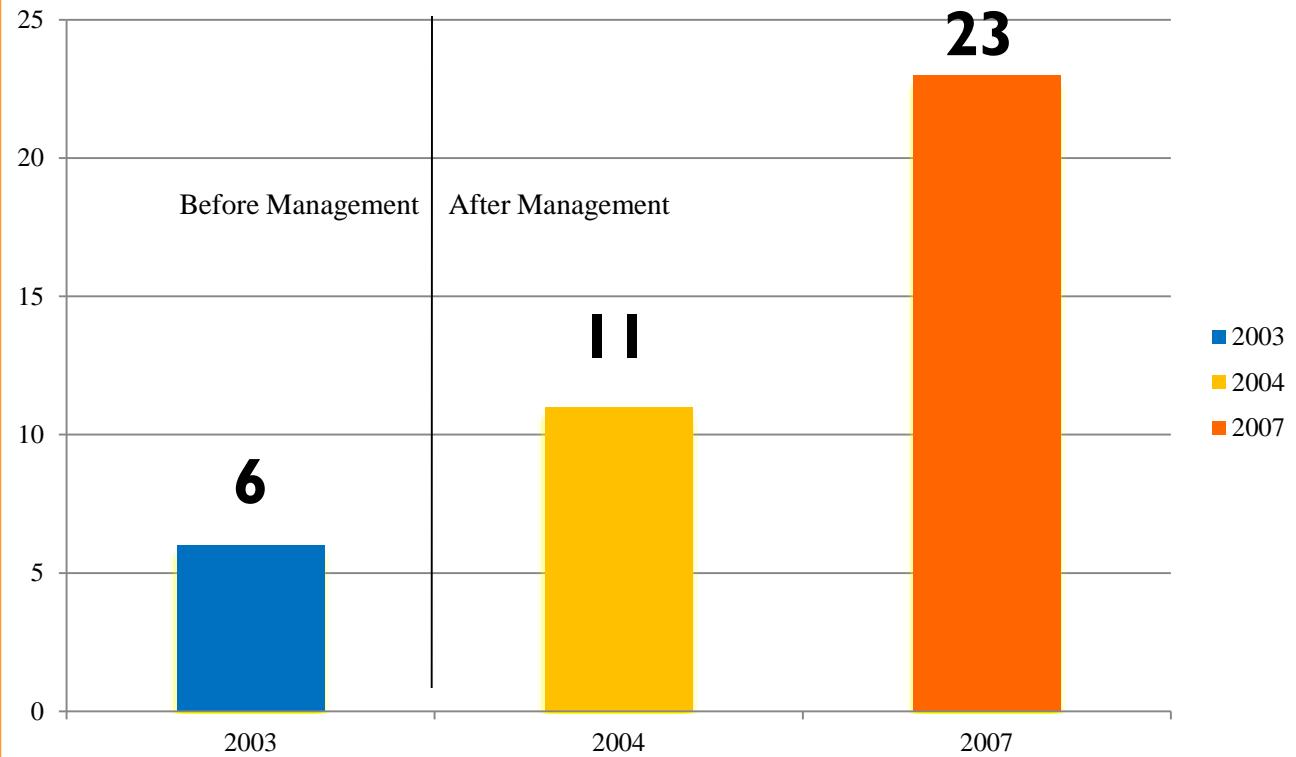
Indigo bunting



SUCCESS STORIES



**Number of Butterfly Species
Waterfall Glen - Signal Hill**



WHITE PRAIRIE FRINGED ORCHID

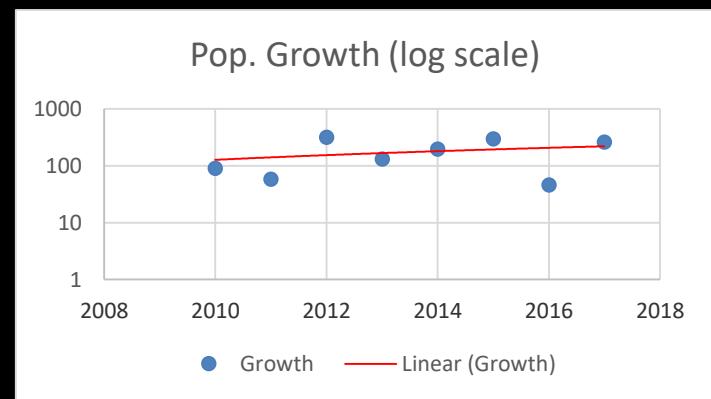
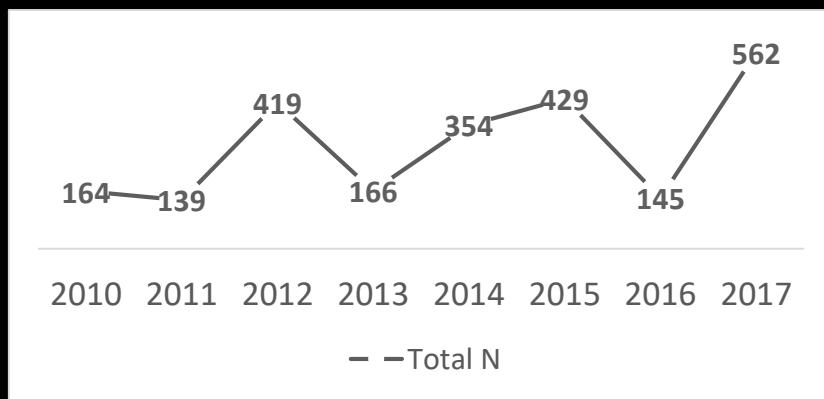


