

Public Meeting Notice

Cary Park District
Board of Commissioners
Parks & Recreation Operations Committee
June 14, 2018
7:00 p.m.
Community Center
255 Briargate Road
Cary, Illinois



AGENDA

- I. Call to Order, Roll Call
- II. Approval of Minutes
 - A. 5/10/18 Meeting.
- III. Matters from the Public, Commissioners, Staff
- IV. Direction Items
 - A. For Discussion/Direction to the Board for Consideration
 - 1. R-2018-19-01, National Recreation and Parks Month.
 - 2. Replacement, 2012 F-350 4 x 4 Regular Cab Dump Truck.
 - 3. Replacement, 2012 F-350 4 x 2 Regular Cab Pickup Truck.
 - 4. Replacement, 2012 F-350 Extended Cab Pickup Truck.
 - 5. Replacement, Two 2009 Yamaha Gas Powered Beverage Carts.
 - 6. Sands Main Street Prairie Nature Preserve Advancement Opportunity Plan.
 - B. For Discussion/Information Only.
 - 1. None.
- V. Adjournment

Note: In compliance with the American with Disabilities Act, this and all other meetings of the Cary Park District are located in facilities that are physically accessible to those who have disabilities. If additional reasonable accommodations are needed for persons who qualify under the Act as having a “disability”, please contact the Park District during normal business hours at 847-639-6100 at least 48 hours prior to any meeting so that such accommodations can be provided.

Cary Park District
Board of Commissioners
Administration, Finance & Personnel Committee Meeting
March 8, 2018
6:30 PM
Community Center
255 Briargate Road
Cary, IL

Minutes

Committee Members Present: Frangiamore and Stanko
Committee Members Absent: Hauck
Commissioners Present: Renner

Guest Present: None.

Staff Present: Jones, Krueger, Kelly, Rogus, Raica, Hughes, Nesler, and Lee.

Chair Stanko called the meeting to order at 6:30 PM.

The minutes from the February 8, 2018 Administration, Finance, and Personnel Committee meeting were presented for approval.

Frangiamore moved to approve the minutes; second by Stanko.

Voice vote: 2-0. All voting yes. Motion carried.

There were no matters from the Public or Commissioners.

Jones updated the Committee that the bid has been out for two weeks for the Kaper and Lions Park Renovation Project, and a pre-bid meeting was held on Tuesday, March 6. Responses to the bid will be opened on March 16. On April 12, 2018 the Board will be presented with the results of the bid.

Jones next stated that staff did a walkthrough of District 155's Haber Oaks Campus, and staff feels there is value in exploring the space further. He then explained that he is unsure of the timeframe of when this might be brought back to the Board for discussion since it depends on input from staff and exploring options in more detail. Jones explained that this time of year is very busy in the prep for summer, budget, and the current project load the Park District has undertaken.

The first Discussion Item discussed was the FY2018-19 Budget. Jones explained that at this meeting each year, a preview of the budget is presented and larger items are highlighted for discussion.

Krueger explained the Park District received an estimate from the County Assessor of \$586,506,165 for its 2017 EAV at an increase of 7.6%, but the actual amount received may be higher or lower than that estimate. For 2016 the EAV was \$545,062,124.

Frangiamore stated there were two new positions proposed to be filled during the upcoming year, but one of those position was budgeted for the last fiscal year and not filled. He asked if that changed the

IMRF and social security fund. Krueger explained that it would have an impact on that fund when individuals were hired for the two positions.

Krueger next discussed Foxford Hills Golf Club (FHGC). She explained that Foxford Hills Golf Club is projected to have an operating income of \$154,028 by the end of this fiscal year, but was budgeted for an operating income of \$130,779. This is an increase of \$23,249 over budget.

Krueger then explained that the Corporate Fund will loan FHGC funds to make future debt payments through an inter fund transfer with the understanding that FHGC will pay back the loan when the acquisition debt has been paid in full. The inter fund transfer is completed per the direction of the Park District Board. As a result of taking this action, the projected year-end fund balance for FY 18/19 at FHGC is estimated to be \$1,343,862. The acquisition debt will be tracked internally moving forward. The acquisition debt will be paid off on December 15, 2020.

Krueger next discussed preliminary schedules, including the 10 Year Capital Projects Financial Projection – Executive Summary, CERF Schedule, Debt Service Schedule, and Possible Available Funding from Fund Balance. She explained that available Funding for Capital Projects is comprised of the Corporate Fund Balance, the Capital Projects Fund Balance, and the Developer Donations Fund Balance. In addition, direct transfers from the Special Recreation Fund to the Capital Projects Fund are made when a project has an ADA component as part of it.

Frangiamore asked when the decision is made on how long the debt will be carried on the Lions and Kaper Park project, and Krueger stated that in the financial forecasting a term of 10 years was utilized. The term would be finalized when the action to issue the debt is undertaken by the Board of Commissioners.

Stanko asked if hiring a new Recreation Manager would affect office space, and Jones stated yes, but that is something that would need to be evaluated as presently there is no office space for the individual in this position.

Renner asked about the boom truck and if that is a piece of equipment that may be shared with another local government entity. Jones explained that is an essential piece of equipment that the Park District uses for tree work, light bulb replacements, and many other items. It is as necessary as a mower for the parks staff to effectively operate.

Stanko stated currently there is \$330,000 of expenditures in the upcoming fiscal year in the CERF, and if an item can be moved to next year to balance the budget. Jones stated that it is something that can be evaluated, but it is a common practice of staff to evaluate items before it is determined that a replacement is needed. Stanko explained he would like items to be looked at so there isn't a huge difference in the expenditures each year.

Krueger next explained the capital needs of FHGC. Frangiamore asked why a bunker rake was being replaced earlier than was expected according to the CERF replacement schedule in comparison to the projected replacement of newer bunker rakes on the schedule. Krueger explained she would need to speak with staff at FHGC and provide the answer for him.

Krueger reviewed the debt service schedule. What will be new this year is series 2018 bond issue for the Lions and Kaper Parks Renovation Project. The numbers presented are for a total of \$3,500,000. The

first payment will be \$76,222. Krueger noted that for the first time in nearly 20 years the bond issue to purchase Hoffman Park no longer appears on this schedule as it was paid off in December.

Krueger explained that the Park District will receive \$300,000 from developer donations and the Meyer donation for a multi-use trail development. These dollars are to be used as matching funds for the ITEP grant application currently submitted to the State for consideration.

Stanko asked if the Board came to a future decision about obtaining a new facility and how that would affect the current budget and the numbers presented. Krueger stated there is money in the operating budget for lease and operating costs for a new space that also includes set-up costs. This was done last year as well in the event that suitable alternative space was found to lease or rent in the community. Jones stated that numbers are not included, however, for the purchase of a new facility.

Krueger asked if there were any questions from the Committee. There were no questions.

Jones next discussed the Illinois Park and Recreation Association (IPRA) Environmental Report Card. He stated that no action will be taken on this item, but due to a lack of a quorum in the Park and Operations Committee, he wanted to answer any questions the present Commissioners may have about the report. He explained that part of the Distinguished Accreditation is to review this item every three years.

Rogus explained it is a self-assessment tool that looks at best practice items. The report card is similar to the one done in 2015, but there were some minor changes to the 2018 report card. He explained that compared to 2015, there are several more environmental initiatives the Park District utilizes, but due to scoring, the Park District had already maxed out in those areas.

Renner asked why the Park District did not get full points for the category of conserving fuel and energy. Rogus explained that not every vehicle is converted to liquid propane. There is no Policy or Procedure in place to address this item. Vehicles are converted as best practice, but not all vehicles are converted.

Jones stated this item will be placed on the March 22, 2018 Board Meeting as an Action Item.

Frangiamore moved to adjourn the meeting. Second by Stanko.

