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Glenview, IL 60025  
December 31, 2018

Larry Suffredin, Commissioner  
Forest Preserves of Cook County  
Suite 192  
820 Davis Street  
Evanston, IL 60201

Dear Larry,

We have enclosed brief updates on 2018 restoration activities in Miami and St Paul Woods for your information. We have two purposes in sending them to you. First, we are proud of the work being done in our sites, but just as importantly we want to offer these reports as examples of the magnitude of work being done by thousands of volunteers throughout Cook County.

The past year has been a busy one, especially in St Paul where we have focused a lot of effort. As noted in the Miami update, we have scaled down our group workdays there as we have virtually eliminated the buckthorn and honeysuckle brush that has absorbed much of our energy during the past 18 years. (414 workdays involving 10,033 volunteer visits and 27,546 contributed work hours.) The Miami cover photo shows the recovery seen by the many users of the bike path.

In contrast, we have increased our efforts in St Paul Woods where we began working in the north half in 2011. During the past 8 years there have been 122 workdays involving 2,132 volunteer work visits and 4,951 work hours. We have now removed most of the brush from the north half and are concentrating on rescuing the ancient oaks from fire sensitive trees that grew in during the past 80 or so years during the absence of natural fires. The cover photo for St Paul shows arborists participating in a contest held this year among the newly revealed ancient oaks.

On behalf of the North Branch Restoration Project and ourselves as site Stewards, we thank you for your support.



Kent and Jerry Fuller  
Volunteer Stewards  
North Branch Restoration Project

## **St Paul Woods Ecological Restoration 2018 Update**



**Arborist Competition Attracted By Ancient Oaks in Unit WO02**

**Kent Fuller, Volunteer Steward  
December 2018**



# St Paul Woods North Ecological Restoration

## December 2018 Update

Management of St Paul Woods is divided into three zones. This report focuses primarily in the Northern zone. The northern zone consists of the northern half of the Preserve which extends from Dempster Street on the north to an imaginary line where Main Street would be located if it was to be extended through the Preserve. This zone is being restored by the North Branch Restoration Project led by site steward Kent Fuller. The southeastern zone lies south of the Main Street line and is generally on the east side of the Forest Preserve Drive. It is also being restored by the North Branch Restoration Project led by site steward Chris Parson. The southwest zone is generally between the Forest Preserve drive and the river south of the Main Street line, and is being managed by Forest Preserve staff.

### Restoration of St Paul North During 2018

The northern zone includes management units WO01, WO02, FO01 and the northern 30% of FO01. During 2018 there were 21 workdays with 278 volunteer visits and 717 hours of donated work. In addition, the steward worked on 10 days applying foliar spray for a total of about 30 hours.

During 2018 group work was concentrated in the "St Paul Cathedral" portion of Management unit WO02 south of shelters 1 and 2. The 'Cathedral' area covers most of the central 2/3 of WO02 and contains many very large oaks, probably more than 200 years old. The oaks have been heavily invaded by fire sensitive trees, primarily basswoods of about 70 years of age which have resulted in dense shade which impoverished herbaceous vegetation and prevented oak reproduction. The North Branch Wednesday Woodchoppers spent 17 workdays rescuing oaks and working toward the western edge of the management unit. Chicago City Day School students also worked at the western edge completing brush removal and thinning fire sensitive trees to provide approximately 20% direct sunlight on the ground.

The woodchoppers finished the season by spending 4 workdays in the eastern edge of unit WO01 along Lincoln Street thinning the dense population of maples in that area. Throughout north St Paul the steward sprayed herbaceous invasive species, primarily Canada thistle, phragmites, reed canary grass, and celandine buttercup. A FPD contractor provided one round of spraying for the buttercup which was very helpful.

