



University of Wisconsin-Madison
Lakeshore Nature Preserve Committee
Facilities Planning & Management
Preserve Staff Reports – September 26, 2018

DIRECTOR'S REPORT – Gary Brown, Director

The Lakeshore Nature Preserve continues to enthusiastically promote and support the protection of these 300 acres of undeveloped land along the shoreline of Lake Mendota. Not a week goes by that we are conscious of threats to these incredible resources and the importance of providing a natural area for teaching, research and outreach right here on campus. We are indeed the largest classroom and outdoor learning laboratory available to the over 60,000 people in the UW-Madison community and the thousands of visitors we engage every year. We know that providing a space for students, faculty and staff to get outside and enjoy nature helps reduce stress, provides respite from a busy day on campus and allows for passive use to maintain a healthy lifestyle. We are a discovery, learning and wellness program all wrapped into one amazing place we call, the Lakeshore Nature Preserve.

Over the past 6 months, Preserve staff have been using the 2018 work plan as a guide to prioritizing their work both in the field and in the office, reaching out to faculty, staff and students to bring awareness to this important resource. Much has been done and there is much yet to do. I want to thank are hardworking professional staff, our enthusiastic seasonal staff and the many, many volunteers that help maintain this place for those who enjoy the Preserve today and will enjoy its use in the future. Please join us as we prepare for the development of our 2019 work plan in the coming months. It's important that we gather your good advice and counsel as we head toward the development of a strategic plan for the Preserve and the work ahead in the coming years.

PROGRAM MANAGEMENT – Laura Wyatt, Program Manager

It is hard to believe we have crossed the mid-point of our planning year, but from the information shared in this report, you can see that activity at the Preserve has remained in top gear throughout the summer. As a result of generous donors, we were able to hire two seasonal workers and a student intern to assist in our field work. These opportunities not only enable the Preserve to get important work done, but also fills a need in development of these future natural resource managers. Hands-on experience is absolutely necessary to advance in a career in natural resource management. This hands-on field time provide our seasonal team members with a variety of experiences in developing both land management and people engagement skills. Managing an increased number of staff does require an increased commitment by the Preserves permanent staff. This year, staff also launched a new safety training program complete with a safety handbook.

Utilization of the Preserve continues to increase. With our outreach efforts to connect with faculty and staff, and to document all uses of the Preserve, we are receiving permit applications from a wider range of individuals and university departments. This is important information to gather and is necessary to accurately tell the story of this treasured natural resource.

Permits:

- 2018-47 – Mallehappa – Snapshot Wisconsin (DNR citizen science program)
- 2018-46 – BIO 152 – Knick – Undergraduate research – cold tolerance of native WI trees
- 2018-45 – ENV5 400 – Ohrens – Wolves, Dogs and People (FIG)
- 2018-44 – ENV5 600 – Anke – Last Child in the Park
- 2018-43 – SS 301 – Urrutia – General soil science - Bill's Woods soil pits #1 and #2
- 2018-42 – FWE 551 – Shea – Decomposition Experiment
- 2018-41 – FWE 551 – Townsend – Data collection and analysis

- 2018-40 – ES 339 - Shattuck – Environmental Conservation
- 2018-39 – Endres - Seed Collection, Dane County restoration
- 2018-38 – Chaney –UFAA photo shoot at Picnic Point
- 2018-37 – ES 400 - Maier – Science and Practice of Prescribed Fire
- 2018-36 – BTNY 402 - Woodward – Dendrology
- 2018-35 – Dugan – Continuing Center Of Limnology studies on chloride concentrations in 1918 Marsh
- 2018-34 - PJ Liesch – Grandparents University Entomology Class
- 2018-33- Townsend – Hyperspectral Imaging of Preserve
- 2018-32 – Eisner – DATCP – Insect monitoring in Eagle Heights Gardens
- 2018-31 – Townsend – Filming for National Ecological Observatory Network (NEON)
- 2018-30 – BTNY 460 - Paulson – High winds and impact on tree growth
- 2018-29 – Paskewitz – Desired Nesting materials for Peromyscus
- 2018-28- ECO 460 -Kennedy - Feeding Tendencies of Squirrels
- 2018-27 ECO 460 - Dick - Egg color and predation
- 2018-26 - Van Zoeren - Evaluating marmorated stink bug
- 2018-25 - Tiller - PEOPLE Program
- 2018-24 - Bielec - BTC Institute walk (Biotechnology Center-Promega)
- 2018-23 - Keesling - Phylogenetic relationships within Monotropa is M. brittonii distinct (Indian Pipe)
- 2018-22 - Sentoff - inaturalist Training
- 2018-21 - Hobbins - SEG -Effects of Amynthas on tree functioning
- 2018-20 – Sain – Botany – Determining Sex Determination Using the Genus Thalictrum
- 2018-19 – Nelson – SEG – Hike and Learn
- 2018-18 – Biocore 699 - SEG -Levin – Examining Flowering Times of Native Prairie Plants
- 2018-17 – Pearce – Invasive species collection for Wisconsin First Detector Network

