

To: Town of Middleton, Park Commission
 Prepared by: Stacey Marion, Adaptive Restoration LLC
 Re: Town Conservancies Management Activities Update 2018-2019
 Updated November 6, 2018

Why Manage Middleton’s Conservancies?

Conservancy lands are public lands managed for natural vegetation, habitat and passive recreation. Although conservancy lands vary in size, vegetative communities, landscape features, management priorities, and uses, most conservancies share some or all of the following characteristics:

- ▶ Unique plant communities, wildlife, and geology.
- ▶ Ecological function, such as protecting water quality or preserving wildlife habitat.
- ▶ Maintained as natural area and restored to native plant communities.
- ▶ Provides opportunities for passive recreation, education and volunteering.

The Town’s conservancy areas protect unique features such as glacial moraines, glacial kettles, historic homesteads, and remnant prairies, savannas and woodlands. Protection of Middleton’s conservancy lands preserves the value of these natural areas into the future. The upfront expenses of managing conservancy lands for restored native communities are offset by the values provided by restored land. These values include inherent ecological value, provision of ecological services, water and air quality, climate change mitigation, and increased public interest.

Ongoing and active management of the Town’s Conservancies necessary to protect past investment made to these areas.

<i>Inherent ecological value</i>	Nature has intrinsic value beyond the value that it provides to people. Wisconsin’s endemic native communities demand protection due to their irreplaceability and rarity. Less than 0.01% of Wisconsin’s original (remnant) prairie and oak-dominated communities remain to this day.
<i>Air and water quality</i>	Middleton’s conservancy lands provide air and water filtration. Natural plant communities are superior to human-modified landscapes.
<i>Protection of critical wildlife habitat</i>	Middleton’s conservancy lands protect unique native plant communities and associated wildlife. Conservancy lands support a variety of fauna, including grassland birds and pollinator species.
<i>Climate change mitigation</i>	Biodiversity lends to greater adaptability in response to pressures including climate change and human influence. Native species have superior resilience to conditions of flooding and/or drought.
<i>Passive and active recreation</i>	Conservancy areas provide opportunities for passive recreation, and provide green corridors for the Town’s expanding public trail network.

Look ahead

- ▶ **Management costs per acre are consistent or decreasing year-to-year.** Acres restored has increased over time. Many Conservancies (e.g. Noll Valley, Pope Farm, Cherrywood Forest) have completed development projects within the last few years and have transitioned to a long-term “maintenance” phase. Trends associated with the maintenance phase include: a holistic, park-wide approach to vegetation management; less year-to-year budget variation; maintenance costs slightly decreasing over time; increased or sustained biodiversity and aesthetic quality of conservancies.

2016 Expenses: \$40,422

2017 Expenses: \$35,910

2018 Approved budget: \$36,000

2019 Budget estimate: \$39,250

- ▶ **Continued pursuit of supporting partnerships with Friends groups and grant funding to assist with stewardship of Town parks and conservancy areas.**

In 2018:

- ▶ The Town received \$7,700 value of seed donated from Dane County Parks. We applied for 4 Dane County Environmental Council small grants (up to \$1,000 value) in 2018 and did not receive direct funds, however, our grant applications were instrumental in leveraging this generous seed donation.
- ▶ The Friends of Pope Farm Conservancy (FOPFC) donated \$1,475 worth of seed to the Town for use throughout conservancies. The seed augments seed donated from Dane County Parks, adding a diversity of species for improved habitat quality. The seed will be used to plant a new section of prairie at Settler’s Prairie Park and seed savanna and woodland areas at Goth Conservancy.
- ▶ We toured Cherrywood Forest, Noll Valley, and Pope Farm with Kirt Pierson on June 26, 2018 to discuss management responsibilities of both the Town crew and Adaptive Restoration. Town Park Rangers are responsible for monitoring trails and downed or hazardous trees, mowing trails, and removal of downed heavy material across trails. The Town crew also maintains visibility of Park signs by mowing around sign bases. The Town crew does not have the capacity to manage for specific weeds, thus Adaptive Restoration will take a more active role in managing weeds in non-seeded (i.e. non-restored) areas of Conservancies where weeds would negatively impact ongoing restorations. This delineation of responsibility will increase AR’s scope of work in future seasons.
- ▶ We are partnering with the FOPFC to limit growth of invasive weeds in “edge” areas at Pope Farm in order to protect managed and restored areas. (For example, we are jointly working to limit the growth of reed canary grass at the south, top, edge of the Ravine).
- ▶ We are working with the FOPFC to investigate methods of control for pale Indian plantain at Pope Farm in areas where protecting the viewshed is a stated goal and objective. The Friends cut stalks throughout the South Prairie where views are impaired. The Friends also established some test plots in which cut stalks were dabbed with a broadleaf herbicide. Adaptive Restoration

will conduct mini-experiments testing methods of control, with coordination with the Friends in Spring of 2019 following a controlled burn in the South Prairie.

> Other: We collected small quantities of seed from Noll Valley and Pope Farm, for use in future conservancy projects. Following drying and cleaning, seed can be spread this fall following burns at Cherrywood and Goth Park.

Management Activities 2018-2019

Cherrywood Forest

Unique features Largest and most mature white oaks in the region (an endangered resource!)

Activities in 2018

- Toured site with Kirt Pierson
- Monitor and control invasive species in woodland (Removed garlic mustard, treated reed canary grass, burdock and Canada thistle)
- Interseed oak woodland to increase species diversity and quality of wildlife habitat using seed donated from Dane County Parks and the Friends of Pope Farm Conservancy
- Host volunteer work sessions and/or interpretive programs (hosted 2 sessions)
- Pending approval: Controlled burn of woodland if not completed in fall 2018. Coordinate with adjacent neighbors. Following burn, interseed oak woodland to increase species diversity and quality of wildlife habitat. Seed donated from Dane County Parks for burn + overseed.

