



UW-Madison Lakeshore Nature Preserve Approved–2017 Work Plan 6-month Status Report – September 2017

The following document provides a status update on the Lakeshore Nature Preserve 2017 Work Plan facilitated by our professional staff within Facilities Planning & Management. This is not an exhaustive list of duties, but does provide a general understanding of what completed work in the past 6 months. The initiatives shown 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

- Monitor and control priority non-native plant species across entire Preserve (e.g., porcelain berry, Japanese hedge parsley, garlic mustard).

Status: Japanese hedge parsley – \$1,000 DNR invasive species suppression funds allowed Good Oak Ecological Services to monitor 24 acres across Tent Colony and Frautschi Point Woods. Additional populations were identified and removed by Preserve volunteers.

Status: Porcelain berry – Staff, interns, and ongoing volunteers have monitored and performed control work across 40+ acres, focusing on areas where porcelain berry has been most prevalent in previous years. The GLEDN app introduced and shared with the Preserve by Professor Mark Renz’s lab is being used to map occurrences across the monitoring units.

Status: Garlic Mustard – Manual removal efforts by volunteers, interns and staff were successful in removing a majority of the 2nd-year plants from the Preserve in spring 2017. Two students, hired for 100 hours each, focused on spring, hand-removal of garlic mustard. Where site conditions are appropriate, locations with abundant first-year plants will be treated with a fall herbicide application.

*Status: Preserve staff has begun working with UW Housing on the management of a WI DNR prohibited invasive species, Fig Buttercup, (*Ficaria verna*) that is growing on land adjacent to Eagle Heights Woods. Housing has treated the invasive over the last two growing seasons. This year, in part as a result of a donation directed to control of invasives, we are working with Housing staff and monitoring and mechanically removing this invasive plants found along the east side of Eagle Heights Woods.*

Status: In partnership with the UW Arboretum, the Preserve was fortunate to host an AmeriCorps crew of eight during the first week of June, completing invasive brush removal work across ~2.5 acres of west Bill’s Woods.

Status: Siberian motherwort – A volunteer identified a small population of this invasive species along University Bay Drive, later confirmed by UW Herbarium as first report of the species in the state. The plants were disposed of prior to setting seed.

Status: *Purple loosestrife – New population identified by volunteer along University Bay shoreline west of Willow Creek. Flowering stems were removed prior to herbicide application.*

- Continue follow-up management in sites cleared of buckthorn and honeysuckle in preceding years (i.e., resprout treatment, general weed control, over seeding).

Status: *In the process of completing invasive brush mowing across 1-acre section in southern end of Frautschi Point and 0.5-acre (combined) section at the head of Picnic Point. Resprouting stems of buckthorn and honeysuckle will be treated by Good Oak Ecological Services in fall.*

- Establish greater diversity of native vegetation through over seeding and planting in sites that have been adequately prepared.

Status: *Volunteers planted plugs of native grasses and forbs as well as a handful of shrubs at Lot 34 site.*

Status: *Staff transplanted native grasses and forbs to areas on Picnic Point east of the narrows from a planting bed planned for removal at west end of the Willow Drive Mound Group. Cut-stem treatments to resprouting buckthorn had been performed the previous winter.*

Status: *No seeding initiatives to date this year.*

- Continue to implement prescribed fire as a land management tool where site conditions allow.

Status: *Prescribed burns conducted across nearly 25 acres and four sites on April 8, 2017 – Eagle Heights Woods, Biocore Prairie, Picnic Point, and Willow Creek Savanna.*

- Implement approved management plans, and begin to draft management plans for additional sections of the Preserve.
 - Working with UW Housing staff and other stakeholder groups, develop a vegetation management plan for the wooded area north of Elizabeth Waters Residence Hall.

Status: *on-going discussion with UW Housing.*

- Working with UW Housing staff and other stakeholder groups, develop a management plan for the compost pile in both the Eagle Heights Gardens and University Houses Gardens.