### St Paul 2018 activity

Group	Days	Volunteer Visits	Hours Contributed
Chicago City Day Sch.	6	154	237
NB Woodchoppers	15	124	480
Total Groups	21	278	717
Stewards	10	10	30
Total All	31	288	747

### St Paul 2011 – 2018 Total Group Workdays

Year	Days	Volunteer Visits	Hours Contributed
2011 - 2017	101	1854	4204
2018	21	278	717
Total	122	2132	4951

St Paul is located in the Village of Morton Grove between Oakton and Dempster Streets east of the river. It covers a total of 137 acres with 102 acres of natural area and 35 acres of picnic groves and related driveway and parking. The four picnic groves accommodate large gatherings

### **The State of St Paul North**

St Paul mirrors Miami Woods across the river to the west and shares many of the same challenges which are discussed in the report *Miami Woods & Prairie: 40 years of Volunteer restoration 1977-2017* which is available on the North Branch website at northbranchrestoration.org. That report reviewed conditions base on six major restoration factors which are used here.

#### Invasive Species

##### a) Brush

Invasive brush consisting primarily of common buckthorn, had spread throughout St Paul woods by 2011 when restoration started in the northern zone. Since then it has been removed from virtually all of management unit WO01, and from about 80% of WO02 which includes the ancient Oaks area. In general, brush has been removed from about 90% of the natural areas within North St Paul North.

##### b) Garlic mustard

Garlic mustard is not being managed within St Paul North. It is far less of a problem than in Miami Woods, but it may require attention as recovery progresses.

##### c) Other Herbaceous Invasive Species

Other herbaceous invasive species include reed canary grass, thistles, phragmites (common reed), tansy, lesser celandine buttercup and buckthorn seedlings. Management consists of foliar spraying by the steward together with help from a Forest Preserve contractor in the case of LCBC. In general, herbaceous invasive species have been reduced to a nuisance level with two exceptions. There are large amounts of reed canary grass in the floodplain portions of management unit FO01 south of shelter #1. Lesser celandine buttercup blankets portions of the floodplain south of shelter #2 and continues to spread with the exception of areas being treated with herbicide .

#### Excess Shade

Initial thinning of fire-sensitive tree species has been completed in about 80% of the northern zone with brush removal and thinning continuing in the eastern end of unit WO02 and along Lincoln Avenue as described above.

#### Fire

Controlled burning came to portions of management units WO01, and FO01 in 2016 and continues in those units. Unit WO02 has yet to be burned.

#### Hydrology

Hydrology is not a major issue in St Paul North with one notable exception during 2018. Two large water mains are located under the southern edge of unit WO02 and extend to the west and under river. They provide the majority of water used by the Village of Morton Grove. Late in 2018 a leak was discovered and repaired. It had apparently been flowing for many months, saturating several acres and supporting a population of duckweed. The plant is not a



problem, but indicated that water had been standing for a long time. The impact on the old oaks remains to be seen.

### Seed

Seed is not gathered from St Paul because it has few desirable species and small quantities of desired seed. Hopefully this will change during recovery.

### Animal Management

Plant species preferred by deer are absent from St Paul. Data are scarce, but information gathered by North Branch interns in the 1980s showed that some high quality species were present. None have been observed in recent years. As in Miami Woods, the population of deer is excessive and severely limiting ecological recovery.

### **St Paul Southeast**

During 2018 there was a pause in work due to the retirement of a key teacher from the Chicago public School System's Hawthorn School. Future prospects are uncertain, but work is being planned for 2019.

### **St Paul Southwest**

Several years ago a Forest Preserve contractor cleared brush and many canopy trees from much of the upland portion of the zone. The clearing is part of a Forest Preserve experiment or demonstration project which involves intense thinning of fire sensitive trees. Canopy cover has been further reduced in the area by the death of virtually all ash trees, leaving savanna-like shade conditions. Monitoring results are not available at this time.

