FINAL REPORT

WOLF ROAD PRAIRIE CONSERVATION CAMPUS CONCEPT PLAN WILDLIFE PRESERVATION FUND GRANT #03-047W

Introduction

The Wolf Road Prairie Nature Preserve offers an unequaled destination for conservation education, natural and human history awareness and enjoyment, scientific study and restoration ecology. Wolf Road Prairie also provides a location for teacher training, seminars, cultural programs, nature arts, a nature center and museum and Native American exhibits and interpretation. The preserve is easily accessible by major highways and expressways within highly populated Chicagoland and is drawing visitors from all over the world.

To better serve the conservation needs of the public and wildlife for now and the future, an inventory of the features and benefits of Wolf Road Prairie has been compiled in the Concept Plan for the development of a Conservation Campus. These multi-level features combine to create a broad spectrum of attractions and services all located at one of the richest and most diverse natural areas in Illinois. The Plan has been developed to appeal to visitors, protect rare natural resources and promote Wolf Road Prairie as a conservation destination and education hub.

Materials

The objective of the Campus Plan is to create wider awareness and appreciation of the features of Wolf Road Prairie for public education and natural resource protection. In order to accomplish this purpose, a 32-page, full color publication was developed and designed. The Plan features a front cover cutout revealing a close-up of beautiful wild bergamot blossoms. When the cover page is turned open, a full color diversity photograph of Wolf Road Prairie in summer covers the page as a mid-landscape view.

The following materials were used to develop the pages of the Plan:

- 1. Articles written by natural resource and environmental economic professionals.
- 2. A species list identifying the 360 native plants of Wolf Road Prairie with Latin and common names.
- 3. A bird species census list compiled from 1983 to 2003.
- 4. Seasonal, close-up and landscape photos.
- 5. An aerial photo of Wolf Road Prairie and buffer.
- 6. Photos of students and adults touring the preserve and visiting the Prairie House nature center.

- 7. Original artwork.
- 8. A c. 1808 map showing the tribal boundaries of the Potawatomi village of Sauganakka which included Wolf Road Prairie and bufferlands.
- 9. A site map identifying the features, locations and uses of Wolf Road Prairie, bufferlands and compatible structures.
- 10. Principles of ecological land management and bird habitat requirements.
- 11. Historic and philosophical quotes.
- 12. Descriptions of prairie and the ecosystem features of the preserve.
- 13. Original text describing Wolf Road Prairie and the Campus Plan and why Wolf Road Prairie is ideally suited to be the site of a Conservation Campus.
- 14. Lists of partners, including the Illinois Department of Natural Resources, advisors, volunteers, artists, photographers and Save the Prairie Society board members and a direction map to Wolf Road Prairie.
- 15. A summary of how Wolf Road Prairie and the Campus Plan fulfill the goals and purposes of Chicago Wilderness.

Methods

Initially, a draft Campus Concept Plan was developed and circulated to partners and consultants for discussion and comment. Photos, images, species lists and original art were gathered, and information and text written and compiled. The plan was laid out page-by-page, integrating written material with photos and artwork reflective of the theme and topic of the page. Over 300 hours were devoted by volunteers to writing, typesetting, research and sizing and selection of graphics, followed by proofreading and contacting area printers to determine which printer would provide the best service and price. Subsequently, camera-ready pages of the Plan were delivered to Unique Printers along with original photos. Unique Printers agreed to print the Plan for \$1,000.00, the amount of the grant, and donate the remainder of the cost of printing for 1,000 copies of the 32-page full color Concept Plan valued at \$5,000.00.

Results

The Campus Plan was originally intended to be 16 pages long with only four full-color pages. But as the Plan evolved, additional critical and supportive information was added to create a more thorough, factual and comprehensive booklet, bringing the Plan to 32 pages. As a result, the expanded Plan contains many more features and photos and better lays out the concept for the development of a Conservation Campus at Wolf Road Prairie. The Plan will be distributed to elected officials, natural resource managers, conservation agencies and groups, educators, professionals, the media and the public for the purposes of promotion of conservation issues and values and education outreach. The Plan will be adapted to the Save the Prairie Society website (www.savetheprairiesociety.org) with links to the Illinois Department of Natural Resources and the Illinois Nature Preserves Commission websites when funding is

available to transfer the Conservation Campus Concept Plan to our site. We will publish information about the Plan in our newsletters and Annual Report to members and make copies available upon request.

Discussion

The Conservation Campus Concept Plan presents a blueprint to develop Wolf Road Prairie into a world-renowned conservation destination and educational resource. The Plan identifies the need for additional buffer acquisition to protect the watershed and biodiversity and enlarge the preserve as recommended by natural resource experts. The Plan serves as a guideline for potential uses of land and structures in order to offer a wide variety of programs, studies and events designed to appeal to a diverse conservation audience, create awareness of conservation, historic and cultural values and establish societal benefits which result from the preservation and protection of the original landscape features and human history of Illinois.

Summary

The Wolf Road Prairie preservation project has benefited from private and public collaborative partnerships for over 25 years, resulting in land acquisition, native ecosystem restoration, native plant propagation, cultural and historic programs and conservation education programs. Over 2,000 students participate in outdoor classroom activities and field trips at Wolf Road Prairie each year offered without charge and led by Society volunteers. Free programs scheduled for adults are held at the Prairie House Nature Center monthly. Special events such as National Public Lands Day, Settlers Day and Prairie Fest are held annually. These kinds of programs and services are expected to grow once the Concept Plan moves from the visionary phase to implementation and development.

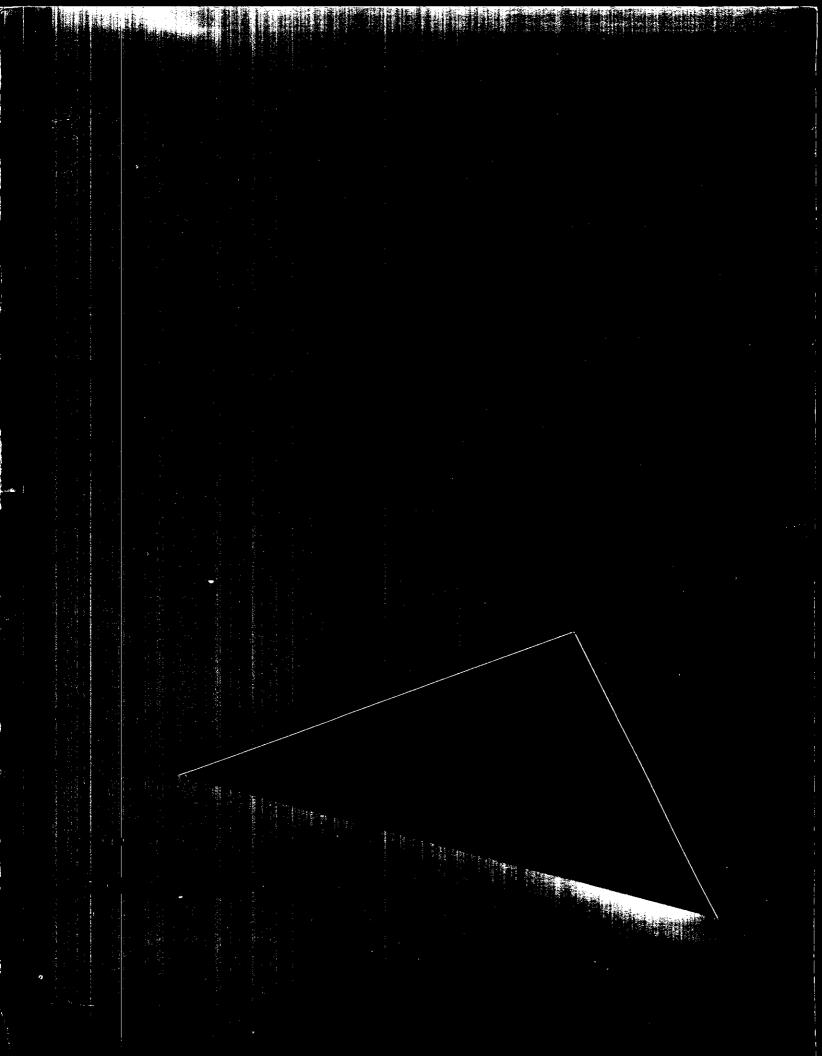
The nucleus of the Conservation Campus at Wolf Road Prairie is already in place and functioning with the Prairie House Nature Center serving as the gateway to the preserve. But it is the potential for growth and greater public outreach that excites the imagination. The Campus Plan lays the groundwork for this Wolf Road Prairie of the future.