Status: *Planned for this fall - Grounds will re-grade the leaf and weed pile areas and create a concrete pad for the weeds. This will improve the ability to manage the piles and reduce the drainage issues in the space. At University Houses Gardens, the weed area has been graveled and edged on two sides with concrete blocks.*

- Eagle Heights Woods Implementation – Continue follow-up control of invasive woody resprouts and seedlings in the Mounds, Central, and South Zones. Continue vegetation monitoring in Indian Mounds, Central and South Zones, and perform initial monitoring in West Zone. Identify potential burn units and prepare firebreaks ahead of prescribed burns. Identify hazard and undesirable trees for removal. Perform invasive brush removal in West zone.

Status: *Conducted prescribed burn across ~10 acres of the site on April 8, 2017. Performed spring (May) and summer (July) vegetation surveys in the West Zone ahead of planned brush removal with support of Friends' volunteers, interns and staff. Removed downed trees from trails. Hosted a site tour for the Friends of the Lakeshore Nature Preserve in July. Planning fall/winter tasks with Good Oak Ecological Services.*

- Establish a service agreement with UW-Grounds outlining the services/locations routinely provide the Preserve, the approximate value and processes for review and requests.

Status: On-going discussion with UW Grounds leadership.

- Implement the second year of a four-year initiative focused on manual control of weedy herbaceous plants.

Status: Leo Roth hired as Invasive Species Specialist. The initiative expanded in its second year to include herbicide applications, which greatly increased the efficacy and expanded the area of impact. Leo led two Badger Volunteer groups consisting of four to six members each for 2.5 hours for an eight-week period focusing on manual weed control needs and other land management tasks. Additionally, the position assisted the Renz Lab with vegetation surveys along the Temin Lakeshore Path, and provided input on several invasive species tracking and record-keeping programs.

2) OUTREACH AND INFORMATION ACCESS

- Implement volunteer program goals and policies.

Status: Ongoing. See metrics below on the volunteer program.

- Engage volunteers in meaningful land stewardship activities in support of Preserve goals, and continue the ongoing volunteer program.

Status: Ongoing. For the first 6 months of 2017, 345 volunteers donated 984 hours to the care of the Preserve. Volunteers removed invasive plants, transplanted native plants from the Limnology garden, planted native shrubs, chipped and brushed back trails. For the second summer, we hosted two Badger Volunteer Teams who worked weekly with the seasonal Invasive Species Technician. Our on-going volunteers monitored and reported on trail conditions, collected trash, cleaned the kiosks, maintained the entrance garden at Frautsch Point worked with staff one morning each week, and inventoried directional signs and audio trail signs.

- Manage the Lakeshore Nature Preserve website and social media sites.

Status: Ongoing. The Preserve website was updated to new mobile friendly format. We continue to utilize Facebook and Twitter to reach out to the public. A plan/schedule for communications was developed.

- Continue to provide site-based and virtual information through temporary work activity signs, audio trail recordings, and the website.

Status: We continue to support the Lakeshore Audio Trail and Class of 1918 Marsh Audio Field Trip via cell phone service and our website. Temporary signs are regularly updated and replaced to provide 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 2017, we engaged 29 student and community groups to care for the Preserve through volunteer events. A number of these groups have provided their service for multiple years including Chancellor's Scholars, Army ROTC, UW MBAs, Sierra Student Coalition, and Alternative Breaks. We continue to work with the Clean Lakes Alliance to host "Renew the Blue" volunteer days. Preserve staff continues to work with the Friends of the Lakeshore Nature Preserve on long-standing volunteer efforts such as the spring garlic mustard pull.

The Lakeshore Nature Preserve also hosted a field trip as part of the UW-Madison 2017 Teaching and Learning Symposium, May 17, 2017. Janet Batzli, Margaret Nellis, Sissel Schroeder and Adrian Treves shared how they incorporate the Preserve into their curriculum. Twelve participants attended the field trip, and our outreach (poster session and handouts) had a potential of reaching 500+ educators on the UW-Madison campus.

- Assist promotional activities as appropriate for development initiatives.

Status: Ongoing.

