# Summer 2012 Lakeshore Nature Preserve E-Newsletter



# **Cycles and Selection**

It has been a trying year for plants, animals, and humans, alike. Early warm weather in March sent plant communities into overdrive, well ahead of their usual phenological cycle. Insect communities were a-buzz well before their typical spring emergence. The prescribed burn season was upon us considerably sooner than expected, and the window of opportunity closed just as quickly, as burn units burst into a sea of green. What exactly the anomalous natural cycles of this year will mean for the organisms that call the Preserve home is yet to be seen.

Much of the region has now slid into the <u>severe drought category</u> not seen in Madison since 1988. The extreme heat and lack of precipitation has set back many new plantings in the Preserve. Even well-established trees and shrubs are struggling to survive. Preserve staff has had to prioritize watering trees and shrubs planted in the last three years, along with herbaceous plugs planted this spring. The Preserve's newest staff member, Ron Noe, has been thrown into a nearly full-time schedule of watering. Each week, he has rotated through the various areas with newer plantings, doling out the precious liquid 65 gallons at a time – a literal drop in the bucket, given the current conditions. Even with continuous efforts to deliver water to plants in need, Preserve staff are not equipped to move large quantities of water around the Preserve.

While newly planted herbaceous plugs, trees, and shrubs are kept on life support in the sweltering summer heat, many of the plantings established from seed continue to persist without any supplemental watering. Sowing seed, rather than plugs, across restoration areas will be increasingly important, especially if current weather patterns are any indication of what the years ahead will bring. Not only is seed considerably more cost-effective, but the resulting plants require no cosseting to ensure they become established.

In Biocore prairie, many plants touted as drought-tolerant species are looking haggard in the oppressive heat. Leaves wilt, curl, twist and compress, in effort to hide from the sun and retain any remaining moisture. The overall stature of the prairie vegetation is noticeably shorter and sparser than last year. Many plants are flowering and setting seed well ahead of schedule. It is yet to be seen how much seed will be produced in a year like this, or how much of that seed will be viable, but looking around the prairie, it appears certain species have aborted seed production all together (milkweeds) – at least until there is relief from the drought. Seth McGee, Lab Manager for the Biocore program, said he has never seen the prairie restoration in such need of water. "There will be a lot of selection taking place this year," said Mcgee, referring to the potential shift in plant community structure that could result from the persistent dry conditions.

The Wisconsin Department of Natural Resources has more info on the 2012 Drought.

## Staff Member, Foe to Buckthorn, and Friend to the Rest Retires

This past fall, the Lakeshore Nature Preserve said farewell to former volunteer and dedicated staff member, Tom Helgeson. Tom, who retired in November and has since moved to be closer to family, started as a volunteer with the Preserve in 1998 while concurrently serving as a volunteer team leader with the UW Arboretum. During his time as a Preserve volunteer, Tom helped to build trails, control invasive plants, remove debris, and lead volunteer groups.

Tom was eventually hired as a part-time steward for the Preserve and continued to apply his many talents. One of Tom's most notable and remarkable achievements in service to the Preserve was his girdling of over 12,000 fruiting buckthorn trees. He did this over the course of several years and primarily during the winter months. Tom first experimented girdling with only a few trees in order to observe their response and then expanded his work to include much of the Preserve. His earliest victims still haunt many a woods, recognizable by their missing ring of bark and relative deadness.

Because of Tom's efforts, overall management of buckthorn in the Preserve has improved. Girdling doesn't always kill the tree, but it buys time by preventing seeding while letting in more light to the ground layer for desirable vegetation, without the costs related to cutting, hauling, chipping and treating. Tom found that while many of the girdled trees resprouted, if he cut the resprouts once or twice the plant did die. We are still watching for evidence that killing buckthorn by girdling then slowly removing the dead trees may allow for incremental increases in sunlight and a smaller crop of buckthorn seedlings from the seed bank.

Respected by his team members and feared by his leafy adversaries, Tom has not only been a tireless volunteer and dedicated staff member, but he is also a uniquely helpful and kind human being. We feel very lucky to have had him on our side, and will miss his presence in the Preserve dearly.



Tom Helgeson staying cool last summer while planting cup plant near Biocore Prairie.

