



FRIENDS

for friends of the University of Michigan's
Matthaei Botanical Gardens and Nichols Arboretum

Spring
Plant Sale!
May 5-7
See Gift Shop
News, p. 7

Rain, Rain, You Can Stay

Rain Gardens Slow Storm Water Runoff and Require Little Watering

Monica Milla

Monica Milla is a master gardener, master composter and MBGNA volunteer. She lives within 15 feet of Malletts Creek and every year she turns a little more of her lawn into garden beds.

Want a beautiful, low-maintenance garden that also slows and cleans storm water runoff? Rain gardens do exactly that and they are easy to create in any home landscape.

Rain gardens allow water to slow and cool down (it can be 140° F when coming off the roof), and they filter out nutrients and pollutants. According to the Rain Gardens of West Michigan website, www.raingardens.org, "Rain is natural; storm water isn't. Up to 70% of the pollution in our streams, rivers, and lakes is carried there by storm water. About half of the pollution that storm water carries comes from things we do in our yards and gardens!"

Rain gardens let about 30% more water soak into the ground than a lawn does, and keep 90% of pollutants out of our waterways. How? They simply use water that would otherwise run off your property each time it rains. They collect and hold the water from downspouts or driveways to give it the chance to filter slowly into the ground rather than to flow off quickly.

Storm water specialists in Maryland introduced rain gardens, or bioretention systems, in 1990. Since then they are becoming popular all over the U.S. in both residential and commercial settings. When homeowners create rain gardens, they are mimicking the natural hydrologic function of a forest where a spongy "litter" layer of leaves and needles soaks up water and allows it to penetrate the soil layer slowly. The plants, soil, roots and mulch of the rain garden serve the same function.

Rain Garden Basics

A rain garden should be located strategically to intercept water runoff. It can be created by directing a downspout into an existing garden, by installing plants in a low area where water tends to pool up, or by creating a garden in an area of lawn where water tends to run. Making a rain garden is similar to creating any other new garden: evaluate your site, create a design, dig and amend the soil, and plant. For step-by-step instructions and sample designs, see the website cited above.



Spring 2006 / Vol. 2, No. 3 Stewardship Issue

Contents

features

- 1 Rain, Rain, You Can Stay
- 3 How Else Can I Help?
- The N.I.M.B.Y. List
- 6 Our Local Actions
- 11 What Is the Big Deal with Biodiversity?

departments

- 2 Director's Message: Thinking About the Future As We Approach 100 Years
- 5 Curator's Notes: Green Roofs
- 7 Spring/Summer Calendar 2006
- 13 Get Lost at MBGNA...
- 13 Profile: Aunita Erskine
- 14 Natural Areas Spotlight: Kirk Woods
- 14 Ask The Experts: Planting a Rain Garden
- 15 New Members

updates

- 4 Meet Budge Gere, Director of Development
- 4 Staff Transitions
- 10 What Happened to the Driveway?
- 14 From the Editor
- 15 Thank You Friends
- 15 2006 Bulb Sale
- 16 Help Us Create a Celebration to Remember

continued on page 12

Director's Message Thinking About the Future As We Approach 100 Years

Bob Grese

1906 was an eventful year. It was a year of many major disasters. An earthquake and fires nearly destroyed San Francisco. Mt. Vesuvius erupted and devastated much of Naples, another major earthquake hit Ecuador, and a major typhoon and tsunami hit Hong Kong. There were also some wonderful things. In college sports, Princeton won the NCAA football championship. The Chicago White Sox bested the Chicago Cubs to win the World Series. Among major inventions, W. K. Kellogg introduced the world to corn flakes, the wireless telephony was created by Reginald Fessenden, the world's first feature film was produced, and the muffuletta sandwich was created in New Orleans. President Theodore Roosevelt won the Nobel Peace Prize. He also created our nation's first National Monument – Devil's Tower in Wyoming.

Here in Ann Arbor, 1906 was the year that Frederick Newcombe and George Burns were busy laying the groundwork for the University Botanical Gardens and Arboretum that would officially open in 1907. With the help of the Chicago landscape architect Ossian Cole Simonds, they evaluated several sites around campus, including “the Cat Hole,” now the site of the Life Sciences Complex and the Palmer Drive Parking Structure. In the end, they convinced Walter and Esther Nichols to donate about 27 acres they owned on Geddes Avenue to be combined with city-owned land stretching down to the Huron River to create a botanical garden as a joint venture between the City and University.

As he made his case for the botanical garden and arboretum to the University Regents, Newcombe thought primarily about the future. He suggested, “In this University we have been able to work without a botanic garden, because we have been able to use the whole surrounding

country for our field of study. But one can foresee that in twenty-five years the farmer's woodlots will be put under cultivation for timber, the bogs will be drained, and no land will be left where vegetation can be studied in natural conditions.” By preserving this land as a botanical garden and arboretum, Newcombe noted that “the University students of the future and the school children would have a field within fifteen minutes' walk of the Campus where practically all the lessons taught by vegetation growth could be learned.”

As I think about the rich heritage we enjoy in what are now Matthaei Botanical Gardens and Nichols Arboretum, I'm mindful of what legacies we ought to be leaving for the future. Some of our local challenges are much like those Newcombe, Burns and their colleagues faced in 1906. We continue to lose natural habitat at an alarming rate. Other environmental challenges are much more global in scale: loss of biodiversity, climate change, and a growing lack of ecological literacy. So, what can we at Matthaei Botanical Gardens and Nichols Arboretum do in response? As in 1906, there is still a need for nearby places of learning that will help people respond in local and personal ways to these vexing global problems. We can teach by example, helping redefine our relationship to nature and showcasing examples of environmental stewardship through our buildings, gardens and natural areas.

This issue of our newsletter shares some of the ways we're putting these ideas into practice. Our cUltivating coMmunity project demonstrates a closed loop system of composting and food production that is engaging a growing group of students on campus. Our Junior Master Gardener program excites young children about growing food and learning how to garden. We're creating a series of green roof demonstrations and experiments that will help us evaluate and showcase a variety of plant species that could help to make our cities much more green. Finally, our



Friends of Matthaei Botanical Gardens and
Nichols Arboretum Newsletter
Spring 2006 / Vol. 2, No. 3
Dorothea Coleman, Editor
mbgna.editor@umich.edu

© 2006 Regents of University of Michigan
For permission to use, contact Matthaei Botanical Gardens
and Nichols Arboretum

Matthaei Botanical Gardens and
Nichols Arboretum
University of Michigan
Robert E. Grese, Director
Karen Sikkenga, Associate Director

Invasive: oriental bittersweet

partnering work with the Michigan Botanical Club to preserve the rich diversity of Horner Woods and our oak openings restoration at Kirk Woods are good examples of how to care for local nature. As you can see from our calendar of programs and learning opportunities, we are continuing to explore new ways of connecting people with nature, gardens and art.

Over the spring and summer months, you'll continue to see additional improvements to our gardens and displays. For instance, we're working on new lobby displays at Matthaei Botanical Gardens and new signage and plant labels on both sites. You'll see continued new plantings in our Centennial Shrub Collection at the Arb as well as continued enhancements to the riverfront as a place for people to gather or sit and simply enjoy the river. At the Gardens, we'll be working to improve trails, provide a new picnic grove, and create a “rain garden” and new plantings around our newly expanded parking lot. You'll also see a start to expanding our display gardens linking our Gateway Garden of New World Plants and the Alexandra Hicks Herb Knot Garden. The pools in the Gateway Garden at Matthaei will be transformed into a water garden honoring Erich Steiner, and our Perennial Garden will become an even more vivid display of perennial garden favorites.

I like to think that all these changes build on past traditions at Matthaei Botanical Gardens and Nichols Arboretum and provide a renewed momentum for another 100 years. We're feeling a lot of excitement about our future and hope you will, too, as you come out and join us.

How Else Can I Help?

Dorothea Coleman

Dorothea has been a Master Gardener and MBGNA volunteer since 1990. Working with plant records dating to 1908, she discovered that buckthorns, privets and honeysuckles were purchased for 6 cents each. If they'd only known!

