



PRESERVE!

Volume 5, Number 1, Winter 2005

Friends of the Lakeshore Nature Preserve Newsletter

Dedicated to the Preservation and Stewardship of our Woodlands, Wetlands, Prairies and Shorelines

A Master Plan for the Lakeshore Nature Preserve

by William Cronon, Chair, Lakeshore Nature Preserve Committee

For the past several years, supporters of the Lakeshore Nature Preserve have been working on recommendations for the care and management of the Preserve for the next decade. In an initiative begun under the leadership of John Harrington, former chair of the CNA Committee, the UW Foundation hired the consulting services of Ken Saiki Design to develop a master plan for the Preserve. A design team led by Ken Keeley and Rebecca Flood has spent the past year working on that plan. By the time you read these words, we should be finalizing these recommendations.

Our timing could not be more fortuitous. The planning process for the Preserve has been synchronized with the ten-year revision cycle for the Campus Master Plan for the University as a whole, with Associate Vice Chancellor Alan Fish and Planning Director Gary Brown playing lead roles in both efforts. As a result, this will be the first master plan in UW history that will include the protection and management of campus green space among the highest priority goals for the entire university. We are all in Alan and Gary's debt for this happy outcome.

I'm writing this report in early October, and cannot state for sure what our final recommendations will be. That said, the emerging outlines of the master plan seem clear enough that I can sketch them as follows:

- Following the guiding principles of the Lakeshore Nature Preserve Committee, the plan will strive to preserve, restore, and interpret the natural plant and animal communities of the Preserve while also protecting the signature landscapes and views that help make the Preserve such a special place.
- Toward these ends, some Preserve trails will be rerouted or regraded to diminish the erosion they cause, while others will be decommissioned altogether. At the same time, we'll improve ADA accessibility where we can.
- We will continue to remove the most aggressive invasive species and work to enhance the integrity of the Preserve's ecological communities. We're especially excited about the prospect of beginning to

develop an area of oak savanna where a number of large open-grown oak trees already exist. To achieve this, we hope also to expand the use of fire as a management tool.

- We will make a much more intentional effort to protect and improve views to and from the Preserve, since these are among the best loved features of the Preserve—and since the university's failure to attend to them in the past has encouraged unplanned side trails and visitor behaviors that have contributed to erosion and other problems.
- We'll offer conceptual designs for several locations in the Preserve, including Frautschi Point and especially the end of Picnic Point. As any visitor to the tip of Picnic Point knows, the area has suffered from heavy use and management neglect for a long time, so that a once beautiful area now consists largely of eroded dirt, exposed tree roots, and views so badly blocked by invasive shrubs that visitors have trouble glimpsing the main campus or the Capitol dome. We'll try to redesign this area so that it is once again ecologically healthy, aesthetically beautiful, and able to withstand the heavy use it will always receive from the many people who visit it. By providing visitors with carefully designed, naturalistic pathways and stepping stones leading down to the water's edge, we hope both to enhance the human experience of Picnic Point and to protect its fragile plants and soils.
- Finally, we'll propose changes at the entrance of Picnic Point to do a better job of welcoming visitors and helping them understand the ecological dynamics and environmental values of the Preserve. Although detailed designs for this visitor facility will require

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Save the Date: April 11, 2006

William Cronon will speak about
Caring for the Preserve at the
Friends' Annual Meeting on
Tuesday, April 11, 2006, at 7 PM at the
McKay Center of the Arboretum

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Friends of the Lakeshore Nature Preserve
is a 501(c)(3) non-profit organization

We Welcome Submissions to the Friends of the Lakeshore Nature Preserve Newsletter and Web Site

The Friends of the Lakeshore Nature Preserve welcomes the submission of articles and announcements for our newsletter. We encourage people to share their checklists and other relevant Lakeshore Nature Preserve materials on the Friends of the Lakeshore Nature Preserve Web Site. For information on submitting material, call Roma Lenahan at 238-5406 or send your articles or checklists to rlenehan@charter.net. To reserve space in our next newsletter, please tell us about your material by January 25, 2006. The submission deadline is February 20.

Grennie
(1939-1954)
Anonymous

Fallen tears from mourners
grew straight, straight.
In the forgotten forest
ferns patiently wait.

Innocent soft pink
tears that fell
in the forgotten forest.
They have a story to tell.

As you count the waves
rolling on the lake
A million coots pass
A million clouds break.

Who ran with you?
These oak trees must know.
I see you in a thousand forms
but hear only echo of the wind.