# **Ron Noe Joins Preserve Team**

The Preserve added Ron Noe to the staff team as a part-time field tech in April. A restorationist with prescribed burn experience, he is also experienced with equipment on which we depend. If you see Ron in the field you can thank him for improvements to our water tank and pump and his ceaseless watering to keep many recent plantings alive.



Ron Noe showing off the newly refurbished tank and pump.

## **Pulling Together: The 2012 Garlic Mustard Challenge! THE RESULTS!**

Bags of garlic mustard removed from the Preserve = 381 !!

## **Hours donated by volunteers = 1066!!**

A phenomenal amount of garlic mustard was removed from the Preserve thanks to the efforts of volunteers from the Friends of the Preserve, the university, and local community groups. Thank you!

The early warm up this spring (80 degrees in March?!) and the subsequent cool down to more seasonable temps helped the efforts by contributing to a long flowering season and more visible plants for a longer period of time. The Friends of the Lakeshore Nature Preserve celebrated all volunteers by providing a delicious picnic on the Point at our last official pulling workparty on May 5 where top pullers were awarded prizes and fun was had by all!



Roma Lenehan was awarded the "Outstanding Tugger" prize for the 164 hours she had contributed to pulling garlic mustard as of May 4.

#### **Volunteers Busy Despite the Heat**

Volunteers have met throughout the summer during our regularly scheduled drop-in volunteer opportunities to work in the Preserve. The most recent workdays focused on removing invasive shrubs in northern Bill's Woods adjacent to the UW Grounds storage site and the Eagle Heights Community Gardens. The goals of this work are to release trees from the competition of the invasive shrubs, better define the edges of the Grounds storage area, and beautify the Garden's edge. Volunteers have been enthusiastic about their work employing a combination of removal methods from cutting to pulling depending on the size of the plants. Our regularly scheduled workparties are cosponsored by the Friends of the Preserve.

A small but dedicated number of volunteers also work independently on projects approved by the Preserve Field Manager. They contribute many hours to planting, weeding, watering and other projects.

Recent community groups to volunteer in the Preserve are Land's End employees (as part of the 25<sup>th</sup> Annual Take a Stake in the Lakes), youth conference attendees from 4H, and teens from UCP (United Cerebral Palsy). Before the drought, Land's End employees planted over 1100 herbaceous plants in Tent Colony Woods and UCP teens planted several flats of spring and fall blooming species near the accessible wildlife viewing area at the bottom of Bill's Woods. 4H visited the Preserve for a service learning seminar on invasive species and how they can contribute to efforts to control them in their own communities.

The 2010-2011 Preserve Volunteer Report is now on-line.



Land's End volunteers planted over 1100 herbaceous plants in Tent Colony Woods.

<u>Summer volunteer opportunities</u> are set from 9AM-Noon on the following dates: Sun. July 22, Fri. Aug. 10, Sat. Aug. 11, Sun. Aug. 26, Fri. Sept. 7 and Sat. Sept. 8. All meet at the entrance to Picnic Point next to parking lot 129. Activities include watering, clearing trails, removing buckthorn and honeysuckle and controlling porcelain berry vine. Tools and gloves are provided. Bring your own drinking water.

# **Prairie Partners Interns Migrate Back**

After the usual end-of-semester storm of final exams and research papers, and the annual flight of most students to summer jobs and visits home, calm descended upon campus. However a few short weeks later, a group of students migrated back to campus to join the group known as the Prairie Partners Interns coordinated by the Madison Audubon Society. A group of five students (both recent graduates as well as current undergrads) spend their summer rotating between several local natural areas, learning about restoration ecology theory, and putting that theory into practice on the landscape as ecological restoration techs.



Interns Chris Warneke and Allison Schmidt work in the Willow Creek Woods restoration as two cranes pass by in the foreground.

The Friends of the Lakeshore Nature Preserve is once again graciously funding the interns at the Lakeshore Nature Preserve. The Preserve shares the interns with the Natural Heritage Land Trust's <u>Westport Drumlin</u>, the <u>Pheasant Branch Conservancy</u>, and <u>Madison Audubon's Goose Pond Sanctuary</u>.