In this issue there are many suggestions of things you can do to help steward the earth. Here are some actions any of us can take right now.

Be a N.I.M.B.Y.

If any of the exotic invasives (see “The N.I.M.B.Y. List,” below) are already growing in your yard, remove them. Replace them with natives or more well-mannered aliens. Did you know that such common species as daisies, daylilies and Queen Anne's lace are not native? These aren't on the “most unwanted” list because, while they have naturalized, it's not been to the exclusion of our native vegetation. There are many other common garden and landscape plants that never seem to escape into the wild – our Spring Plant Sale (May 5-7) and its plant list is a good starting point.

Honey, I Shrunk the Lawn

An even more radical idea (for some) is to decrease the size of your lawn and increase

THE N.I.M.B.Y. LIST

Barberry (*Berberis* spp.)
Buckthorn (*Rhamnus* spp.)
Dame's rocket (*Hesperis matronalis*)
Garlic mustard (*Alliaria petiolata*)
Honeysuckles, bushy (*Lonicera* spp.)
Honeysuckle, vine (*Lonicera japonica*)
Multiflora rose (*Rosa multiflora*)
Privet (*Ligustrum* spp.)
Russian olive (*Eleagnus angustifolia*)
Winged spindle tree or burning bush (*Euonymus alatus*)

See photos of these species throughout the newsletter...
They are the ones you do NOT want in your yard!

the area planted with trees, shrubs and other plants. By selecting plants that are adapted to the growing conditions of your area, you can create green spaces around your home that don't require the constant application of fertilizers and pesticides, or the routine lawn work. Another advantage of lawn reduction is that the addition of trees, shrubs, perennials and annuals will increase habitat for the critters around us. There will be new nesting areas, new sources of food (especially if you plant primarily natives), new cover to hide in, and new places to raise their young for the songbirds, small mammals, butterflies, bees and other beneficial insects that have been displaced by human development. The trick here is to avoid making your landscape attractive to the larger, unwanted mammals like skunks and raccoons. These websites can get you started <http://www.nwf.org> or <http://www.xerces.org> or, more locally, http://www.socwa.org/lawn_and_garden.htm.

Just Say No!

Consider reducing your reliance on chemical fertilizers, herbicides, insecticides, etc. Because lawns are unnatural – there are very few monocultures in nature – they require a lot of effort to maintain them. Consider redefining your standards a bit. Do you really need a lawn that looks like a pristine golf course? Or could you go back to lawns as they existed before the post-World War II chemical era? Lawns that include plants other than grass tend to stay green even during droughts. If an all-grass lawn is important to you, then change the way you care for it. Fertilize less often, but first test your soil to see if it's necessary – spring and fall is sufficient. Mow at a higher height. This gives the grass plant more leaf area for photosynthesis resulting in a healthier plant; the taller blades will shade and cool the soil, the roots will appreciate that. Don't bag your clippings – the nitrogen in your fertilizer goes right to the leaves, so if you leave the clippings on the lawn it will be returned and

reused as they decompose –allowing you to use 1/3 less fertilizer! Water less often (once a week) but more deeply (spread a few cans around your lawn and note how long it takes to fill to one inch). The grass roots will grow deeper and be ready for droughts. Visit these websites for details on caring for your lawn in a more eco-friendly way <http://www.hrwc.org/ie/yardgard.htm> and <http://www.healthylandscapes.com/> or, if you aren't in SE Michigan, your local cooperative extension website.

Think Globally, Act Locally

Another way to steward the earth is to do more of your shopping close to home. Think about it – the strawberries that you enjoy all winter had to be shipped great distances to reach your table. Multiply that by all the other products you use that are not made nearby and you can see that there is a great dependence on oil and other fossil fuels to bring these conveniences to you. Whenever possible buy locally grown fresh produce – the extreme position would be to grow your own food, can or freeze it, store other crops in a root cellar, etc. This would be quite impractical for most of us. But we can think about where food and other products come from and the environmental impacts hidden therein. We are fortunate enough to have many farmers' markets in this area, so at least during the growing season we have many options. And besides, we all know that fresh, vine-ripened tomatoes of the many varieties that do not stand up to the rigors of shipping just taste better. Let the produce manager where you shop know that you would prefer more locally grown fruits and vegetables. Also consider whether you want food grown in large industrial settings, or those grown in environmentally friendly ways – such as coffee. This has a big impact on the environment.

continued on page 6



Invasive: burning bush

Meet Budge Gere, Director of Development

As the new Director of Development of the Matthaei Botanical Gardens and Nichols Arboretum, I welcome being given this opportunity to introduce myself to you through this issue of *Friends*. May it be the prelude to when we meet and spend time together.

I am truly excited to be part of MBGNA at this point in its history. The Botanical Gardens and Arboretum are at the threshold of a new era full of promise. I count it a privilege to be invited to enhance its present work and to secure the future of these treasures entrusted to the University of Michigan.

This year marks 100 years since the Board of Regents approved the establishment of a botanical garden and arboretum. Plans are already underway for celebrating this event. MBGNA Director Bob Grese has cast a centennial vision that includes both maintaining traditional values and launching new initiatives in response to present-day threats to the environment. As one new to the work of MBGNA, I find what is going on at both sites fascinating and exciting, whether it is related to the facilities or education or the plants and trees.

I view my role at MBGNA to be one of building relationships with you and people like you in service to furthering the wonderful work of the Gardens and the Arboretum. So who am I and how did I get here? Obviously an introduction needs a few identifying facts about the one introducing himself.

I come to MBGNA having previously lived and worked both in Ann Arbor and Metro Detroit. I have also lived in Seattle and St. Louis, where an arboretum and botanical gardens are treasured institutions. During our years in Michigan family members have had various connections with U-M both as students and faculty. So, on a personal level, this is a delightful homecoming.

Professionally, although new to development at U-M, I have been active in this field throughout my working career,

both as a parish minister responsible for annual giving and capital funds campaigns, and as a board member of numerous not for profit agencies. My passion for development comes from a deeply held belief that the happiest people are people who give of themselves and what they have. One of the great joys of my life is experiencing the joy others receive from giving.

At this time of my work life, I am particularly drawn to this position at MBGNA because the institution's core values are consistent with my own. I believe that nature with all its life-giving properties is a gift. This gift is to be treated wisely and well by all who use it and benefit from it. Part of treating the earth well is being good stewards of it. Naturally the gift is to be enjoyed, something all of us who appreciate and use the Matthaei Botanical Gardens and Nichols Arboretum do. At the same time, we are to maintain what we have and promote its benefits.

We live in a time when a loss of biodiversity, habitat destruction, and ecological illiteracy are on the rise. Global climate change threatens our earthly home. In response to all this, MBGNA has a key role to play in encouraging responsible environmental action in the world and showcasing what can be done to sustain the health of the earth.

To realize the potential of MBGNA in these areas, more people need to know who we are and what we do. We need to develop new friends and build relationships with them.

To that end, five "I"s apply: *Identify, Inform, Invite, Involve, Invest*. You as a friend of MBGNA and all of us on the staff can play a role in the first four parts as together we build the membership and the financial strength of MGBNA. I am confident if we do our part with passion, then others will invest themselves and their financial resources in MBGNA.

You are a friend of MBGNA because you appreciate what it stands for, what it



Budge Gere

practices and what value you receive from the relationship. I now invite you to become part of the Development Team so together we all will share with others what we value about Matthaei Botanical Gardens and Nichols Arboretum.

In the weeks and months ahead, I look forward to meeting you!

Staff Transitions

We'd like to extend a warm welcome to three new staff members. Matthew Scott joins us as a horticulturalist, bringing with him a love of native plant gardens, experience in the heritage bulb business, and some great cookie recipes. Our new IT support person, TJ Smith, brings the experience he gained at The Henry Ford Museum to our new web design, on-line registrations and better database accessibility.

Our new Development Director, Budge Gere, bringing decades of experience along with lots of enthusiasm for MBGNA, introduces himself on this page. Joan Wolf will be continuing as a key member of our development team. We'd like to thank Joan for past leadership as our Director of Development, and for her continued contribution to MBGNA.