Activities planned for 2019

Why burn? Burning removes thatch and creates an ideal environment for seeding. Seed was donated by Dane County Parks/Ron Endres last spring. Fall burns tend to be mellow.

- Monitor and control invasive species in woodland
- Controlled burn of woodland if not completed in fall 2018. Coordinate with adjacent neighbors.
- Interseed oak woodland to increase species diversity and quality of wildlife habitat
- Investigate supporting partnerships with neighborhood associations to assist with stewardship
- Host volunteer work sessions and/or interpretive programs
- Coordinate with Town staff regarding management of woody material

Goth Conservancy

Unique features Glacial kettles; mosaic of prairie, savanna and woodland habitats. Park supports a variety of birds and wildlife.

Activities in 2018

Planned and on our schedule when weather conditions are appropriate. Firebreaks installed. Received approval from Park Chair October 22.

- Installed new interpretive signage
- Controlled burn of northeast and northwest prairies (April 2018)
- Controlled burn of woodland and savanna areas in Fall 2018 if weather conditions allow
- Interseed burned areas to increase species diversity and improve wildlife habitat using seed donated from Dane County Parks and the Friends of Pope Farm Conservancy
- Maintain diverse prairie, savanna and woodland habitat.
- Monitor and control invasive species throughout Goth (Removed garlic mustard, Japanese hedge parsley and Dame's rocket, removed reed canary grass and miscanthus flowers to prevent seed production)
- Coordinate with Town staff to remove heavy downed fuels from the woodlands (Fall/Winter 2018)
- Coordinate with Town staff to recommend management of the south grassland
- Host volunteer work sessions and/or interpretive programs (hosted 2 sessions)

Activities planned for 2019

- Monitor and control invasive species throughout conservancy area
- Controlled burn of woodland and savanna areas if not performed in Fall 2018
- Following controlled burns, interseed to increase species diversity and quality of wildlife habitat
- Manage and restore southern grassland area to improve management efficiency of entire conservancy
- Coordinate with Town staff regarding management of natural areas, trail maintenance, downed woody material, and maintenance of fire breaks
- Host volunteer work sessions and/or interpretive programs

Noll Valley Conservancy

Unique features *High quality remnant and restored oak savanna; Biodiversity hotspot with many irreplaceable native species! Town area abuts the Valley View Preserve and Ice Age Trail corridor.*

Activities in 2018

- Toured site with Kirt Pierson
- Maintain high diversity of native plant in remnant and restored oak savanna. This area is a high quality biodiversity hotspot!
- Monitor and control invasive species (Removed garlic mustard, Dame's rocket, Japanese hedge parsley and birdsfoot trefoil)
- Collect native seed for use in Town conservancies
- Host volunteer work sessions and/or interpretive programs (hosted 1 session)

Activities planned for 2019

- Monitor and control invasive species
- Controlled burn of entire conservancy. Coordinate with neighbors and Ice Age Trail Alliance.
- Following controlled burn, interseed conservancy to increase species diversity and improve wildlife habitat.
- Collect native seed for use in Town conservancies
- Investigate grant opportunities for restoration and development of interpretive signage
- Host volunteer sessions and/or interpretive programs

Pope Farm Conservancy

Unique features *Over 100 acres of open space within the Town protecting ancient glacial features. Restored prairie areas managed by the Town and Friends of Pope Farm Conservancy total 32 acres. Restored natural areas compliment agricultural demonstration areas and provide educational opportunities for adults, youth and researchers. Pope Farm is a great resource for Town residents and also attracts visitors from nearby communities.*

Activities in 2018

- Controlled burns of the Blackhawk Prairie and north section of the Hillside Savanna in coordination with the FOPFC (funded by the FOPFC, May 2018)
- Monitor and control invasive species (Removed garlic mustard and Dame's rocket from the Ravine, Treated reed canary grass in all native planting areas, removed curly dock and birdsfoot trefoil from North and South Prairies)
- Host volunteer work sessions and interpretive programs (Hosted 2 sessions)

- Continue partnership with the FOPFC
- Collect native seed for use in Town conservancies

Activities planned for 2019

- TBD: remediation for flood damage in Ravine
- Monitor and control invasive species
- Conduct controlled burns of native plantings to improve conditions for native plant establishment (Ravine, Blackhawk Prairie, Hillside Savanna)
- Host volunteer work sessions and interpretive programs
- Continue partnership with the FOPFC
- Investigate grant opportunities for restoration and development of interpretive signage (in progress)
- Collect native seed for use in Town conservancies
- Host volunteer work sessions and/or interpretive programs

Settler's Prairie

Unique features Restored prairie and woodland areas compliment adjacent restored prairies and grasslands.

Activities in 2018

- Controlled burn of restored prairie and woodland areas to promote native plant species (May 2018)
- Restore old fenceline to the east of the existing prairie (in progress) using seed donated by Dane County Parks and FOPFC - seeded fall 2018
- Installed new interpretive signage
- Host volunteer work sessions and interpretive programs (hosted 1 session)
- Monitor and control invasive species (Removed garlic mustard, treated reed canary grass and leafy spurge in native planting areas)

Activities planned for 2019

- Monitor and control invasive species
 - Controlled burn of prairie and north woodland if fuel and weather conditions allow
 - Prairie establishment in newly seeded area (Year 2)
 - Assess site for secondary trail development
 - Host volunteer work sessions and interpretive programs
- Fenceline was seeded in October, 2018. It is essential to follow-up with year 2 of prairie establishment. Actions include: tractor mowing (12-15"), spot weed management, overseeding if seed is available.