University of Wisconsin-Madison Facilities Planning and Management

LAKESHORE NATURE PRESERVE

E-NEWSLETTER

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Summer Students Active in the Preserve

By Cathie Bruner

The Preserve is humming with student activity over the summer season. Students are working in the Preserve through classes, internships, summer outreach programs, and student organizations including Biocore, FH King Students for Sustainable Agriculture, the GreenHouse, and the Experimental Archaeology Laboratory. Students working for the Saturday Science at Discovery program received a permit to harvest grapevine to be used in an art and science lesson plan at the Wisconsin Institutes for Discovery program.

According to Alan Turnquist, GreenHouse Program Coordinator, the GreenHouse Learning Community is enjoying a second year of gardening in the College of Agriculture and Life Sciences research area in the Lakeshore Nature Preserve. This year, five GreenHouse residents from the 2012-2013 academic year are working as garden interns, helping to plan, prepare, plant and tend to the garden that they will then pass off to next year's cohort. The garden space is a great laboratory for learning. Not only do students get an opportunity to learn through doing, but they also interact with gardening aficionados and experts in the FH King student garden and the CALS research plots. Interns got to share their own expertise and perspective, as well, when they led a group of students from the PEOPLE program in a work day on July 11th. As is common at the garden, the workday wasn't all about work, as Interns also shared stories and lessons from their first year college experience with the eager group of rising high school juniors.

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GreenHouse Learning Community student interns learn to farm in the Preserve. Photo by Alan Turnquist.

The Experimental Archaeology Laboratory, located east of the Eagle Heights community gardens near the old orchard, provides an area for students to engage in experimental archaeological research to understand the ways in which materials are processed and discarded, and eventually become a part of the archaeological record. According to Professor Mark Kenoyer the outdoor lab is an essential component of the Department of Anthropology's teaching program in archaeology. It was first established in 1988 and has since served as an important laboratory for many

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research projects that have developed into doctoral dissertations or major publications in archaeological journals. He claims that the Experimental Archeology Laboratory is the only such classroom in any major U.S. university and is a very important resource for UW students, both undergraduate and graduate.

From 8am to midnight on Thursday July 18 the Ancient Technology and Invention class will fire up the kiln they built on July 11.



Anthropology students mix local clay with straw, sand, and manure to build a kiln. Photo by Mark Kenoyer.

Prairie Partners Interns Hard at Work by Adam Gundlach

A fresh crew of Prairie Partners interns has been busy in the Preserve this summer, thanks to generous funding from the Friends of the Lakeshore Nature Preserve. This year's crew features recent graduates and undergrads from UW-Madison, UW-Stevens Point, and Fox Valley Technical College.

The Madison Audubon Society is again graciously coordinating much of the administrative logistics for the Prairie Partners. Each week, the intern crew travels between four sites in the greater Madison area to perform ecological restoration work under the guidance of respective land managers. In addition to the Lakeshore Nature Preserve, the crew works at the Natural Heritage Land Trust's (NHLT) Westport Drumlin, Pheasant Branch Conservancy, and Madison Audubon's Goose Pond Sanctuary.

Much of the work involves control of invasive plant species, but the interns are also exposed to many evolving ecological topics, land management considerations, and restoration tools. Not solely a job of playing green reaper, the crew has also had the opportunity to put down some roots. Their efforts have been greatly appreciated in assisting Preserve staff install two formal native gardens - one around the newly installed kiosk at the Frautschi Point parking lot, and a second rain garden near the entrance to Picnic Point. They also prepped and overseeded a savanna mix at Willow Creek Woods in the footprint of the former Trachte sheds and driveway.

To supplement and expand upon the often-tedious restoration work, a variety of speakers have been invited to drop in as part of a lunch seminar series. Periodically throughout the summer, experts from the campus community join the crew for an hour to discuss environmental topics ranging from bird banding to Native American mound building cultures. Most recently, the crew enjoyed a tour of Lake Mendota aboard the Limnos, the Department of Limnology's research vessel, with emeritus professor of Limnology, John Magnuson, as guide.

Thanks to Kennedy Gilchrist, Friends of the Lakeshore Nature Preserve member, for helping coordinate the guest speakers.



The 2013 Prairie Partners Interns: (from left to right) Anthony Abate, Sarah Gleason, Jacob Zedlin, Adam Trotz, and Ashley VandeVoort take a break from planting to pose with Preserve field technician Adam Gundlach. Photo by Bryn Scriver.

2013 PROJECT UPDATES

by Bryn Scriver

Informational kiosks

What's blue and green, showcases the Preserve trail map, and clearly spells out the guidelines for enjoying the Preserve? It's our two news kiosks! They are located at the Frautschi Point parking lot on Lake Mendota Drive and at the east end of the Howard Temin Lakeshore Path near the Limnology Lab. One side of the three sided structure features a lockable bulletin board to hold notices. The third side will feature an interpretive panel which is currently under development.



This new informational kiosks, located at the Frautschi Point parking lot, is surrounded native plantings. Photo by Bryn Scriver.