CAPITAL PROJECTS - Rhonda James, Senior Landscape Architect

Capital Projects adjacent to the Preserve:

- Nielsen Outdoor Tennis Courts Expansion – located north of the Nielsen Tennis Stadium, UW Athletics is expanding their outdoor tennis courts from 6 to 8 and adding more spectator bleachers, lighting and a sound system. Construction is nearly complete and the courts are already being used for practice. Later this fall, a sound study will be completed to minimize impacts from the new sound system in the neighboring areas.
- Lot 129/130 consolidation – Construction documents are being completed to rebuild Lot 130 and eliminate the continually flooded Lot 129 near the entry to Picnic Point. The improvements will include a new concrete loading and unloading pad for the 80 bus route, a crosswalk and user-activated flashing lights to warn traffic of pedestrians. Lot 129 will be removed and planted with a mix of herbaceous, shrub and tree species that are intended to re-naturalize the space. Bicycle parking will be adjacent to the entrance area near where it is today. Prior to this project, the two lots could accommodate up to approximately 101 cars. The new Lot 130 will accommodate 98 cars with four dedicated accessible stalls. The lot will be asphalt with a flat concrete edge and curbing at the entrance. A central bioswales is to be located in the center to help manage stormwater. Construction is expected to begin in summer 2019. Lot 129 will stay open until the new Lot 130 is complete to assure parking is available at the entry to Picnic Point throughout construction.

Capital Projects within the Preserve:

- MG&E will be removing Ash trees and brush under the power lines along Lake Mendota Drive in the space between the road and the Eagle Heights Community Gardens. This will be a winter 2019 project.
- On the west edge of Eagle Heights Gardens, a portion of the access path/road will be regraded and the irrigation line protected.
- We are working on getting a sign at Frautschi Point. Similar to the one at Raymer’s Cove.
- There will be a new memorial bench installed in Muir Woods this fall.

- At the City of Madison Well site south of Frautschi Point and west of Biocore Prairie, the National Atmospheric Deposition Project is requesting to install research equipment. This is all on the City's easement.
- The bridge at the south end of the Class of 1918 Marsh is closed.

LAND MANAGEMENT – Adam Gundlach - Field Projects Coordinator

- Seasonal staff – Ben Winesett was hired as a Natural Areas Technician, Emily Jorgensen was hired as an Invasive Species Specialist, and Leah Stolz was hired as a student Natural Areas Assistant. This amazing field crew worked to maintain the Picnic Point fire circles and wood racks, monitor and maintain the Preserve's trail system, control invasive species across the Preserve, and help coordinate with the Eagle Heights Community Gardens.
- Eagle Heights Woods:
 - a. A prescribed burn was conducted on April 26 across the Indian mounds trail loop and portions of west slope (~4 acres).
 - b. Vegetation surveys were conducted in May and July in the North Zone ahead of invasive brush removal planned for winter 2018-19.
 - c. Volunteers and Prairie Partners interns mulched sections of the Eagle Heights Woods trail with wood chips generated during invasive brush removal in winter 2017-18.
 - d. An arborist contractor cut and felled hazard trees to reduce safety issues along the trail system.
 - e. Hazard tree debris removal around the Indian mounds has been postponed until winter 2018-19 due to current wet ground conditions. Tree debris will be easier to remove when the ground is frozen.
- Prescribed burns were conducted on April 2 (Biocore prairie, University Bay Dr swale) and on April 26 (Eagle Heights Woods, Picnic Point-Ebling circle plantings), and other burn units planned.
- Prairie Partners intern crew worked in Preserve on Thursdays from May 24-August 9.
- Invasive species management – focal species included garlic mustard (late spring onset), fig buttercup, reed canary grass, Japanese hedge parsley, Canada thistle, leafy spurge, and porcelain berry.
- Good Oak Ecological Services crew was contracted to target Canada thistle, leafy spurge and other invasive species in various locations across the Preserve.
- Frautschi Point – Prairie Partners intern crew installed new trail segment connecting parking lot to water utility field edge and Biocore prairie. Performed buckthorn resprout control in the same area brush mowed in fall 2017. Drafting plans for tree removals at south end around cluster of white oak regeneration.
- Willow Creek Savanna – repeated cutting of weeds in newly seeded southeast project site were completed to maintain light to germinating prairie seedlings. Brush removal was performed at Willow Beach.
- Oak management planning – staff mapped existing advanced oak regeneration in the southern end of Frautschi Point and the base of Picnic Point (east savanna/old field) to help inform future management decisions regarding long-term oak regeneration.

OUTREACH & VOLUNTEERS – Bryn Scriver, Outreach Specialist

Outreach activities:

- In May, Laura Wyatt and Bryn Scriver presented a poster on research and educational uses of the Preserve at the annual UW Teaching and Learning Symposium.