Voice vote: 2-0. All voting yes. Motion carried.

Adjourned at 7:17 PM.

Committee Memo

To: Operations Committee
From: Dan Jones, Executive Director
Paul Rogus, Superintendent of Parks and Facilities
Date: June 8, 2018



RE: 2012 Ford F-350 Super Duty, 2012 Ford F-350 4x2 and 2012 Ford F-350 Replacement Recommendations

Providing exceptional, recreation, parks and open space opportunities.

Funds totaling \$50,008.00 have been allocated within the 2018-2019 Capital Equipment Replacement Fund (CERF) to replace the 2012 Ford F-350 4x4 Regular Cab Dump truck, \$46,966.00 for the 2012 Ford F-350 4x2 Regular Cab Pick-Up Truck and \$47,175.00 for the 2012 Ford F-350 Extended Cab Pick-Up Truck.

Replacement vehicles are available through the Illinois State Purchase Program. The pricing and options provided by the purchasing program are favorable and allow the Park District to upsize the vehicles to improve operational efficiencies.

The recommended replacement for the 2012 Ford F-350 4x4 Regular Cab Dump truck is a 2019 Ford F-350 DRW 4x4 chassis with a 9' dump body at a cost of \$41,245.00. The vehicle will be prepped for Liquid Propane Gas (LPG) fuel and trailering. The LPG conversion cost is \$8,194.00 and will be done by Advanced VTech of Buffalo Grove, IL. The total cost of the replacement is \$49,439.00.

The recommended replacement for the 2012 Ford F-350 4x2 Regular Cab Pick-Up Truck is a 2019 Ford F-350 SRW 4x4 Regular Cab Pick-Up Truck at a cost of \$35,795.00. The vehicle will be outfitted with a Thieman 1,500# aluminum lift-gate and prepped for LPG fuel and trailering. The LPG conversion cost is \$8,194.00 and will be done by Advanced VTech of Buffalo Grove, IL. The existing back rack and strobe light are in good condition and will be reused on the new vehicle. The total cost of the replacement is \$43,989.00.

The recommended replacement for the 2012 Ford F-350 4x4 Extended Cab Pick-Up Truck is a 2019 Ford F-350 SRW 4x4 Extended Cab Pick-Up Truck at a cost of \$47,930.00. The vehicle will be outfitted with a 6.7L V8 Turbo Diesel engine, an 8'6" Western V-plow, prepped for snow removal and trailering. The existing back rack and strobe light are in good condition and will be reused on the new vehicle.

The 2012 Ford F-350 Regular Cab Dump Truck replacement and the 2012 Ford F-350 4x2 Regular Pick-Up Truck replacement are under budget by a combined \$3,546.00. However the 2012 Ford F-350 4x4 Extended Cab Pick-Up Truck replacement exceeds the budgeted amount by \$755.00. All trucks will be delivered to the Park District from Morrow Brothers Ford, Inc. in Greenfield, Illinois.

All vehicles will be listed for sale using Obenauf Auction Service's online bidding system. A disposal value of \$10,000 has been established for the 2012 Ford F-350 Regular Cab Dump Truck & 2012 Ford F-350 Extended Cab Pick-Up truck in Ordinance 2018-19-04. A disposal value of \$8,000 has been established for the 2012 Ford F-350 4x2 Regular Cab Pick-Up Truck in Ordinance 2018-19-04.

Committee Memo

Motions To Consider

Move to recommend Board approval for the purchase of a 2019 Ford F-350 DRW 4x4 chassis and 9' Dump body through the Illinois State Purchase Program from Morrow Brothers Ford, Inc., Greenfield, Illinois, in the amount of \$41,245.00.

Move to recommend Board approval for the purchase of a 2019 Ford F-350 4x4 Regular Cab Pick-Up Truck through the Illinois State Purchase Program from Morrow Brothers Ford, Inc., Greenfield, Illinois, in the amount of \$35,795.00.

Move to recommend Board approval for the purchase of a 2019 Ford F-350 4x4 Extended Cab Pick-Up Truck through the Illinois State Purchase Program from Morrow Brothers Ford, Inc., Greenfield, Illinois, in the amount of \$47,930.00.

Committee Memo

To: Operations Committee
From: Dan Jones, Executive Director
John Miles, General Mgr., FHGC, Golfvisions
Date: June 8, 2018



RE: Two 2009 Yamaha Gas Powered Beverage Carts Replacement Recommendation

Providing exceptional, recreation, parks and open space opportunities.

Funds totaling \$17,850 per cart or \$35,700 in total have been allocated within the 2018-2019 Capital Equipment Replacement Fund (CERF) to replace two 2009 Yamaha Gas Powered Beverage Carts.

The fleet of golf carts, replaced in 2017 is Club Car model. The recommended model for replacement beverage carts is from Club Car and is the 2018 Club Car Café Express Gasoline Powered Beverage Cart. Club Car is the preferred model type and gas is the preferred fuel source (rather than electric). This cart is available through the US Communities Joint Purchase Program. The Park District is a member of this joint purchasing program. The Northbrook Park District recently purchased two similar model beverage carts via this program for use at its golf course.

The Yamaha Beverage Carts will be listed for sale using Obenauf Auction Service's online bidding system. A disposal value of \$1,750.00 has been established for each cart in Ordinance O-2018-19-04.

Motions To Consider

Move to recommend Board approval for the purchase of two Club Car Express Gasoline Powered Beverage Carts via the US Communities Joint Purchase Program from Nadler Golf Car Sales, Inc., Aurora, Illinois, in the amount of \$34,109.60.

Committee Memo

2018 Club Car Café Express Beverage Cart



Committee Memo

To: Operations Committee
From: Dan Jones, Executive Director
Paul Rogus, Superintendent of Parks and Facilities
Date: June 8, 2018



RE: Carl and Claire Marie Sands- Main Street Prairie Nature Preserve Advancement Opportunity Plan

Providing exceptional, recreation, parks and open space opportunities.

As part of the 2016 CMP update, opportunities for enhancements at Sands Main Street Prairie including educational & wayfinding signage, seating, hiking trail expansion and seeking grant opportunities were identified as action items.

Hey & Associates, Inc. was hired to conduct a site assessment and develop a plan for future assessments, management, restoration and improvement work at Sands Main Street Prairie. During this initial site assessment staff has identified an approximate six year window for the enhancement opportunities. Included in the Advancement Opportunity Plan are cost opinions associated with each task.

Staff Recommendation

Staff worked closely with Hey & Associates, Inc. in the preparation of the Advancement Opportunity Plan. This included a site visit of the Main Street Prairie Nature Preserve, a meeting at the Hey & Associates, Inc. office in Volo, and multiple drafts of the plan. Staff recommend Board approval of the Advancement opportunity Plan as presented.

Motion To Consider

Move to recommend Board approval of the Carl and Claire Marie Sands- Main Street Prairie Nature Preserve Advancement Opportunity Plan as presented.