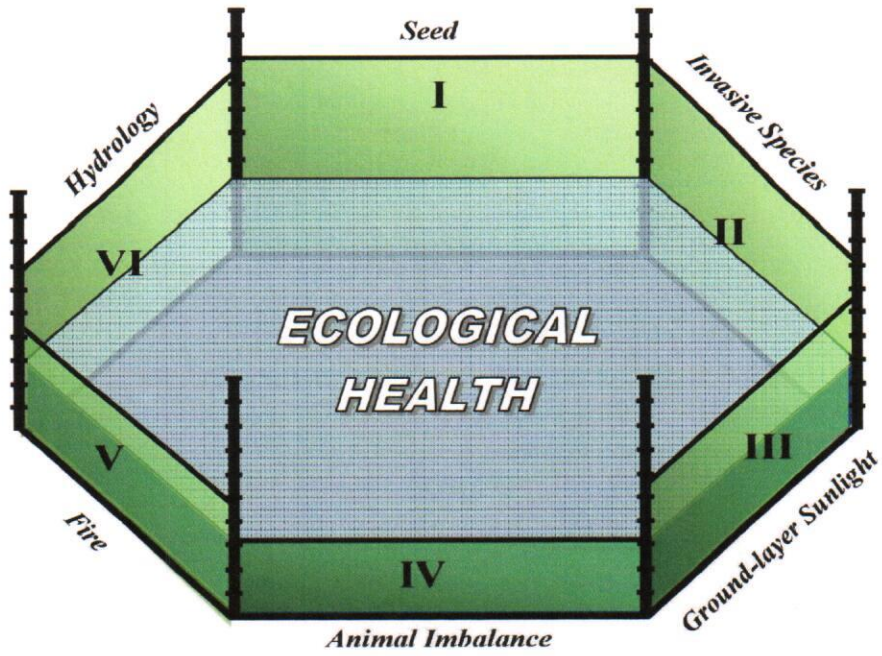
### **Summary**

In St Paul North, steady progress is being made in removing invasive brush and thinning fire-sensitive trees. The most notable achievement was completion of the three year effort thinning large basswoods from the St Paul Cathedra area in the northern half of management unit W002. Restoration in the Southeast area paused during 2018. The status of the Southwest area is uncertain, but further thinning is scheduled during the winter of 2019.