We've also said goodbye to long-time senior horticulturalist and greenhouse manager Jim Dickinson. We send Jim off with appreciation for his many years of dedication to this organization.

A heartfelt wish for happiness to each of you in your new circumstance!

CURATOR'S NOTES: Green Roofs

David Michener

If "green roofs" conjure hazy childhood images of tales where cows graze on roofs or imps lurk behind the eave's reeds and iris, then you are not alone. Indeed, modern green roofs are in many ways a welcome revival of a long heritage in which a building's roof is used for growing plants. Only now our reasons have nothing to do with cattle and magic – but with pressing issues of energy and water conservation.

Consider "typical" roofs. They just shed water – great for the building but with horrific consequences for all parties downstream. That quick runoff is a significant source of storm water surges in sewer systems, creeks and rivers. Also, the roof gets quite hot from the sun, consequently the runoff water (and the building underneath) is heated. So while solving one problem – keeping the building dry – three more are created: increased flooding and heating of both building and water. These are severe "system" costs for individual benefit.

A green roof is a special landscape that functions quite differently from the shingles of a pitched roof or the membranes of flat roofs. A green roof happens above this impervious layer! The basic concept is to use thin, lightweight layers stacked like a cake. The base consists of a drainage layer and a root barrier on top of the roofing material. Above that are one or two shallow layers of a very porous soil mix. Then plants create the visible top layer. This system creates a mini-ecosystem buffer zone between the environment and the building, acts as an insulating layer and keeps sunlight from degrading the roof membrane (thereby lengthening the lifespan of the roof). The soil captures water that the plants then absorb. Significant amounts of solar energy are used in photosynthesis, transpiration then cools the air above the roof, and the roots hold

the system in place. Another benefit, the diversity of animal life that visits the green roof can be considerable – some even have birds nesting – but no reliable sightings of imps are yet in. And, of course, the aesthetics are vastly changed – improved to my mind.

Which plants tolerate these harsh conditions? Nature provides numerous equivalent habitats: rocky slopes, alpine zones, alvar (think of northern Michigan), shale barrens, etc. It should be no surprise that small sedums and their relatives are particularly useful here. However, since the pioneering work with green roofs has been done mostly in Germany and Japan, few American species have been tried.

Visit the Gardens to see our initial green roof "in action." Tremco Inc. (<http://www.tremcoroofing.com/greenroofing.asp>) donated the materials for this demonstration pitched-slope green roof. It relies heavily on non-natives, especially Eurasian sedums. Then observe our demonstration plots where we'll evaluate natives and mixtures for use here in Michigan. These plots are allowing us to see if a broader, and native-focused, set of plants can thrive on site. They may be candidates for the retrofitting of the entire MBG building complex perhaps using a concept plan by U-M students in Landscape Architecture. Come, see, learn, and comment – very likely there is a green roof in your future as well.

Planting the green roof



Calling all Stewards of Nature: Great Opportunities to Volunteer

Learn to interpret the landscape and share this wonderment with public audiences of all ages. Bring us your enthusiasm and interest and we will train you for our docent or ambassador positions.

Would you rather engage our visitors in the many plant-based boutique items and books in our Gift Shops at the Gardens or Arboretum? Bring us your smile and customer service skills and we will train you in retail sales.

Hone your horticultural skills working in our Conservatory and formal gardens.

Assist us in our conservation efforts by participating in our ecological restoration activities at either site.

Work on special events such as fundraising, our annual plant sale, Scout and Family Day programs or Shakespeare in the Arb.

There is a place for you at MBGNA!

Contact Barbara Major, Volunteer Coordinator at 734-647-8528 or email

bamajor@umich.edu



Another invasive to avoid: privet

Get Involved

You can pass these messages on to friends, relatives and members of other groups to which you belong. You can let nursery owners know when you shop for plants that you would appreciate it if they would not offer invasives for sale, and that you are interested in native and non-invasive plants for your landscape. (They will not change their offerings unless they know their customers are concerned.) You can take the message to your homeowners association if new common area landscaping is being planned. Let your representatives at all levels of government know that you are concerned with preserving natural areas and will support such legislation.

Continue to Support Our Efforts

Here at the Gardens and Arb we are making such changes. In the article “Our Local Actions” we remind you of some we’ve featured recently. Join us on our workdays: we’ve been working diligently to remove exotic invasives and are beginning to remove other species that are showing signs of becoming a problem such as Castor Aralia (*Kalopanax pictus*), Japanese Aralia (*Aralia elata*), Tree Lilac (*Syringa reticulata* and its relatives; we’ll keep a couple of specimen plants), and some of our black locusts (*Robinia pseudoacacia*). As we progress with new gardens in the formal plantings at the Gardens, lawn will be greatly reduced. We’re working with more than just the plants, too. We have replaced much of the asphalt with gravel to decrease storm water runoff. We are exploring many other ways to improve our stewardship of the lands under our care. We hope that you will join and support us in these efforts.

While our human activities have caused major changes in the world around us, they do not have to be permanent. With education and hard work we can begin to reverse the processes of degradation in the small space that surrounds each one of us. While what you do in your yard may not seem like it will make much difference, when it is multiplied by the changes all of us make, great changes are possible.

Our Local Actions

Rick Meader

Many visitors to the Matthaei Botanical Gardens come away impressed – impressed with the Conservatory, the nature trails, or the gardens surrounding the Conservatory. But, what many don’t see, and which are just as impressive, are the ways in which the Gardens are involved in the community. The facilities, and the people who use and maintain them, are helping to make better use of our resources and beautify our surroundings in a responsible way. Here are just a few ways in which the Gardens is being used to help the community to Think Globally and Act Locally.

cUltivating coMmunity

cUltivating coMmunity (<http://www.cultivatingcommunity.com/>) was formed to develop ways for the University to make a closed loop food system. Julie Cotton, the Program Coordinator, is currently leading a group of about 20 students in growing produce by organic methods. This winter they grew spinach, carrots, beets and a variety of greens in City of Ann Arbor compost in a frame structure behind the greenhouses. Yes, it was cold, but covering the structure with plastic keeps the “greenhouse” surprisingly warm. As the weather warms up, they’ll move to plots located between two Matthaei greenhouses. The chefs of the University Club will use the produce from these gardens. The group is feeding food waste from the Club to worms whose castings are used as an organic fertilizer in the garden plots. That’s right, lowly worms are helping to stimulate our University’s brightest minds. To reach the scale necessary to process all of the waste generated by the university’s kitchens and supply a portion of the food demand will require significant effort and growth of the program, including the facilities devoted to it. To meet that lofty goal, the group is actively pursuing funding for the program and continuing to develop skills and relationships necessary to create and sustain the loop. If you want to help out, or learn more, check out the website above.

Junior Master Gardeners

Younger folks can benefit from the Junior Master Gardener program, in operation at the Matthaei Botanical Gardens for over ten years. According to Tom Shope, program coordinator, the program is geared toward Washtenaw County kids from 9-11 years old and is sponsored by the Washtenaw County chapter of the MSU Extension Service. (I know, how did MSU work themselves into the U-M Gardens?) For six weeks, beginning in May, the students attend a two-hour class where they learn about a new subject, take a test on the subject and work in the garden. They maintain the crops over the summer and have a harvest party in the fall. Students who successfully complete the program and donate 10 hours of community service are honored at the fall 4-H luncheon. On average, 15-16 kids enroll in the program, which benefits them, their families and those who learn about gardening from them.

Spring Plant Sale

Yet another outreach to the community is the Botanical Gardens’ annual Spring Plant Sale, May 5 – 7. According to David Read, coordinator of the sale, it provides members and the general public with the opportunity to purchase plants they may not be able to find at your garden-variety garden store, such as plants native to Michigan, unique daylilies, and a wide variety of shade plants and rock garden plants. To help protect the local environment from infiltration by invasive plants, the sale will not offer plants found on the City of Ann Arbor’s Invasive Species List. Master Gardeners will be available to answer your general gardening and plant questions. New this year, members of Wild Ones and the Huron Valley Chapter of the Michigan Botanical Club will provide tips about the numerous native plants available, and advice as to which will attract birds or butterflies to your garden to give an aerial dimension to your world.