Slides/Photos

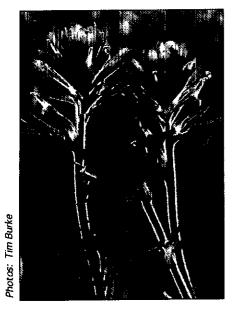
There are no slides or photos of the Plan available, as the Plan itself is the product. We are providing IDNR with a dozen copies of the Plan at this time. More copies can be obtained at any time.

Expenditures

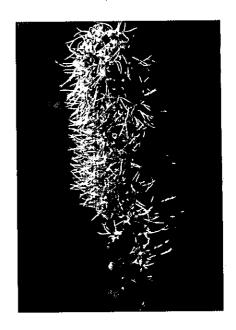
Cost of printing – funded by grant – 1,000 copies	\$1,000.00
Value of donated printing costs - Unique Printers	\$5,000.00
Value of hours donated by volunteers to write, design,	
lay out, obtain photos, artwork and supporting materials	
and finalize completion of the Plan	•
300 hours @ \$10.00 per hour	\$3,000.00
Total Cost of Project	\$9,000.00











A SAMPLING OF NATIVE PLANTS AT WOLF ROAD PRAIRIE





Photo: Phil Cihlar

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July, 2003

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Save the Prairie Society 10327 Elizabeth, Westchester, IL 60154



THE ROLE OF SAVE THE PRAIRIE SOCIETY AT WOLF ROAD PRAIRIE IS . . .

- * To partner with the Illinois Department of Natural Resources, the Forest Preserve District of Cook County and the Illinois Nature Preserves Commission as a not-for-profit support organization to benefit conservation.
- * To provide volunteers to assist with the management and restoration of Wolf Road Prairie and buffer.
- * To conduct educational programs, field trips, prairie tours and classroom visits at Wolf Road Prairie.
- * To seek funding through grants and private donations to enhance public ownership and protection of biodiversity of Wolf Road Prairie and buffer.
- * To conduct native plant propagation on buffer to the prairie and encourage scientific study.
- * To sponsor programs, activites and events as a public service, develop nature exhibits and promote conservation awareness values.

WOLF ROAD PRAIRIE Conservation Campus -- Microcosm of Illinois Landscapes



For over a quarter century, Save the Prairie Society has focused on preserving and restoring Wolf Road Prairie, protecting and enhancing biodiversity at the preserve and conducting conservation and outreach programs.

When we began our work, the prairie movement was in its infancy. Saving Wolf Road Prairie faced incredible odds, and in the beginning, few people thought it could be done. Then as land in the prairie began to be acquired and restoration was introduced, Wolf Road Prairie became an inspiration for other challenging preservation projects.

Now, Save the Prairie Society envisions Wolf Road Prairie assuming a new leadership role-one that takes conservation education and public outreach to a broader level of awareness and participation. As more and more visitors gravitate to the site seeking information on native ecosystems, natural resource protection and restoration, stewardship of the land and conservation education programs, Wolf Road Prairie is emerging as the ideal location for a Conservation Campus.

The original landscapes of Wolf Road Prairie set the backdrop for this rich nature learning experience at an easily accessible location close to major highways just 12 miles west of the Chicago Loop. Situated within the core suburbs of highly populated central Cook County, Wolf Road Prairie takes visitors back over 10,000 years to a time when the last glaciers had retreated and the famed grasslands and oak and hickory savannas of northeastern Illinois, abundant wildlife and first humans arrived to a warming and hospitable ancient world.

More recently, the French, English and Spanish left their marks upon the history of Illinois as they explored the territory and interacted with native peoples. By the early 1800's, a surge of European settlers moved into Illinois, and the displacement of frontiersmen and the tribes of the Great Lakes region began. The vast wilderness which had remained virtually unaltered by human presence for millennia was transformed within a short span of time into farms, towns and cities, and centuries' old cultures connected to living in harmony with the land vanished with the prairies, wetlands and forests



Today, Wolf Road Prairie, considered the largest and finest original black soil prairie east of the Mississippi River, remains a link to that rich natural and human history of our past. The Prairie House Nature Center located at the north end of the preserve, believed to be the oldest structure in Westchester, traces its origins to the German settlement of Franzosenbusch and contains within its walls the c. 1852 first Lutheran school in Proviso Township. It was here that those settlers also held their first community meetings and church services.

Now the Prairie House is taking on a new life. As the Gateway to Wolf Road Prairie and the Conservation Campus, the Prairie House is a welcoming center to thousands of visitors annually. It is a place where rich local history is interpreted enveloped by vistas of original tall grasses and colorful wildflowers unlike any other scene in Illinois.

The nucleus of the Conservation Campus at Wolf Road Prairie is already in place and functioning, but it is the potential for growth and greater public outreach that excites the imagination. It is here that a broad spectrum of opportunities for conservation learning and enjoyment come together to create a one-of-a-kind natural and human history educational hub. Nature studies and prairie tours, Native American studies and displays, teacher training programs, scientific research, historical research, international conservation collaboration, a natural history library, native plant propagation, ecosystem restoration, nature arts and much more provide a diverse yet fully compatible curriculum of programs, events, exhibits and outreach designed to attract visitors while promoting the value and importance of conservation.

A key component of the Wolf Road Prairie Conservation Campus Plan focuses upon the Hickory Lane bufferlands. Experts recommend that Wolf Road Prairie be enlarged to protect its watershed and biodiversity, and restoration already underway on several Hickory Lane bufferland properties is demonstrating how lands adjacent rich natural areas can serve as recovery sites and benefit native species and wildlife.

Although opportunities to acquire and restore sensitive sites are rapidly being lost to development sprawl and other urbanized uses throughout Illinois, the window is still open to acquire more bufferlands at Wolf Road Prairie and work with interested private landowners who may wish to preserve their large spacious properties before they are lost to high density development.

The investment in dollars and efforts to realize this vision may be challenging, but as Wolf Road Prairie gains greater recognition, prestige and acclaim as a world renowned conservation education center and hub, the rewards and benefits to the natural world and to the public in years to come will far outweigh the costs and committments of the present.

The Campus Plan lays the groundwork for this Wolf Road Prairie of the future.



Photo: Larry Godson

FEATURES AND PUBLIC BENEFITS OF THE WOLF ROAD PRAIRIE CONSERVATION CAMPUS

1852 Prairie House Museum Nature Center . . . Gateway to Wolf Road Prairie Conservation Campus



Wolf Road Prairie is drawing visitors from all over the world and has no equal in the Chicago Wilderness area or in the State of Illinois as a conservation hub. The multi-level attractions of natural resource preservation, conservation, education, native ecosystem restoration, Native American cultural interpretation, historic preservation and nature arts create a campus environment which appeals to a broad spectrum of visitor interests and showcases the incredible diversity and versatility of the Wolf Road Prairie Eco-Region.

Attractions of the Wolf Road Prairie Conservation Campus include:

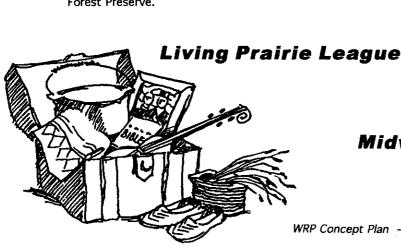
- * Preservation and restoration of rare and imperiled prairie, savanna, wetland, stream corridor and pond ecosystems at one easily accessible location
- *Prairie House Nature Center featuring rotating natural history exhibits, programs, demonstrations and special events
- * Rare native genotype seed bank and seed gardens
- * Native plant propagation demonstration site with green house and seed processing facility
- * Scientific and restoration research facilities
- * Internship programs
- * Watershed recovery and demonstration site in the West Cook Salt Creek Basin
- * Senior citizen programs and tours
- * Teacher training, outreach programs and Chicago Wilderness West Cook Hub training site
- * Collaborative educational programs with regional institutions i.e. Triton College, University of Illinois at Chicago, College of DuPage, Northeastern Illinois University, Robert Morris College, Brookfield Zoo, Riverside-Brookfield High School, Proviso East and West High Schools, local grade schools, special adult education programs and Chicago area underserved schools such as Jackie Robinson, O'Toole and Elvalor
- * Natural history library collection
- * Student ecology and group tours and orientations
- * Facilities for workshops and seminars for resource managers, conservation organizations, officials, media and educators



Franzosenbusch Prairie House Museum/Nature Center

- * Native American cultural programs and interpretive exhibits and facilities
- * Adaptive re-use of existing publicly owned structures on bufferlands for educational programs, classes, presentations, learning opportunities and teacher training
- * Cultural programs, including nature art, writing, photography, videodocumentation and early settler and Native American crafts, exhibits and interpretation
- * Native plant heritage and heirloom gardens
- * Native American food, spiritual and medicinal gardens
- * A trail system linking to the Salt Creek Greenway
- * Restoration and furnishing of the c. 1852 Franzosenbusch schoolroom and teacherage as a museum within the Prairie House Nature Center
- * Early settler genealogical study programs and research library
- * Connection to the underground railroad and Civil War period
- * Historic re-enactments and free public programs, tours, presentations and events
- * Tourism destination attracting local, statewide, national and international visitors and cultural exchange programs

Note: The Campus Plan includes Wolf Road Prairie, 60 acres of Hickory Lane Bufferlands, The Prairie House Museum/Nature Center with links to the Salt Creek Greenway and Bernis Woods Forest Preserve.