Before



After

BALTIMORE CHECKERSPOT





MASTER PLAN

Forest Preserve District of DuPage County
2019 Master Plan



INPUT GATHERING METHODS



Input gathered from over 6,500 individuals:

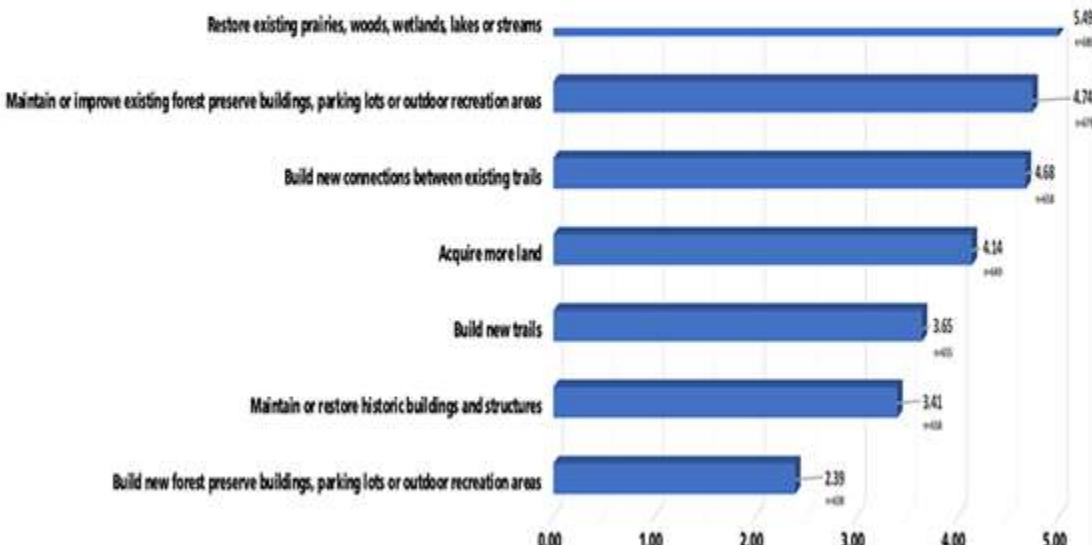
- 6 Public Input Meetings
- 3 Volunteer Input Meetings
- 4 Commissioner Input Sessions
- 9 Special Interest Group Meetings
- 1 Staff Workshop
- 18 Cumulative Voting Opportunities
- 782 Random Sample Surveys Returned
- 1,982 General Population Surveys Returned
- 178 Employee Surveys Returned
- 172 Volunteer Surveys Returned

MASTER PLAN RESULTS

- Top Areas of Focus:
1. Restore Natural Areas
 2. Maintain and improve existing
 3. New Trail Connections

15: Considering the Forest Preserve District of DuPage County does not have unlimited resources, what should it focus on over the next five years?

Rankings (Weighted)



MASTER PLAN - RESTORATION

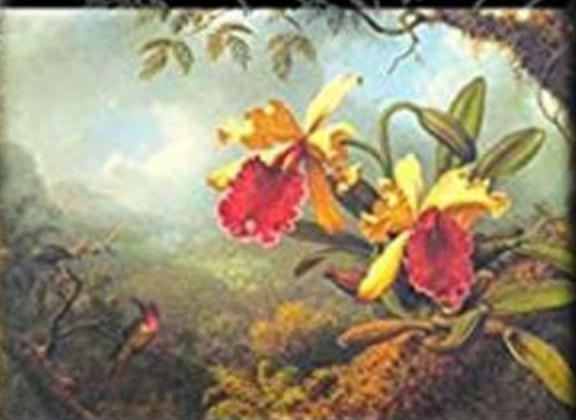
- Fullersburg - Butler Woods
- Egermann – Grove Restoration
- Maple Grove – Maple Woods
- Herrick Lake – Prairie and Savanna
- Fischer Woods – Dunklee's Grove
- Danada – Rice Lake Prairie
- West Chicago Prairie – Prairie
- Timber Ridge – Klein Creek
- Hickory Grove – Savanna
- Hidden Lake – King's Grove
- Springbrook Prairie – Prairie and Grassland