Then, with wonder
a kind naturalist's hand
cut away the thicket
on this tiny piece of land.

Forgotten past, wake up!
Marble? Gravestone?
Name? Dog?
And magic lilies.



Grennie's Grave with Pink Magic Lilies in Bloom
(G Denniston)

In a wooded setting, a little off-trail in Frautschi Point, stands a gravestone memorializing "Grennie Our Dog." The clearing of the grave inspired this poem.

Exploring the Picnic Point Area with Daniel Einstein

by Jean Meanwell

The next time you are walking on Picnic Point, consider looking for some of the cultural artifacts and sites that make the history of this area so fascinating. I recently had the privilege of walking with Daniel Einstein, one of the people managing the Cultural Landscape Resource Plan for the UW Madison, who showed me some things you might look for.

What You Can Find

- The partially exposed brick walkway of the house pictured which belonged to E. J. and Alice Young from 1924 until it burned in 1935. Apparently, the fire started in an upstairs playroom, possibly from faulty wiring of a new electric train set. To get to the house site from the entrance to Picnic Point, go through the metal gate and follow the road uphill past Bill's Woods. Turn right at the first fork and left at the second fork. The partially unearthed walkway is in the woods area on the left (look for the area with the least understory) across from the small metal silo.

The foundation of the Caretaker's House that burned in the 1970's. At the time of the fire, graduate students who evidently owned a snake were living in the house. The story is that after being told they could not keep the snake in the house, they moved it to an adjacent garage or storage building. To keep the snake from freezing they ran a cord from the house to a heater with disastrous results. Apparently, the cord shorted out and started a fire, which spread to the house and totally destroyed it. As you continue walking toward the prairie area the foundation is the concrete slab on the left. Information on the Caretaker's House, which may have been converted from Youngs' garage and stables, is limited. If anyone has pictures or information on this

site, please contact Daniel Einstein (608 265-3417 or deinstein@fpm.wisc.edu).



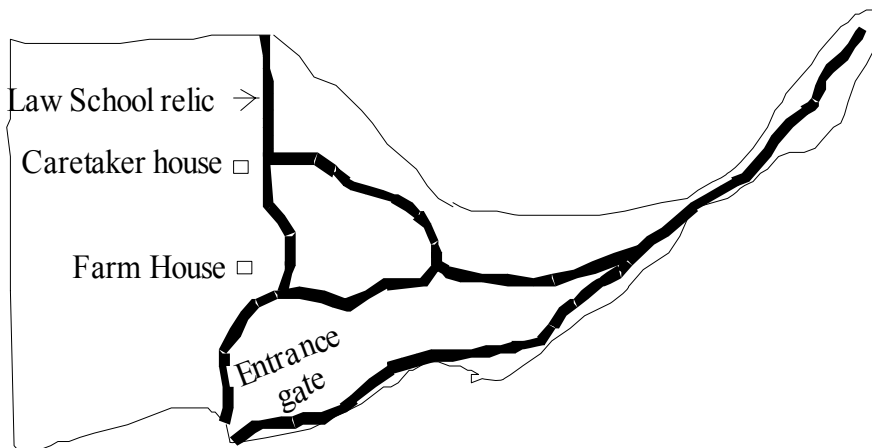
Old Farmhouse Before Remodeling by the Youngs ca 1920
(UW Archives CPU-U0027)

- The cornerstone of the old University Law School and the stones from the Lew Porter House on the corner of State and Park Streets. (This house was later expanded into the old Administration Building.) The Law School cornerstone has a 1891 date on it and is on the left. If you look carefully to the right, you will see many pieces of "Madison Sandstone" which were saved from the old Lew Porter House for possible repairs to Bascom Hall and North and South Halls. To see these stones, take the middle path just beyond the Caretaker's House, and keep bearing right. You will go by three "wooded islands" between the Biocore Prairie and the woods that go down to the lake. Near the end of the third "wooded island", you will find the cornerstone on the left and the sandstone pieces on the right.

What You Won't Find on Picnic Point

- The remains of Captain Boeringer's "Refreshments and Dancing Hall" located on Picnic Point in the 1860's.
- The three hole golf course laid out in 1899.
- All of the houses that could have been built here based on a residential housing plat drawn up in 1922.

If you could find these, this area would not be (to quote Daniel Einstein) an oasis in "the heart of a growing campus or a sprawling metropolitan area" where we can "find a little quiet and reconnect with the natural world."