CARL AND CLAIRE MARIE SANDS - MAIN STREET PRAIRIE NATURE PRESERVE ADVANCEMENT OPPORTUNITY PLAN

CARY PARK DISTRICT CARY, MCHENRY COUNTY, ILLINOIS

PROVIDING EXCEPTIONAL
RECREATION, PARKS, AND
OPEN SPACE OPPORTUNITIES

APRIL 2, 2018



Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

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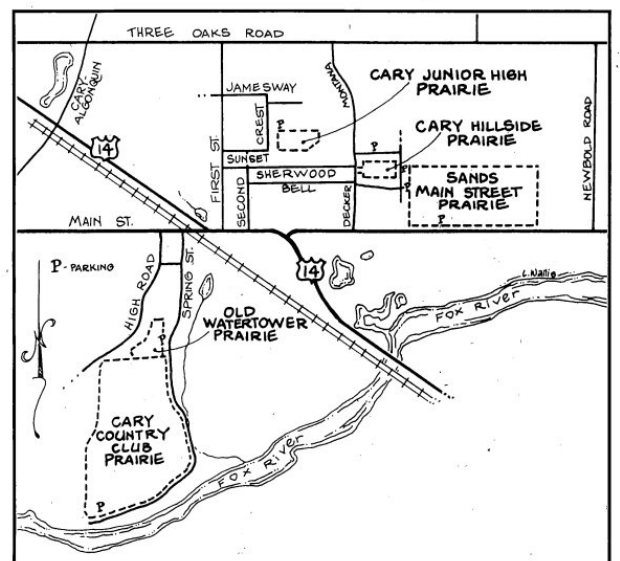


COMPILED HISTORIC PLANT SPECIES LIST

SITE HISTORY MAP

SITE NATURAL HISTORY MAP

SCANNED HISTORIC TRAIL GUIDE



Advancement Opportunity Plan-Cost Opinion
Cary Park District

Tasks	Q1	Q2	Q3	Q4	Cost Estimate	Notes
FY '18-'19						
Annual best practices maintenance tasks: (in-house) controlled burns, brush mowing, dormant seeding, and invasive control	X	X	X	X	\$5,000	Staff
Grant Research and Outlook Plan	X	X			\$1,000	Contracted
Phase 1 Archeological Survey	X	X			\$3,000	Contracted
Discuss Opportunities with MCCD/ INPC	X	X	X		NA	Contracted
Engage Volunteer Programs	X	X	X		NA	Contracted
Prioritized Vegetation Management/Enhancement Plan (VMEP) includes: base GIS data collection, vegetation and threatened and endangered species, drain tile study, and overall site and vegetative base maps and narrative report and 5-year vegetation management enhancement plan.	X	X	X	X	\$11,000	Contracted/Staff Blend
FY 18-19 Subtotal					\$20,000	
FY '19-'20						
	Q1	Q2	Q3	Q4		
Implement Vegetation Management & Enhancement Plan	X	X	X	X	\$4,500	Contracted
Maintenance operations to assist with implementation of VMEP	X	X	X	X	\$2,500	Staff
Compile Site History	X	X			\$2,000	Contracted
On Site Structure Assessment	X	X			\$6,000	Contracted
Overall Site Programming and Master Plan	X	X	X		\$5,000	Contracted
FY '19-'20 Subtotal					\$20,000	
FY '20-'21						
	Q1	Q2	Q3	Q4		
Continue Vegetation Management & Enhancement Plan	X	X	X	X	\$3,500	Contracted
Maintenance operations to assist with implementation of VMEP	X	X	X	X	\$2,500	Staff
Topographic Survey - Select Locations	X	X			\$2,000-\$10,000	Contracted
Site/Trail Master Planning - Design Development	X	X	X		\$5,000	Contracted
Interpretive Program Design Plan & Panel Manufacturing	X	X	X	X	\$15,000	Contracted
Parking/Universal Access Master Planning - Design Development	X	X	X		\$7,500	Contracted
FY '20-'21 Subtotal					\$35,500-\$43,500	
FY '21-'22						
	Q1	Q2	Q3	Q4		
Continue Vegetation Management & Enhancement Plan	X	X	X	X	\$2,500	Contracted
Maintenance operations to assist with implementation of VMEP	X	X	X	X	\$2,500	Staff
Site/Trail Design/Permitting and Implementation	X	X			\$10,000-\$40,000	Contracted
Interpretive Program Implementation	X	X			\$4,500	Staff
FY '21-'22 Subtotal					\$19,500-\$49,500	
FY '22-'23						
	Q1	Q2	Q3	Q4		
Continue Vegetation Management & Enhancement Plan	X	X	X	X	\$1,500	Contracted
Maintenance operations to assist with implementation of VMEP	X	X	X	X	\$2,500	Staff
Parking/Universal Access Improvements Design/Permit/Implement	X	X	X	X	\$10,000-\$50,000	Contracted
FY '22-'23 Subtotal					\$14,000-\$54,000	
FY '23-'24						
	Q1	Q2	Q3	Q4		
Continue Vegetation Management & Enhancement Plan	X	X	X	X	\$1,000	Contracted
Maintenance operations to assist with implementation of VMEP	X	X	X	X	\$2,500	Staff
Digital Media Outreach Program Design	X	X	X	X	\$3,500	Contracted
FY '23-'24 Subtotal					\$7,000	
Grand Total					\$116,000-\$194,000	

INTRODUCTION

This report provides a brief summary of the site history and resources at the Carl and Claire Marie Sands – Main Street Prairie Nature Preserve. The site, which is owned and operated by the Cary Park District, lies east of downtown Cary north of East Main Street and west of Newbold Road. Following a discussion of site cultural and natural history is a recommended plan for ongoing enhancement and improvements to the property.



Photo of savanna and prairie remnant provided by Cary Park District.

SITE HISTORY

What became known initially as the Cary Main Street Prairie was not discovered during the original Illinois Natural Areas Inventory (INAI) during the 1970s, though two other gravel hill prairies within one half mile of the site were noted (Cary Junior High Prairie and Hillside Prairie). Rather, Gill Moreland, a volunteer and field assistant for The Nature Conservancy first discovered what is now known as the Carl and Claire Marie Sands - Main Street Prairie Nature Preserve in the winter of 1982 while cross-country skiing.

Dr. Wayne Schennum then assessed the site using the INAI methodology and ranking system in the early summer of 1982. This assessment described the site as a natural area containing high quality dry gravel prairie communities including “Grade B Dry and Dry Mesic Gravel Prairie” along with other more degraded remnants. This meant the site was worthy of protection and stewardship and many people were involved in the site in the following years.

The INAI developed a system of letter grades to express degrees of natural quality. A Grade B was defined as “late successional or lightly disturbed communities” in the original 1978 INAI. This may not sound very exceptional, but they used a very high standard and we now know that very few Grade A and B communities remain in Illinois, and even Grade C communities are considered high quality natural areas in many cases.

The site of this gravel prairie remnant was owned by the Reiger family from 1904 until 1964. The area was used as a dairy farm, and while this prairie remnant was never plowed due to the gravelly nature of the soil, it was used for cattle and horse grazing until at least the late 1940s. In 1964 the land was sold, but it is not clear to whom – perhaps the Wallace family. Several writings reference the property as the Wallace farm, including studies of the historic dairy barn located on the property.

With the discovery of the high-quality prairie remnant in 1982, The Nature Conservancy negotiated a lease agreement with the owners and began management of the prairie by 1983. Meanwhile, Carl and Claire Marie Sands had purchased the adjacent property to the east of the prairie remnant. In 1986, Mr. Sands began restoring prairie using seed from Nebraska. The Cary Park District received a LAWCON grant to aid in the acquisition of 16 acres containing the original prairie remnant, while the Sands property was gifted to The Nature Conservancy in two parcels in 1986 and 1989 bringing the total protected area to 80 acres.

This 80-acre area, including the original Cary Main Street Prairie remnant and the Sand's restored prairie, was dedicated as the 199th Nature Preserve in Illinois in June 1991. Later additions to the nature preserve brings the total property dedicated as Nature Preserve today to 114.8 acres, with the 80-acres under Cary Park District ownership. It is now known as the Carl and Claire Marie Sands – Main Street Prairie Nature Preserve.



Prairie in bloom with shooting stars. Photo provided by Cary Park District.

The site also has some apparent significance beneath the surface as well. The "Cary Main Street Prairie" is listed as State Archeological Site Mh-17. This is a native American village site reported by Scharf and included in the site nature preserve dedication documentation. It was not surveyed in the 1973-74 archeological survey of McHenry County because the parcel was being used as pasture and the ground surface had not been disturbed, nor were there any plans to disturb it. A report referenced in the documents that have been reviewed indicates that it is likely that the village lies intact beneath the prairie sod.

