### Lakeshore Nature Preserve Spring 2010 E-newsletter

#### By Adam Gundlach and Daniel Einstein

#### Volunteer Opportunities in the Preserve

Spring has sprung and the volunteer season is upon us. The early snowmelt gave garlic mustard (*Alliaria petiolata*) a head start this spring, and all around the Preserve the culinary invader is poking its nose out in unwanted places. Numerous garlic mustard pulling "parties" are scheduled from now through mid-May. If you have some time, and want to get out to enjoy the beautiful weather, pick a day (or two, or three) to come help us remove this troublesome plant. Check the work day schedule for more information.



## East Bill's Woods Restoration

Thanks to a generous donation from the Friends of the Preserve, restoration work has been able to proceed in the eastern portion of Bill's Woods, near the Picnic Point entrance. Quercus Land Stewardship Services was contracted to remove a dense understory of buckthorn saplings and resprouts, as well as other weedy natives such as box elder and green ash, which have become prevalent in the absence of fire and large herbivores. Many quality oak and hickory trees exist in this stretch of woodland, and hopefully the increased sunlight will facilitate their natural regeneration. Larger box elders and Norway maples were girdled to open pools of light to the forest floor without excessive disturbance and labor. The snags will be left standing as habitat for cavity-nesting animals and invertebrate organisms.



This spring, an assortment of native shrubs and herbaceous flora will be replanted throughout the woodland to increase diversity and help nudge the plant community back to its former glory.

## Willow Creek Woods Savanna Restoration

Earlier this winter, UW grounds department arborists removed several more trees from the Willow Creek Woods oak savanna restoration project. The removals will increase the amount of sunlight in the understory, allowing native savanna vegetation to be reintroduced in the coming years. The eastern section of the restoration area has been set up with experimental test plots to help gather information on how plant communities respond to varying management techniques and nutrient regimes. Due to the archeological significance of the site, replanting native oaks and other savanna tree species requires additional survey work to avoid the possibility of disturbing ancient cultural features. Native trees and shrubs will be replanted in future years when specific planting locations have been given the green light.



# Willow Creek Woods - Great Horned Owls

The emerging savanna habitat in Willow Creek Woods attracted a nesting pair of great-horned owls this winter. The owls successfully fledged two owlets that have been on display through the early spring, drawing a steady stream of onlookers. The fluffy owlets were often seen perched together in the same tree, with their cryptic parents keeping a watchful eye from a nearby perch.

As the woodland understory opened in recent years, the owls took refuge in a large, broken-off silver maple trunk, where they nested this winter. The open habitat and high perches in mature trees seem to benefit the owls' ability to hunt for the small mammal prey (voles, mice, rabbits, squirrels) that forms a large portion of their diet. With similar restoration projects scheduled for other areas in the Preserve, the owl population with hopefully continue to soar (or at least swoop silently in the night).



#### **Biocore Prairie Burn**

Quercus Land Stewardship Services, along with support from Lakeshore Preserve staff and volunteers, successfully carried out the largest prescribed burn in the history of Biocore Prairie. In the months leading up to the burn, a prescribed fire plan was prepared by Seth McGee, (Biocore Instructor) Steve Glass (UW Arboretum), and Jim Elleson (Quercus Fire Boss). On March 31, with winds finally settling on the desired SSW heading, nearly 12 acres of the prairie restoration was set ablaze. A Biocore small mammal research project will use wildlife refugia area protected from the fire. Fire removes the dense thatch layer in older sections of the prairie that can inhibit seed germination and smother sprouting plants. The burn also helps to suppress cool-season exotics and knock back young trees and shrubs that would otherwise form the first wave of woodland succession. The blackened earth left behind after the burn warms quickly, helping native warm-season prairie plants grow earlier in the season. After spring rains and warm days, the prairie begins to green quickly.

We hope to expand the burn program to surrounding oak woodlands in coming years, as fire will be a critical management tool for restoring the continuum of prairie – oak savanna – oak woodland that is laid out in the master plan.



## **Tent Colony Woods Erosion**

Stormwater channeled off of Eagle Heights apartment complex is causing erosion problems on the slope of the former Tent Colony. Working with university landscape architects, Preserve staff has begun the process of repairing these fragile areas. Years of dominance by non-native honeysuckle and buckthorn have eliminated the majority of groundcover species and left much of the soil bare. Selective removal of a few lower quality trees (mulberry, boxelder, young ash) will allow more pools of light to the forest floor. By replanting these openings with a diversity of native plant species, we hope to lock up as much sediment as possible on the slope and improve the ability of the gully to filter sediment before the runoff reaches the lake below.

Any structural recontouring of the gully will be coordinated with FPM's planning department.



### I scream, you scream, we all scream for, Ice Scour?

Though erosion is often thought of in negative terms, especially as it relates to or is caused by human activities, it still remains a vital disturbance mechanism in many natural systems. Ice scouring generally refers to geological features created by the movement of glaciers across the landscape. On a much smaller scale, ice scouring is also an annual occurrence along the shoreline of many of our lakes.

In late March, strong northeast winds carried the dwindling Lake Mendota ice sheet across the lake. As the ice was forced on shore, it carved into the shoreline violently shaking trees and moving debris. These images don't capture the immense sound produced by this microcosm of glacial movement, but they show the natural forces that are constantly shaping our Preserve environment.



## First iconic Lakeshore Nature Preserve park bench installed

Along the lakeshore path, (to the east of the Willow Creek bridge) is a new custom crafted park bench--just in time for enjoying springtime views across University Bay. The bench was created by students from UW-Platteville with support from manufacturing partners. Read more about the <u>design and manufacturing process</u> used to create this unique bench.

Now go sit a spell...



## Trail directional signage

Navigating the trail network in the Preserve can sometimes be confusing. Things should be a bit easier now that new trail signs have been installed throughout the Preserve along major routes and trail intersections.

The signs were designed and located by staff from the campus planning and landscape architecture department of Facilities Planning and Management. The size, color scheme and material choices for the signs were vetted by an ad hoc working group that collaborated with the designers.

The work group wanted signs that were: low profile, blend into the environment but are also distinctive, and used sustainable materials. Responding to this direction, the designers came up with a sign that stands just 4-feet out of the ground, uses the Preserve's logo color scheme and is mounted on a post fabricated from black locust lumber milled from Preserve trees. Black locust lumber is naturally rot-resistant so toxic preservatives are not needed. Although the posts are just 2X2 inches, the wood is tough as a rock and is anchored in the ground to resist vandalism.

Thanks to Darin Newman, landscape architect intern, for his trail mapping and sign design work (not to mention post-hole digging), and Rhonda James, senior landscape architect for project management.

Happy trails!