Historical Sites Near Picnic Point (T Brock)

Insect Drama in a Tree Trunk

by Glenda Denniston

Story of a Dying Hackberry

The story begins about two years ago, when the top of a large hackberry near the edge of the main service road at the base of Picnic Point was broken off in a storm. The Grounds Department cut the tree about 15 feet up, leaving a standing trunk. The tree trunk still had a few small living branches this spring when I noticed the drama taking place inside it.

I was walking by the tree when I noticed a large insect I did not recognize behaving very strangely. It appeared to be doing acrobatics, rhythmically swinging its long abdomen over its head and then down again. I went closer and saw that it had a long “tail,” which I first thought was a stinger, and that it was drilling this appendage into a small beetle larva hole in the trunk. The more I watched, the more fascinated I became, and I spent the evening researching the strange creature. For much of the summer I watched the drama being repeatedly enacted on the dying hackberry.



Megarhyssa atrata using legs to hold ovipositor during egg-laying.
(G Denniston)



Megarhyssa macrurus laying eggs. The upper one has a retracted ovipositor.
(G. Denniston)

The Predators: Giant Ichneumon Wasps

Giant Ichneumon Wasps of the genus *Megarhyssa* star in the dramae. Two different species, *M. atrata* and *M. macrurus* were there at different times. Occasionally both were present at the same time.

What I had seen on the tree trunk were female Giant Ichneumons laying eggs. The long “tails” were not stingers, but ovipositors or egg-laying tubes. These ovipositors are kept rolled up in a yo-yo-like membranous pouch on the insect’s abdomen when they are not in use. They are more than two inches long, and made up of three parts. The parts vibrate together and the hard tip of the middle part drills into the wood. The insect deposits each egg deep in the wood through the

central tube. One individual seemed to help the egg down the tube with the aid of her back legs.

Ichneumons are parasitic wasps. Their larvae prey on the larvae of a different wasp, the Pigeon Horntail (*Tremex columba*) or sawfly, finding Horntails in their tunnels and eating them from the inside out, starting with the least important parts of their bodies. The Ichneumons must allow their prey to remain alive until the sawflies eat their way to the surface or both insects will die.

The Prey: Horntails or Woodwasps

Horntails are fascinating in their own right. Adult females drill each egg individually into dead and dying trees, at the same time implanting fungal spores (*Cerrena unicolor*, a white rot fungus) stored in a special pocket in their abdomens. The fungus grows inside the tree, helping to break down the cellulose in the wood and making it softer and more digestible for the larvae. The larvae live for up to two years inside the tree until they are ready to emerge as adults, chewing their way to the surface.

The Story Continues

The hackberry appears lifeless now. The only evidence of the fascinating drama taking place inside it is a number of small holes on the surface. Inside it, however, hundreds of lives are being lived. Some of the Horntail larvae – the ones lucky enough to have escaped unharmed – will emerge next season as adults, as will the successful Ichneumons. Keep an eye on this tall hackberry stump in the warm season and see the fascinating life for yourself. For more information about Giant Ichneumons see the Heatwole and Davis article in the January 1965 *Ecology*, pages 140-150.

Biocore Prairie: Where There Is Smoke...There Really Is Fire!

by Janet Batzli, Associate Director Biocore

Don't be surprised or alarmed if you notice a black plume of smoke rising over Picnic Point early next spring. Instead, walk up the hill to the open grassland just east of the Eagle Heights Community Gardens and watch—from a safe distance! What you will see is a burn crew setting fire to the Biocore Prairie.

Why fire?

One word...weeds!

Fire is a natural element of a healthy prairie ecosystem and an essential tool for restoration and management of prairies. For the last eight years, Biocore students, staff, faculty and volunteers have been converting the old agricultural fields at the base of Picnic Point to tall grass prairie, using prescribed burns as one management strategy to help control weeds, remove encroaching woody plants, and encourage prairie plant growth. We burned the area in 2004 and 2005 to attack the many annual and perennial weeds.



Seth McGee (Lab Manager) and Nate Chin (Biocore student) burn the Biocore Prairie in spring 2004. (J Batzli)

As plants grow and die, above-ground biomass accumulates and supplies fuel for burning. Fire in early spring provides a pulse of nutrients and exposes dark soil to direct sunlight. These conditions are optimal for growth of prairie plants that are particularly well adapted to fire, with deep, extensive, long-lived root systems and underground growing points. Most annual weeds and grasses can be controlled with prescribed burning. However, fire must be carefully applied and managed in restorations since the conditions following a burn may also favor weeds if seeds survive within the soil, disperse from adjacent areas, or if the site supports perennial weeds such as Canada thistle that can resprout following fire. Fortunately, fire is not our only restoration tool.