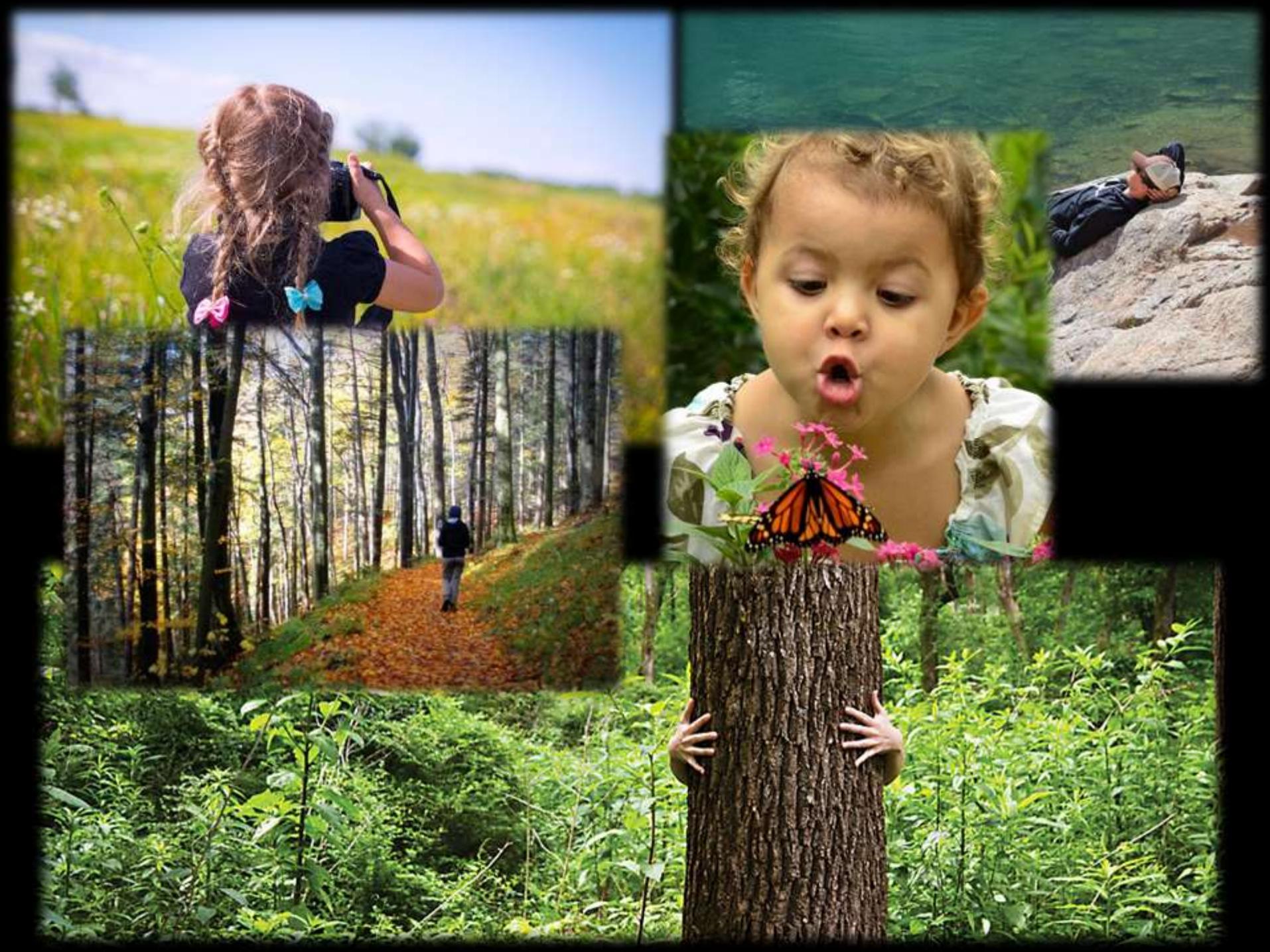


BIOPHILIA



The Biophilia Hypothesis









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Questions?



DuPage Forest Preserves

NATIVE PLANT SALE

Friday & Saturday

May 8 • 10 a.m. – 7 p.m.

May 9 • 9 a.m. – 2 p.m.

Mayslake Peabody Estate
1717 W. 31st St. in Oak Brook

Preorder starting March 9. Visit
dupageforest.org/native-plant-sale.

Programs on Native Plants

Get ready to plant as you learn from our experts!
Register at dupageforest.org or 630-850-8110.

Feb. 23 Native Landscaping: All About Plants
March 18 Native Landscaping: Design



Think global. Plant local.



Forest Preserve District of DuPage County

dupageforest.org