SPRING AND SUMMER CALENDAR 2006

Matthaei Botanical Gardens Conservatory Hours: Tuesdays, Thursdays, Fridays, Saturdays and Sundays from 10 am – 4:30 pm; Wednesdays from 10 am – 8 pm; closed on Mondays. \$5 Adult admission, \$2 Child Admission, free to public on Fridays from 12 – 4:30 pm, Friends members free.

The Reader Center at Nichols Arboretum Hours: Monday - Friday from 8:30 am – 4:30 pm.

The trails and grounds remain open from dawn until dusk daily at both Nichols Arboretum and Matthaei Botanical Gardens.

All events, meetings and Adult Education, Youth and Family classes are held at Matthaei Botanical Gardens except as noted.

All events and meetings are free, except as noted, and open to the public. Classes have fees; see the individual listings. For the full description of the classes please consult your Community Education Brochure or the website www.sitemaker.umich.edu/mbgna. To register for classes, please call 734-647-7600.

● Events in blue are events sponsored or run by Matthaei Botanical Gardens and Nichols Arboretum.

● Events in light blue are hosted by other organizations.

May

Friends Evening Herb Study Group Meeting

1, Monday, 7 – 9 pm

Ohara Ikebana (ADULT EDUCATION)

1, 8, 15, 22, June 5 and 12, Mondays, 7 – 9 pm

Learn how to arrange flowers in this Japanese style. Materials fee: \$30.

Fee: \$120 (Members: \$108) #06-AE-33

3000 Years of Chocolate (ADULT EDUCATION)

2, 9, 16 and 23, Tuesdays, 7 – 9:30 pm

Doc Choc returns with more chocolate and its story. Lots of chocolate!

Fee: \$100 (Members: \$90) #06-AE-34

Inspired By the Outdoors: Plein Air Painting (ADULT EDUCATION)

3, 10, 17, 24, 31 and June 7, Wednesdays, 1 – 3:30 pm

Whether you paint with oils, watercolors or acrylics, this class will help you paint better landscapes. This class is co-sponsored with the Ann Arbor Art Center so members of either group enjoy the members’ discount.

Fee: \$150 (Members: \$135) #06-AE-20

Secret Spaces and Natural Places

(YOUTH AND FAMILY)

4, 11, 18 and 25, Thursdays, 10 – 11:30 am

This weekly series provides parents and children, ages 3-5, a start exploring science in a fun and engaging way. Registration is required as space is limited.

Fee: \$8/child (Members: \$7.50/child) #06-YE-7

Sketching at Matthaei Botanical Gardens (ADULT EDUCATION)

4, 11, 18, 25, June 1 and 8, Thursdays, 1 – 3:30 pm

Learn the art of drawing; refine skills with line, edge, shading, proportion, perspective and composition. This class is co-sponsored with the Ann Arbor Art Center so members of either group enjoy the members’ discount.

Fee: \$150 (Members: \$135) #06-AE-21

Indiana’s “Hills and Hollers”

(ADULT EDUCATION)

4 – 7, Thursday after 3 pm through Sunday morning

Explore the limestone uplands of south-central Indiana with Ellen Weatherbee.

Register soon as this class fills quickly.

Fee: \$295 (Members: \$280) #06-AE-16

26th Annual Spring Plant Sale

5, Friday, 3 – 7 pm

Members only, Memberships may be purchased at the door

6 and 7, Saturday and Sunday, 9 am – 4:30 pm

Open to the Public

Andy Goldsworthy Natural Sculptures at the Arboretum (YOUTH AND FAMILY)

6, 13 and 20, Saturdays, 1 – 3 pm

Students will learn about Andy Goldsworthy’s sculptures made with natural materials. Then they’ll head outside to make their own. Sculptures will remain on exhibit at the Arb.

Fee: \$60 (Members: \$54) #06-YE-6

Huron Valley Rose Society Meeting

9, Tuesday, 7:30 – 9:30 pm

Wed. A.M. Hiker, Spring (ADULT EDUCATION)

10, 17, and 24, (begins April 19 and 26), Wednesdays, 9 am – 12 pm

Ellen Weatherbee returns to lead you into the wilderness to collect edible plants and mushrooms.

Fee: \$150 (Members: \$135) #06-AE-14

Wild Ones Meeting

10, Wednesday, 7 – 9 pm

Rain Gardens – John J. Gishnook

Arboretum Restoration Workday

13, Saturday, 9 am – 12 pm

Join MBGNA staff in working to remove invasive plant species from the Arb to promote native plant growth. We typically mix a little bit of hard work with education about the Arboretum and restoration ecology work here and in the local area. Dress to work outside! Snacks and tools provided, but you are welcome to bring your own loppers or pruners. Locations vary from month to month, so call 734-647-7600 or email Arb@umich.edu for more information. If you would like to join our email listserve for workday information, send a note to arbworkdays-request@umich.edu with the word “subscribe” in the subject line of the message.

Illustrating Nature for students ages 9-12 (YOUTH AND FAMILY)

13, 20, June 3 and 10, Saturdays, 10:30 am – 12 pm

This class will teach young artists how to see and record natural subjects like a science illustrator! This class is co-sponsored with the Ann Arbor Art Center so members of either group enjoy the members’ discount.

Fee: \$55 (Members: \$50) #06-YE-9

Wildflower Wander (ADULT EDUCATION)

13, Saturday, 10 am – 12 pm or 2 – 4 pm at Nichols Arboretum

14, Sunday, 10 am – 12 pm or 2 – 4 pm at Matthaei Botanical Gardens

Join MBGNA docents on a search for spring ephemerals.

Fee: Free! But do register as space is limited! #06-AE-22

GIFT SHOP NEWS

Ah, gardening season, finally! Whether you are a seasoned gardener with a green thumb or a beginner whose thumb is undecided, you’ll want to check out the excellent selection of helpful gardening books and useful gardening supplies we have in the gift shop. You’ll find a large selection of Felco pruners, hand tools and gardening gloves, along with some whimsical decorative items.

During the Spring Plant Sale, May 5 – 7, we’ll again be holding a major clearance sale, reducing the inventory of garden themed items, both functional and decorative. If you missed our sale in December, or if you scored some great bargains, you’ll want to check out our sale! As always, show your membership card and save 10% on your purchases.

May, continued

Woodland Explorer Walk
(YOUTH AND FAMILY)

13, Saturday, 1 – 4 pm
Stroll through the Wildflower Garden with an interpretive guide. Make a basket and listen to stories of Native American culture. Children ages 6-12 with an adult. Registration required.
Fee: \$6/adult or child (Members: \$5/adult or child) #06-YE-8

Sierra Club Meeting

16, Tuesday, 7:30 – 9:30 pm
Nature Photography
<http://michigan.sierraclub.org/huron/>

Friends Herb Study Group Meeting

17, Wednesday, Potluck at 12:30 pm;
Program at 1 pm
Latin for Gardeners – Dorothea Coleman

Audubon Society Meeting

17, Wednesday, 7:30 – 9:30 pm
Hummingbirds and Great Lakes HummerNet

Great Lakes Judging Annual Seminar

20, Saturday, 10 am – 10 pm
21, Sunday, 8 am – 1:30 pm

Ann Arbor Orchid Society Meeting

21, Sunday, 2 – 4 pm
Paul Phillips of Ratcliffe Orchids – New Breeding in Complex Paphiopedilums

Ann Arbor Bonsai Society Meeting

24, Wednesday, 7 – 10 pm
Bring Your Own Tree

Ecosystem Restoration Workday at the Gardens

27, Saturday, 9 am – 12 pm
Join MBGNA staff in working to restore our various ecosystems at the Gardens by removing invasive species. We'll mix hard work with education about the Gardens, its ecosystems, and the focus and reasons for our restoration work. Dress to work outside! Use our tools or bring your own. Please call Connie Bailie at 734-647-8084 for details and to sign up for workdays.

