



Lakeshore Nature Preserve
FACILITIES PLANNING & MANAGEMENT
UNIVERSITY OF WISCONSIN-MADISON

UW-Madison Lakeshore Nature Preserve Work Plan – status review October 2023

The following document provides a status update on the 2023 Lakeshore Nature Preserve Work Plan 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. 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 goal of completing as much of the work as possible based on available staff and financial resources. The Work Plan, annually reviewed by Preserve Committee, 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

- Plan implementation of recommendations from 2022-23 Preserve Master Plan Update.
 - Prioritize areas of the Preserve for development of management plans.
Update: Master Plan is awaiting final review by campus leadership.
- Establish Preserve monitoring program to document current status of plant, animal, and invertebrate communities ahead of planned land management projects. Identify and incorporate academic teaching and research needs, citizen science volunteer opportunities, Preserve staff capacity and contracted service needs.
Update: Two new post-Doc (2-year) positions have been approved within the Office of Sustainability/Nelson Institute for Environmental Studies to support the establishment of biodiversity and carbon sequestration assessments in the campus starting with the Preserve.
- Continue to use prescribed fire across a variety of sites and seasons to achieve management objectives and promote diverse natural communities. Continue to recruit volunteers with wildland fire training to expand prescribed fire capacity to achieve management objectives. Provide support to LA581 – Prescribed Fire Ecology & Implementation course.
December 2, 2022 – Rx burn of Lot 60 prairie planting and University Bay Drive swales completed with Quercus Land Stewardship Services. First Rx burns completed this late in the season on record.
April 7-10, 2023 – completed Rx burns at Willow Creek savanna, Picnic Point, Bill’s Woods, and Biocore prairie with Preserve staff, student volunteers, and assistance from Quercus Land Stewardship Services.
April 2023 – Assisted with live fire instruction at UW Arboretum for LA581 class and participated in discussions about potential expansion of the class to 2 sessions and use of Lakeshore Nature Preserve as secondary live fire exercise location.
Planning for fall 2023 burn season is in process. Potential Rx burn units in Eagle Heights Woods (mounds and south-central units), Frautschi Point (2nd Oak project area), Bill’s Woods (central unit) and Picnic Point (south shore) are under consideration.

- Limnology garden – Initiate management to protect garden in response to Limnology Bridge Project.
UPDATE: the project is being re-studied to consider creating a path south of the Limnology Building rather than a bridge.
- Frautschi Point – Monitor the Second Oak project site. Control herbaceous weeds and undesirable woody re-sprouts and assess additional tree thinning needs toward oak savanna community objectives. Continue follow-up control of undesirable woody resprouts and herbaceous weeds in areas recently cleared of invasive brush by volunteers. Plan and implement prescribed fires to promote diverse woodland communities.
UPDATE: Preserve Natural Areas Assistants cut dense pockets of resprouting buckthorn/honeysuckle in preparation for late-season foliar herbicide application to new growth. Other cut-stem treatments were made to aspen sprouts. A small area of invasive brush regrowth and herbaceous weeds were mowed north of 2nd Oak.
- Biocore Prairie – Continue to support prairie management through prescribed burn planning and implementation, assistance with invasive species control, seed collection, and routine mowing of surrounding paths and gathering spaces.
UPDATE: Working with Prairie Partners intern crew, cleared invasive brush from Area 4, treated stumps and constructed burn piles for winter. Staff, interns, and volunteers began to collect seed of various species as they came into maturity.
- Eagle Heights Woods Implementation – Continue control of invasive woody re-sprouts, especially on the north slope, and herbaceous weeds across the site. Perform post-management vegetation surveys in the West Zone. Plan and implement prescribed burns to meet management goals. Identify hazards and undesirable trees for removal. Consider and plan management treatments that promote oak regeneration.
UPDATE: Coordinating with contractor crew (RES) to perform cut-stem treatments to invasive brush regrowth along the upper portion of the north slope, the west slope and portions of the south-central unit late-fall into the winter season.
- Recruit and trained seasonal student interns in addition to providing orientation and supervision.
UPDATE: Nine UW-students have served as Natural Area Assistants (3-spring, 4-summer, 2-fall) gaining applied work experience in natural areas facility care and restoration. All positions supported by generous donors to the Preserve Stewardship Fund and a fund endowed by the Kelly Family Foundation to support the E. David Cronon Stewardship Fellows of the UW-Madison Lakeshore Nature Preserve.
- Supervise *Prairie Partner* interns; five student workers visiting the Preserve 1-day per week in summer to assist Preserve staff in land management activities. Financially supported by Friends of the Lakeshore Nature Preserve.
UPDATE: Completed another successful summer learning and working with the Prairie Partners crew.
- Engineered stormwater features – Monitor conditions of plantings at former Lot 129 site and bioswale in center of Lot 130, University Bay Drive swales, Lot 60 Swale, Cogen swales and Lot 34 basin and control weeds as needed.
UPDATE: Preserve's Natural Area Assistants crew completed woody control in the University Bay Drive swales and the west end of the Lot 60 swale planting. Prairie Partners crew worked on woody control in Lot 34 swale. Cogen swales management plan for fall/winter '23/'24.
- Class of 1953 Central Lakeshore Path improvements – Continue regular maintenance. Monitor and control purple loosestrife along shoreline. Remove invasive brush from shoreline to maintain filtered views of the lake and support native plant community.
UPDATE: Staff removed a few scattered individuals of purple loosestrife encountered along the shoreline. Volunteers removed woody invasive plants and their resprouts in portions of this area.
- 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.
UPDATE: Thanks, Roma!