Midwest SOARRING Foundation

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PROTECTING BIODIVERSITY AT **WOLF ROAD PRAIRIE**





Photo: Tim Burke





Wolf Road Prairie should be maintained as high quality prairtie, wetland and savanna ecosystems by protecting, managing, and restoring pre-settlement vegetation and ecosystem processes, maintaining natural communities and species diversity, and restoring native plant and animal species to the extent possible within the constraints of the preserve's size and urban contexts. Planning is needed for buffering or enhancing the interaction between Wolf Road Prairie and its surrounding environment and providing a high quality educational research resource that does not compromise the integrity of the natural area.

The importance of maintaining adequate buffer for Wolf Road Prairie has been recognized by the Illinois Nature Preserves Commission, Illinois Department of Natural Resources, Forest Preserve District of Cook County and Save the Prairie Society. The communities present in Wolf Road Prairie and the associated neighboring lands are a complex assemblage of living things co-existing in communities, and it is more important to examine these systems from the viewpoint of biodiversity.

The present environmental conditions of sites like the Wolf Road Prairie Nature Preserve continue to include many of the requisite factors such as fertility, stability of climate and adequate moisture. The Wolf Road Prairie Nature Preserve today, however, is a small island of natural area compared to that which existed in the area now called Westchester prior to settlement.

In order to adequately insure the future of this preserve and its attendant biodiversity, it is necessary to continue ecosystem restoration and management and most importantly to include as much land surface as possible from an ecological perspective and include the greatest possible diversity.

^{*} Excerpt from the Wolf Road Prairie Management Plan by Martin Bowles, The Morton Arboretum

NATIVE AMERICAN PEOPLES --The Potawatomi Influence at Wolf Road Prairie

The historic boundaries of the Potawatomi village of Sauganakka covered an extended geographic area in DuPage and Cook counties which included portions of Wolf Road Prairie and Hickory Lane as indicated on the map. A signal station, chipping stations, camps, mounds and trails were characteristic of this settlement along Salt Creek until displacement of most Native Americans occurred following the Blackhawk War of 1832. An arched trail tree still remains on Hickory Lane, a reminder of use of this area by native peoples.

In the early 1850's, Christian Thiele came to America from Hanover, Germany and opened a general store at the intersection of Cermak and Wolf Roads in the Franzosenbusch community very near to the location of the famous village of Sauganakka.

During this time, Potawatomi who still remained in the vicinity traded at Thiele's General Store according to Thiele's son, Henry, in a story printed in the April 13, 1932 edition of the Westchester Tribune.

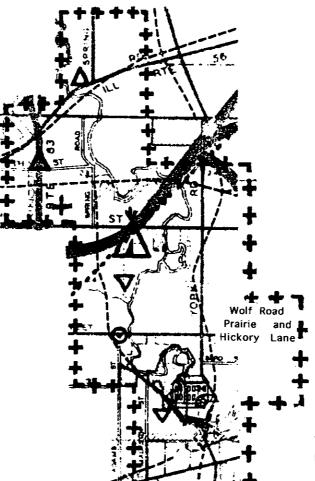
"In the store, which he opened in the back of the house, he had the usual stuff a country store carried in those days. He had some clothing, hay, supplies and barreled pork and barreled whiskey which he sold at 12 to 15 cents a gallon, retail.

"There were still a lot of Indians in those days, and they had a habit of coming to our place to buy. We never sold them any liquor for it was against the federal law. They used to trade a lot of their furs for supplies. They stayed near the banks of Salt Creek, I suppose because trapping was better there, and many's the time when I was a lad I could see the sharp top of a wigwam against the sky."

Today, the rich history of Native Americans of the region is nearly forgotten as subdivisions, corporate complexes and shopping centers cover the lands of old native villages, out-stations and sacred burial sites. The Wolf Road Prairie Conservation Campus, located within the boundaries of Sauganakka, presents the ideal opportunity to establish an archival and interpretive center honoring the lives and cultures of Native American people of the region. In this historically accurate landscape setting, this heritage can be preserved from extinction and educational exhibits, displays, programs, classes and a research library can be developed for public knowledge and appreciation.

The name, Potawatomi, which is derived from the Chippewa language, is believed to mean "People of the Place of Fire". Indian legend says that the Potawatomi, Chippewa and Ottawa were once all members of one tribe which traveled from the north to settle around Lake Huron and later divided into three separate tribes.

Tribal Boundaries of Sauganakka circa 1808



As the Potawatomi moved southward, they settled in parts of Wisconsin, Michigan, Indiana and northeastern Illinois.

The Potawatomi were allied with the French until the peace of 1763. Some were allied with the English in the War of 1812.

In the treaty of September 26, 1833 at Chicago, the Potawatomi ceded most of their lands to the United States and began to leave the territories of their ancestors.

In early times the Potawatomi made their clothing of tanned animal hides and furs. Men wore mocassins, leggings, breechcloths, garters, leather shirts and occasionally belts. They wore feathers and fur turbans as head decorations and fur robes during winter. Clothing was decorated by painted designs and dyed quill work. When trade goods became available, they used glass beads and applique work to decorate their clothing.

According to Thomas McKenney and James Hall in *History of the Indian Tribes of North America*, "Some are six foot in height. They have a rather dark complexion, remarkably high and prominent cheekbones, black eyes and black hair with a slight tendancy to curl."

WOLF ROAD PRAIRIE CAMPUS PLAN FULFILLS CHICAGO WILDERNESS BIODIVERSITY RECOVERY PLAN RECOMMENDATIONS



"Chicago Wilderness refers to nature and to the people and institutions that protect it. Many of the surviving natural communities of the Chicago region are of national and global significance for conservation. The region is blessed with both richness and opportunity for conservation."

Biodiversity Recovery Plan — 1999

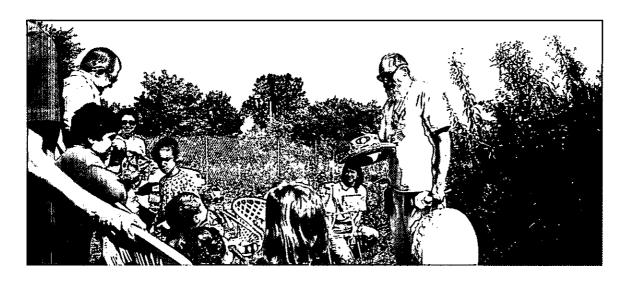
If Road Prairie Conservation Campus

The Wolf Road Prairie Conservation Campus addresses these selected goals of the Chicago Wilderness Recovery Plan:

- Involves the citizens, organizations and agencies of the region in efforts to conserve biodiversity
- Improves the scientific basis of ecological management
- 3. Protects globally and regionally important natural communities
- 4. Restores natural communities to ecological health
- Manages natural communities to sustain natural biodiversity
- Develops citizen awareness and understanding of local biodiversity to ensure support and participation
- Fosters a sustainable relationship between society and nature in the region
- 8. Enriches the quality of lives of the region's citizens

The Campus Plan implements these selected goals at Wolf Road Prairie by:

- Creating and managing a larger preserve and working with public agencies to acquire and restore bufferlands
- 2. Understanding and mitigating urban threats
- 3. Protecting priority areas and endangered species
- 4. Expanding ecological management research and monitoring
- 5. Including watershed management in the preserve design
- 6. Developing educational and communication programs and outreach
- Creating a long-tern vision and recovery goal for rare terrestial communities
- 8. Recording human history on the land
- Developing a research station for the preservation and propagation of native genotypes



WOLF ROAD PRAIRIE

-- THE PLACE TO GO FOR NATURE EDUCATION







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CONSERVATION CAMPUS CONCEPT PLAN MAP

The Wolf Road Prairie Campus Plan Map identifies native plant and ecosystem landscape recovery sites and adaptive re-uses of existing structures for seminars, scientific study sessions, conservation workshops, teacher training, cultural interpretive programs, historic archives, Native American exhibits and many more public purposes and benefits.