June

Grasses, Grasses, Grasses
(ADULT EDUCATION)

1, Thursday and **6**, Tuesday, 7 – 9 pm, plus 2 Sundays, **4** and **11**, 9 am – 1 pm
Evening lectures and Sunday hikes combine to teach you about grasses, their identification and ecology.
Fee: \$120 (Members: 108) #06-AE-23

Introduction to Bog and Fen
(ADULT EDUCATION)

3, Saturday, 10 am – 2 pm
A lecture, brown bag lunch, and then a walk to Radrick Fen initiate this new series of classes. These classes may be taken singly or as a whole.
Fee: \$40 (Members: \$36) #06-AE-24

Georgia O'Keefe Acrylic Painting
(YOUTH AND FAMILY)

3, 10, 17 and 24, Saturdays, 10 am – 12 pm
This class for youth, ages 12-17, will focus on painting in the style of Georgia O'Keefe. Students will sketch first, learn techniques of stretching canvas and painting with acrylics. A materials list will be sent with confirmation.
Fee: \$80 (Members: \$72) #06-YE-10

Hosta Hybridizers Meeting

4, Sunday, 10 am – 4 pm

Friends Evening Herb Study Group Meeting

5, Monday, 7 – 9 pm

Shakespeare in the Arb Love's Labours Lost

9 – 11, Friday – Sunday, 6:30 – 9:30 pm
15 – 18, Thursday – Sunday, 6:30 – 9:30 pm
22 – 25, Thursday – Sunday, 6:30 – 9:30 pm
Tickets: General Admission - \$15; Members, Children and Students with ID - \$10

Arboretum Restoration Workday

10, Saturday, 9 am – 12 pm
Please see May's listing for complete details.

Mud Lake Bog (ADULT EDUCATION)

10, Saturday, 9:30 am – 1:30 pm
Visit Mud Lake Bog, another property managed by MBGNA and not open to the public. These classes may be taken singly or as a whole.
Fee: \$40 (Members: \$36) #06-AE-25

Shakespeare in the Arboretum

This year's offering brings you *Love's Labours Lost*, another romantic comedy full of great dialogue, mistaken identity and best intentions gone wrong. Director Kate Mendeloff brings it all together in the natural beauty of the Nichols Arboretum to create one of Ann Arbor's most memorable springtime events.

All shows begin at 6:30 pm and run Thursday through Sunday each week (with the exception of the first week – no performance on Thursday) – June 9-11, 15-18, and 22-25. The box office opens at 5 pm each day for Members and 5:30 pm for General Admission, with no advance ticket sales (due to the possibility of weather related cancellations). Tickets are \$10 for students with ID and Members of the Friends of MBGNA, \$15 General Admission. Bring your own light chair or blanket to sit on, and wear good walking shoes! For more information, see our website: www.lsa.umich.edu/arbtheater. If you will need mobility assistance during the performance, please call 734-647-7600.

Volunteers are a big part of each production. If you'd like to see the play for free and lend a hand in either the box office tent or as an usher, please contact Barbara Major at 734-647-8528. Ushers are required to attend an hour-long orientation prior to volunteering. All volunteers get a free t-shirt!

Andy Goldsworthy Natural Sculptures at the Gardens (YOUTH AND FAMILY)

10, 17 and 24, Saturdays, 1 – 3 pm
Students will learn about Andy Goldsworthy's sculptures made with natural materials. Then they'll head outside to make their own. Sculptures will remain on exhibit at the Gardens.
Fee: \$60 (Members: \$54) #06-YE-11

Huron Valley Rose Society Meeting

13, Tuesday, 7:30 – 9:30 pm

Wild Ones Meeting

14, Wednesday, see website, <http://www.for-wild.org/chapters/annarbor/>, for directions
Native Plant Nursery

Wild In the City – A Prairie Fen Walk in Ypsilanti (ADULT EDUCATION)

15, Thursday, 7 – 9 pm and **17**, Saturday, 10 am – 2 pm
This prairie fen was preserved in a cemetery on top of a bluff overlooking the Huron River. These classes may be taken singly or as a whole.
Fee: \$ 60 (Members: \$54) #06-AE-26

Great Lakes Judging Meeting

17, Saturday, Lecture at 11 am; Judging 1 – 4 pm

Huron Valley Rose Society Annual Rose Show

18, Sunday, 1:30 – 4:30 pm

Sierra Club Meeting

20, Tuesday, 7:30 – 9:30 pm
Michigan's Green Era Under Governor Milliken
<http://michigan.sierraclub.org/huron/>

Audubon Society Meeting

21, Wednesday, 7:30 – 9 pm

Meet Fleming Creek: Stream Ecology 101 (ADULT EDUCATION)

22, Thursday, 6 – 9 pm and **24**, Saturday, 9 am – 1 pm
Evening lecture will introduce you to the habitat and inhabitants of Fleming Creek. Saturday field trip will allow you to explore the creek and look for its invertebrate communities. This class is in collaboration with the Huron River Watershed Council so members of both groups enjoy the members' discount.
Fee: \$70 (Members: \$63) #06-AE-27

Ecosystem Restoration Workday at the Gardens

24, Saturday, 9 am – 12 pm
Please see May's listing for complete details.

Ann Arbor Bonsai Society Meeting

28, Wednesday, 7 – 10 pm
Refinement Pruning

July

Arboretum Restoration Workday

8, Saturday, 9 am – 12 pm
Please see May's listing for complete details.

Arboretum Riverfront Dedication

9, Sunday, 11:30 – 12:30
Join us on Huron River Day to dedicate the newly improved riverfront at the Arb. You'll discover a vastly improved gathering place where the Arb's roads meet the Huron. We are grateful for the generous support of the Porter Family Foundation, Clan Crawford, Sally and Ian Bund, Rebecca and William Horvath, and friends and family of Nancy Osborn. Project collaborators included the City of Ann Arbor, Washtenaw County, U-M's OSEH, and Southeast Michigan Resource Conservation & Development Council as well as private design firms, non-governmental organizations and volunteers. Concrete rubble was removed and a new slope has been planted. A canoe landing, steps accessing the river, and new benches and trees have been added. After the Arb's dedication, we encourage you to go downstream to Gallup Park and enjoy a fun and activity-filled afternoon on the river.

2006 Hands-On Museum Science Alliance Camp: Creepy Crawling Bugs

10 – 14, Monday thru Friday, 2 sessions, 9 am – 12 pm or 1 – 4 pm
This class for kindergarten and first graders will teach them many facts about bugs. This is a joint project of MBGNA and the Ann Arbor Hands-On Museum. Members of either group enjoy the members' discount.
Fee: \$100/session (Members: \$90/session)
Registration for this class is through the Ann Arbor Hands-On Museum at <http://www.aahom.org> or 734-995-1188.

Friends Evening Herb Study Group Meeting

10, Monday, 7 – 9 pm

Highlights Of Hiawatha-Land (ADULT EDUCATION)

11 – 13, Tuesday – Thursday
Join Ed Voss, Curator Emeritus of the U-M Herbarium, and Ellen Weatherbee on a field trip throughout the Upper Peninsula.
Fee: \$295 (Members: \$280) #06-AE-28

Huron Valley Rose Society Meeting

11, Tuesday, 7:30 – 9:30 pm

Wild Ones Meeting

12, Wednesday, see website, <http://www.for-wild.org/chapters/annarbor/>, for directions.
Rain Gardens of Ann Arbor

flies and butterflies in the Gateway Garden (ADULT EDUCATION)

15, Saturday, 9 – 11:30 am (Rain date, Sunday, July 16, 9 – 11:30 am)
Learn why they've come to the garden as you uncover the fascinating natural history of our many everyday, garden insects.
Fee: \$25 (Members: \$22.50) #06-AE-29

Great Lakes Judging Meeting

15, Saturday, Lecture at 11 am; Judging 1 – 4 pm

Hosta Hybridizers Meeting

16, Sunday, 10 am – 4 pm

2006 Hands-On Museum Science Alliance Camp: From Earth to Art

17 – 21, Monday thru Friday, 2 sessions, 9 am – 12 pm or 1 – 4 pm
Kindergarteners and first graders will turn plants into paper, make dyes with vegetables and explore other ways to turn natural products into art. This is a joint project of MBGNA and the Ann Arbor Hands-On Museum. Members of either group enjoy the members' discount.
Fee: \$100/session (Members: \$90/session)
Registration for this class is through the Ann Arbor Hands-On Museum at <http://www.aahom.org> or 734-995-1188.

