

UW-Madison

Lakeshore Nature Preserve

2019 Work Plan – Approved

6-month Status Report – October 2019

The following document provides a first 6-month status update on the 2019 Lakeshore Nature Preserve Work Plan (March 1, 2019 – February 28, 2020) facilitated by our professional staff within Facilities Planning & Management. This is not an exhaustive list of accomplishments, but does provide a general understanding of the completed work in the past 6 months. The initiatives shown in the Work Plan are also not prioritized, understanding that Preserve staff will work on the initiatives throughout the year with the ultimate goal to complete as much of the work as possible based on available staff and financial resources. The Work Plan, annually reviewed by Preserve staff and approved by the Lakeshore Nature Preserve Committee, provides guidance on priorities and initiatives for the year ahead.

1) LAND MANAGEMENT OBJECTIVES

- Continue to target the use of prescribed fire across a variety of sites and seasons to achieve management objectives and promote diverse natural communities. Build volunteer corps of trained individuals to assist with burn implementation.
Status: Burns completed at Biocore prairie, shoreline units in Frautschi Point, portions of Picnic Point, and a portion of the old field southeast of Biocore prairie. Late growing season monitoring.
- Bill's Woods – Partner with UW Arboretum to secure AmeriCorps crew to complete brush removal in western section.
Status: Worked with AmeriCorps NCCC crew to clear more than one acre of dense buckthorn in the western unit of Bill's Woods.
- Limnology garden – transplant out desirable specimens ahead of planned construction that will disturb the garden.
Status: We continue to move plants from this garden, as time and conditions permit, as construction proceeds on the project.
- Evaluate impact of 2018 high water levels on shoreline and low-lying areas in the Preserve.
Status: Limnology Dept. staff hosted Preserve/CPLA staff and Professor emeritus, David Mickelson on the Limnos 2 to assess/review shoreline erosion from the water. We have established a record of observed conditions, including photos, of the existing conditions of the shoreline for future comparisons. A section of near-shoreline trail in Caretaker's Woods was rerouted after collapsing in April, and the hazardous shoreline section was roped off. UW Grounds Dept. installed a small boardwalk over an eroded section of trail at the outlet of the Frautschi/Second Point gully.
- Frautschi Point – Remove aspen clone in south section adjacent to water utility facility to open space around the existing cluster of white oaks and allow further establishment of savanna vegetation.
Status: Phase one plans are being developed to remove trees immediately impacting growth of the oak trees in winter 2019-20. Additional tree removals would be considered in future years.

- Second Point Woods - Remove trees along southern border of the woods that are growing out into young oaks as well as the utility path along the north side of Biocore prairie.
Status: Trees for removal have been identified. Removal planned once trees identified in previous bullet are removed.
- Eagle Heights Garden/Lake Mendota Drive R-O-W - Manage swath of vegetation that was forestry mowed in fall 2018 through a combination of periodic mowing and herbicide application.
Status: The R-O-W has been mowed twice during the summer, reserving a few patches of desirable native vegetation. After several years of mowing to control resprouting invasives, we will now work with the Eagle Heights Community Garden community to restore.
- Wally Bauman Woods – removal of woody invasives including honeysuckle and buckthorn.
Status: Invasive brush removal is 75% completed.
- Eagle Heights Woods Implementation – Continue follow-up control of invasive woody resprouts and seedlings in the Mounds, Central, South, West and North Zones. Continue vegetation monitoring in Indian Mounds, Central, South, West, and North Zones, and perform pre-management vegetation surveys in the East Zone. Plan and implement prescribed burns. Identify hazard and undesirable trees for removal. Perform invasive brush removal in East Zone. Implement storm water control project for erosion on the Shady Lane path, in the SW corner of Eagle Heights Woods.
Status: Spring and summer vegetation surveys have been completed in the East Zone with the final area to be surveyed prior to invasive brush removal. Worked with AmeriCorps NCCC crew to install a series of 3 water bars, as the first phase of storm water mitigation efforts on the Shady Lane trail segment. Good Oak Ecological Services will perform resprout control across the ~2-acre section of the north slope cleared of brush last winter. Planning fall prescribed burns of the cleared section of the north slope, Indian mounds loop, and west slope cleared in winter 2017- '18.
- Monitor and control priority non-native plant species across entire Preserve (e.g., porcelain berry, Japanese hedge parsley, Canada thistle, fig buttercup, garlic mustard).
Status: Fig buttercup removal performed across a portion of the known population extent before onset of early spring dormancy. Second-year garlic mustard and dame's rocket populations removed by staff, volunteers, and Prairie Partners intern crew. Porcelain berry monitoring and control work is ongoing, but overall the population has been significantly reduced compared to prior years. Canada thistle prevented from flowering/setting seed through a combo of mowing/cutting and pulling early in the season. Good Oak Ecological Services treated denser patches of Canada thistle regrowth in the old field in early September. Japanese hedge parsley was removed manually as encountered. We continue to use ISM Track to document invasive species monitoring and control work.
- Continue follow-up management in sites cleared of invasive brush in preceding years (i.e., resprout treatment, herbaceous weed control, and seeding native species).
Status: Resprout control to take place during September-October. Herbaceous weeds controlled by Preserve staff and interns.
- Establish greater diversity of native vegetation through seeding and planting in sites that have been adequately prepared.
Status: Friends' spring planting party installed additional herbaceous plugs and young shrubs in the woodland edge of Frautschi Point, adjacent to the new trail, north of the water utility building.
- Implement approved management plans, and begin to draft management plans for additional sections of the Preserve. Prioritize areas of the Preserve for the development of future management plans.
Status: In the process of finalizing the Preserve's Strategic Plan. Management plans would likely be developed after completion of a new Preserve Master Plan. A new monitoring process has been initiated to provide opportunities to evaluate management regimes.