At the Preserve the interns quickly turned into a herd of specialized herbivores, with a voracious appetite for invasive plant species, from relatively new arrivals—porcelain berry (see *A Tale of Tugging: porcelain berry management in the Lakeshore Nature Preserve*" from the Summer 2011 E-newsletter) and Japanese hedge parsley—to the old standards—buckthorn and honeysuckle. The interns do get some breaks from battling invasive plants. They recently joined Biocore summer interns to collect seed in the Preserve's prairies and they've sown seed in the Willow Creek Woods savanna restoration site.



Interns Kristina Bartowitz, Jenna Mertz, and Allison Schmidt cut and haul buckthorn near Indian Mound 7 on Picnic Point.

New this year, the interns will be treated to regularly scheduled talks with knowledgeable speakers from the Friends of the Preserve on topics such as: <a href="limnology">limnology</a>, <a href="geology">geology</a>, <a href="wildlife">wildlife</a> disease</a>, <a href="Native American mounds">Native American mounds</a>, and more. Thanks to Kennedy Gilchrist for coordinating and scheduling the speakers.



Interns ply the waters on Lake Mendota aboard the Limnos. From left to right: Kristina Bartowitz, Jenna Mertz, Kennedy Gilchrist (kneeling), Dan Stien, John Magnuson (kneeling), Adam Gundlach, Chris Warneke, Allison Schmidt, and Nick Schiltz

#### **Preserve Alive with Sound and Study**

Widely loved as a place for relaxation, contemplation, and recreation, the Preserve is the ideal setting for unwinding and steeping one's senses in the peace and beauty of the natural world. However, as a backyard to both campus research laboratories and vibrant city life, the Preserve is more than just a space for running, walking, and picnicking. The permitted projects taking place this year illustrate the Preserve's potential as a multi-use area, engaging not only with research, but also with student training and culturally enriching activities.

The following represent only a few of the projects active in the Preserve but demonstrate the diversity of activity these 300 acres can sustain.

# Entomology

Two projects this season focus their attentions on some of the Preserve's more undesirable, six-legged inhabitants: gypsy moths and ticks. Johnny Uelmen, a Research Assistant with Ken Raffa at the University of Wisconsin-Madison, is assisting Patrick Tobin of the USDA Forest Service in a study exploring climate effects on the reproductive synchrony of the invasive gypsy moth. The researchers used the Preserve as one of many research sites across a latitudinal gradient where they placed overwintering gypsy moth egg masses in traps along with a preprogrammed temperature recording device for allow for remote monitoring. Once the eggs hatched, Uelmen used an aspirator to remove individual larvae for further study. More traps baited with a chemical lure have been installed in order to capture male gypsy moths.



Graduate student researcher, Johnny Uelmen, installs a gypsy moth trap.

Susan Paskewitz, a UW professor of entomology, is conducting research this summer on the Preserve's tick population as part of a larger study she is directing in Dane County. Dr. Paskewitz is capturing and releasing voles and chipmunks to measure the density of deer ticks in the area and the extent of their infestation. She will also be collecting the ticks for use in diagnosing individuals infected with Lyme disease spirochetes. Funds from the Kelly Family Foundation and the E. David Cronon Stewardship Fellows of the UW-Madison Lakeshore Nature Preserve are being used to support an undergraduate on Dr. Paskewitz's team to make the Preserve's inclusion in this research possible.



Dr. Paskewitz's research assistant sampling for ticks in Bill's Woods.

# <u>Ornithology</u>

In a continued effort to attract the prothonotary warbler back to the area, Bill Barker, Chair of the Lakeshore Nature Preserve Committee, secured a permit to once again install nest boxes in Picnic Point Marsh this past spring. Wisconsin represents the northern edge of the prothonotary warbler's range, and the golden-yellow bird prefers moist bottomland forests that are seasonally flooded or remain permanent wetlands.

#### Botany

This July, ecologist Quentin Carpenter will be using Wally Bauman Woods and Eagle Heights Woods to train students in "Quarter point survey" techniques. These sites are great places for students to learn, and the sampling done here will provide the Preserve with relevant information needed to complete the management plan for Eagle Heights Woods. Over the years, Carpenter has provided botanical information for many parts of the Preserve, affording snapshots of vegetation useful for monitoring changes of surveyed areas over time.