Sierra Club Meeting

18, Tuesday, Potluck at 6:30, Meeting 7:30 – 9:30 pm
<http://michigan.sierraclub.org/huron/>

Ecosystem Restoration Workday at the Gardens

22, Saturday, 9 am – 12 pm
Please see May's listing for complete details.

Historic Herb Walk and Tea (ADULT EDUCATION)

23, Sunday, 1 – 3 pm or **30**, Sunday, 2 – 4 pm
Enjoy the Alexandra Hicks Herb Knot Garden while it's at its peak. Learn many uses of herbs, share a cup of tea and some treats.
Fee: \$1 (Members: Free) #06-AE-30

Ann Arbor Bonsai Society Meeting

26, Wednesday, 7 – 10 pm
Show Clean Up Help!

● Events in blue are events sponsored or run by Matthaei Botanical Gardens and Nichols Arboretum.
● Events in light blue are hosted by other organizations.

July, continued

2006 Hands-On Museum Science Alliance Camp: From Earth to Art

31 – August 4, Monday thru Friday, 9 am – 3 pm

Second and third graders will create art inspired by the earth and its materials. This is a joint project of MBGNA and the Ann Arbor Hands-On Museum. Members of either group enjoy the members' discount.

Fee: \$200 (Members: \$180) Registration for this class is through the Ann Arbor Hands-On Museum at <http://www.aahom.org> or 734-995-1188.

August

HerbFest

6, Sunday, 12– 4 pm

Native American Herbs

Dr. Daniel E. Moerman, noted U-M (Dearborn) professor emeritus, will present a talk "Summertime Medicinal Herbs" and lead a tour of the grounds focusing on the plants used by Native Americans. For those who do not care to participate in the walk, there will be a discussion of the progress on a medicine wheel garden now being constructed outside of Ann Arbor. As always, herbal treats and lavender and sumac lemonades will be available for your enjoyment, as well as educational displays.

Fee: \$15 (Members) \$10

2006 Hands-On Museum Science Alliance Camp: Plant Power

7 – 11, Monday thru Friday, 9 am – 3 pm

Second and third graders will explore the wonderful world of plants. This is a joint project of MBGNA and the Ann Arbor Hands-On Museum. Members of either group enjoy the members' discount.

Fee: \$200 (Members: \$180) Registration for this class is through the Ann Arbor Hands-On Museum at <http://www.aahom.org> or 734-995-1188.

Friends Evening Herb Study Group Meeting

7, Monday, 7 – 9 pm

Huron Valley Rose Society Meeting

8, Tuesday, 7:30 – 9:30 pm

Wild Ones Meeting

9, Wednesday, see website, <http://www.for-wild.org/chapters/annarbor/>, for directions.

Prairie Walk

Arboretum Restoration Workday

12, Saturday, 9 am – 12 pm

Please see May's listing for complete details.

2006 Hands-On Museum Science Alliance Camp: Plant Power

14 – 18, Monday thru Friday, 2 sessions, 9 am – 12 pm or 1 – 4 pm

Kindergarteners and first graders will explore the world of plants. How they make food, relate to animals, and more. This is a joint project of MBGNA and the Ann Arbor Hands-On Museum. Members of either group enjoy the members' discount.

Fee: \$100/session (Members: \$90/session) Registration for this class is through the Ann Arbor Hands-On Museum at <http://www.aahom.org> or 734-995-1188.

Sierra Club Meeting

15, Tuesday, 7:30 – 9:30 pm

The Wonder of Raptors
<http://michigan.sierraclub.org/huron/>

Southeast Michigan Bromeliad Society Show & Sale

19 and 20, Saturday and Sunday, 10:30 am – 4 pm

Great Lakes Judging Meeting

19, Saturday, Lecture at 11 am; Judging 1 – 4 pm

Ann Arbor Bonsai Society Meeting

23, Wednesday, 7 – 10 pm

TBD

Ecosystem Restoration Workday at the Gardens

26, Saturday, 9 am – 12 pm

Please see May's listing for complete details.

Prairie Walk (ADULT EDUCATION)

26, Saturday, 10 am – 12 pm at Matthaei Botanical Gardens and 2 – 4 pm at Nichols Arboretum

Explore the prairies at each location, learn about different types of prairies and how people of different cultures used the plants found there.

Fee: \$6 (Members: \$5) #06-AE-31

Ann Arbor Bonsai Society Show

26 and 27, Saturday & Sunday, 10 am – 4:30 pm

What Happened to the Driveway?

This is a question that many of our visitors have been asking since the asphalt driveway and west parking lot were replaced with gravel. The answer is that we are helping to protect Fleming Creek and the Huron River into which it flows.

When it rains on an impervious surface such as asphalt, the water must flow off of it. In the process it picks up the oils and other fluids that leaked from cars. And since it picks up a fair amount of speed as it flows, these are carried into storm drains or the nearest waterway. If left unchecked it will then continue into larger and larger waterways. Our previous first line of defense was the constructed wetland (a large rain garden, if you will). Its purpose is to contain storm water, allowing contaminants to be absorbed by the plants or settle to the bottom, before continuing on into Fleming Creek.

When it rains on a porous surface such as gravel, the water is able to soak into the ground below. While it still carries the contaminants, they go into the soil where they can be broken down by soil bacteria, rather than directly into streams and rivers. Our first step was to grind up the existing damaged asphalt and mix it with new gravel. In this way we reused the driveway without creating waste. With this new surface, Matthaei Botanical Gardens has added another tool in protecting the health of Fleming Creek and the rest of the Huron River Watershed that is a source of the drinking water of many communities along its course.

Invasive: bush honeysuckle



What Is the Big Deal with Biodiversity?

Biodiversity refers to the abundance of living organisms in an area. These may range from algae and fungi, mosses and lichens, grasses and forbs, shrubs and trees, to bacteria, worms, insects and spiders, birds and mammals. They are all important and they are connected in so many ways that we humans have yet to discover.

Biodiversity Changes Naturally

Biodiversity is in a constant state of flux. Millions of years ago, when seas covered Michigan, it was inhabited by a very different set of plants and animals than it was 10,000 years ago when it was covered by a mile thick sheet of ice. It was yet another set of plants and animals that were present just 300 years ago before the first European settlers arrived in Michigan, and today we see still more changes.

In a normal ecosystem, all the plants and animals have evolved with each other for thousands of years. In the course of doing so, natural checks and balances are formed. Prey and predators, diseases, and the habitat itself all exert an influence. Natural processes such as floods, drought, and fire further shape the flora and fauna of a particular region, giving each place its own unique identity.



Humans Accelerate Change

In our global economy, humans are changing places faster than nature can adapt. When humans bring organisms from one area to another, the existing balance is upset and unintended consequences can be the result. For example, purple loosestrife (*Lythrum salicaria*) has very attractive flowers that gardeners enjoy. In its native Eurasia, there is a voracious beetle that keeps it under control. No similar beetle lives here, so more loosestrife is able to reproduce (each plant is capable of producing a million seeds). It replaces the native vegetation along our rivers and lakes. The birds and animals that rely on that vegetation for nesting sites and food no longer have that available – they didn't evolve to eat loosestrife or nest in its clumps. The problem is not limited to Michigan. Southeastern states have water hyacinth and nutria. Australia has rabbits.

In other instances, we overfish certain species in the oceans; their prey increases while their predators decrease. Collectors dig all the specimens of some desired plant out of its natural habitat that then affects the insect that lays its eggs on that plant and other animals that might eat it. Hunters take all the trophy animals leaving only smaller survivors to reproduce. Humans eradicate large predators such as wolves, lions, tigers, etc. and prey species abound. In other cases, we greatly simplify natural ecosystems, reducing the great variety found in a native woodland, for instance, to a mere handful of species found in our lawn and gardens around our house. Repeat these processes hundreds of times all

Invasives:
Left: buckthorn
Below: purple loosestrife



Invasive: dame's rocket

around the globe and you can see the havoc that occurs to natural systems.