# Miami Woods

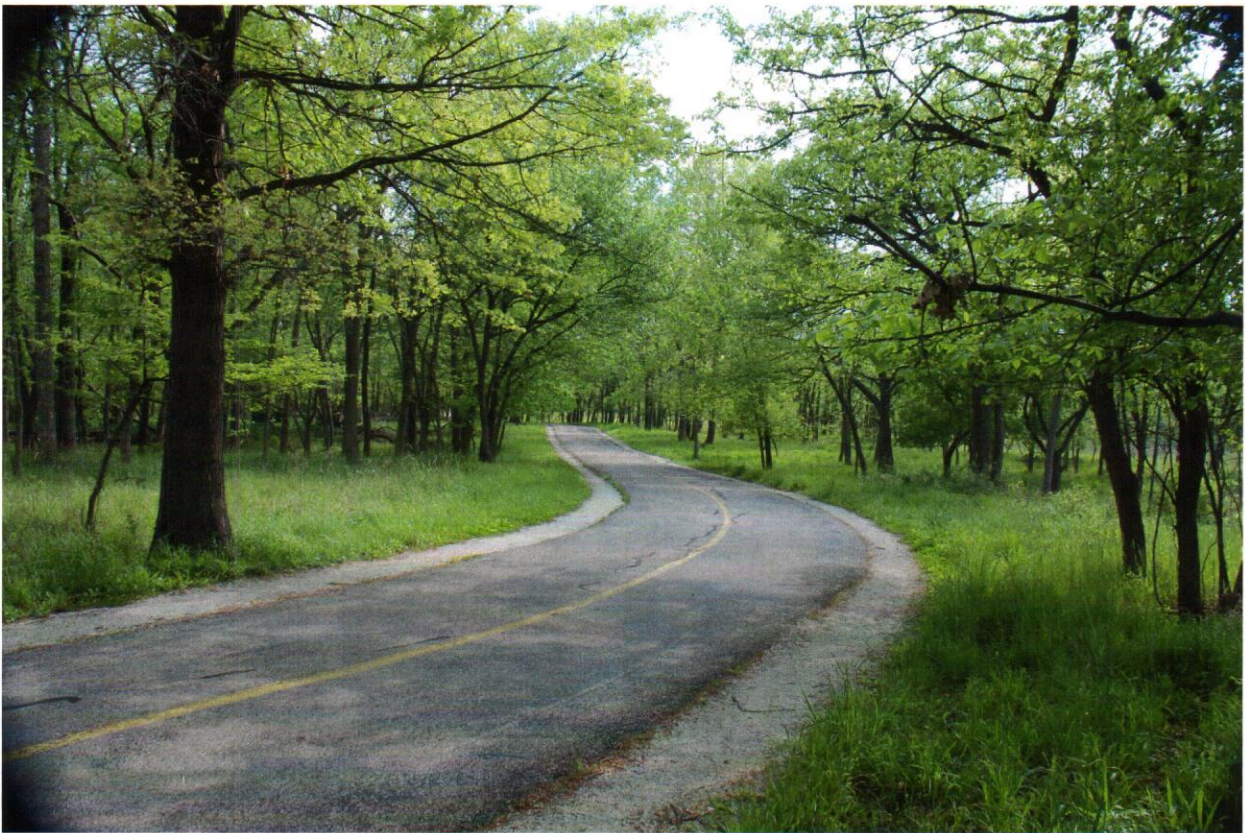






**Ecological Quality Container & Limiting Habitat Factors**  
(The most deficient factor limits the level of ecological quality)

# **Miami Woods & Prairie Ecological Restoration 2018 Update**



**Formerly clogged with buckthorn, the woods are recovering**

**Kent & Jerry Fuller  
Volunteer Stewards  
December 2018**



# Miami Woods & Prairie 2018 Update

As a whole, Miami Woods and Prairie continue to reflect the massive volunteer investment of visits and contributed hours from 2000 through 2017. This, together with work during 2018 has resulted in removal of virtually all invasive brush and thinning fire sensitive native trees to provide sunlight to support herbaceous plants and tree reproduction.

During 2018 the focus remained on: continuing control of herbaceous invasive species, control of woody re-sprouts and seedlings; and removal of the last remaining buckthorn. Spraying of herbaceous invasives involved 15 steward visits and 50 hours. Control of woody re-sprouts was conducted primarily by the Friends of the Forest Preserves crew which provided 192 hours during 5 days. Brush removal was by the North Branch Volunteers and Wright College. The North Branch Volunteers worked on 5 days involving 18 volunteer visits and 76 hours. Wright College worked on two days involving 73 visits and 257 hours. Activity in Miami during 2018 has been modest compared to previous years.

## 2018 Activity

Groups	Workdays	Volunteer Visits	Hours Contributed
Wright College	*	50	150
North Branch Vols	5	46	167
Chi City Day School	1	20	42
Total Group	6	112	359
Stewards Herbicide	15	15	50
Stewards Other	9	16	51
Total Volunteers	30	142	460

\*Wright College days combined with 2 North Branch workdays

## 2000 – 2018 Activity\*\*

Groups	Workdays	Volunteer Visits	Hours Contributed
2000 - 2017	408	9921	27546
2018	6	112	359
2000 - 2018	414	10033	27905

\*\*Does not include Wednesday seed pickers or data for stewards working independent of groups

Traveling along the North Branch bike path through the Preserve, the woods provides a pleasant scene of dappled sunlight and a carpet of green consisting of grasses, sedges, and broad leafed plants. At the midpoint the prairie provides an open expanse of plants that bloom at various times throughout the growing season.