Harrier Marsh Lookout/Study Site Elevated permanent observation platform overlooking wetlands — #9 Hickory Lane

Greenhouse/Propagation Plots -Seed processing and plant propagation
facilities -- #9 Hickory Lane

Heritage Center --

Exhibits and programs highlighting early settlement history and the Civil War period of the area -- #8 Hickory Lane

Nature Arts Center --Painting, photography, music, crafts, classes exhibits and journal writing -- #5 Hickory Lane

Savanna Restoration --

An open grown savanna recovery and scientific study site on 10 acres of original savanna soil — #1 Shaqbark Lane & #6 Hickory Lane

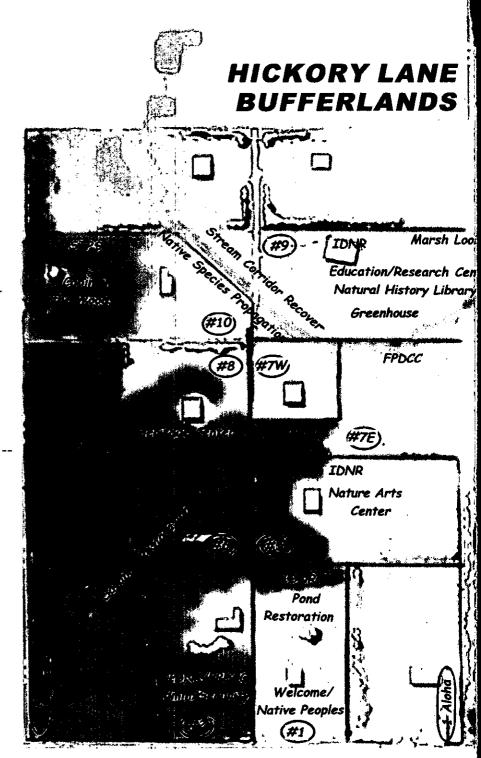
IDNR/FPDCC Security/Admin. Office --Satellite educational facility and work site for environmental studies -- #2 Hickory Lane

Welcome/Native American Lodge -Informal greeting area and program site for
visitors -- Midwest SOARRING Native American museum and exhibits -- #1 Hickory Lane

Pond/Wetland Restoration --Adding an additional ecosystem feature to preserve --#1 Hickory Lane

Education/Training Center --Teacher training classrooms with site for pond and wet prairie restoration -- #1 Aloha Lane

31st Street Information Kiosk --Twin Wolf Road Prairie exhibit cases holding
revolving displays, data and Calendar of Events at
Wolf Road Prairie





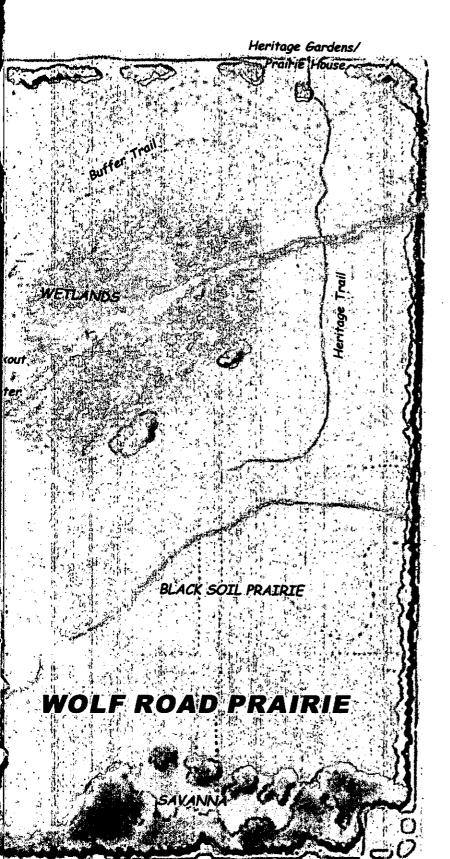




PRAIRIE

STREAM RECOVERY

MADSH



31st St. Kiosk





MESIC SAVANNA

SEDGE MEADOW AND WET PRAIRIE

Franzosenbusch Prairie House Museum/Nature Center --Gateway to Wolf Road Prairie featuring natural, cultural and historical exhibits and programs

Heritage Gardens --

A series of colorful theme gardens spanning the 150 year history of the Franzosenbusch Prairie House including Native American, German immigrant, WW II "Victory" and a dozen other floral displays

Heritage Trail --

A 1/2 mile north/south pathway leading from the Prairie House to the 31st Street savanna

Buffer Trail --

Leads westward from the Prairie House to Hickory Lane Campus Complex, then south to 31st Street

STPS Education/Research Center -- Training facility for professional and public study and research -- #9 Hickory Lane

Natural History Library --

Over 5,000 volume collection of nature books plus thousands of natural history magazines -- #9 Hickory Lane

Stream Corridor Recovery --

Water flow and stream bank restoration to enhance water quality and prevent erosion through plantings of native genotypes -- #9 & #10 Hickory Lane

Native Species Propagation Beds --Plantings of approximately 40 species of grasses and forbs from original Wolf Road Prairie seed --#9 and #10 Hickory Lane

Learning "Cabin in the Woods" --Nature programs and activities in an open area especially suited for scout groups and students --#10 Hickory Lane







HICKORY LANE -PASTORAL LANDSCAPE IN THE HEART OF CHICAGOLAND



VALUING THE ENVIRONMENT

by Jeff Swano SALT CREEK WATERSHED NETWORK

Studies show that for each dollar spent by IDNR for outdoor recreation, another \$25 is generated for Illinois' economy.

--Outdoor Illinois, April 2002

The exact value of a tract of open space is generally difficult to estimate. The primary reason for this is because its value in environmental economic terms is the sum of each individual's demand curves (values that individuals place on the specific tract) plus the environmental services the tract provides for society (e.g. cleaning water if it is a wetland, providing oxygen if it is a forest, etc.).

Essentially, economics is the study of human behaviors and the changes in behaviors based on information and individual preferences and values. Environmental economics is the way individuals behave given the state of the environment. In order for biodiversity to be valued as a benefit to humans, the value that humans apply to biodiversity must be measured.

Values can be obtained through observation of behaviors, surveys to individuals and reasonable comparisons with known market values. Some values are intrinsic, and society agrees that they are important but cannot put an exact value on it. In these cases, it is easier to measure the damages or losses to that unknown intrinsic value.

General environmental concepts such as environmental services, biodiversity and eco-tourism can be explained. At a minimum, all these concepts can come together to form an acceptable model that can be used to communicate intrinsic and extrinsic values.

Measurable Traits of Environmental Services

- * Potential for drinking water usage
- * Cleaning water (wetlands and phytoremediation) and pollutant assimilation/absorption
- Air to breath (oxygen production)
- * Purifying air (carbon sequestration)
- * Flood control and rainfall storage

Measurable Traits of Biodiversity

- * Number of species (with rarity implying higher values)
- * Population numbers within each species
- * Interconnectedness among species (value of food chain)
- * Aesthetic values and human enjoyment of biodiversity (eco-tourism)

Measurable Traits of Eco-Tourism

- * Aggregate (round trip) travel costs including time, distance, gas, and prorated transportation (equipment and insurance)
- * Time spent at the site
- * The actual recreational activities participated in
- * Availability of nearby similar attractions
- * Labor hours provided by volunteers to enhance the site which leads to an increased asset value
- * Amenities at the site

Environmental Services

Estimating environmental services is based on logical comparisons to known market variables combined with scientific observations. For example, 5,000 gallons of water entering a wetland contain 65 parts per million (ppm) of total suspended solids (TSS) and water exiting the wetland contains 25 ppm TSS. The wetland provides filtration services removing 40 ppm per 5,000 gallons per day. The results can be compared to mechanical filtration systems, assimilated and presented in a unified manner.

In order to create and manage large preserves, land holdings in public ownership and potential acquisition sites should be assessed. Investment in land acquisition calls for determining which sites provide the biggest return for the investment based upon environmental services, valuing biodiversity, eco-tourism and the presence of threatened and endangered species. Greater emphasis should be placed on land acquisition as a means of protecting rare species because of the inherent higher values (due to rarity) and the potential for a higher return on investment. Priority should be given to creating complexes of communities since many animal species are dependent upon a variety of habitats which also creates value.