We All Lose

In the end we all lose. Losses of trees – recently ashes to the emerald ash borer beetle in the Midwest, in the past, American elms and chestnuts to imported diseases – are big and easily visible to everybody. But smaller changes occur, too. The proliferation of buckthorn has dried up bogs and fens, causing the plants that depend on these wet areas for survival to retreat or die out. Each invasive species impacts a different community of plants and animals. Hunters lose the object of their hunt. Nature lovers lose the enjoyment of the natural connections between organisms. Insects pollinate many of our food crops; their loss already impacts our agriculture. Some of our most important medicines come from apparently insignificant organisms: a cancer drug from Madagascar periwinkles; penicillin and other antibiotics from fungi; curare, a muscle relaxant important in surgery, from poison arrow frogs; the list goes on and on. No one knows what other life-saving drugs still lay hidden within the natural world. If it is destroyed, we will never know.

There's Still Hope

Biodiversity everywhere has been impacted in significant ways. Can we reverse the negative impacts we have already made? In many cases, the answer is yes. While we may not be able to reverse all of them, that doesn't mean we should not try to reverse as many as we can. It will take hard work, both individually and in groups, to achieve the goal of restoring damaged ecosystems to health. Are you willing to help?

● Events in blue are events sponsored or run by Matthaei Botanical Gardens and Nichols Arboretum.

● Events in light blue are hosted by other organizations.

The garden must be located away from buildings and utilities, with runoff diverted to it. It can be large or small, designed in various shapes and readily added to any landscape. It should be a bit lower than its surrounding area: it's a slight depression or saucer-shaped indent containing soil amended with compost or humus to better absorb water. You need to dig up slightly more soil than you replace to create this shape. (That extra soil may be used to create a berm or mound with sloping sides to direct the water to the garden or to keep it in if your site slopes downward.)

Recommendations for the depth of the amended soil cover a broad range, anywhere from three inches to two feet. Obviously, the deeper the good soil, the more water it can absorb and filter. If you have been gardening and amending your soil for a long time, or are otherwise blessed with good, well-draining soil, you will need to dig out less and make fewer amendments. While sandy soil provides good drainage, you will need to add compost or topsoil to grow the plants. If your soil is heavy clay, you'll need to dig deeper and make major amendments to the soil. Otherwise, you're creating a huge bowl that will hold water, but won't drain well. Although many native plant roots grow several feet deep, helping future drainage, a rain garden needs to drain adequately from the beginning. Of course, you must also listen to your lower back. If you can't dig out a large, deep area, it may be more practical to create a smaller, deep garden.

Some "recipes" for the ideal amended soil emphasize sand, others contain large amounts of compost. Don't worry about this lack of agreement; various combinations are all effective. The great thing about gardening is that there are often many right answers. As long as you amend the soil, your rain garden will turn out just fine!

Once your amended soil is in place, you need to check drainage patterns. To judge how evenly water will fill your garden, turn on your hose and place it near the water source. This will show you where water



Rain garden in Nichols Arboretum's Gateway Garden, summer 2003

will flow and pool in a rainstorm. You can make adjustments, like digging certain areas deeper or adding a berm, so that water spreads evenly into the entire garden. After making the adjustments, let the soil drain and dry. Redo the test until the water fills the area evenly. Now you're ready to plant!

Rain Garden Plants

When it comes to choosing plants, go native! Native plants, those that grew in this area prior to settlement, are ideal for using in rain gardens. They are adapted to thrive in our climate without any care from humans. Many natives are drought-tolerant, so you don't have to water them. However, they can also handle a good downpour and don't mind standing in water for a while. Native plants also provide food and shelter for birds, butterflies, bees and other beneficial insects.

For a list of Michigan native plants ideally suited for rain gardens, see "Ask the Experts" (p. 14). For a more complete list of all Michigan native plants, see Ann Arbor's Natural Area Preservation's website, <http://tinyurl.com/c7g7p>.

After your plants are in place, water them as you would any new plantings. (Once they are established, they will be able to thrive only with rainwater.) Finally, mulch the garden with leaves or a shredded wood to retain moisture and suppress weeds.

Area Rain Gardens

Rain gardens are becoming more common in Michigan. Last year, the Washtenaw

County Drain Commissioner received a grant from the Michigan Department of Environmental Quality to help property owners in Ann Arbor's Allen Creek watershed create rain gardens. The City of Ann Arbor partnered on this project, contributing matching funds. This pilot project seeks to address the needs of reducing phosphorus and bacteria in the creek, and of slowing water running into the creek. Twenty rain gardens are being created for residents who applied for the program. Collecting data on the gardens' effectiveness (which requires the plants to have matured) starts this fall.

Last summer InSite Design Studio, an Ann Arbor-based landscape design firm, designed a rain garden and plan for Carrie Turner's home at 910 Bath Street in Ann Arbor. (She welcomes visitors but suggests you walk since it's a dead-end street.) Then she provided the labor. She thoroughly enjoys the garden and its benefits.

Turning to public gardens, the Gateway Garden at the Reader Center in Nichols Arboretum, is a good example. The garden includes a series of dropped pools and connecting dry creeks to capture and slow the rainwater that rushes through the garden from the cemetery and parking lots above it, preventing further erosion of School Girls' Glen below. It showcases colorful flowers and native Michigan sedges and grasses.

Another public rain garden is the Buhr Park Children's Wet Meadow at 1751 Packard in Ann Arbor. It filters storm water runoff from the park grounds, provides habitat for native plants and animals, and serves an educational site. See www.wetmeadow.org.

Finally, as part of its Healthy Lawns and Gardens Program, the Southeastern Oakland County Water Authority encourages area residents to create rain gardens. The City of Lathrup Village also helps residents create rain gardens. For photos of such rain gardens, see www.socwa.org/rain_garden_registry.htm.

Get Lost

Tom Gaffield

Tom earned an MSE in Electrical Engineering in 1960 from the University of Michigan. He designed digital electronics for both the Apollo and Mars seismometers, as well as radar and electro-optical airborne and ground support systems. A docent since 1995, his hobbies include gardening, furniture building, and jazz piano – performing monthly at Glacier Hills in Ann Arbor and Silver Maples in Chelsea.

The trails at the Gardens provide an exceptional opportunity for interpreting the wide variety of plants that grow in the variable topography of the site. My favorite is the Sam Graham Trail that begins along Fleming Creek with its delightfully rushing water.

When I give tours, the Sam Graham Trail allows me to explain biodiversity as it relates to floodplains. This lovely trail, which starts just over the bridge at the constructed wetland, provides a complex of different types of plant communities ranging from aquatic habitats to wetlands to uplands.

The constructed wetland was built to protect groundwater quality by acting as a contaminant sink. The wetland removes contaminants by sedimentation of soil and organic particles to the bottom of the wetland. Also, the 60 varieties of aquatic plants remove a significant amount of damaging nutrients. Both plants and bacteria degrade the pollutants.

After leaving the constructed wetland, you will encounter several different types of floodplain communities with muck soils. These include wet meadows and swamps with white cedar, prickly ash, hazelnut, nannyberry, musclewood, tamarack, silver maples, and several varieties of dogwoods.

As you turn left at the foot bridge and start going upland, you will come to an open area that is currently being planted with 100 new trees, along with prairie grasses and wildflowers to form an oak savanna restoration project.

Come and "get lost" at MBGNA.

Get lost at the Arb and Gardens... Get lost at the Arb and Gardens... Get lost at the Arb and Gardens... Get lost at the Arb and Gardens... Get lost at the Arb and Gardens...

PROFILE: Aunita Erskine

Karen Sikkenga

Aunita Erskine is the head of our Volunteer Committee, a long-time steward of the MBG reconstructed prairie, and a member of our Director's Council. I spoke to her in our Conservatory on a cold, clear day in February 2006.