#### Music

In late August, Sound Ensemble Wisconsin will be performing on the lawn just inside the entrance to Picnic Point (next to parking lot 129) in a 45-minute concert preview of acoustic chamber music from their upcoming season featuring. The date and time are yet to be determined, but the event will be free and open to the public, and the musical selection will celebrate and promote enjoyment of the natural surroundings. *NOTE: Sound Ensemble Wisconsin had to cancel its Picnic Point concert preview due to scheduling problems. They hope to reschedule for next summer.* 

## **Intern Begins Work on New Audio Trail**

By Jenna Mertz, Lakeshore Nature Preserve Intern

In addition to the hacking, yanking, and spraying duties I perform as a loyal intern of the Lakeshore Nature Preserve, this summer I've been given the wonderful opportunity to work on an exciting new project providing educational opportunities along the Class of 1918 Marsh trail. The Stanley Dodson Audio Trail will invite visitors to use cellphones to access snippets of audio pertaining to Marsh ecology and history. This will be the first interpretive programming associated with the Marsh since the interpretive signage written and illustrated by UW Arboretum naturalist James Zimmerman and is wife Elizabeth, in 1972. The Friends of the Lakeshore Nature Preserve are generously sponsoring my work on the project, and I have been working closely with them to write the script and prepare the audio.

Currently, I am steeped in the revision of my first draft and reading as much as I can to better understand the geological and ecological features of the Marsh. I have been working closely with Ginny Dodson, wife of the late UW zoology professor Stanley Dodson and a member of the Friends, to craft the narrative around which the audio trail will revolve. We hope to have a completed script by the end of the summer.

The audio tour will be posted on the Lakeshore Nature Preserve website for downloading when complete.



Student intern, Jenna Mertz, is working on a script for the new Stanley Dodson Class of 1918 Marsh Audio Trail.

#### **Trails Get Spring Spruce-Up**

A few of the Preserve's well-used and weathered trails received a refresher of crushed limestone this past spring courtesy of the UW Grounds department. Restored trails include the path that leads to Picnic Point, the shoulder of the Lakeshore Path, as well as the trail which encircles the Class of 1918 Marsh.

The Marsh trail had almost entirely disappeared in recent years due to high water and the colonizing activities of plants taking advantage of the moist soil. A limestone path now clearly marks the passage, keeping the feet of runners, walkers, and Preserve enthusiasts dry and happy.

## The Point's New Planting

A few steps inside the entrance to the Lakeshore Nature Preserve's Picnic Point, a new sight graces the slope of lawn north of the main path. A section of sod has disappeared, and has been replaced with a cluster of native, water-tolerant plants.

Last year, landscape architect Rhonda James, in coordination with the UW Grounds department, realigned the entrance path and drainage culverts inside the Picnic Point entrance to reduce muddy conditions on the path and allow better access for emergency vehicles. In early June, a group of volunteers planted a diverse mix of native vegetation to grow in the moist soil. While the area is expected to be soggy in wet weather, the new planting is not an official "rain garden" due to a lack of water infiltration at lake level. It should, however, attract and serve the vibrant insect community of the University Bay Marsh area.

Preserve staff will periodically spread seed over the new planting to increase the diversity of the plant community but hope that the rain, too, will help support their efforts.



Volunteers plant a diverse mix of plants at the entrance to Picnic Point

# **New Fire Circle Reservation System**

To make reservations for a fire circle please contact Campus Event Services at 608-262-2511 Mon. through Fri. 8:00am to 5:00pm. UW-Madison departments and registered student organizations can reserve a site on-line athttp://www.union.wisc.edu/eventservices-services.htm

With the new reservation system you will receive an email with confirmation of the date, time and site number for you to print out. Note: it can take up to 24 hours to receive confirmation. Your reservation will not be posted at the fire circle itself, and since reservations are not required, the site may be in use when you arrive. You may politely ask that party to leave and show them a print out of your confirmation reservation.

Due to dry conditions, NO FIRES ALLOWED IN THE PRESERVE, until further notice. Please check the Preserve website to learn the latest status of the fire ban.

The Clean Lakes Alliance is partnering with local businesses to sponsor <u>Aquapalooza 2012</u> on Sunday July 29 with a boat-up live music event on the water north of the Picnic Point Narrows from noon to 3:30pm. The <u>Clean Lakes Alliance</u> (CLA) is a not-for-profit organization devoted to the water quality of area lakes, streams and wetlands in the Yahara River Watershed.