SITE NATURAL HISTORY

The Carl and Claire Marie Sands – Main Street Prairie Nature Preserve prairie remnant occupies an undulating ridge of sandy and gravelly outwash deposited in terraces above the Fox River by glacial meltwaters from the Cary End Moraine. The extremely well-drained soils and subsurface materials combined with steep west facing slopes, create a droughty environment most suitable for dry and dry-mesic gravel prairies. In 1983 most of the prairie was dominated by the four grasses little bluestem, prairie dropseed, side oats gramma, and Indian grass. Characteristic dry and dry-mesic prairie forbs were well-represented with several rare, threatened, or endangered species present. Various plant inventories taken over the years are compiled in Table 1 below, and show the tremendous richness and diversity of this remnant prairie. This historically compiled list gives the prairie a Floristic Quality Index of 58.1 which indicates it is of extremely high natural area quality with many plant species that are restricted to prairie habitat. See the side bar for further explanation of the Floristic Quality rating system.

In addition, the site assessments at the time of dedication also noted an oak savanna remnant on the Sands portion

The Floristic Quality Assessment (FQA) system was first published in 1979 in Swink and Wilhelm's Plants of the Chicago Region, and was revised in the 1994 edition, and most recently in the 2017 Flora of the Chicago Region. It is widely used as an assessment tool for describing the natural quality of the vegetation and monitoring that quality over time. The FQA method assigns to each plant species a rating that reflects the fundamental conservatism that the species exhibits for natural habitats. A native species that exhibits specific adaptations to a specific native plant community is given a high rating. Conversely, a ubiquitous species that shows adaptations to a broad spectrum of environmental conditions is given a low rating. Utilizing this method, a Floristic Quality Index (FQI) is derived for a given area. The FQI is an indication of native vegetative quality for an area: generally, 1-19 indicates low vegetative quality, 20-35 indicates high vegetative quality and above 35 indicates one can be relatively certain that there is sufficient native character to be of rather profound environmental importance in terms of a regional natural area prospective.

of the site that included white, red, and bur oaks and a richness of understory plants. A small prairie remnant also existed on a hillside immediately east of the savanna remnant. This also had a diversity of prairie forbs.

The re-created Sands part of the Carl and Claire Marie Sands – Main Street Prairie Nature Preserve is of course much less diverse since it was taken out of agricultural production and seeded to warm season grasses and a modest mix of forbs. This area has been enhanced over the years and is included within the dedicated nature preserve.

The remnant prairie portion of the site is likely too small on its own to provide significant wildlife habitat, though it may contain several remnant-restricted insect species. But wildlife such as grassland birds are using the larger acreage that is the re-created prairie. Already in 1989, grasshopper sparrows, vesper sparrows, savanna sparrows and meadowlarks, grassland restricted species, were documented using the restored grassland areas soon after Mr. Sands began his restoration efforts. This highlights the imperative task of continuing to enhance the surrounding re-created prairie areas to expand the possibilities for creation of wildlife habitat for these unique species.

The state-threatened prairie buttercup was documented from the gravel prairie remnant and in 1983 was known only from six other locations in Illinois and was considered close to extirpation from the Chicago region. It is a prairie-restricted species and it is not known if it survives at this site today.



Prairie Buttercup

Michigan Natural Features Inventory Photograph.



Drawing by Linda Wallis, provided by Cary Park District

Advancement Opportunity Plan

This section outlines specific tasks identified during preliminary site visits, review of the Park District's 2016 Comprehensive Master Plan Update, and review of other available documents. Staff has identified an approximately six-year window to plan for these tasks, collectively identified as the Advancement Opportunity Plan for the site. This section expands upon the cost table provided as Page A.

FY '18-'19

Annual best practice maintenance tasks: Continue to perform site specific vegetative management tasks including controlled burns, brush mowing, dormant seeding, and invasive species control.

Grant Research and Outlook Plan: Provide a summary of known available grant opportunities related to natural resources restoration and site management, trail construction, interpretive education, and universal access improvements. Summarize known schedules and requirements, and provide a recommended strategy for submittals.

Phase 1 Archeological Survey: Engage archaeological studies to determine potential constraints on site master planning, trail or universal access improvements based on the potential archeological site location. This will include preliminary GIS based coordination with IDNR-SHPO and a Phase I study performed by a specialist.

Discuss Opportunities with McHenry County Conservation District and Illinois Nature Preserves Commission: Continue discussions with MCCD and INPC to explore opportunities to enhance the nature preserve and regional corridor, as well as shared improvement opportunities.

Engage Volunteer Opportunities: Work toward re-establishment of volunteer stewardship programs at the site to assist in invasive species control, prairie enhancement, monitoring and outreach at the site. Explore opportunities with local groups to grow these types of programs in a manner that minimizes the burden on Park District staff.

Prioritized Vegetation Management and Enhancement Plan (VMEP): Develop a site-specific prioritized vegetation management enhancement plan and report identifying specific goals for each year to be implemented. It will help implement specific vegetation management, enhancement items, and prioritize invasive species control tasks with the use of adaptive management principles. This plan will allow staff to better utilize resources already engaged on this site.

Field reconnaissance will be used to map site features using sub-meter accuracy GPS for each major plant community, invasive species infestation areas, physical structures, trails, and key viewshed areas. Threatened and endangered species will be identified and mapped. A low impact field survey completed by hand will search for significant drain tile locations to better understand local site hydrology and will aid and inform the VMEP and other planning initiatives. Base maps will be created of on-site enhancement priority areas, and will help monitor site sustainability progress, and or

increased biodiversity or degradation within key site areas. Vegetative transects will be established through key site management areas to work towards building a long-term record of the site vegetation and cover conditions.

FY '19-'20

Implement Vegetation Management & Enhancement Plan: Implement vegetation management and enhancement plan tasks as outlined in the VMEP. This task will likely be performed jointly through contracted labor and District staff involvement.

Compile Site History: Compile additional site cultural and natural history information into one summary document that can then be used as future interpretive materials are developed. Scan and save collected paper documents to build digital library of historical information.

Onsite Structure Assessment: Perform assessment of all historic buildings and structures on site to determine current condition and issues for general maintenance and upkeep. This work will be completed by an Illinois Registered Structural Engineer knowledgeable in timber-frame structures and safety assessments.

Overall Site Programming Master Plan: Identify key desired site elements throughout the Carl and Marie Claire Sands – Main Street Prairie Nature Preserve and non-nature preserve areas. Prepare a narrative of proposed elements, consistent with the Cary Park District's 2016 Comprehensive Master Plan Update, including educational and wayfinding signage, seating, and trail expansion. This overall master plan level exhibit will include consideration of key viewsheds within and outside the site, and how best to protect, utilize and enhance those viewsheds.

FY '20-'21

Continue Vegetation Management and Enhancement Plan Tasks: Continue vegetation management and enhancement plan tasks as outlined in the VMEP. This task will likely be performed jointly through contracted labor and District staff involvement.

Topographic Survey (at select locations): Perform topographic survey of key site areas including the parking lot and access area, potential trail connections, and other critical areas identified during the Overall Site Programming Master Plan task. This task will assist in identifying potential constraints related to ADA accessibility and other grade-based design or universal access issues.

Site/Trail Master Planning-Design Development: Prepare Master Plan and Design Development level plans to consider potential trail system construction, trail accessibility, locations for benches/seating, information kiosks, interpretive educational opportunities, and overall trail experience. Master plan design will factor in future trail planning corridors as identified within the Cary Park District's 2016 Comprehensive Master Plan Update.

Interpretive Program Design Plan: Develop interpretive signage plan including educational signage, kiosks, wayfinding, etc. as funds are available. Promote interpretive educational opportunities unique to this site, and present local history, culture, heritage, and environmental understanding, as well as other opportunities as discovered.