More research is needed to determine the value of a single plant species based on its relationship to or dependence on specialized biological or environmental factors such as specific pollinators, soil microorganisms, hydrological conditions, soil chemistry or soil parent materials. Models can be developed to lay out the relative values that the environment confers onto the plant species, the plant species onto the general health of an ecosystem and that ecosystem's general value to humans in numerous ways. Public recognition of the value of biodiversity is important to achieving conservation goals.

The easy part of valuing ecosystems is that is it merely the sum of all individuals' demand curves. The problem with valuing ecosystems is that everyone values the environment differently which is heavily based on levels of education. Understanding that educating the public results in an increased value of the environment without any physical alteration to the environment has a profound meaning, and places emphasis on education as a means for increasing environmental values.

Jeff Swano, environmental economist and founding Executive Director of the Salt Creek Watershed Network, has 15 years experience in environmental economic analysis, contaminated property assessment, solid waste management and watershed protection.

WOLF ROAD PRAIRIE Ecosystems

The 80 acre Wolf Road Prairie is considered the largest remaining tract of typic silt loam prairie east of the Mississippi River. Over 360 native plant species have been recorded, including state and federally listed threatened and endangered species such as the prairie fringed orchid, bearded wheat grass and white lady slipper orchid. More than 300 insect species and 28 remnant dependant butterflies and moths, including three found nowhere else in Illinois, have been recorded. The natural area also contains a large wetland and a globally imperiled black soil savanna, one of the rarest ecosystems on earth.





PRINCIPLES OF ECOLOGY

It is essential to develop a landscape-level preserve design for Wolf Road Prairie. The existing landscape characteristics should be interpreted in a hierarchical scale that relates to landscape preserve design theory, and the planning process should anticipate the need for more public open space and expanded conservation education, professional study, heritage programming and events in the decades ahead. The principles of ecology that result in high biodiversity can be grouped into two categories; those relating to spatial aspects of communities; and those relating to biological aspects. The following list is not inclusive of all possible principles but contains those that pertain to the need to acquire additional acreage or provide adequate buffer that is maintained according to sound ecological concepts. These ecological principles are more fully described in the text Landscape Restoration Handbook by Harker, Evans, Evans and Harker, 1993.



SAVANNA

Spatial Principles--

overall biodiversity.

Large areas of natural communities sustain more species than small areas. It is absolutely essential to preserve as many large natural areas as is possible in single tracts and expand the size of smaller tracts to maintain biodiversity.

Fragmentation of habitats, communities and ecosystems reduces diversity. The reduction in size of natural areas reduces diversity. It is essential to maintain the size of natural areas especially those that have been reduced to islands surrounded by development or dissimilar habitat types. In the case of Wolf Road Prairie Nature Preserve there is development on the north and east. In addition fragmentation is also present on the south side in the form of 31st Street. Even this narrow corridor interferes with species migration and ultimately reduces diversity.

Isolated patches of natural communities sustain fewer species than closely associated patches. The area known as Hickory Lane located to the west of the Wolf Road Prairie Nature Preserve contains remnants of oak savanna, a closely associated community to the prairie. The communities should continue to coexist in close association in order to maintain diversity.

Ecotones between natural communities are natural and support a variety of species from both communities as well as ecotone specific species. Ecotones, or transition zones between communities, are an inherent part of the Wolf Road Prairie complex. The prairie blends into the remnant oak savanna area to the west. This blend between the true prairie and the oak savanna increases



Biological Principles--

Full restoration of native plant communities sustains diverse populations. Introducing or preserving as many components of the natural ecosystem as possible is essential to maintaining biodiversity. An increase in the structural diversity of vegetation increases species diversity. The Wolf Road Prairie Nature Preserve is under an ecosystem management plan designed to increase the structural diversity of the prairie. The remnant oak savanna and bufferlands to the west should be managed, restored and enhanced to increase structural diversity as well.

* Excerpts from Biodiversity and the Wolf Road Prairie
Nature Preserve, Ralph Thornton, FPDCC--9/2/93



MANAGING WOLF ROAD PRAIRIE FOR BIODIVERSITY

The management goal is to develop a balanced restoration and ecosystem plan which will stimulate native plant populations and preserve and sustain wildlife habitat. Management decisions also take into consideration that visitors to Wolf Road Prairie enjoy birding, hiking, observation of wildlife, photography and related nature appreciation and that nature tours and outdoor classroom field trips provide a basic public expectation at the site.

MANAGEMENT TEAM RECOMMENDATIONS

- * Open the core interior of the preserve by removing invasive brush and compensate for shrub loss with native species on buffer edges for bird and wildlife needs.
- * Employ prescribed burns, seasonal mowing, herbicide treatment of invasive species, weed removal, seed collection and seed dispersal. Mowing reduces invasive shrub biomass and is beneficial to prairie vegetaion as it allows grasses and forbs the opportunity to become more aggressive and revitalized. The combined method of mowing and burning is a successful strategy at Wolf Road Prairie.
- Remove all buckthorn and dogwood. Removal of trees requires approval of landowners based on species and size.
- Implement mechanization/heavy equipment without resulting in soil and vegetation damage.
- * Consider adjacent property owners privacy. Maintain brush screens and eventually replace exotics with native species.
- * Maintain transition zone of flowering crabs and other fruit trees for bird habitat and for spring scenic beauty at the northwest section of the preserve until native shrubs and trees can be selected and introduced.
- * Propagate and relocate native genotype plants to bufferland to preserve rare species and to expedite ecosystem recovery and enhancement.
- * Mitigate sedimentation and erosion impacts to the hydrology and biodiversity of the preserve and improve water quality through aquatic enhancement projects resulting in the overall enrichment of the preserve.
- * Maximize plant biodiversity. Integrate bufferland for

- use by migratory and nesting birds. Consider habitat requirments of raptors. Maintain as wide a varierty of bird species known to Wolf Road Prairie as possible.
- * Expand nursery beds for native plant propagation and seed production. Collect seed throughout the year as crops become available. Develop and expand partnerships for the propagation and production of local genotypes to be returned as plants or seed to Wolf Road Prairie buffer and restoration locations. Example: Chicago High School for Agricultural Sciences, UIC, Salt Creek Nursery, Save the Prairie Society buffer beds, etc. Monoculture beds produce mass quantities of seed but eventually will begin the transition "to the wild". Begin propagation of native hazel shrubs.

Begin aggressive buffer aquisition on unprotected Hickory Lane properties to:

- * Maintain sensitive open space and buffer ecosystem features for restoration.
- * Prevent edge effects and encroachment by invasive species.
- * Prevent mitigation of contaminants such as lawn chemicals and parking lot run-off from incompatible dense development and prevent intrusion into the preserve by light and sound pollution.
- * Mitigate altered hydrology by restoring aquatic ecosystems on Hickory Lane Buffer.
- * Prevent impacts on sensitive breeding areas for birds, insects, and wildlife by unregulated human activities, poaching and domestic pets.
- * Develop a long range conservation plan to protect the integrity and character of Wolf Road Prairie and the priceless value and enjoyment of the preserve by the public.

MANAGEMENT TEAM

Dan Kirk, IDNR Steve Byers, INPC Bill Koenig, FPDCC John Raudebush, FPDCC, Dr. Darrel Murray, UIC

STPS Volunteers

Jack Pizzo, Tom Hintz, Phil Cihlar, Valerie Spale, Larry Godson, Elizabeth Plonka, Jack Shouba, Ron Kumnick, Tim Burke, Greg Jerzek

Midwest SOARRING Foundation

Joseph Standing Bear, Gregg, Bill Gramm, Nick Roach

WOLF ROAD PRAIRIE PLANT SPECIES LIST

Compiled by Jack Shouba and Dr. Darrel Murray -- 2000 Illustrations: Jill Jarom, Terryl Shouba







Scientific Name

Ambrosia trifida

Acer negundo Acer saccharinum Acnida altissima Agalinis tenuifolia Agrimonia gryposepala Agropyron trachycaulum unilaterale Agrostis hyemalis Agrostis perennans Agrostis scabra Alisma subcordatum Allium canadense Allium cernuum Ambrosia artemisiifolia elatior

Amorpha canescens Andropogon gerardii Andropogon scoparius Anemone canadensis Anemone cylindrica Anemone virginiana Anemonella thalictroides Antennaria neglecta Antennaria plantaginifolia Apios americana Apovynum androsaemifolium Apocymum sibericum Arabis alabra Arenaria lateriflora Arisaema dracontium Arisaema triphyllum Asclepius exaltata Asclepias incarnata Asclepias purpurascens Asclepias sullivantii Asclepias syriaca Asclepias tuberosa Asclepias verticillata Aster azureus Aster ericoides