## "New" Equipment Helps the Preserve

While phasing out old equipment to make way for new, the UW Grounds department bestowed a small tractor upon the Lakeshore Nature Preserve earlier this year. Though it's a bit on the small size, lacking any implements, and showing its age, the tractor represented a huge step forward for land management in the Preserve.

The main purpose of mowing is to prevent weed species from producing seed the timing of which depends on weather patterns, the target species, and the goals for the site.

In the past we were dependent on the Grounds department to mow all of the fields and fallow buffers areas and were at the mercy of their busy schedule. Now we can fine tune mowing operations to match the progression of the season. Because Preserve staff controls the mowing we can also be more selective in what we cut—weeds—and what we leave—desirable plants which can bloom and set seed.

The current "precipitation deficit" plaguing the region has had one positive effect; it has eliminated the necessity to mow more than once this season; a small consolation for a landscape full of withered plants.

Thanks to Lynn Hummel, College of Agriculture and Life Sciences, for allowing the Preserve to borrow a brush mowing attachment.

Lakeshore Preserve field technician, Adam Gundlach, mows around a patch of common milkweed.



# **Preserve Project Updates**

## Improvements to the Tip of Picnic Point

- 1. Construction is mostly complete.
- 2. The old lake safety light will be removed as soon as a second lake safety light is installed at the Lot 60 boat launch.
- 3. The contractor is responsible for watering the new plants.
- 4. The fire circle will be available for reservations after Sept. 15.

#### UW Housing Shoreline Project (across from newly named Dejope Hall)

- 1. This project is scheduled to take place July 5 through August 3, 2012.
- 2. The project will include removal of invasive plants, repair of the old boat pin access routes, replanting with a thicket of native shrubs and perennials and a stone step access to an observation area to satisfy the desire to get to the water.
- 3. Please use caution and pay special attention when using the bike path during tree removal and construction.



This <u>rendering</u> shows the lakeshore (in the foreground) that will be affected.

## **Eagle Heights Woods Planning**

1. The plan is being formulated and will be discussed with the Lakeshore Nature Preserve Committee in the fall

# **Ticks and Preventing Lyme Disease**

From a Public Health of Madison/Dane County press release and an article by John Krerowicz in Kenosha News-

While ticks are most prevalent in spring and fall they are also present in the landscape in the hotter summer months. And joining the relatively common wood tick in southern Wisconsin is the deer or black legged tick, which was officially confirmed in Dane County for the first last summer. These poppy seed sized ticks carry a surprisingly long list of diseases, but the one that we worry about most in this part of the country is Lyme disease. Untreated Lyme disease can be very serious, but early antibiotic treatment is quite effective. The best strategy however, is prevention.

## How to prevent tick bites:

- Wear hats, long sleeves and long pants. Tuck the pants into your shoes or boots. Tuck in your shirt.
- Wear lighter clothing; it makes the ticks easier to spot.
- Use insect repellent on pant cuffs, socks, shoes and exposed skin.
- Stay on hiking trails. Avoid tall grasses and woody, bushy areas.
- Check yourself, pets and children when returning in doors.

If, despite these prevention efforts, you do find a tick on your skin, place the ends of a tweezer against your skin and as close to the bug's head as possible then gently grab the insect and slowly pull it out. Folk remedies like petroleum jelly, nail polish remover or burning matches DO NOT WORK, and are not safe. Consult a physician as soon as possible if a tick has been attached for 24 or more hours, if tick removal is incomplete or if a "bull's eye" rash appears at the bite area.

For more detailed information on ticks and Lyme disease, go to the Centers for Disease Control.

#### Photo Exhibit to Feature the Preserve

Deb Ahlstedt, long-time member of the Friends of the Preserve, will have her photos of the Preserve displayed at the Sunroom Cafe on State Street from July 8 through August 19 as part of a larger exhibit on UW-Madison. This follows an exhibit of her photos at the UW Health Science Learning Center. Congratulations Deb and thank you for promoting the beauty of the Preserve with your work!



Photo by Deb Ahlstedt whose work will be on display July 8-Aug. 19 at Sunroom Cafe.