3) SITE INFRASTRUCTURE

- Maintain trails, parking areas, and work with campus partners for user safety and enjoyment of the Preserve.

Status: Several stretches of trails were covered with a fresh layer of wood chips generated by brush removal activities. Additional sections of trails will likely be chipped this fall. Trail corridors were pruned to maintain user access, with high-use corridors receiving the most attention.

- Maintain fire circles and stock wood racks (with assistance from UW Grounds Department).

Status: Fire circles were maintained on a daily basis Monday through Friday, and wood racks refilled as needed to meet reservation demand. UW Grounds staff services the wood racks on Wednesdays each week and Preserve staff provide additional labor as needed.

- Remove hazard trees, control erosion, and install safety signs and barriers (with assistance from UW Grounds Department and contractors).

Status: UW Grounds staff continue to provide support for hazard and downed tree removal along high-traffic paths, as well as regrading eroded portions of the Temin Lakeshore Path and main Picnic Point path as needed following heavy rain events. Hazard and downed trees on other trails have been removed by Preserve staff or contractors. We are working with two Shorewood Hills residents and UW Housing on removal of Preserve trees that are at a high potential of creating hazards on properties adjacent to the Preserve.

- As defined in the Preserve Master Plan, install benches as donations allow, and maintain views through selective vegetation removal.

Status: Two gifts of \$10,000 each were received for installation of commemorative benches in memory of Grace and Maurice White and Joan and Joe Murray. The White bench has been installed along the Picnic Point path. The Murray bench will be installed in Muir Woods along an existing trail. Pruning has occurred near all existing benches to maintain views.

- Maintain Picnic Point pit toilets (Custodial & Plumbing Departments), continue regular trash collection (Waste and Recycling Department), and maintain hand water pump (Plumbing Department).

Status: Custodial and Recycling units of Physical Plant continue to provide regular services.

4) ADMINISTRATIVE SUPPORT

- Provide support for the Preserve Committee and subcommittees.

Status: Staff provided administrative support for the four Preserve Committee meetings and additional meetings of the “Planning and Implementation” and “Education” subcommittees held to date in 2017. 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 2017 work plan and scheduling of the first public Stakeholder Meeting on Wednesday, October 11, 5:30 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, 2017.

- Provide development opportunities for UW Foundation fundraising, grants, and financial support to continue building the Preserve endowment and stewardship resources.

Status: The Director and Program Manager are participating 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. Preserve donors in FY2016 received a copy of the 2016 Annual Report. The Stewardship Fund has received 20 donations totaling \$64,010 since March 1, 2017. This includes funds for fire circle #3 renovations and two commemorative benches. The Endowment Fund received three donations totaling \$530 since March 1, 2017.

- 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: A central organizational system is being developed for Preserve working documents. The system will eventually include both hard and electronic file information.

- Begin the development of a strategic planning initiative to build on the overall vision and future of the Preserve.

Status: Strategic planning for the UW-Madison Lakeshore Nature Preserve continues to be a long-term goal for the director and our professional staff. We hope to begin to identify funding for this initiative in the coming year and then begin the process of defining a scope and overall timeline. 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 monitored 19 continuing permits and issued 32 new permits since March 1, 2017.

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

- a. Class of 1918 Marsh trail – Support planning for the Wellness Trail - connection from the UW Hospital to and around the Class of 1918 Marsh. Repair bridge surface. (continuing project)

Status: While not our main capital project priority, Preserve staff are working with the Friends of the Lakeshore Nature Preserve and the Wisconsin Foundation and Alumni Association to develop an initial fundraising strategy.

- b. Class of 1953 Central Lakeshore Path improvements – Continue regular maintenance. (continuing project)

Status: Contractors will be providing maintenance for the Cogen bio swales through 2020.

- c. Class of 1955 Tent Colony Woods improvements – Continue regular maintenance with volunteer assistance from Roma Lenehan to control weeds along the Lake Mendota Drive corridor. (continuing project)

Status: Roma Lenehan continues a Tent Colony roadside weed control project to replace mowing of the steep sides of the roadside along Lake Mendota Drive that prevents the introduction and spread of weed seeds. Native species are being established which has caught the attention of the community.