- Willow Creek Woods savanna restoration – Implement prescribed burn. Continue to manage invasive species and undesirable woody regrowth across entire site. Monitor impacts of Bakke Recreation & Wellbeing Center construction on site integrity.
UPDATE: Natural Area Assistants performed cut-stem treatments to brush regrowth in wooded strip between burial mounds and Bakke Center. Preserve staff and Natural Area Assistants have also collected seed from various species and will continue to add to the collection.
- Monitor and control priority non-native plant species across the Preserve (e.g., porcelain berry, Japanese hedge parsley, Canada thistle, fig buttercup, garlic mustard, buckthorn).
UPDATE: Amur cork tree identified in two locations in the Preserve (Eagle Heights Woods, triangle marsh). Porcelain berry continues to be widespread, but population is significantly suppressed compared to prior years. Despite removal efforts by volunteers and staff, the stick-tight seeds of Japanese hedge parsley continue to find their way around the Preserve to establish new populations.
- Continue follow-up management in sites cleared of invasive brush in preceding years (i.e., brush re-sprout control, herbaceous weed control, and sowing native seed). Establish greater diversity of native vegetation through seeding and planting in sites that have been adequately prepared.
UPDATE: This work is ongoing and is conducted by staff, interns, contractors, and volunteers. Seed was sown across ~15 acres where recent invasive brush removal, Rx burns, and hazard tree removal work occurred. The drought conditions of summer 2023 were not conducive to seedling establishment in many areas. Additional overseeding/planting will be needed moving forward to achieve the desired plant community establishment.
- Complete service agreement with UW Grounds outlining the services/locations routinely provided to the Preserve, the approximate value, processes for review, and requests.

2) OUTREACH AND INFORMATION ACCESS

- During the academic year, focus on recruiting and engaging student volunteers in the Preserve.
*UPDATE: On-going. From July 1 to September 30, we engaged 167 volunteers (including 13 UW and community groups) in the restoration and maintenance of the Preserve. They contributed 650 hours (not including RL hours). During the academic year we focus our engagement on UW students/groups, and during the summer months we welcome more non-UW groups to volunteer activities. For the first 3 months of FY 2024, 68% of volunteers were UW students. **In 2022, 530 volunteers, 78% of them UW students, and 40 groups donated 2,424 hours to the care and ecological restoration of the Preserve.***

For the first time in spring 2023 we presented a poster about Student Engagement Grants and the importance of the Preserve for teaching and research at the Center for Ecology and the Environment Spring Symposium.

In February 2022 staff participated in an environmentally focused CALS Connector event to meet students and talk about career pathways in natural resources management and the Lakeshore Nature Preserve.

We continue to participate in the Spring and Fall Public Service Fairs, CEE Job Fair, and Sustain-A-Bash Event to raise awareness of Preserve programming and volunteer and internship opportunities.