Aster laevis

Aster pilosus

Aster praealtus

Aster lateriflorus

Aster novae-angliae

Common Name

Box Elder Silver Maple Water Hemp Slender False Foxglove Tall Agrimony **Bearded Wheat Grass Tickle Grass** Thin Grass Fly-away Grass Water Plantain Wild Onion, Wild Garlic **Nodding Wild Onion** Common Ragweed Giant Ragweed Lead Plant Big Bluestem Grass Little Bluestem Grass Meadow Anemone Thimbleweed Tall Anemone Rue Anemone Cat's Foot **Pussy Toes Ground Nut** Spreading Dog Bane Prairie Indian Hemp **Tower Mustard** Wood Sandwort Green Dragon Jack-in-the-Pulpit Poke Milkweed Swamp Milkweed Purple Milkweed Prairie Milkweed Common Milkweed **Butterfly Weed** Whorled Milkweed Sky-blue Aster Heath Aster Smooth Blue Aster Side-flowering Aster **New England Aster** Hairy Aster

Scientific Name

Aster puniceus firmus Aster sagittifolius drummondii Aster sagittifolius sagittifolius Aster simplex Astragalus canadensis Baptisia leucantha

Bidens cernua Bidens frondosa Bidens vulgata Boehmeria cylindrica Boltonia latisquama Bromus kalmii

Cacalia plantaginea Calamagrostis canadensis Camassia scilloides Cardamine bulbosa Carex annectans Carex atherodes Carex bicknellii Carex blanda Carex previor Carex buxbaumii Carex cristatella Carex lacustris Carex pellita Carex pensylvanica Carex rosea Carex sartwellii Carex stricta Carex tenera Carex tricocarpa Carex vulpinoidea Carya cordiformis Carya ovata Castilleja coccinea Ceanothus americanus Celtis occidentalis Cicuta maculata Circaea lutetiana

Circium discolor

Cirsium muticum

Claytonia virginica

Comandra umbellata

Convolvulus sepium

Common Name

Shining Aster Drummond's Aster Arrow-leaved Aster Panicled Aster Canadian Milk Vetch White Wild Indigo **Nodding Bur Marigold**

Common Beggar's Ticks Tall Beggar's Ticks False Nettle False Aster Prairie Brome

Prairie Indian Plantain **Blue Joint Grass** Wild Hyacinth **Bulbous Cress** Small Yellow Fox Sedge Hairy-leaved Lake Sedge Copper-shouldered Oval Sedge Common Wood Sedge Plains Oval Sedge Dark-scaled Sedge Crested Oval Sedge Common Lake Sedge **Broad-leaved Woody Sedge** Common Oak Sedge Curly-styled Woody Sedge Running Marsh Sedge Common Tussock Sedge Narrow-leaved Oval Sedge Hairy-fruited Lake Sedge **Brown Fox Sedge** Bitternut Hickory Shagbark Hickory Indian Paintbrush New Jersey Tea Hackberry Water Hemlock Enchanter's Nightshade Pasture Thistle Swamp Thistle Spring Beauty False Toadflax Hedge Bindweed

Willow Aster



Galium aparine

Galium asprellum





Wolf Road Prairie	Wolf
Scientific Name	Common Name
Coreopsis palmata	Prairie Coreopsis
Coreopsis tripteris	Tall Coreopsis
Cornus obliqua	Blue-fruited Dogwood
Cornus racemosa	Gray Dogwood
Cornus stolonifera	Red-osier Dogwood
Corylus americana	American Hazelnut
Crataegus crus-galli	Cockspur Hawthorn
Crataegus mollis	Downy Hawthorn
Crateagus punctata	Dotted Hawthorn
Cryptotaenia canadensis	Honewort
Cuscuta glomerata	Rope Dodder
Cuscuta polygonum	Knotweed Dodder
Cyperus strigosus	Long-scaled Nut Sedge
Cypripedium candidum	White Lady's Slipper
Danthonia spicata	Poverty Oat Grass
Desmodium canadense	Showy Tick Trefoil
Dodecatheon meadia	Shooting Star
Echinacea pallida	Purple Coneflower
Echinochioa crusgalli	Barnyard Grass
Echinocystis lobata	Wild Cucumber
Egrostis frankii	Sandbar Love Grass
Eleocharis acicularis	Needle Spike Rush
Eleocharis compressa	Flat-stemmed Spike Rush
Eleocharis elliptica	Golden-seeded Spike Rush
Ellisia nyctelea	Aunt Lucy
Elymus canadensis	Canada Wild Rye
Elymus villosis	Silky Wild Rye
Elymus virginicus	Virginia Wild Rye
Epilobium coloratum	Cinnamon Willow Herb
Equisetum arvense	Horsetail
Equasetum hyemale	Tall Scouring Rush
Eragrostis frankii	Sandbar Love Grass
Erechtites hieracifolia	Fireweed
Erigeron annuus	Annual Fleabane
Erigeron canadensis	Horseweed
Engeron philadelphicus	Marsh Fleabane
Erigeron strigosus	Daisy Fleabane
Eryngium yuccifolium	Rattlesnake Master
Erythronium albidum	White Trout Lily
Euonymous atropurpureus	Wahoo
Eupatorium altissimum	Tall Boneset
Eupatorium maculatum	Spotted Joe Pye Weed
Eupatorium purpureum	Purple Joe Pye Weed White Snakeroot
Eupatorium rugosum Eupatorium serotinum	Late Boneset
Euphorbia corollata	Flowering Spurge
Euphorbia maculata	Flowering Spurge Eyebane
·	
Fragaria virginiana	Wild Strawberry
Fraxinus pennsylvanica	Red Ash
Fraxinus pennsylvanica subinteger	ria Green Ash

rairie)	Wolf Road Prairie
Scientific Name	Common Name
Galium boreale	Northern Bedstraw
Galium concinnum	Shiny Bedstraw
Galium obtusum	Wild Madder
Galium tinctorium	Stiff Bedstraw
Galium triflorum	Sweet-scented Bedstraw
Gaura biennis	Biennial Gaura
Gentiana andrewsii	Closed Gentian
Gentiana flavida	Yellowish Gentian
. Gentiana puberulenta	Downy Gentian
Geranium maculatum	Wild Geranium
Geum aleppicum	Yellow Avens
Geum canadense	White Avens
Geum laciniatum trichocarpun	Rough Avens
Gleditsia triacanthos	Honey Locust
Glyceria striata	Fowl Manna Grass
Habenaria leucophaea	Eastern Prairie Fringed Orchid
Hackelia virginiana	Stickseed
Helenium autumnale	Sneezeweed
Helianthus grosseserratus	Sawtooth Sunflower
Helianthus rigidus (H. laetiflo	-
Helianthus strumosus	Pale-leaved Sunflower
Heuchera richardsonii	Prairie Alum Root
Hieracium canadense	Canada Hawkweed
Hydrophyllum virginianum	Virginia Waterleaf
Hypericum majus	Sand St. John's Wort
Hypericum punctatum	Spotted St. John's Wort
Hypericum pyramidatum	Great St. John's Wort
Hypoxis hirsuta	Yellow Star-Grass
Hystrix patula	Bottlebrush Grass
	Blue Flag
Iris virginica shrevei	False Rue Anemone
lsopyrum biternatum	False Rue Allemone
Juglans nigra	Black Walnut
Juncus dudleyi	Dudley's Rush
Juncus greenei	Greene's Rush
Juncus interior	Inland Rush
Juncus tenuis	Path Rush
Juniperus virginiana crebra	Red Cedar
Krigia biflora	False Dandelion
Lactuca canadensis	Wild Lettuce
Lathyrus palustris	Marsh Vetchling
Lathyrus venosus	Veiny Pea
Leersia oryzoides	Rice Cut Grass
Lemna minor	Small Duckweed
Lepidium virginicum	Common Peppergrass
Lespideza capitata	Round-headed Bush Clover
Liatris aspera	Rough Blazing Star
Liatris pycnostachya	Prairie Blazing Star
Liatris spicata	Marsh Blazing Star
Lilium michiganese	Michigan Lily
Lilium philadelphicum	Prairie Lily
Lithospermum canescens	Hoary Purcoon

Hoary Puccoon

Lithospermum canescens

Annual Bedstraw

Rough Bedstraw







Scientific Name

Lobelia spicata
Ludwigia alternifolia
Ludwigia palustris
Ludwigia polycarpa
Lycopus americanus
Lycopus uniflorus
Lysimachia ciliata
Lysimachia lanceolata
Lythrum alatum

Malus ioensis Mentha arvensis Mimnlus ringens Monarda fistulosa

Oenothera biennis Oenothera pilosella Onoclea sensibilus Osmorhiza claytonii Osmorhiza longistylus Oxalis stricta Oxalis violacea Oxypolis rigidior