Parking/Universal Access Master Planning-Design Development: Prepare Master Plan and Design Development level plans to consider parking improvements, universal accessibility, interpretive educational and site experiential opportunities to serve disabled usage and enjoyment of some key identified locations at this site as funds are available. Planning will factor in potential future improvements outlined in the Cary Park District's 2016 Comprehensive Master Plan Update and all other studies previously completed.

FY '21-'22

Continue Vegetation Management and Enhancement Plan Tasks: Continue vegetation management and enhancement plan tasks as outlined in the VMEP. This task will likely be performed jointly through contracted labor and District staff involvement.

Site/Trail Design/Permitting and Implementation: Prepare design and permit documents for proposed site trail improvements and complete as funds are available.

Interpretive Program Implementation: Develop interpretive signage content including educational signage, kiosks, wayfinding, etc. and have produced and delivered from vendors and installed on site as funds are available.

FY '22-'23

Continue Vegetation Management and Enhancement Plan Tasks: Continue vegetation management and enhancement plan tasks as outlined in the VMEP. This task will likely be performed jointly through contracted labor and District staff involvement.

Parking/Universal Access Improvement Design/Permit/Implement: Prepare design and permit documents for proposed site parking and universal access improvements as funds are available.

FY '23-'24

Continue Vegetation Management and Enhancement Plan Tasks: Continue vegetation management and enhancement plan tasks as outlined in the VMEP. This task will likely be performed jointly through contracted labor and District staff involvement.

Digital Media Outreach Program Design: This would include exploration of using QR codes, drone video footage, and other ways to reach all generations of potential site users, and to provide visual access to the homebound as funds are available.

Table 1. Compiled Historic Plant Inventories.

DATE: 1/29/2018

Sands Main St Prairie

Cary, McHenry County, Illinois

NOTE:

This site was originally documented and assessed using the nomenclature and the original coefficients of conservatism and floristic quality method in Swink and Wilhelm (1979) 3rd edition of Plants of the Chicago Region. Nomenclature used for many of these prairie species has changed over the intervening years, with significant changes in the most recent Flora of the Chicago Region, Wilhelm and Rericha (2017). Adjustments were also made to the individual species coefficients of conservatism. Table 1 presents this compiled list of plant species from multiple historic sources, attempting to show current nomenclature and older synonyms with their current floristic quality information.

Conservatism-Based Metrics:

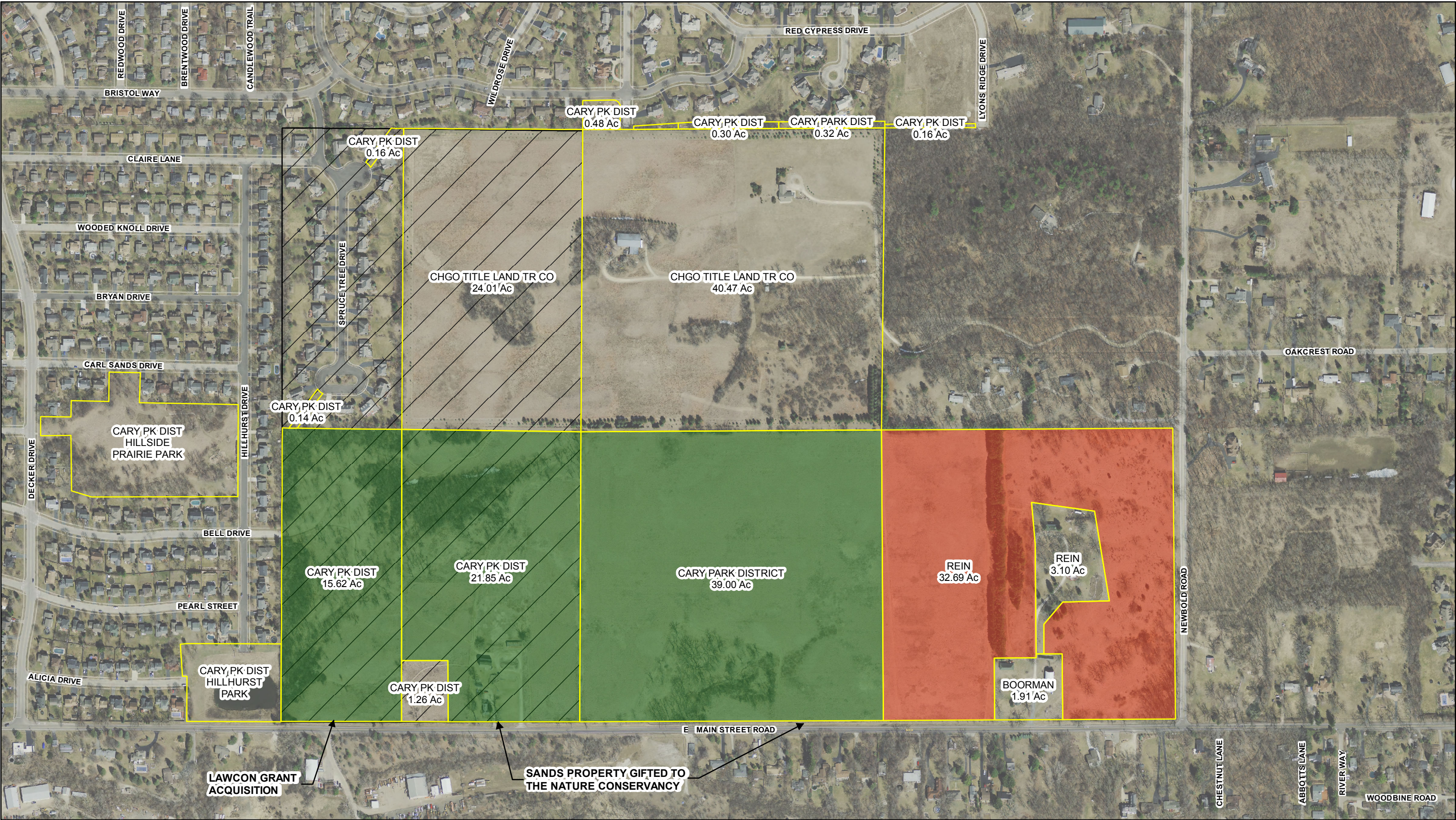
Total Mean C:	5.8	
Native Mean C:	5.9	
Total FQI:	57.7	
Native FQI:	58.1	
Total Species:	99	
Native Species:	97	98%
Non-native Species:	2	2%
Mean Wetness:	1.4	
Native Mean Wetness:	1.4	



Species:

Scientific Name	Older Synonym	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Ambrosia artemisiifolia		AMBART	native	0	1	forb	annual	common ragweed
Amorpha canescens		AMOCAN	native	10	2	shrub	perennial	lead plant
Andropogon gerardii		ANDGER	native	5	0	grass	perennial	big bluestem
Anemone cylindrica		ANECYL	native	8	2	forb	perennial	thimbleweed
Antennaria neglecta		ANTNEG	native	3	2	forb	perennial	woolly cats foot
Antennaria plantaginifolia		ANTPLA	native	4	2	forb	perennial	pussytoes
Apocynum sibiricum		APOSIS	native	2	0	forb	perennial	smooth indian hemp
Artemisia campestris subsp. caudata		ARTCAC	native	5	2	forb	biennial	beach wormwood
Asclepias verticillata		ASCVER	native	1	2	forb	perennial	whorled milkweed
Asclepias viridiflora		ASCVIR	native	10	2	forb	perennial	short green milkweed
Bouteloua curtipendula		BOUCUR	native	8	2	grass	perennial	side-oats grama
Brickellia eupatorioides var. corymbulosa	Kuhnia eupatoriodes	BRIEUC	native	6	2	forb	perennial	false boneset
Carex meadii		CXMEAD	native	10	2	sedge	perennial	meads stiff sedge
Carex richardsonii		CXRICH	native	10	2	sedge	perennial	prairie tussock sedge
Cirsium discolor		CIRDIS	native	3	1	forb	biennial	pasture thistle
Cirsium hillii		CIRHIL	native	10	2	forb	perennial	hills thistle
Comandra umbellata	Comandra richardsiana	COMUMB	native	9	1	forb	perennial	false toadflax
Cornus racemosa		CORRAC	native	1	0	shrub	perennial	gray dogwood
Crataegus mollis		CRAMOL	native	2	0	tree	perennial	downy hawthorn
Cuscuta pentagona		CUSPEN	native	10	2	forb	annual	prairie dodder
Dalea purpurea		DALPUR	native	9	2	forb	perennial	purple prairie clover
Desmodium illinoense		DESILE	native	9	2	forb	perennial	illinois ticktrefoil
Dichanthelium leibergii	Panicum leibergii	DICLEI	native	10	2	grass	perennial	prairie panic grass
Dichanthelium scribnerianum	Panicum scribnerarium	DICSCR	native	4	1	grass	perennial	scribners panic grass
Dodecatheon meadia		DODMEA	native	6	1	forb	perennial	shooting star
Draba reptans		DRAREP	native	4	2	forb	annual	common whitlow cress
Dryocallis arguta	Potentilla arguta	DRYARG	native	10	1	forb	perennial	prairie cinquefoil
Equisetum arvense		EQUARV	native	0	0	fern	perennial	horsetail
Eragrostis spectabilis		ERASPE	native	3	2	grass	perennial	purple love grass
Erigeron strigosus		ERISTR	native	5	2	forb	biennial	daisy fleabane
Euphorbia corollata		EUPCOR	native	4	2	forb	perennial	flowering spurge
Fraxinus pennsylvanica		FRAPEN	native	4	-1	tree	perennial	red ash
Galium triflorum		GALTRL	native	5	1	forb	perennial	sweet-scented bedstraw
Gaura biennis		GAUBIE	non-native	0	2	forb	biennial	biennial gaura
Gentiana puberulenta		GENPUB	native	10	2	forb	perennial	prairie gentian
Geum laciniatum		GEULAC	native	3	-1	forb	perennial	rough avens
Geum triflorum		GEUTRI	native	10	1	forb	perennial	prairie smoke
Helianthus occidentalis		HELOCC	native	10	2	forb	perennial	western sunflower
Helianthus x laetiflorus		HELLAE	native	5	1	forb	perennial	hybrid stiff sunflower
Hesperostipa spartea	Stipa spartea	HESSPA	native	8	1	grass	perennial	porcupine grass

Scientific Name	Older Synonym	Acronym	Nativity	C	W	Physiognomy	Duration	Common Name
Heuchera richardsonii		HEURIC	native	10	1	forb	perennial	prairie alum root
Hypoxis hirsuta		HYPHIR	native	8	0	forb	perennial	yellow star grass
Ionactis linariifolia	Aster linariifolius	IONLIN	native	10	2	forb	perennial	flax-leaved aster
Koeleria macrantha	Koeleria cristata	KOEMAC	native	8	2	grass	perennial	june grass
Lactuca canadensis		LACCAN	native	1	1	forb	biennial	wild lettuce
Lespedeza capitata		LESCAP	native	4	2	forb	perennial	round-headed bush clover
Liatris aspera		LIAASA	native	8	2	forb	perennial	rough blazing star
Liatris cylindracea		LIACYL	native	10	2	forb	perennial	cylindrical blazing star
Liatris pycnostachya		LIAPYC	native	8	-1	forb	perennial	prairie gay feather
Linum sulcatum		LINSUL	native	10	2	forb	annual	grooved yellow flax
Liparis liliifolia		LIPLIL	native	4	1	forb	perennial	purple twayblade
Liparis loeselii		LIPLOE	native	4	-1	forb	perennial	green twayblade
Lithospermum canescens		LITCAN	native	8	2	forb	perennial	hoary puccoon
Lithospermum incisum		LITINC	native	10	2	forb	perennial	fringed puccoon
Lobelia spicata		LOBSPS	native	4	2	forb	perennial	pale-spiked lobelia
Malus ioensis	Pyrus ioensis	MALIOE	native	4	2	tree	perennial	iowa crab apple
Minuartia michauxii	Areneria stricta	MINMIC	native	10	2	forb	perennial	stiff sandwort
Monarda fistulosa		MONFIS	native	4	1	forb	perennial	wild bergamot
Oligoneuron album	Aster ptarmicoides	OLIALB	native	10	1	forb	perennial	stiff aster
Oligoneuron rigidum	Solidago rigida	OLIRIG	native	3	1	forb	perennial	stiff goldenrod
Orobanche uniflora		OROUNI	native	5	2	forb	perennial	one-flowered broomrape
Oxalis violacea		OXAVIO	native	8	2	forb	perennial	violet wood sorrel
Packera paupercula	Senecio pauperculus	PACPPA	native	4	0	forb	perennial	balsam ragwort
Penstemon hirsutus		PENHIR	native	9	2	forb	perennial	hairy beard tongue
Physalis heterophylla		PHYHET	native	3	2	forb	perennial	clammy ground cherry
Physalis virginiana		PHYVIG	native	4	2	forb	perennial	prairie ground cherry
Poa compressa		POACOM	non-native	0	1	grass	perennial	canada bluegrass
Polygala polygama var. obtusata		POLPOO	native	9	2	forb	biennial	purple milkwort
Prunus serotina		PRUSER	native	0	1	tree	perennial	wild black cherry
Quercus alba		QUEALB	native	5	1	tree	perennial	white oak
Quercus macrocarpa		QUEMAC	native	5	1	tree	perennial	bur oak
Ranunculus rhomboideus		RANRHO	native	10	2	forb	perennial	prairie buttercup
Ratibida pinnata		RATPIN	native	4	2	forb	perennial	yellow coneflower
Rhus glabra		RHUGLA	native	1	2	shrub	perennial	smooth sumac
Rosa carolina		ROSCAC	native	5	1	shrub	perennial	pasture rose
Rubus occidentalis		RUBOCC	native	0	1	shrub	perennial	black raspberry
Rudbeckia hirta		RUDHIH	native	1	1	forb	perennial	black-eyed susan
Schizachyrium scoparium	Andropogon scoparius	SCHSCO	native	5	1	grass	perennial	little bluestem
Scrophularia lanceolata		SCRLAN	native	4	2	forb	perennial	early figwort
Scutellaria parvula		SCUPAR	native	8	2	forb	perennial	small skullcap
Sisyrinchium albidum		SISALB	native	6	1	forb	perennial	common blue-eyed grass
Solidago altissima		SOLALT	native	1	1	forb	perennial	tall goldenrod
Solidago decemflora	Solidago nemoralis	SOLDEC	native	6	2	forb	perennial	gray goldenrod
Solidago missouriensis		SOLMIS	native	9	2	forb	perennial	missouri goldenrod
Solidago speciosa		SOLSPE	native	8	2	forb	perennial	showy goldenrod
Sorghastrum nutans		SORNUT	native	5	1	grass	perennial	indian grass
Spiranthes lacera		SPILAL	native	5	2	forb	perennial	northern slender ladys tress
Spiranthes magnicamporum		SPIMAG	native	8	1	forb	perennial	great plains ladys tresses
Sporobolus heterolepis		SPOHET	native	10	1	grass	perennial	prairie dropseed
Symphyotrichum ericoides	Aster ericoides	SYMERI	native	6	1	forb	perennial	heath aster
Symphyotrichum oblongifolium	Aster oblongifolius	SYMOBL	native	9	2	forb	perennial	aromatic aster
Symphyotrichum oolentangiense	Aster azureus	SYMOOL	native	8	2	forb	perennial	sky-blue aster
Symphyotrichum pilosum	Aster pilosus	SYMPIM	native	0	0	forb	perennial	hairy aster
Tradescantia ohiensis		TRAOHI	native	3	1	forb	perennial	common spiderwort
Verbena stricta		VERSTR	native	4	2	forb	perennial	hoary vervain
Viola pedata var. lineariloba		VIOPEL	native	9	2	forb	perennial	birds foot violet
Viola pedatifida		VIOPEA	native	9	1	forb	perennial	prairie violet
Viola sagittata		VIOSAG	native	5	0	forb	perennial	arrow-leaved violet
Vitis riparia		VITRIR	native	1	0	vine	perennial	riverbank grape



Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:

0 400 Feet

Project Number: 17-0264

Orientation:



Date: 3/23/2018

Legend:

- Carl and Claire Marie Sands/Main Street Prairie Nature Preserve: Cary Park District Owned 76.47 Ac
- Carl and Claire Marie Sands/Main Street Prairie Nature Preserve Addition: Privately Owned 32.69 Ac

Parcel Boundaries

Approximate Reiger Farm Extent

Project Name:

Sands Main Street Prairie

Prepared For:

Cary Park District

Information about exhibit:

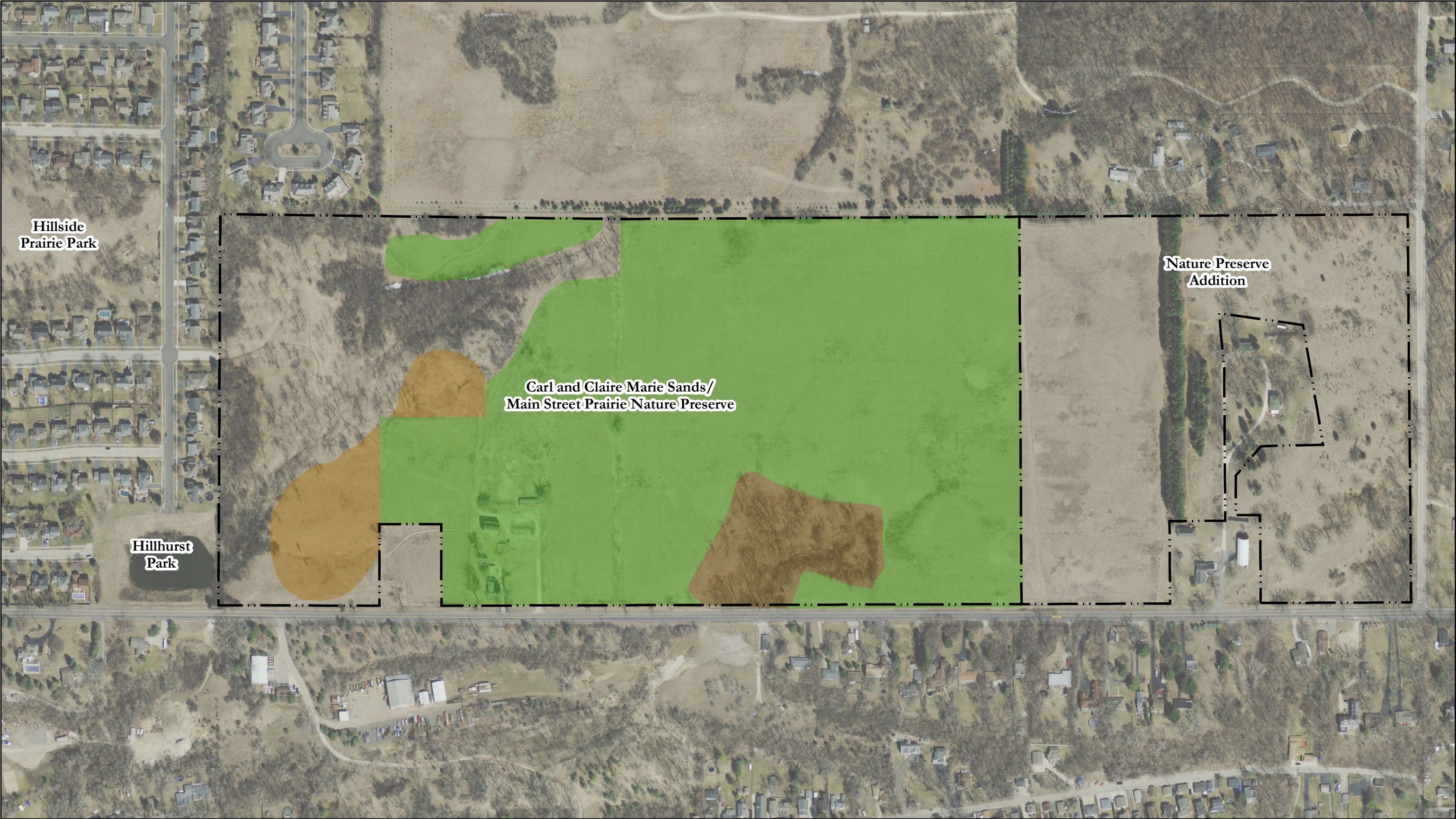
2013 Aerial

Exhibit Title:

Site History

Exhibit:

1



Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:

0 300
Feet

Project Number: 17-0264

Orientation:



Date: 3/20/2018

Legend:

- Parcel Boundaries
- Approximate Prairie Remnant and Archeological Site 4.66 Ac
- Approximate Savanna Remnant 4.37 Ac

Re-created Prairie 50.50 Ac

Project Name:

Sands Main Street Prairie

Prepared For:

Cary Park District

Information about exhibit:

2013 Aerial

Exhibit Title:

Site Natural History

Exhibit:

2

Sands Main Street Prairie

"This large restoration, begun by the owners in 1986 is made possible thanks to the generous donation of land by Claire Marie and Carl Sands. Their vision was to see the farm fields returned to the original native flora and fauna."

1. Not wanting to see their land developed, the Sands planted warm season **grasses**. Continuing the restoration, volunteers are re-introducing native wildflowers. The epicenter for this part of the project is the area just north of the path as you enter the prairie. In this area where grass seed was hand broadcast, the native wildflowers will have a greater chance to establish themselves, competition with the grasses will be much less.

2. **Main Street Prairie** is one of the finest examples of a dry gravel hill prairie in the state of Illinois, a true remnant of pre-settlement landscape. This prairie was spared the farmers plow by its sloping terrain and its dry gravel nature. Instead it served as pasture for cows and horses until the late 40's.

"...it was just grass and wildflowers... pussy toes, shooting stars and prairie smoke..." Jo Miller recalls. Her grandparents, the Riegers owned the land from 1904 until 1964.

Just past the hand carved wooden sign, south of the path, you enter an area filled with plants referred to as pioneers. Pioneers move into an area quickly after it has been disturbed, holding the soil, keeping the area open so that in time higher quality plants, referred to as conservatives, can establish themselves.

3. The trail now opens into the very **high quality prairie**. Take some time to drink in the rich colors and textures of the wildflowers and grasses. Leadplant, blooming in June, with brilliant lavender and orange flowers and fine silvery gray foliage, is one of three species of woody shrubs adapted to the fire, wind and drought resistant community of the prairie. It can be found growing profusely along the trail. Later in the fall, Indian grass and big blue stem wave gently at shoulder height, while little blue stem dances gracefully around your knees.

Further along you come to the edge of a large **depression**. In 1917 this bowl was excavated for fill when the Old Village Hall was built in downtown Cary. When restoration began here in the early 80's, this depression was barren, having been further destroyed by erosion caused by Off

Road Vehicle's. Fencing, brushcutting, prescribed burns, elimination of ORV's and windblown seed from the surrounding high quality prairie have returned this depression to health.