More than fire.....

Since 1997, the Biocore Prairie team has been preparing soil, hand-pulling weeds, sowing prairie seed, transplanting and watering prairie seedlings, cutting brush, and mowing fields and fire breaks. Happily, we can report that our hard work is paying off with the establishment of 37 native prairie species, declining weed growth in some areas, and a significantly higher bird species diversity in Biocore Prairie compared to an adjacent grassland control.

The goal of the Biocore Prairie project is to provide ecological education opportunities for undergraduate students as well as public outreach and enjoyment. The Biocore Prairie is a central field site for two Biocore lab courses, for summer independent research projects, service learning, and collaborative research and teaching efforts with many other UW programs and departments including the Biocore Prairie Bird Observatory coordinated by Mara McDonald. We are always interested in new partners!

Highlights

In summer 2004, a civil engineering class taught by Dan Rodman (CEE450) did a detailed survey of the Biocore Prairie resulting in a permanent, 20x20 meter grid overlay map of the entire prairie that is geo-referenced to the Dane County coordinate system (accurate to 5 cm!). This work establishes a valuable base map from which students can accurately locate study plots and analyze their data spatially utilizing GIS (Geographic Information System) software.

Each year since 2001 we have welcomed three to seven summer students doing independent research projects in the Biocore Prairie. All areas of the site have provided venues for projects carried out by Biocore students and/or high school students. These students receive directed study credits (and in some cases small grants) to do their research on topics as diverse as seed predation, the impact of sawdust addition to soil on prairie plant competition and soil invertebrates, distribution and abundance of mycorrhizae fungi, simulated grazing, and bird and insect diversity in different patches of prairie.

Biocore Prairie currently has two of seven acres planted in prairie. This fall we plan to plant the remaining five acres that are now under soybeans. To find out more about Biocore and this project please visit <http://www.biocore.wisc.edu/biocore> or contact Janet Batzli and Seth McGee.

Biological Communities in the Preserve's Master Plan

by Ann Burgess

The Lakeshore Nature Preserve's governing committee is in the process of finalizing a master plan that will guide management of the Preserve over the coming years (see article on page 1 by Bill Cronon). An essential component of this plan is a vision of the ecological communities for each part of the Preserve 30 to 50 years in the future and management strategies for achieving these goals.

Developing the Master Plan's Biological Component

The Preserve Committee, and particularly a subcommittee chaired by Professor Paul Zedler that included members of the Friends of the Preserve, spent over two years discussing issues and working out the biological component of the master plan. We toured various areas, assembled data on existing communities, and talked with users, including many faculty and staff who teach and conduct research in the Preserve. We also looked at historical records, such as photos from the early part of the twentieth century, old maps, and surveyors' notes. We paid particular attention to the 1996 Campus Natural Areas management plan written by Virginia Kline and Brian Bader when the Preserve was under management by the Arboretum. We modified our plan as we gathered data and spoke to people.