Panicum implicatum Panicum oligosanthes Panicum virgatum Parthenium integrifolium Parthenocissus quinquefolia Pedicularis canadensus Penstemon calvcosus Penthorum sedoides Petalostemum purpureum Phlox glaberrima Phlox pilosa Phragmites australis Physalis heterophylla Physalis subglabrata Physostegia virginiana Phytolacca americana Pilea pumila Plantago rugelii Platanus occidentalis Podophyllum peltatum Polygala sanguinea Polygonatum senega Polygonum amphibium Polygonum coccineum Polygonum hydropiper Polygonum lapathifolium Polygonum pensylvanicum Polygonum punctatum Polygonum ramosissimum Polygonum sagittatum

Common Name

Pale Spiked Lobelia
Seedbox
Marsh Purslane
False Loosestrife
Common Water Hoarhound
Northern Bugle Weed
Fringed Loosestrife
River Loosestrife
Lance-leaved Loosestrife
Winged Loosestrife

lowa Crab Wild Mint Monkey Flower Wild Bergamont

Common Eveming Primrose
Prairie Sundrops
Sensitive Fern
Hairy Sweet Cicely
Smooth Sweet Cicely
Common Sorrel
Violet Wood Sorrel
Cowbane

Old-field Panic Grass Scribner's Panic Grass Switch Grass Wild Ouinine Virginia Creeper **Wood Betony** Smooth Beard Tongue Ditch Stonecrop Purple Prairie Clover Marsh Phlox Prairie Phlox Common Reed Clammy Ground Cherry Tall Ground Cherry Prairie Obedient Plant Pokeweed Clearweed Red-stalked Plantain Sycamore May Apple Field Milkwort Seneca Snakeroot Water Knotweed Water Heartsease Water Pepper Heartsease **Pinkweed Smartweed**

Bushy Knotweed

Arrow-leaved Tear Thumb

Scientific Name

Polygonum scandens
Polygonum virginianum
Populus deltoides
Populus grandidentata
Populus tremuloides
Potamogeton amplifolius
Potentilla simplex
Prenanthes alba
Prenanthes aspera
Prenanthes racemosa
Prunella vulgarus
Prunus americana
Prunus serotina
Prunus virginianum
Pycananthemum virginianum

Quercus bicolor Quercus coccinea Quercus macrocarpa Quercus rubra Quercus velutina

Ratibida pinnata Rhus glabra Rhus radicans Rhus typhina Ribes missouriense Rorippa palustris Rosa arkasana Rosa blanda Rosa carolina Rosa setigera Rubus allegheniensis Rubus flagellaris Rubus occidentalis RuRubus pensilvanicus Rudbeckia hirta Rudbeckia subtomentosa Rumex altissimus

Sagittaria latifolia
Salix amygdaloides
Salix discolor
Salix glaucophylloides
Salix humilis
Salix interior
Sambucus canadensis
Sanicula gregaria
Scirpus acutus
Scirpus atrovirens
Scirpus fluviatilis
Scirpus pendulus
Scirpus validus
Scutellaria epilobiifolia
Scutellaria lateriflora

Common Name

Climbing False Buckwheat
Woodland Knotweed
Eastern Cottonwood
Large-toothed Aspen
Quaking Aspen
Large-leaved Pond Weed
Common Cinquefoil
White Lettuce
Rough White Lettuce
Glaucous White Lettuce
Selfheal
Wild Plum
Wild Black Cherry
Choke Cherry
Common Mountain Mint

Swamp White Oak Scarlet Oak Bur Oak Red Oak Black Oak

Yellow Coneflower Smooth Sumac Poison Ivy Staghorn Sumac Wild Gooseberry Marsh Cress Sunshine Rose Early Wild Rose Pasture Rose Illinois Rose Common Blackberry Common Dewberry Black Raspberry Yankee Blackberry Black-eyed Susan Sweet Black-eyed Susan Pale Dock

Common Arrowhead
Peach-leaved Willow
Pussy Willow
Blue-leaved Willow
Prairie Willow
Sandbar Willow
Elderberry
Clustered Black Snakeroot
Hard-stemmed Bulrush
Dark Green Rush
River Bulrush
Red Bulrush
Great Bulrush
Marsh Skullcap
Mad-dog Skullcap

Scientific Name Scutellaria parvula Senecio pauperculus Silene stellata Silphium integrifolium Silphium lacinatum Silphium terebinthinaceum Sisyrinchium albidum Sium suave Smilacina racemosa Smilacina stellata Smilax lasioneura Solanum americanum Solidago altissima Solidago canadensis Solidago gigantea Common Grass-leaved Goldenrod Solidago graminfolia Solidago graminfolia nuttalli Solidago gymnospermoides Solidago iuncea Solidago missouriensis Solidago nemoralis Solidago riddellii Solidago rigida Solidago ulmifolia Sorghastrum nutans Sparganium eurycarpum Spartina pectinata Sphenopholis obtusata Spiraea alba Spiranthes cernua Sporobolus heterolepis Stachys palustris

Teucrium canadense Thalictrum dasycarpum Thalictrum dioicum Thalictrum revolutum Tilia americana Tradescantia ohiensis Trillium recurvatum Triosteum aurantiacum Typha augustifolia Typha latifolia Ulmus americana

Stachys tenufolia

Stellaria longifolia

Ulmus rubra Urtica procera

Verbena bracteata Verbena hastata Verbena urticifolia Vernonia altissima Vernonia fasciculata Veronicastrum virginicum Vicia americana Viola affinis

Viola pedatifida Viola pubescens Viola sagittata Viola sororia Vitis riparia

Zizia aurea

Common Name Small Skullcap Balsam Ragwort Starry Campion Rosin Weed Compass Plant Prairie Dock

Common Blue-eyed Grass Tall Water Parsnip Feathery False Solomon's Seal Starry Faise Solomon's Seal Common Carrion Flower Black Nightshade Tall Goldenrod Canada Goldenrod Late Goldenrod

Hairy Grass-leaved Goldenrod Viscid Grass-leaved Goldenrod Early Goldenrod Missouri Goldenrod Old-field Goldenrod Riddell's Goldenrod Stiff Goldenrod Elm-leaved Goldenrod Indian Grass Common Bur Reed Prairie Cord Grass Prairie Wedge Grass Meadowsweet Nodding Ladies' Tresses Prairie Dropseed

Woundwort

Stitchwort

Germander Purple Meadow Rue Early Meadow Rue Waxy Meadow Rue Basswood Common Spiderwort Red Trillium Early Horse Gentian Narrow-leaved Cattail Common Cattail

Marsh Hedge Nettle

American Elm Slippery Elm Tall Nettle

Creeping Vervain Blue Vervain Hairy White Vervain Tall Ironweed Common Ironweed. Culver's Root American Vetch LeConte's Violet Prairie Violet Yellow Violet Arrow-leaved Violet Common Blue Violet Riverbank Grape

Golden Alexanders

Nesting Birds of

BIRD MONITORS' GOAL

The Wolf Road Prairie landscape recovery plan should ensure the survival of native plant species, provide habitat for area sensitive birds and other wildlife in stress caused by loss of open space and developmental sprawl and create a sustainable ecosystem for greater migration stopovers.

A driving principle should be the development of a bird network to monitor bird populations and species at Wolf Road Prairie.

Birdwatching is a popular outdoor activity for Wolf Road Prairie visitors. Attracting birds to the site is a key goal for education and enjoyment.

CONCLUSIONS OF BIRD MONITOR TEAM

- * Clear the core area of the preserve to open a vista from end to end, but leave existing cottonwoods and some hedgerows on the western edge of the prairie and the eastern edge of buffer for bird habitat.
- Focus on savanna birds such as the Baltimore and orchard orioles, red-headed woodpecker, warblers and buntings. Restoration, enhancement and enlargement of the savanna ecosystem is crucial to these bird species under threat.
- Maintain a 15-foot wide privacy hedge along Wolf Road, Constitution Drive, Ashley Woods and Hickory Lane. Phase in replacement of non-native brush with native shrubs such as hazelnut, American plum, Hawthorn, etc. Consider propagation of hazelnut from site genotypes to replace non-native shrubs.
- Preserve pine trees on Hickory Lane being used for nesting by red-tailed hawks. Preserve some snags and clusters of trees for perching by hawks and other birds. Maintain other required raptor habitats for kestrals, Cooper's hawk, Northern Harrier and owls known to the preserve.
- Work to attract shrubland birds such as chats, rufous-sided towhees, willow flycatcher, field sparrow and breeders such as yellow warbler, common yellowthroat, kingbirds, Cooper's hawk, downy woodpecker, flicker and red-bellied woodpecker. Establish small stands of native brush in the buffer areas to compensate for the removal of brush in the preserve core to attract field sparrows and other birds requiring brushy habitat.
- Wetland birds known to Wolf Road Prairie may be in decline such as the sora rail, swamp sparrow, sedge wren, Virginia rail, etc. Improve habitat in the wetland to attract these birds by aggressively removing Common reed, phragmites australis. Add some hackberries.
- Consider adding some bluebird houses, re-positioning some unsuccessful bluebird houses to new locations and continue monitoring. Address issues of nest predation.