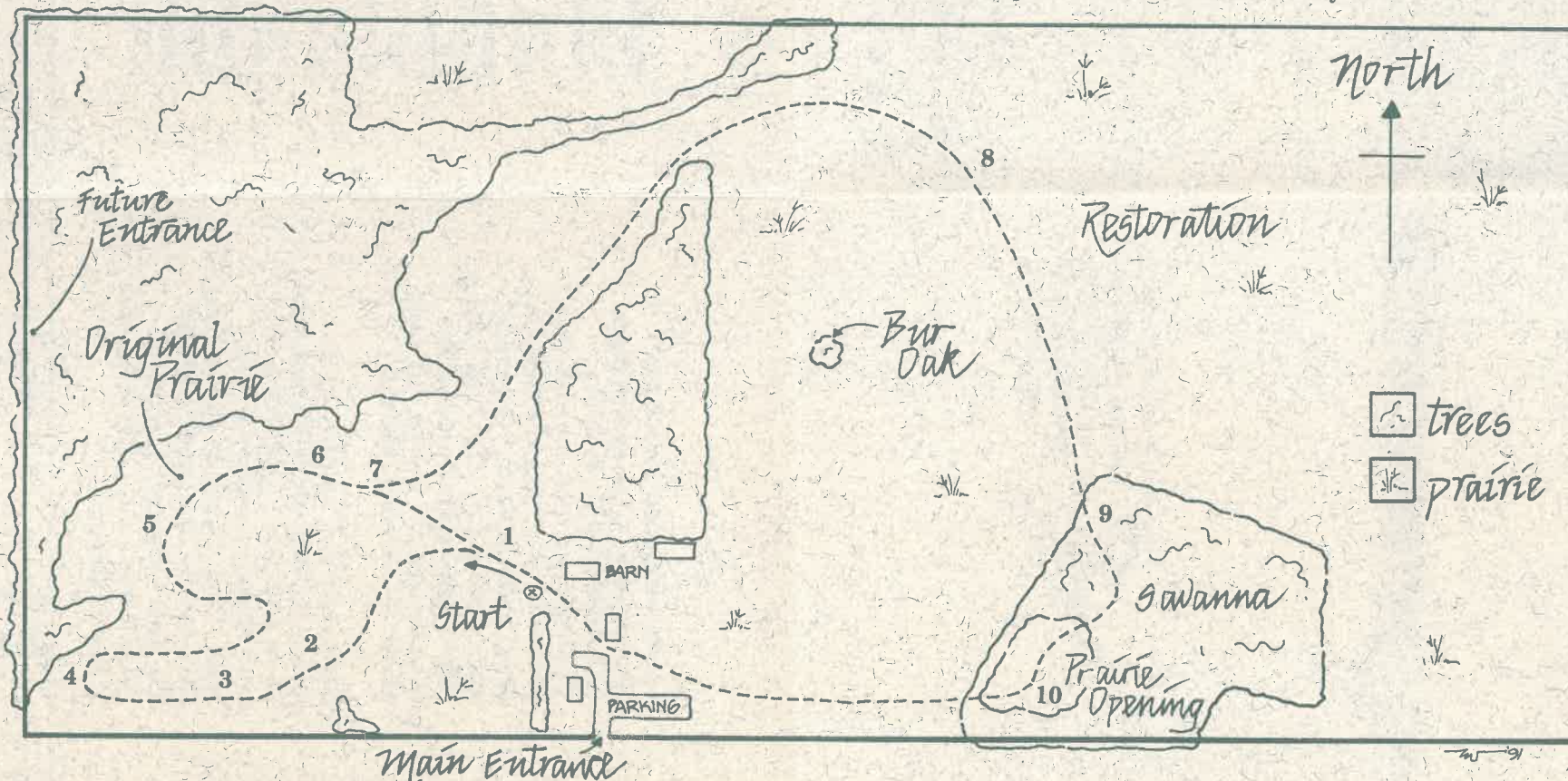
4. In 1990 an **Insect Survey** began. Three goals were established:

- 1) To gather baseline information and build a teaching collection.
- 2) To establish specific prairie plant-insect relationships.
- 3) To establish a butterfly monitoring program. Using simple techniques small groups of volunteers began collecting information and specimens. Certain insects are dependent upon specific plants for food and habitat and cannot survive beyond their refuge. To understand how best to serve and protect these creatures, it first must know who's there and what they require. The teaching collection will enable those visiting the prairie to become familiar with its insect inhabitants, and which part of the prairie they claim as their own.

5. **Shooting stars**. In late spring people travel from all over the state to see the shooting stars along with the hoary puccoon, birdsfoot and prairie violets, prairie smoke and violet wood sorrel.



As you look up the hill, notice that the grasses grow in clumps. The sand and gravel, which these hills are made of, is clearly visible around the plants. Water runs off very quickly, hence the name, dry gravel hill prairie. Roots of many of these plants extend deeply down into the earth, enabling the plants to collect as much water as possible. These plants have evolved specifically to survive and thrive under these harsh, dry conditions. Weeds, non-native plants, are few, conditions are much too severe for them. The dominant grass on a dry gravel hill prairie is little blue stem, which all winter keeps the hills alive with its rusty hue.



6. **Bluebird houses**. If you're lucky you'll catch a glimpse of a beautiful sky blue bird, the bluebird. Their habitat was all but destroyed, preferring big old trees with holes in which to make their nests. But introduction of man-made houses has brought them back from the brink of extinction. Respect them by maintaining a distance. Stand very still and perhaps you'll see them in the branches of nearby trees. They like their homes orientated to open fields so they can survey their world. You're also likely to see the kingbird with its white tipped tail along with yellow shafted flickers, with bright yellow under wings and a white rump.

7. The back eight acres were once as open as the front eight. To provide shade for livestock, boxelder trees were planted along the back. Existing patches of prairie continue to be opened up by volunteers: prescribed burns, brushcutting, seed planting and weed control.

You'll be re-entering the restoration area. After being in the high quality prairie, you should now be able to distinguish the prevalence of grasses. Re-introduction of the native forbs, collected from all around the Cary area will be an ongoing job.

At this point, having completed **the short loop**, you may wish to return to the farm. Continue on to experience what the sweeping vistas of the pre-settlement landscape were like. You won't be disappointed.

8. A **lone bur oak** stands patiently over this beautiful sweeping landscape. With its thick corky fire resistant bark, it is a distinctive feature of the prairie. A different matrix of wildflowers will be found growing under its sheltering branches.

The highest vantage point on the prairie is your next stop. Standing here, one can imagine the landscape that greeted the first settlers mile after mile. Oak groves, islands in an ocean of endless grassland, drew the settlers in with the comfort of their leafy canopies and their sheltering branches. After the vastness of the prairies, these groves were reminiscent of the forested lands from which the settlers came. The farm house which stands at the Sands Main Street Prairie entrance originally started out as two homes, each occupying one of the two oak groves to the north. That land is private property, please respect their ownership.

These large open grasslands have provided habitat for birds, previously unseen in this area. Vesper, grasshopper and savanna sparrows have returned, along with sedge wrens. We hope for the return of more grassland birds.

9. You'll now be entering the **savanna**. Over two dozen majestic oaks populate this woodland, along with a number of deer. Hawks, who prefer long vantage points, make their home along its edges. Many woodland grasses and wildflowers can be found beneath the oaks sheltering branches.

10. **Prairie opening**. When restoration work began in 1989, this opening was approximately 20' across. Small numbers of spindly light starved native plants were only just clinging to existence. Several years of controlled burns, combined with brushcutting have allowed light to reach these sun-loving plants and this area has exploded in size and in health. The existing seed bank gave rise to the native grasses and wildflowers you see here. It is said that the memory is in the soil. Here indeed it was.