- Continue to plan management activities that promote oak regeneration. Identify tree removal priorities and phasing plan. Identify outlets for productive use of wood generated during tree thinning activities. Develop a communication and outreach plan to engage stakeholders.
 - Eagle Heights Woods, Frautschi Point, Bill’s Woods, and Picnic Point

Status: Currently drafting plans for removal of trees impacting the white oak cohort along the Frautschi Point field edge near the water utility facility.
- Establish a service agreement with UW Grounds outlining the services/locations routinely provide the Preserve, the approximate value, processes for review, and requests.

Status: Process underway. Discussions occurring with lead staff in the Preserve and in Grounds.
- Implement the fourth year of a four-year initiative focused on control of invasive and weedy plant species. Incorporate use of Invasive Species Management Early Detecting & Distribution Mapping System * (ISM Track/EDD Maps) data program to document invasive species management activities.

Status: Jeff Schneider was hired as an Invasive Species Specialist in spring 2019. ISM Track is being used to document porcelain berry monitoring and control work.

2) OUTREACH AND INFORMATION ACCESS

- Implement volunteer program goals and policies.

Status: Ongoing. See metrics below on volunteer program.
- Engage volunteers in meaningful land stewardship activities in support of Preserve goals, and continue to expand the ongoing volunteer program.

Status: Ongoing. For the first 6 months of 2019, 389 volunteers donated 1011 hours to the care of the Preserve. Volunteers pulled and cut invasive plants, planted native plant plugs, and chipped and brushed back trails. For the fourth year in a row, we hosted a Badger Volunteer Team that worked on weekly ecological restoration and invasive species removal projects with the seasonal Invasive Species Specialist. Eight Volunteer Stewards work with on-going projects including monitoring trail conditions, collecting trash, cleaning kiosks, weeding and planting the Frautschi Point entrance garden, removing invasive plants, and stewarding Muir Knoll and Gard Storytellers Circle.
- Manage the Lakeshore Nature Preserve website and social media sites.

Status: Ongoing. Preserve staff continue to update the website to announce news and events and post notices. Staff continues to utilize Facebook, Twitter, and Instagram to reach out to stakeholders.
- Continue to provide site-based and virtual information through temporary work activity signs, audio trail recordings, and the website.

Status: Preserve staff continue to support the Lakeshore Audio Trail and Class of 1918 Marsh Audio Field Trip via cell phone service and our website. Temporary work activity and visitor etiquette signs are regularly updated and replaced to provide current information to Preserve visitors.
- Continue to develop on-going partnerships with organizations and community groups, including the Friends of the Lakeshore Nature Preserve.

Status: Ongoing. In the first 6 months of 2018, 27 student and community groups were engaged to care for the Preserve. A number of these groups have provided their service for multiple years including Chancellor’s Scholars, Blackhawk Church, UW MBAs, Masters of Public Health, Sierra Student Coalition, and Medlife. Staff continue to work with the Clean Lakes Alliance to host “Renew the Blue” volunteer days. Preserve staff also continues to work with the Friends of the Lakeshore Nature Preserve on long-standing volunteer efforts such as the spring garlic mustard pull.

- Assist promotional activities as appropriate for development initiatives.
Status: Ongoing.
- Continue to partner with UW Arboretum staff on developing a community of practice for land managers who work with volunteers in the Dane County region.
Status: Preserve staff continues to work with UW Arboretum outreach staff to facilitate the development of a community of practice for land managers who work with volunteers. A follow-up meeting was held at the end of November 2018 to plan for 2019 and update the training calendar. One winter and one spring field trip were planned for sharing work sites with other managers; however both were canceled due to weather. The next meeting is scheduled for mid-December when each participant will share accomplishments and challenges. Wisconsin Master Naturalist volunteers will be invited to learn more about the organizations and how they can get involved.