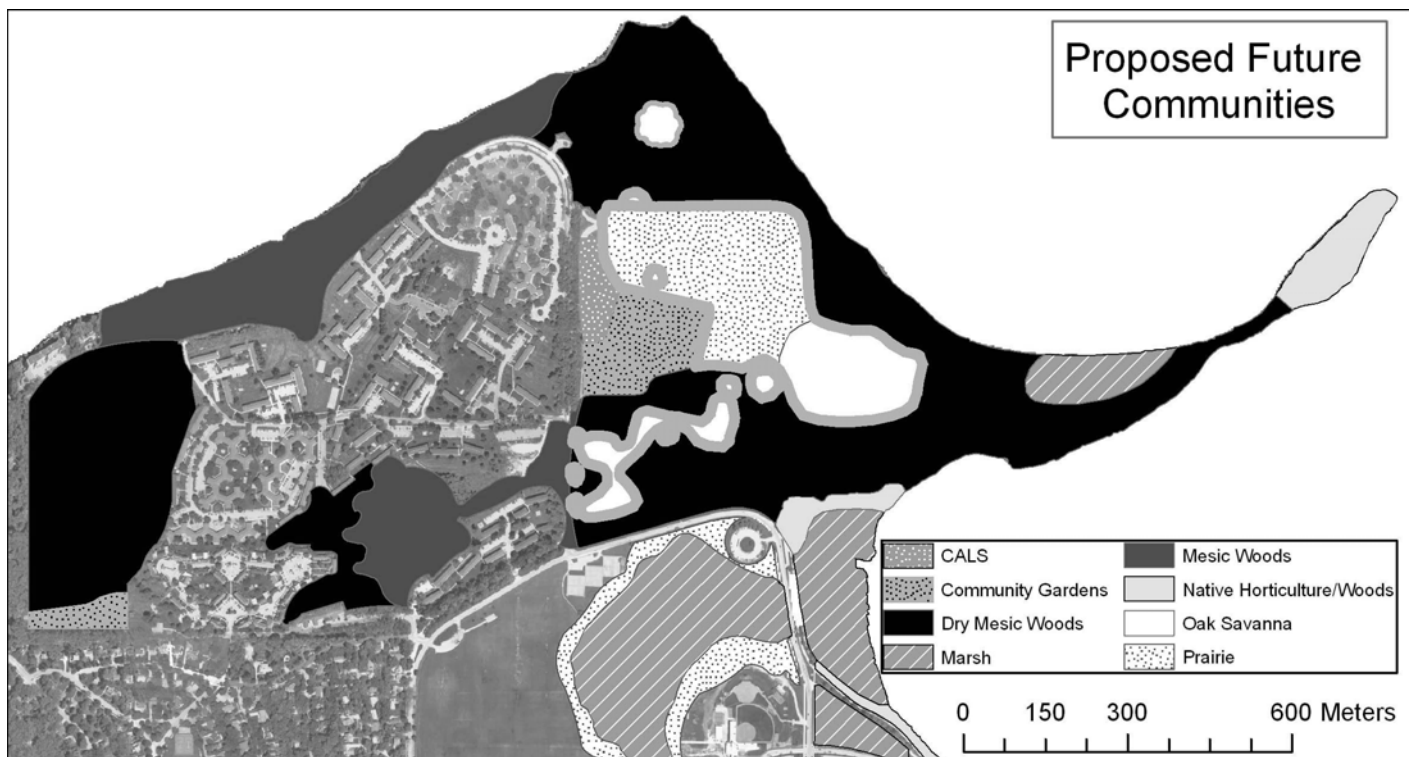
Vision for the Future

We based our vision to a large part on the communities that are there now, but we also paid attention to historical records. The plan is conservative. Any management activities designed to change community types will be implemented slowly over a period of years. There are practical reasons for going slowly, but we also want to do this step-wise so that we can learn what works best as we go.

An overriding necessity for all of the biological communities is the need to control invasive species. In many cases this means not only removing the offenders, but replacing them with the appropriate native plants. Much effort to deal with invasive species is already underway, and the Friends are deeply involved. This will continue to be an on-going and very difficult issue. Another crucial issue is controlling erosion, particularly on slopes going towards the lake.

Woods: The majority of the wooded areas will continue to be wooded. We recommend allowing the moister, richer sites, such as North Shore/Wally Bauman Woods, to slowly undergo succession to a sugar maple-dominated woods while maintaining the drier sites, such as Eagle Heights Woods, as oak-dominated woods. Since oaks cannot reproduce in the

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Proposed Future Communities. Proposed changes will take place gradually over the next 30 to 50 years. Muir Woods and the Lakeshore Path (not shown) are designated Native Horticulture/Woods. Map prepared by Cassandra Garcia.

Biological Communities *(continued)*

shade of other oaks, this will require planting oaks and/or experimenting with the careful use of fire.

Savanna: Savanna (also called oak opening) is an important community that we hope to reestablish in the Preserve. We recommend opening small areas around a few large, open-grown oaks in Frautschi Point and trying to establish some areas of savanna/oak opening in parts of Bill's Woods and in the field northeast of Bill's Woods. The boundaries between woods and prairie will include savanna transition zones where the woodland area gradually becomes more open.

Prairie: The open area between Picnic Point and the Eagle Heights Community Gardens and College of Agriculture's experimental plots is designated as prairie. The Biocore program has been working on one section since 1997 (see Janet Batzli's article on page 5). The 1918 Marsh edges will also be prairie. Creating and maintaining prairies and oak openings will require the careful use of fire.

Wetlands: The wetlands should be maintained in an open condition with good water quality to encourage a diversity of aquatic plant and animal species. A long-term plan for the 1918 Marsh is currently underway.