For a long term report on restoration efforts and conditions in the Preserve readers are encouraged to review the report *Miami Woods & Prairie: 40 Years of Volunteer Restoration 1977-2017* available on the North Branch website at [northbranchrestoration.org](http://northbranchrestoration.org). As described in that report, much progress has been made, especially in controlling invasive species, returning direct sunlight to the ground-layer. As a result of brush removal and reintroduction of North Branch seed mixes, the cleared areas are much improved. Unfortunately the unmanaged deer herd is preventing full ecological recovery and some conditions have deteriorated since early stages of restoration as the deer population increased.

As described in the 40 Year Report, our restoration efforts have focused on six aspects. Progress in each during 2018 is shown as follows.



## Invasive Species

### a.) Brush

Invasive brush consisting primarily of buckthorn and honeysuckle has consumed the majority of volunteer efforts. As a result brush has been reduced to less than 1 acre left as a sight and sound buffer between the picnic grove and the intersection of Caldwell Avenue and Oakton Street.

During 2018 the North branch volunteers including the Wednesday Woodchoppers removed the remaining brush from the northern portion of Miami located near Dempster Street and the AT&T building. In the southern portion students and friends of Wright College finished removing brush except for the remaining buffer at the intersection of Caldwell and Oakton.

The last Wright College workday concluded a series that began in 2006 and included a total of 54 workdays, 2,279 volunteer visits and 7,850 donated hours of work. All were led by Professor Kurt Leslie who retired in the spring of 2018. We are deeply grateful to Professor Leslie for his energetic leadership and lasting benefit to Miami Woods.

### b.) Garlic Mustard

Garlic mustard was widespread and thick when hand pulling resumed in 2000. As a result of hundreds of hours of pulling, it is now scarce. During the spring of 2018 students from the Chicago City Day school combined trash pickup with pulling scattered plants during two workdays. At other times the stewards and North Branch volunteers gleaned scattered plants.

### c.) Other Herbaceous invasive species

These are discussed in greater depth in the 40 year report. During 2018 control was maintained by foliar spraying by the site stewards. Spraying was conducted on 15 days for about 50 hours. With the exception of the increasing population of celandine buttercup, herbaceous invasives including reed canary grass, phragmites, teasel, and Canada thistles have been reduced to nuisance levels. However, long term continuing effort will be required, including developing an effective strategy for controlling celandine. During 2018 an outbreak of phragmites appeared in the flood detention basin in the adjacent Trafalger condo development. The stewards are working with officials of the Village of Morton Grove to ensure control.

## Excess Shade

During the long absence of fire from Miami Woods during the agricultural period and early days of the Forest Preserve District ownership, fire sensitive trees proliferated and darkened the open oak woods that had long existed due to prairie fires. Excess shade has been reduced through brush removal and initial thinning working toward a goal of 20% direct sunlight on the ground. During 2018 thinning was conducted together with brush cutting and is reported together with brush cutting. Continued thinning will be necessary to manage the continuing growth of fire sensitive trees.

## Fire

Fire is an important aspect of managing invasive species and excessive shade due to the abundance of fire sensitive trees. During the spring of 2018 the Forest Preserve District contractors burned several woodland units east of the bike path (WO11, WO12, & WO13) and the prairie east of the bike path (PR02 & PR03). The increased frequency of controlled burns during recent years has accelerated ecological restoration, but spring burning of the prairie has been a mixed blessing as it has increased the abundance of Indian grass to the point that it is suppressing other native plants. Hopefully shifting prairie burns to the fall season will return a better balance between grasses and forbs.



## Hydrology

During 2018 hydrology remained unchanged although prospects for obtaining the needed assessment of agricultural tiles in the prairie improved a bit with the need being recognized in the new 2018-19 management schedule. The possibility of ephemeral pond restoration remains uncertain.