Frautschi Point entrance planting

A gift from the Class of 1946 supported the addition of a new kiosk, and native landscape plantings at the entrance to Frautschi Point. Many of the plants, a mix of prairie and savanna species, installed by staff and interns early this summer, are already blooming. Two white oaks will be added to the site later this year.

Renovations at fire site #2

Contractors have spent the last couple weeks working to protect the underlying archeological resources and eroding shoreline at fire site #2. They moved the much used fire circle away from the water's edge, reinforced the shoreline, and added soil to the bare and compacted surface under the big oak. The oak will remain fenced off with post and chain until native species establish. The renovations will be complete as soon as the new fire circle benches—black locust and oak planks set between boulders—are installed.



Boulders make unique bench supports at fire site #2. Photo by Bryn Scriver.

Newest rain garden beautifies soggy patch of lawn

The rain garden planted by volunteers last year near the entrance to Picnic Point is a restful sight in June with downy wood mint, golden Alexander, Canada anemone and spiderwort dotting its lush green foliage with splashes of purple, yellow, white and blue. It has been attracting and feeding pollinators and helping to infiltrate June's heavy rains.

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A second perennially soggy patch of lawn just east of the first rain garden was planted by the Friends of the Lakeshore Nature Preserve sponsored Prairie Partners interns. This area was under water most of the spring but dried out just in time to be planted with wet prairie species, and then inundated with rain! Only time will tell if the new plants will be able to survive the prolonged flooding. Once they are established they will help reduce standing water through infiltration and evapotranspiration as well as serve the needs of pollinators.



Spiderwort blooms in the rain garden at the entrance to Picnic Point. Photo by Bryn Scriver.



Prairie Partners interns planted a new rain garden just in time for the rain! Photo by Bryn Scriver.

New signs alert drivers to reptiles

This is just one of the many snappers and painted turtles that have tried to cross University Bay Drive in their trek between University Bay Marsh and the Class of 1918 Marsh. Too many have been victims of hit and runs by vehicles. However thanks to help from the UW Police and the Grounds Department we now have 4 new, bright yellow turtle crossing signs along this stretch of road to alert drivers to the slow moving reptiles.



We hope that the new crossing signs reduce turtle fatalities. Photo by Bryn Scriver.

West campus stormwater project

Phase one of the west campus stormwater project is nearly complete. Contractors are finishing up planting and weeding in the two rain gardens created between the west end of University Houses and the University Houses gardens and the two bio-retention areas created at Eagle Heights Apartments. The goal of the project is to reduce sediment and pollutants that flow through the Preserve and into Lake Mendota. A bioretention system is a stormwater best management practice that uses vegetation to treat stormwater. They are like big rain gardens, but are engineered to handle much larger amounts of stormwater.

Phase two of the project will begin sometime between Aug. 15 and Sept. 1 when bio-retention areas are created in the swales on the north side of University Bay Drive. Then sometime after Sept. 1 the overflow parking area in lot 60 will be removed for yet another bio-retention area.

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These bio-retention areas will not only help improve the quality of Lake Mendota but also serve as habitat for birds, amphibians, reptiles, and pollinators while providing humans more opportunities to witness wildlife.

Trachte sheds removed to protect burial mounds

Notice anything different in Willow Creek Woods this summer? Where once stood two metal Trachte sheds, used for years by the Athletic Department to store maintenance equipment, there is now an uninterrupted view across the landscape to and from the Indian burial mounds, and the sheds no longer encroach on the mounds legally protective 25 foot buffer. The sheds were auctioned off by SWAP (Surplus with a Purpose) and will be put to good use at a local community supported agriculture farm.





Before and after shed removal at Willow Creek Woods. Photos by Daniel Einstein.

Newest audio trail honors late professor

The new Stanley Dodson Audio Field Trip at the Class of 1918 Marsh was completed just in time for a dedication ceremony and picnic on Memorial Day for the late Professor Dodson. Dodson was a UW-Madison zoology professor and an expert on the biology and ecology of wetlands.

Visitors can access the audio field trip from their mobile phone to hear about the marsh, its formation, history and plants and animals. Four signs located around the marsh list the various topics. You can also listen to the field trip or read the scripts on the Lakeshore Nature Preserve website.

According to John Magnuson, past President of the Friends of the Lakeshore Nature Preserve, who headed the project, "It is like walking on a nature trail with a mentor at your side...We wanted an appropriate way to remember [Stanley Dodson]. He was an outstanding teacher. Our goal was for the audio field trip to encourage learning and emulate the interactions he might have had with the students during a field trip."

The Stanley Dodson Audio Field Trip at the Class of 1918 Marsh was made possible by the hard work of many volunteers and by funding from the Friends of the Lakeshore Nature Preserve.



The new audio field trip at the Class of 1918 Marsh, "...is like walking on a nature trail with a mentor at your side." Photo by Bryn Scriver.