3) SITE INFRASTRUCTURE

- Maintain trails, parking areas, and work with campus partners for user safety and enjoyment of the Preserve.
Status: Hazard and downed trees have been removed from trails through a combined effort of Preserve staff, UW Grounds Dept., and contractor arborist crew. Parking lot 130 redevelopment is nearing completion. A section of near-shoreline trail in Caretaker's Woods was rerouted after collapsing in April, and the hazardous shoreline section was roped off.
- Maintain fire circles and stock wood racks (with assistance from UW Grounds Department).
Status: Daily maintenance performed by Preserve staff.
- Remove hazard trees, control erosion, and install safety signs and barriers (with assistance from UW Grounds Department and contractors).
Status: Hazard and downed trees have been removed from trails through combined effort of Preserve staff, UW Grounds Dept., and contractor arborist crew. A section of near-shoreline trail in Caretaker's Woods was rerouted after collapsing in April, and the hazardous shoreline section was roped off.
- As defined in the Preserve Master Plan, install benches as donations allow, and maintain views through selective vegetation removal.
Status: An additional bench has been constructed within Muir Woods in memory of a UW student. A recent gift has been identified to support placement of a bench near the bath house.
- Maintain Picnic Point pit toilets (Custodial & Plumbing Departments), continue regular trash collection (Waste and Recycling Department), and maintain hand water pump (Plumbing Department).
Status: The drinking water pump was out of service for much of the summer due to vandalism. Due to the extensive age of the mechanism, parts are difficult to obtain and often have to be custom made.

4) ADMINISTRATIVE SUPPORT

- Continued development of safety operational handbook, and training opportunities.
Status: A safety/orientation handbook focused on Preserve operations has been developed with a copy provided to all staff. The program covers safety and equipment training and includes resources from UW, FP&M and other similar facilities.
- Provide support for the Preserve Committee and subcommittees
Status: Staff provided administrative support for Preserve Committee meetings and additional meetings of the "Planning and Implementation" and "Education" subcommittees held to date in 2019. Support includes coordination of schedules and setting dates of meetings, distribution of meeting announcements and support

materials, agenda and minutes preparation, maintaining the Preserve Committee webpage, and the archiving of Committee documents in the on-line Committee document library.

- Assist with capital project planning.
Status: *See section “5) Capital Project Support” below.*
- Develop annual budgets and work plans.
Status: *The budget planning process has been initiated with development of the 6-month status report for the 2019 work plan and the first public Stakeholder Meeting for FY20 has been scheduled for Tuesday, October 1, 5:00 p.m. in Room 132 of the WARF building, 610 Walnut Street, Madison, WI. A call for Project proposals will be published on the Preserve website with a deadline of November 1, 2019.*
- Provide development opportunities for UW Foundation fundraising, grants, and financial support to continue building the Preserve endowment and stewardship resources. Update the existing list of potential capital projects suitable for donor consideration.
Status: *The Director and Program Manager continue to work with the Wisconsin Foundation and Alumni Association to cultivate private support for the Lakeshore Nature Preserve. Information on making gifts to the Preserve is available on the Preserve website. Preserve staff continue to participate in quarterly meetings of “Cross Campus Partners” hosted by the Wisconsin Foundation and Alumni Association which bring together University programs that do not have dedicated development staff. The Stewardship Fund has received 18 donations totaling \$133,201.43 (\$125,000-designated) since March 1, 2019. The Endowment Fund has received 4 donations totaling \$10,125 since March 1, 2019.*
- Document internal organizational operations, processes, policies and procedures. This includes pesticide use, trail clearing protocol, fire circle maintenance and wood restocking, electronic filing protocol, etc.
Status: *On-going - A central organizational system has been developed for Preserve working documents. Digital and hard copy information is in the process of being reorganized into the new system.*
- Facilitate a strategic planning initiative to build on the overall vision and future of the Preserve.
Status: *On-going - Strategic planning process has been initiated and is being guided by the UW-Madison Office of Strategic Consulting (OSC). Stakeholder input has been gathered through invited focus groups and also a public on-line survey. Preserve staff is working with the consultants on development of a strategic plan based on stakeholder input. Following the strategic planning process, an update to the 2006 Preserve Master Plan will be initiated.*
- Manage permits and collaborate with student life and academic programs to enrich the quality of the resource.
Status: *Reviewed requests and issued 42 new permits since March 1, 2019.*

* Invasive Species Management (ISM) Track is powered by IPCCConnect™. Developed by a partnership between Invasive Plant Control, Inc. and the University of Georgia – Center for Invasive Species and Ecosystem Health with support from University of Minnesota - Extension, Minnesota Dept. of Agriculture and University of Wisconsin - Extension.