- Preserve staff joined Friends of the Preserve members Lillian Tong and Olympia Mathiaparanam to meet UW BioCommons staff and learn about their programs and how we might work together to further their STEM outreach as well as promote the Preserve.
- The summer 2018 E-Newsletter was published on our website and sent out to our e-news list in July. If you haven't read it yet, you can find it on our website.
- Preserve staff worked with UW Arboretum staff to facilitate the development of a community of practice for land managers who work with volunteers. An initial meeting was held on August 17, 2018 with 20 participants from around the county including Dane County representatives and staff from the City of Madison, and the DNR.
- On September 18, Preserve staff attended the Morgridge Center Public Service Fair to advertise volunteer opportunities to students.
- On September 28, Preserve staff will join with UW Arboretum staff at the University Housing Sustain-A-Bash event to introduce students to our mission and engage in a fun seed ball making activity.

Volunteer activities:

The Preserve Volunteer Stewards continued to serve the Preserve by monitoring trails, collecting trash, maintaining the Frautschi Point entrance garden, removing invasive species, and cleaning the kiosks. We were able to call on them to help us monitor trails for tree falls and other hazards after severe weather prevalent over the summer months. We also continue to coordinate and follow up on the good work that Glenda Denniston and Roma Lenehan, the original Preserve Volunteer Stewards, do in the Preserve.

For the third summer, we hosted a Badger Volunteer team (a program through the Morgridge Center for Public Service) who provided 105 hours of service to the Preserve. The students who came out every Friday morning for 8 weeks were led in a variety of ecological restoration activities by the Preserve Invasive Species Specialist. Their work contributed to our efforts to reduce invasive species and nuisance weeds in the Howard Temin Lakeshore Path, Picnic Point and Class of 1918 Marsh areas.



The 2018 Badger Volunteer team showing off the tools of the trade.

Major accomplishments by volunteers included: cleared invasive brush from an area of oak tree regeneration in Frautschi Woods; removed garlic mustard from base of Picnic Point and newly cleared areas in Frautschi Woods; planted over 525 native plants; and cleared buckthorn from the edge of University Bay Marsh adjacent to Lot 129 in preparation for restoration in that area.

List of volunteer events to date (March 1, 2018 - August 31, 2018):

- April 21; WUD Alternative Breaks; pulled garlic mustard at the base of Picnic Point; 8 volunteers.
- April 22; Drop-in; pulled garlic mustard in Bill's Woods, individuals and groups—AOE, Superheros Club; Badgers, Business, and Beyond; AmeriCorps Achievement Connections; Electrical Computer Engineering-Graduate Student Association; 26 volunteers.
- April 22; Clean Lakes Alliance and American Society of Mechanical Engineers; pulled garlic mustard in Frautschi Point Woods; 18 volunteers.
- April 24; All Campus Day of Service; collected trash and raked and weeded Gard Circle in Muir Woods/Muir Knoll; 9 volunteers.
- April 29; Blackhawk Church LOVE-Madison event; pulled garlic mustard in Bill's Woods; 20 volunteers.
- May 3; Army ROTC; moved and stacked brush piles for disposal; 49 volunteers.
- May 6; Friends garlic mustard pull; pulled garlic mustard in Frautschi Woods; 14 volunteers.
- May 7; UW Career Exploration Center; pulled garlic mustard in Bill's Woods; 4 volunteers.
- May 12; Drop-in; pulled garlic mustard adjacent to Eagle Heights Gardens; individuals and groups—Middleton High School; First Unitarian Society; 19 volunteers.
- May 19; Friends Spring Planting Event; planted native plants in new entrance garden next to Lot 129 and along Picnic Point path, individuals and groups—Friends of the Lakeshore Nature Preserve, Spartan Youth Service-Green Committee; 13 volunteers.
- June 7, Wisconsin Foundation and Alumni Association; weed wrench buckthorn and plant native wildflowers; 9 volunteers.
- June 23, Drop-in, cut buckthorn along on Picnic Point main path; individuals and groups—Rotary After Hours, 11 volunteers.
- July 15; Drop-in; collect native seed; Frautschi Point entrance garden; 1 volunteer.
- July 17; Ecology 460; cut buckthorn on edge of University Bay; 10 volunteers.
- July 28; Drop-in; cut buckthorn on edge of University Bay; 3 volunteers.
- August 9; Clean Lakes Alliance and National Guardian Life; pulled Queen Anne's Lace and cut woody plants in University Bay Drive bioswales, 18 volunteers.
- August 12; Drop-in, cut buckthorn in Frautschi Woods; individuals and groups—Pi Lambda Phi; 9 volunteers.
- August 27, STEM Immersion/ WISCIENCE, cut invasive woody shrubs in Frautschi Woods and collected seed in Biocore Prairie; 13 volunteers.
- August 29, MBAs with a Heart, cut invasive woody shrubs in Frautschi Woods and collected seed in Biocore Prairie; 20 volunteers.