New Invader Watch—Japanese hedgeparsley

by Bryn Scriver

Sometimes it seems that all we do is battle weeds...and now there's a new weed in the war. Japanese hedgeparsley is an invasive plant species that is relatively new to Wisconsin—it was first found in the state in 1976 but has been spreading in Dane and the surrounding counties for the last 10 years. The good news is that state invasive species specialists say that most populations are still small enough to contain before they spread further. For the last few years Preserve staff, interns, and volunteers have been pulling and monitoring Japanese hedgeparsley along the old fence row between Frautschi Point and Biocore Prairie. However this summer we found a new infestation in Tent Colony Woods.

Japanese hedgeparsley is an herbaceous biennial. First year plants are low, parsley-like rosettes that stay green into the winter. The next year those plants put up a flower stalk between 2 and 6 feet tall with erect, ridged, branched stems. The low growing first year leaves are hard to find, so the plant is most often found when it flowers in July. The tiny white flowers form flat-topped umbels. The seeds that develop are small and covered in hooked hairs that attach to clothing and fur. The plants are thought to be transported long distances by unwitting people and dogs.

We hope that by sharing this information that visitors to the Preserve can keep an eye out for Japanese hedge parsley in their yards, in the Preserve, and in other places they visit. Preventing the spread of invasive species is the best way to beat them. If you know you visited an area with invasive species such as Japanese hedgeparsley clean off your shoes and check your dog's coat for hitchhiking seeds before you leave the property.

For more information on Japanese hedgeparsley search the Wisconsin Department of Natural Resources website for Japanese hedgeparsley.



Parsley-like leaves give the plant its name. Photo by Bryn Scriver.





(Top) Japanese hedgeparsley flower umbels and (bottom) seeds with hooked hairs. Photos by Dan Tenaglia. Invasive.org

Growing Season Prescribed Burns

by Adam Gundlach

It may seem counterintuitive to conduct a prescribed burn during the growing season, especially here in the Preserve, where vegetation is generally lush throughout the summer. But in certain plant communities, a burn conducted in the summer might be exactly what is needed to maximize diversity.



Altering the timing of prescribed burns can create a shifting mosaic of habitat niches. Photo by Glenda Denniston.

In Michigan, land managers use growing season burns in oak and jack pine barrens to suppress dominant warmseason grasses and increase forb diversity. At the 2013 Tallgrass Prairie & Oak Savanna Regional Fire Conference, Jack McGowan-Stinski gave a great presentation on his experience with summer burns in Michigan while working for The Nature Conservancy. Many of the sites he managed with summer burns overlapped with the range of Karner blue butterfly populations. Burns conducted during the appropriate period of the growing season helped to reduce the prevalence of warm-season grasses and promote growth of wild lupine and other sensitive species that the butterfly depends on.

Though summer burns will likely never occur at the Lakeshore Nature Preserve, if the Preserve were located in the central sands region of Wisconsin, summer burns just might be in the mix as a potential tool to maximize forb diversity. It is important to remember that prescribed fire is a tool, and the appropriate conditions (i.e., prescription) to conduct a burn depend on the

management goals, local site variables, and seasonal weather patterns.

Sites able to support a wide range of burn windows (spring, summer, fall, winter) will be most likely to develop a diverse and resilient plant community. Burns conducted in different seasons will have different effects on the plant community, and also on wildlife and pollinator populations. Altering the timing of prescribed burns can create a shifting mosaic of habitat niches.

For those interested in more about fire-related topics, check out the Tallgrass Prairie & Oak Savanna Fire Science Consortium website.

Why Volunteer in the Preserve?

*Meet new people *Get exercise *Learn about local plants and animals *Enjoy summer!

> July July 13, Saturday, 9AM-Noon, Meet at Picnic Point lot 129.

July 28, Sunday, 9AM-Noon, Meet at Frautschi Point parking lot.

<u>August</u>

Aug. 10, Saturday, 9AM-Noon, Meet at Picnic Point lot 129.

Aug. 25, Sunday, 9AM-Noon, Meet at Frautschi Point parking lot.

Tools and training provided. Bring your own drinking water. Long pants and closed-toe shoes recommended. Large groups and minors ok with advance notice.

> For more info contact: Bryn Scriver at bscriver@fpm.wisc.edu or 220-5560

Dogs Love the Preserve Too

We love our dogs so it's no wonder that we want to include them in our free time and recreational pursuits. Dogs are welcome in the Lakeshore Nature Preserve one of the few nature preserves in Madison where they are. But please remember: 1) Dogs must be on leash and under control of their human companion at all times, and 2) waste must be collected and disposed of properly. Following these two simple rules ensures that everyone—dogs and humans—can continue to enjoy the Preserve.



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A profusion of gardens reside inside the boundaries of the Lakeshore Nature Preserve: Eagle Heights Community Gardens, FH King student farm, GreenHouse Learning Community garden, and College of Agriculture and Life Sciences research plots. Photo by Alan Turnquist.



Join a community of Preserve fans on our Facebook page. View and share photos and wildlife sightings. Get news stories and notices. Let us know what you like about the Lakeshore Nature Preserve!