WOLF ROAD PRAIRIE BIRD CENSUS

Compiled by Vivian McDermott -- 1983-2003



Double-crested Cormorant Great Blue Heron **Great Egret** Green-backed Heron Black-crowned Night-Heron Canada Goose

Wood Duck Mallard

Northern Pintail Blue-winged Teal Northern Shoveler Turkey Vulture Osprey (one time) Northern Harrier Sharp-shinned Hawk

Cooper's Hawk **Broad-winged Hawk** Red-tailed Hawk American Kestrel

Peregrine Falcon (one time) Ring-necked Pheasant

Virginia Rail Sora Sandhill Crane

Killdeer Lesser Yellowleas

Solitary Sandpiper Spotted Sandpiper Least Sandpiper Pectoral Sandpiper Common Snipe

American Woodcock Ring-billed Gull Rock Dove Mourning Dove

Black-billed Cuckoo Yellow-billed Cuckoo Eastern Screech-Owl Great Horned Owl

Common Nighthawk Chimney Swift

Ruby-throated Hummingbird Belted Kingfisher

Red-headed Woodpecker Red-bellied Woodpecker Yellow-bellied Sapsucker

Downy Woodpecker Hairy Woodpecker Northern Flicker Olive-sided Flycatcher Eastern Wood-Pewee Alder Flycatcher Willow Flycatcher

Least Flycatcher Eastern Phoebe

Great Crested Flycatcher

Eastern Kingbird Tree Swallow **Barn Swallow** Blue Jay American Crow Black-capped Chickadee

Tufted Titmouse Red-breasted Nuthatch White-breasted Nuthatch

Brown Creeper House Wren Winter Wren Marsh Wren

Golden-crowned Kinglet Ruby-crowned Kinglet Blue-gray Gnatcatcher Eastern Bluebird

Veery

Gray-cheeked Thrush Swainson's Thrush Hermit Thrush Wood Thrush American Robin **Gray Catbird**

Northern Mockingbird **Brown Thrasher**

Cedar Waxwing Northern Shrike European Starling White-eyed Vireo

Blue-headed Vireo (Solitary)

Warbling Vireo Philadelphia Vireo Red-eyed Vireo Tennessee Warbler Nashville Warbler Yellow Warbler Chestnut-sided Warbler Magnolia Warbler

Cape May Warbler Black-throated Green Warbler Yellow-rumped Warbler

Blackburnian Warbler

Palm Warbler Bay-breasted Warbler Blackpoll Warbler

Black and White Warbler American Redstart

Northern Water Thrush Common Yellowthroat Wilson's Warbler

Canada Warbler Yellow-breasted Chat Scarlet Tanager

Northern Cardinal Rose-breasted Grosbeak

Indiao Buntina Dickcissel Rufous-sided Towhee

American Tree Sparrow Chipping Sparrow Field Sparrow Savannah Sparrow

Fox Sparrow Song Sparrow Swamp Sparrow White-throated Sparrow

White-crowned Sparrow Harris' Sparrow

Dark-eyed Junco Red-winged Blackbird Eastern Meadowlark Common Grackle

Brown-headed Cowbird

Orchard Oriole Northern Oriole House Finch Pine Siskin American Goldfinch House Sparrow

BIRD MONITOR TEAM

Jeff Braun, Illinois Natural History Survey Carol Fialkowski, The Field Museum Conrad Fialkowski, Chicago Audubon Society Douglas Stotz, The Field Museum

Francie Stotz, The Field Museum John Skach, bluebird monitor at WRP Vivian McDermott, Chicago Audubon Society Valerie Spale, Save the Prairie Society Phil Cihlar, Save the Prairie Society

THE PRAIRIE

"It was not until after crossing the river DesPlaines that I became fully sensible of the beauty and sublimity of the prairie. They embrace every texture of soil and outline of surface . . ."

The splendor of the Illinois prairie inspired Patrick Shieriff, a Scottish farmer, to write these words in 1833. In those days, early settlers found a vast land-scape of waving grasses and scattered hardwood groves.

Often growing to the legendary height of a man on horseback, the prairie was well adapted to the high winds, varying rainfall, hot summers and frigid winters of the Midwest.

15,000 years ago, what is now Illinois was covered by mile-high glaciers. After the glaciers receded, boreal forests replaced the ice. As the climate became warmer and drier, oaks and hickories infiltrated the pines and spruces, and prairie began its steady expansion into Illinois. About 8,000 years ago--the origins of Wolf Road Prairie date back to these ancient times--tall grass prairie covered over 70% of the state. Today, less than one one-hundreth of one percent of the original prairie remains.







Photo: Tim Burke

SCENES OF THE SEASONS AT WOLF ROAD PRAIRIE

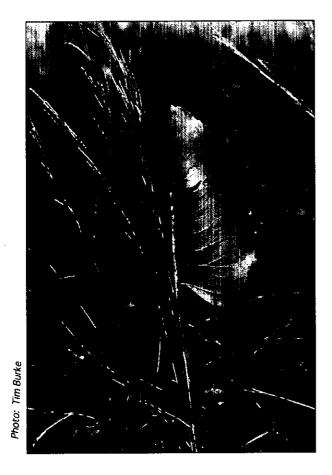




Photo: Phil Cihlar

Save the Prairie Society Governing Body

Phil. Cibler **President** Joseph Standing Bear Vice-President Jeanne Halama Secretary Kenneth Spale Tressurer Valerie Spale **Executive Director** Tim Burke Director **Mary Cray Director Larry Godson** Director **Tom Hintz** Director Linda Noonan Director Elizabeth Plonka Director

Steve Boese Associate Director
Eric Engle Associate Director
Jim Hodapp Associate Director
Jack Pizzo Associate Director
Ron Kumnick Associate Director
Jennie Miksula Associate Director
Mickey Monsen Associate Director

Save the Prairie Society Advisory Board

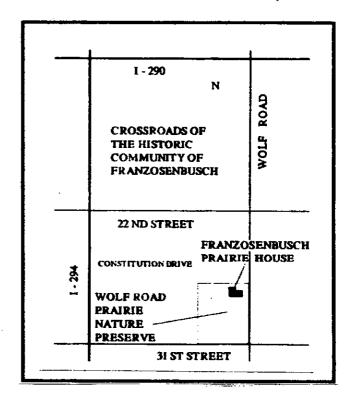
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Carol Fialkowski, The Field Museum
Conrad Fialkowski, Chicago Audubon Society
Dr. Cynthia Gehrie, Video Documentation Studio
Edward Lace, Forest Preserve District of Cook County
Dr. Darrel Murray, University of Illinois/Chicago
Dr. Ronald Panzer, Northeastern Illinois University
Dr. Virginia Turner, Brookfield Zoo/Robt. Morris College
Susan Van Horn, Artist/Graphics Designer
Dr. Gerould Wilhelm, Conservation Design Forum

Wolf Road Prairie Conservation Campus Partners

Chicago Wilderness Ecosystem Partnership Forest Preserve District of Cook County Franzosenbusch Heritage Society Great Lakes Aquatic Habitat Fund Illinois Department of Natural Resources Illinois Environmental Protection Agency Illinois Nature Preserves Commission Living Prairie League Lower DesPlaines Ecosystem Partnership Midwest SOARRING Foundation Northeastern Illinois Planning Commission Oak Park Conservatory Junior Naturalist Program Salt Creek Greenway Association Salt Creek Watershed Network Save the Prairie Society U. S. Army Corps of Engineers

WOLF ROAD PRAIRIE . . . a dedicated Illinois Nature Preserve

--just 12 miles west of downtown Chicagois located at the NW corner of Wolf Road and 31st Street in Westchester, Illinois



Easily reached from

EISENHOWER EXPRESSWAY

Exit southbound on Wolf Road

. . . go 3 miles

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TRI-STATE TOLLWAY

Exit East on Ogden or 22nd St. to Wolf Road

FREE PARKING

along 31st Street bays on north side or Prairie House parking lot

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