Native Horticulture/Woods: Muir Woods and Knoll, the base and tip of Picnic Point, and the Lakeshore Path are heavily used areas of the Preserve. We want these high use areas to be as natural as is practical but recognize that plants that can survive intense use will have to supplement native plantings.

The master plan is ambitious. It will require the combined efforts of staff, faculty, students, and volunteers from the community over many years. We invite you to become involved! Contact Friends Volunteer Coordinator Glenda Denniston (cdennist@wisc.edu) or Preserve Manager Cathie Bruner (cbruner@fpm.wisc.edu)

Announcements

Web Update

The Friends of the Lakeshore Nature Preserve will be updating our web site in the next few weeks. You will find the improved web site at our new web address, www.uwalumni.com/lakeshorepreserve. The new site will have drop down menus, making it easier to locate material on our site. We hope you will visit our web site to learn about the Friends, the Preserve and Preserve history. The site includes many photos of the plants and animals of the Preserve.

Membership Renewal

Many of our members renew in the fall. Please renew promptly when you receive your renewal card to reduce your mail and our mailing costs! Your dues support our stewardship work, such as the Bill's Woods restoration, and outreach activities.

Share Your Bird Sightings

Please share your bird sightings with other birders on the Bird Sightings Board located behind the exercise board by the Picnic Point gated entrance (to the left of the main entrance) next to the Bill's Woods restoration. These bird sightings allow other birders, especially students and beginning birders, to know what birds are present in the area. The data from the Board is used to update the Lakeshore Nature Preserve Bird Checklist. Due to its multiple functions, we encourage people to continue to record species throughout the year and to record more than the rarest species. This will allow us to track bird migration and bird usage of the Preserve. Sightings can also be sent to Roma Lenehan (rlenehan@charter.net). Thank you for helping with this important project.

Join the Friends of the Lakeshore Nature Preserve

Name _____	Student	\$10	<input type="checkbox"/>
Address _____	Individual	\$20	<input type="checkbox"/>
City, State _____ Zip Code _____	Household	\$35	<input type="checkbox"/>
Phone (optional) _____ Email (optional) _____	Steward	\$50	<input type="checkbox"/>
<input type="checkbox"/> Please send me information about how to volunteer	Patron	\$100	<input type="checkbox"/>
(Include your email address and telephone number if you would like to volunteer)	Other	_____	<input type="checkbox"/>

Mail your check payable to Friends of the Lakeshore Nature Preserve with this form to:
Friends of the Lakeshore Nature Preserve P.O. Box 55056 Madison, WI 53705

Your donation is tax deductible to the full extent of the law.

Master Plan *(continued from page 1)*

additional planning (to say nothing of fundraising), we'll probably seek a modest, open, unheated structure capable of sheltering small groups from inclement weather while providing interpretive panels, maps and brochures, and restroom facilities. If we can include an observation deck for visitors to gain better views of University Bay and the Class of 1918 Marsh, so much the better.

Again, the goal of this first master plan for the Lakeshore Nature Preserve is to guide management decisions for the next decade, so that if we successfully follow its recommendations, we should be able to look back ten years from now and feel both confident and proud that the Preserve will be in much better shape than it is right now. But it goes without saying that such a plan is worthless without concerted efforts on all of our parts—university officials, faculty and students, members of the campus and city communities, and, not least, the Friends of the Lakeshore Nature Preserve who have already done so much to protect this special place—to make these recommendations a reality.

Everyone involved with the Preserve Committee looks forward to working with the Friends to make this vision a reality.

Friends of the Lakeshore Nature Preserve
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Our Name Has Changed!

We Are Now

Friends of the Lakeshore Nature Preserve

The Friends has a new name. At the September 13 special membership meeting the attendees unanimously voted to change our name to the Friends of the Lakeshore Nature Preserve to reflect the new name of the Lakeshore Nature Preserve itself.

Please help spread the word of our name change. We need everyone to know our name so that we will have support to protect and maintain the Lakeshore Nature Preserve.

In conjunction with our name change, we have changed our newsletter name to *Preserve!*

We have also changed our web address (URL) to www.uwalumni.com/lakeshorepreserve. Please correct your bookmarks to reflect this change. This new address should make it easy for new people to search for and find our web site.

We are improving our web site by making it more attractive and easier to use as we update it to include our name change. We will be incorporating drop down menus that will make the site easier to navigate. These web changes will occur in the near future.

New Web Address

www.uwalumni.com/lakeshorepreserve