- Engage volunteers in meaningful land stewardship activities in support of Preserve goals.
UPDATE: Between July 1 and October 1 volunteer activities included: pulling herbaceous weeds/invasive plants, cutting and hauling away invasive woody plants, collecting native seeds, picking up trash, cutting vegetation back from trails, checking on signage, reporting trail hazards, transplanting and watering native plants.
- Continue to develop on-going partnerships with organizations and community groups, including the Friends of the Lakeshore Nature Preserve.

- *On November 1, 2022, leaders and members of the Ho-Chunk Nation, the university including Chancellor Mnookin, and community members gathered at the entrance to Picnic Point where Traditional Chief Clayton Winneshiek blessed the land for a new Outreach Center.*
 - *Staff participated in the 2022 Office of Sustainability/Nelson Institute Earth Day event exhibit sharing stories about the Preserve with conference attendees.*
 - *In April 2023 the Preserve hosted a volunteer event as part of the inaugural Bucky's Big Event held in conjunction with the Chancellor's Investiture Week. Chancellor Mnookin joined to help remove invasive buckthorn plants along the Howard Temin Lakeshore Path.*
 - *During the summer focused on engaging **community and corporate groups** including RBC Wealth Management, TDS, Summit Credit Union, and Clean Lakes Alliance business sponsors National Guardian Life and Hovde Properties.*
 - *Hosted **Office of Sustainability staff and interns** for a tour and volunteer activity in Frautschi Point on 7-26-23.*
 - *Provided orientation to Preserve to new **Friends of the Lakeshore Nature Preserve board members** on 8-1-23. Continue to advertise and promote Friends of the Preserve field trips by email, social media, and tabling events.*
 - *Met with **Multicultural Student Center** directors on 8-28-23 to learn more about our programs and how we can support each other.*
 - *Continued the tradition of hosting volunteers from the **Master of Public Health and Master of Business Administration** programs on (8-30-23 and 8-31-23) as part of their student orientations.*
 - *Hosted UW students and staff for an ecological restoration work party on 9-1-23 as part of the 2nd **Bucky's Big Event** sponsored by the Morgridge Center for Public Service.*
 - *Collaborated with the UW Conservation Biology Program and the Wisconsin Society for Conservation Biology Student Chapter to host a **2023 Welcome Week** volunteer activity and campfire on Picnic Point on 9-9-23.*
 - *Hosted sustainability focused **Scan Design Fellows** (both Danish and American students) for a tour and volunteer activity on 9-30-23.*
- *Continue to promote the Preserve mission, goals, and activities through temporary work activity signs, audio trail recordings, newsletter, social media, and the website.
UPDATE: On-going. Collaborated with Friends of the Lakeshore Nature Preserve President Will Vyck to add 10 new poetry stops on the existing Preserve Audio Trail.*
 - *Develop webpages for the Preserve website that tell the story of Preserve land management/land stewardship.
UPDATE: Outline developed.*
 - *Assist promotional activities as appropriate for development initiatives.
UPDATE: On-going. Participated in Spring Day of the Badger fundraising event and fall Fill the Hill fundraising event. Both are coordinated by the University of Wisconsin Foundation.*
 - *Continue implementation of communication plan, including review and redesign of the Preserve newsletter and annual report
On-going.*

3) SITE INFRASTRUCTURE

- *Maintain trails, parking areas, and work with campus partners for user safety and enjoyment of the Preserve.
Ongoing*
- *Maintain fire circles and stock wood racks (firewood provided by UW Grounds Department).
Ongoing*

- Remove hazard trees, control erosion, and install safety signs and barriers (with assistance from UW Grounds Department and contractors).
Ongoing
- Monitor, map and mitigate hazards arising from declining/dying ash trees as a result of emerald ash borer (EAB).
UPDATE: We are starting our second year of receiving \$50,000 from FPM to support removal of tree related risks resulting from EAB infestations.
- As defined in the Preserve Master Plan, install benches as donations allow, and maintain views through selective vegetation removal.
UPDATE: Additional bench locations have been identified in the updated Master Plan. A new bench design is needed since all materials to construct our previous custom benches have been exhausted. Donation level for memorial benches is proposed to increase to \$15,000 from \$10,000 to align with that of the UW Arboretum.
- Maintain Picnic Point pit toilets (Custodial & Plumbing Departments), continue regular trash collection (Waste and Recycling Department).
UPDATE: Pit toilet cleaning is paid for with Preserve gift funds. Trash collection is provided by campus.
- Relocate equipment gathering data on visitor counts to another location within the Preserve. Continue to analyze visitor use data generated through the visitor counter and share with UWPD.
UPDATE: At the complete of 2-full years of collecting data along path to Picnic Point, the visitor counter will be moved to Frautschi Point entrance.