- d. Eagle Heights Apartments Storage Shed and recycle lot design – Project will include area for recycling containers, runoff control, edge protection, restoration of eroded slope and a metal storage building for Housing equipment and materials. (continuing project)

Status: Project is nearing completion.

- e. Eagle Heights Woods Management Plan – Continue follow-up control of woody resprouts and seedlings where invasive shrubs have been removed in the Indian Mounds and Central zones. Continue vegetation monitoring in Indian Mounds and Central Zones, and perform initial monitoring in Southern Zone. Identify potential burn units and prepare firebreaks ahead of prescribed burns. Identify hazard and undesirable trees for removal. Perform invasive brush removal in Southern zone. (continuing project)

Status: Conducted prescribed burn across ~10 acres of the site on April 8, 2017. Performed spring (May) and summer (July) vegetation surveys in the West Zone ahead of planned brush removal. Hosted a site tour for the Friends of the Lakeshore Nature Preserve in July.

- f. Frautschi Point improvements – Continue land care improvements. (continuing project)

Status: An on-going volunteer weeded native plantings around the parking lot area and kiosk routinely throughout the season. The Friends of the Lakeshore Nature Preserve conducted two surveys of plantings from three previous years of spring planting parties. Porcelain berry monitoring and control occurred across much of the site.

- g. Friends Interns – Five *Prairie Partners* interns receive educational experiences while assisting Preserve staff with field work 1 day per week summer. (continuing project)

Status: Completed another successful summer working with the crew on a range of tasks across the Preserve, including brush removal, a variety of herbaceous weed control needs, vegetation surveys, invasive species monitoring/control, trail maintenance, and seed collecting. The crew also benefitted from educational presentations interspersed throughout the summer on topics ranging from the UW Urban Canid Project to geological history of the region, cultural landscapes to the limnology boat tour.

- h. Tree island improvements – Plan and improve biodiversity of tree and boulder island at intersection of Eagle Heights Gardens, CALS, and Biocore Prairie. (continuing project)

Status: Plan was created and volunteers have begun weeding and planting the northeast quarter of the island.

- i. West Campus Stormwater Project – Monitor and maintain the Lot 60 stormwater pond and the University Bay Drive bio-retention basin plantings. The contractor (Applied Ecological Services) is responsible for maintenance through fall of 2017, then Preserve will be responsible for maintenance and Grounds will assist with mowing of the edges. Review project provided maintenance plan and adjust as needed.

Status: Maintenance of the Lot 60 stormwater basin and University Drive bio-retention basin has been turned over to the Preserve. UW Grounds staff will assist with mowing the turf grass borders.

- j. Willow Creek Woods savanna restoration – Implement management plan. (continuing project)

Status: Continued to control weeds and prep the southeast portion of the site for native seeding.

- k. Preserve kiosk at Picnic Point entrance – Planting in spring 2017 by Preserve Staff.

Status: Planting has been delayed to fall or spring 2018.

- l. Point fire circle improvements sites 1, 4 & 5 – review needs and costs for improvements to these areas.

Status: Preserve staff and Rhonda James will be evaluating fire circle 1,4 and 5 for future improvement as funds allow.

- m. Picnic Point fire circle 3 improvements - Improve drainage to reduce erosion, replace benches, formalize the fire circle, and rehabilitate the vegetation adjacent to the circle and along the path edge.

Status: As a result of a generous donation, fire circle 3 at the Narrows has been upgraded–improvements included slope stabilization, new benches, new fire pit and vegetation management.

- n. Preserve Kiosks - Install an interpretive panel on each of the three Preserve kiosks.

Status: Continues in design development. The project will be funded by the Preserve's Dugan Fund.

- o. Raymer's Cove - Design and install a Preserve gateway sign.

Status: The new entry sign has been designed and ordered. Installation fall of 2017 or spring of 2018.