5) CAPITAL PROJECT SUPPORT (ALPHA ORDER BY NAME, NOT PRIORITIZED)

- a. Class of 1953 Central Lakeshore Path improvements – Continue regular maintenance. Monitor and control purple loosestrife population identified in 2017. (continuing project)
Status: Following treatment of the purple loosestrife population in 2017 and high lake levels in 2018, no plants were detected in 2019 in the prior control area.
- b. Class of 1955 Tent Colony Woods improvements – Continue regular maintenance with volunteer assistance from Roma Lenahan to control weeds along the Lake Mendota Drive corridor. (continuing project)
Status: Roma has been diligent in her management of the roadside vegetation, providing a valuable pollinator resource that otherwise would not be there. Additional volunteers are slated to assist in removal of invasive brush regrowth along the shoreline in Tent Colony Woods.
- c. Eagle Heights Woods Management Plan – Continue follow-up control of invasive woody resprouts and seedlings in the Mounds, Central, South, West and North Zones. Continue vegetation monitoring in Indian Mounds, Central, South, West and North Zones, and perform pre-management vegetation surveys in the East Zone. Plan and implement prescribed burns. Identify hazard and undesirable trees for removal. Perform invasive brush removal in East Zone. Implement storm water control project for erosion on the Shady Lane path, in the SW corner of Eagle Heights Woods. (continuing project)
Status: Spring and summer vegetation surveys were completed in the East Zone with the final area to be surveyed prior to invasive brush removal. Worked with AmeriCorps NCCC crew to install a series of 3 water bars, as the first phase of stormwater mitigation efforts on the Shady Lane trail segment. Good Oak Ecological Services will perform resprout control across the ~2-acre section of the north slope cleared of brush last winter. Planning fall prescribed burns of the cleared section of the north slope, Indian mounds loop, and west slope cleared in winter 2017-‘18.
- d. Frautschi Point improvements – Continue land care improvements, including trail maintenance, brush removal with volunteer groups to maintain lake views, and native planting with the Friends of Lakeshore Nature Preserve to improve diversity along the new trail segment connecting the parking lot toward Biocore prairie. Plan tree removals to open up space around the grove of oak trees at south end near the field edge. Plan prescribed burn units where site conditions are conducive. (continuing project)
Status: Prescribed burns were performed along shoreline units in Frautschi Point in April. Friends’ spring planting party installed additional herbaceous plugs and young shrubs along the Biocore trail north of the water utility building. Porcelain berry monitoring/control has been performed across much of the site.
- e. Friends Interns – Five *Prairie Partners* interns (a project funded by the Friends of the Preserve, receive educational experiences while assisting Preserve staff with field work 1 day per week during the summer. (continuing project)
Status: The intern crew completed a successful summer field season between May 23 and August 8.
- f. Willow Creek Woods savanna restoration – Control weed competition in newly seeded southeast project area. Continue to manage invasive species and undesirable woody regrowth across entire site. (continuing project).
Status: Spot mowing and weed removal occurred throughout the summer to encourage establishment of prairie/savanna vegetation from seedlings performed the prior two winters. Many new species were noted to be in bloom for the first time. Prescribed burn planned for fall 2019.
- g. Picnic Point fire circle improvements sites 1, 4 & 5 – review needs and costs for improvements to these areas.
Status: Designs and cost estimates drafted for fire circle 4 & 5, design and cost estimate for fire circle 1 in progress.

- h. Picnic Point fire circle repair at site 6 – reestablish a ring of stone around the fire pit and deter use of user made path to the east of the steps to the lower platform.
*Status: Top ring of cracked stone removed from fire pit. Next step is to remove lower layer of stone and install 12-18” field stone boulders around the edge of the metal fire ring.
Plan created for protecting slope east of steps; next step is to collect bids to implement work.*
- i. Picnic Point Gate repaint and store – remove gates from site, strip paint and rust and repaint, then store on campus until funds for reinstallation is budgeted.
Status: Work order is being prepared.

Status. . .ADDITIONAL PROJECTS not included in initial work plan

- ***Frautschi Point entrance sign*** will be installed in early October. This replaces the old sign that is deteriorated. The text from the old sign will be added to the kiosk.

- ***Signs near the Muir Woods*** steps have been installed directing visitors to an alternate, less steep, route through Muir Woods that does not involve the steep and uneven path where the steps have deteriorated.

Capital Projects adjacent to the Preserve:

- ***Lot 130 Parking Lot*** is nearly complete – September 2019. Crosswalk and pedestrian crossing lights, parking lot lights will be added soon. Conversion of Lot 129 back to natural area will begin as weather permits this fall.

- ***Limnology Lift Station project*** is under construction this fall and the Limnology Building Repair including a wall along the shoreline will follow the Lift Station project. During these projects the Temin Lakeshore Path will be impacted, signs designating detours will direct travelers.