4) ADMINISTRATIVE SUPPORT

- Support reconfiguration of Preserve staffing plan in response to increasing opportunities and the retirement of Gary Brown. This includes recruitment of additional staff.
UPDATE: Preserve staff have transferred from Campus Planning and Landscape Architecture to the Office of Sustainability (a partner with the Nelson Institute for Environmental Services) under the leadership of Missy Nergard, PhD. The recognition of the Preserve as a culturally unique landscape value for academic learning, providing ecosystem environmental services to combat climate change and needed respite is increasing; accompanied by calls for greater campus financial support.
- Continued development of safety operational handbook, and training opportunities.
Ongoing
- Provide support for the Preserve Committee and subcommittees.
Ongoing
- Assist with capital project planning.
Ongoing
- Develop annual budgets and work plans.
Ongoing
- Master Plan Update – Develop plan with funding considerations for implementation of priorities outlined in updated 2022-23 Preserve Master Plan.
UPDATE: Preserve Master Plan needs to be presented to FPM and Campus Leadership. The implementation plan is in the beginning steps of discussion.

- Provide development opportunities for UW Foundation fundraising, grants, and financial support to continue building the Preserve endowment and stewardship resources. Complete a fundraising and fund development plan in conjunction with the WFAA.

Update: Developing possible funding strategies to support the potential construction of an Outreach Center and additional programing.

- In support of the Strategic Plan Priorities, continue process improvement initiatives with documentation of internal organizational operations, processes, procedures, and policies. This includes operational, program and land management functions.

Ongoing

- In support of the Strategic Plan priorities, identify partner organizations and establish a framework and implementation plan for engaging partners in work supporting the Preserve mission.

Ongoing

- CALS, FH King, GreenHouse Learning Community, Eagle Heights Community Garden – Continue to support management of agricultural units, ensure adherence to land use policies amid organizational turnover, and coordination among stakeholders including participation in the Garden Oversight Committee.

UPDATE: Working with members of the UW Student Farm, reorganizing land use processes to ensure greater utilization of land for food production.

- Manage permits and collaborate with student life and academic programs to enrich the quality of the resource.

Ongoing

- Update the permit process to assure archaeological site are protected and permit users are informed of their significance.

UPDATE: FP&M is working on process to ensure academic departments are aware of need to coordinate/communicate any activities where soil disturbance will occur on campus.

- Continue work with Native Nations Working Group on campus to expand support for recognizing this is the ancestral home of the Ho-Chunk Nation.

UPDATE: Working with Bill Quackenbush and others to explore the establishment of a Traditional Cultural Property (TCP) within the Preserve.

5) CAPITAL PROJECT SUPPORT (NOT PRIORITIZED)

- a. Picnic Point fire circle improvements– Create concept plans for fire circles 4 and 5 and for the relocation of fire circle 1.
UPDATE: Plans have been updated in the past and costs have been increased with inflation each time we create a list of potential projects for donors.
- b. Prepare a new bench standard compatible with the Preserve setting. The materials for existing bench styles are exhausted.
UPDATE: A design process will begin in late fall.
- c. Design and install three information panels on the existing kiosks.
UPDATE: no work has been completed on this to date.
- d. Complete advance planning for the Lakeshore Nature Preserve Outreach Center and develop a funding plan to move the project forward. When funded move to the design and construction phase.
UPDATE: Advanced Plan is completed. Project will progress into design when full funding is attained for AE services per UW System Policy.
- e. Re-grade Raymer’s Cove Parking utilizing funds from Paul Zedler’s grant project, \$10,000, for improved drainage.
UPDATE: no work has been completed on this to date.