

Miami Woods & Prairie Ecological Restoration 2018 Update



Formerly clogged with buckthorn, the woods are recovering

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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. 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;

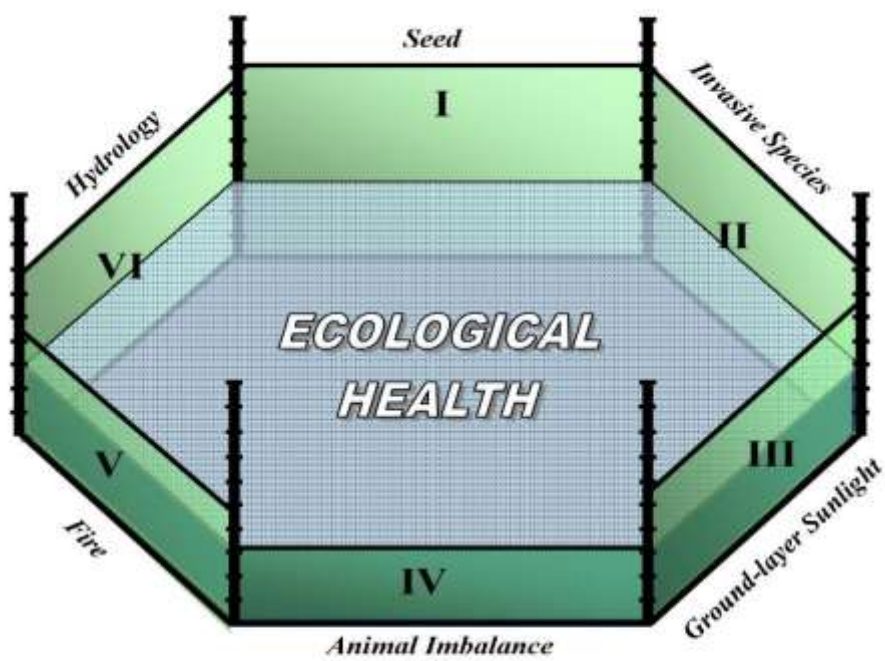
Animal management to control the excess deer population remained absent, and continued to be the primary limiting factor preventing ecological recovery of Miami Woods.

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)