## Seed

### a.) Seed Gathering

During 2018 seed was gathered from Miami Woods on five days by the North Branch Wednesday seed pickers who contributed 120 hours and gathered seed from 63 different species: sedges, grasses, rushes, and forbs. Also two regular workdays were devoted to gathering seeds which involved 22 volunteer visits and 48 hours of donated effort.

### b.) Seed Sowing

The stewards received and planted the Miami allotment of seeds from the North Branch mixes of local source native seeds. The highest quality mix is no longer sown in Miami due to the excessive browsing of deer.

## Animal Management

As discussed in the 40 year report, the unmanaged and excessive deer population is a severe limiting factor on the ecological restoration of Miami Woods and Prairie. During 2018 nothing is known to have changed with respect to direct management.

However, to mitigate some of the damage being done to vegetation by deer, work continued during 2018 to maintain and improve the many deer exclosures and cages which are protecting some areas from excess browsing. The exclosures consist of 3 large exclosures of approximately 3,000 square feet and nearly 100 smaller exclosures and cages. The exclosures are a joint effort with Audubon Chicago Region as described in the 40 Year Report.

## In summary:

Control of invasive species progressed as brush removal reached virtual completion with the result that both brush and other herbaceous invasive species are at a nuisance level which can be managed through continuing maintenance;

Initial thinning of woodland fire-sensitive trees neared attainment of the 20% ground-layer sunlight objective, but will require continued work;

Controlled burns continued to meet objectives, but prairie burns need to be shifted from spring to fall;

Hydrology remained unchanged, but did not present major problems;

Seed gathering and distribution was successful although more seed would be welcome;

Animal management to control the excess deer population remained absent, and continued to be the primary limiting factor preventing ecological recovery of Miami Woods.



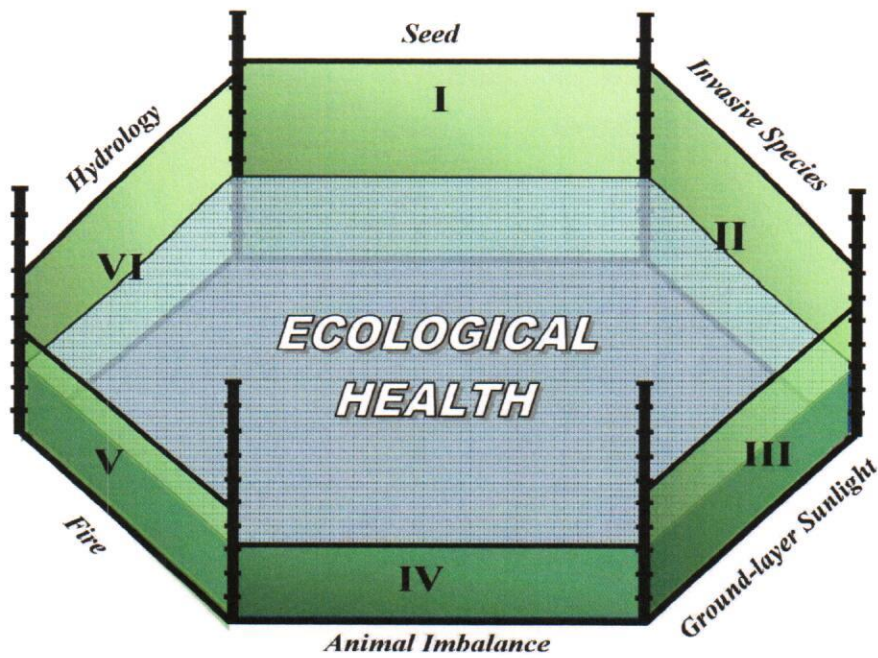
# Miami Woods



0 250 500 1,000 1,500 2,000 Feet







**Ecological Quality Container &  
Limiting Habitat Factors**

(The most deficient factor limits the level of ecological quality)