To Aunita Erskine's eight-year-old eyes, the spotted knapweed (*Centaurea biebersteinii*, pictured below) in the abandoned gravel pit near her Lake Orion home was a pretty purple wildflower. Decades later, she devotes as much as twenty hours a week to educating people about this and other invasive species and helping to remove them from natural areas such as Ann Arbor's Furstenberg Park.

Aunita got involved in Furstenberg Park through her interest in the master gardener program ten years ago. The native plant garden at that time was in a state of neglect, choked with weeds and without a steward. After a tour of the park with botanist Bev Walters, "I was hooked," says Aunita. "I couldn't believe that wild coffee was growing right here in Ann Arbor." Aunita became the first designated steward in the City of Ann Arbor Natural Areas Preservation (NAP), which is now a model for natural areas preservation throughout the country. "When you fall in love with something, you want to take care of it."

As an undergraduate in English at U-M, Aunita never imagined that she would become a voice for environmental stewardship. "I thought I'd go to law school some day," she says with a smile. Instead, she started working at U-M's Mott Hospital as a financial counselor... and found she loved it. "I'm really making a difference in the lives of families with severely ill children," she says. "And besides, working at the hospital is like being

part of a family." Though she didn't know it at the time, two of her co-workers were indeed future family members. "My future husband's mother and sister were working there; that's how we met."

You might recognize Aunita's husband's voice. Dean Erskine is the sales manager of WAAM and also does voiceovers for other radio and television broadcasters all over the country. At restaurants, even when he speaks softly, people turn their heads. "He sounds just like J. P. McCarthy."

Aunita has been studying prairie flora throughout Michigan. She will share that knowledge when she teaches a prairie class in September through the MBGNA adult education program. In addition, she will lead tours of the reconstructed prairie at MBG and the natural prairie at Nichols Arboretum. To enroll, or to obtain a copy of Aunita's 2003 article in the *Friends* newsletter about the reconstructed prairie, call our main number at 734-647-7600.

I asked Aunita what environmental stewardship means. "Stewardship means taking care of the land. It means cutting down buckthorn and honeysuckle on your property. It means picking up trash on the street. It means teaching children to respect the land. It means planting native plants in your garden, showing up for a volunteer workday, or donating a piece of land to a conservation organization. Anyone can do it. And it makes a difference."

"And once you see the difference it makes, you'll fall in love."



FOUND!

at the Arb and Gardens

The answer to last issue's Get Lost article

Teri Williams, MBGNA Docent, was featured in the last issue of Friends, and her poem "floodplain" was included along with an invitation to find the spot she described. Teri says that the exact location that inspired her poem is one best left protected, although Wednesday morning hikers will visit it. But she offers three alternatives that are very close in feeling. Take the Yellow Trail at Matthaei to get a sense of a floodplain – look on the ground for skunk cabbage and wild ginger while listening for the kingfisher's chatter. Nearby, Parker Mill boasts a boardwalk through mature trees with a ground cover of strongly scented wild onions. Or hike along the Paw Paw Trail at Lower Huron Metropark for a real floodplain treat, complete with sycamores.

From the Editor

With the Centennial fast approaching, we'd like to hear from you. Share your favorite stories and photos about the Gardens and Arb with us. Don't forget the intermediate Gardens location on Iroquois St. We have very few stories or photos of that era in our history. If you would like photos returned, please send a SASE and put an address label on the back of the photos. Or, simpler, you may send digital copies. Submissions may be sent to me at either location, or emailed to mbgna.editor@umich.edu.

In our next issue, we will answer the question: why did it take 90 years for the University to build a Botanical Garden and Arboretum? We believe that there were several developments – in genetics, organic chemistry, landscaping, personnel and others – that finally provided the critical momentum allowing this to be accomplished. We hope that you will enjoy the story of our beginnings.

Want to read more about this issue's topics? May I suggest:

American Green: The Obsessive Quest for the Perfect Lawn by Ted Steinberg. W. W. Norton 2006

mipn.org
michigan.gov/mda
forestry.msu.edu/mipc
chicagowilderness.org/biodiversity/why/index.cfm

ASK THE EXPERTS: Planting a Rain Garden

Q: I want to plant a Rain Garden and I'd like to use native plants in it. Can you suggest some?

A: A Rain Garden is a beautiful way to steward the environment right in your own backyard (see cover story). These are some of the favorites of volunteers at the Southeastern Oakland County Water Authority: black-eyed Susan (*Rudbeckia hirta*), blue flag Iris (*Iris versicolor*), boneset (*Eupatorium perfoliatum*), cardinal flower (*Lobelia cardinalis*), Culver's root (*Veronicastrum virginicum*), golden Alexanders (*Zizia aurea*), great blue lobelia (*Lobelia*

siphilitica), New England aster (*Aster novae-angliae*), rough blazing star (*Liatris aspera*), swamp milkweed (*Asclepias incarnata*) and turtlehead (*Chelone glabra*).

For more information about selecting native plants visit the Wild Ones website (<http://www.for-wild.org>), or the SOCWA and Ann Arbor Natural Area Preservation's sites mentioned in the Rain Garden article (beginning on p. 1).

Submit your questions to:
mbgna.editor@umich.edu

NATURAL AREAS SPOTLIGHT: Kirk Woods

Connie Crancer Bailie
Collections/Natural Areas Specialist

Come take a walk past a woodland gem, Kirk Woods, located next to the Demonstration Prairie at the northern portion of the Gardens. It is remnant oak-opening woodland. Oak-opening ecosystems are few and far between in Southeast Michigan. With fire suppression and deer browse leading to a predominance of fire susceptible species like maple, this type of forest is fast becoming a thing of the past. Oak-opening ecosystems were once very common in SE Michigan and were perpetuated by the Native American cultural practice of burning their land. This custom helped to stimulate certain plants used for food and other purposes, aided in hunting, and provided open views of neighboring tribes and incoming settlers.

Sylvia Taylor, an adjunct professor at the School of Natural Resources and Environment and a longtime friend of MBGNA, was one of the first people to recognize the telltale signs of the oaks in Kirk Woods. Their growth habit of large spreading canopies and long sweeping lower branches indicates their past growth was unimpeded by the competition of other

trees. That, and their dominance in the canopy, is a sure indication that this wood was more open and that fire likely played a significant role keeping fire-sensitive species from reaching the canopy.

Volunteer nature steward Aunita Erskine (see "Profiles") has taken on a leadership role in a project to restore the woods by guiding volunteer restoration activities, attending meetings with other volunteers and MBGNA staff, and conducting inventories. A prescribed burn was conducted last fall by MBGNA staff and volunteers to control weeds and stimulate native herbaceous species in the understory. Through these efforts, Kirk Woods is developing into an open, healthy, oak-opening ecosystem.

Invasive: multiflora rose



Thank you, Friends!

Remember the scene in "The Music Man" where the Wells Fargo wagon delivered the instruments? That's what MBGNA was like, the day the twelve new plant carts – complete with large pneumatic tires – were delivered, thanks to member fees from the Friends of Matthaei Botanical Gardens and Nichols Arboretum. The truck driver said he had never seen anyone so happy to see him. Volunteers at the Botanical Gardens, whether in the greenhouse or for our Spring Plant Sale, are familiar with our old gray carts. They were original equipment with the greenhouses, built in the early 1960s. Our diligent mechanic, Bob Schuyler, has welded and painted them and replaced the tires. They have been true workhorses. However, it was time to put them out to pasture. Not only are the new carts quiet (!!), they are easily maneuverable, gliding over bumps in a single bound. They will be most welcome during spring plant sale set-up.

Heartfelt thanks from staff and volunteers for making our lives so much easier.

PLANNING A TRIP!

Remember that one of your member benefits is free admission to botanical gardens and arboreta throughout North America and the US Virgin Islands.

To find participating gardens, go to the American Horticultural Society webpage at http://www.ahs.org/pdfs/0601_RAP_Brochure.pdf. If you'd prefer, call Robyn Robeson at 734-647-8522 and we'll send you a print copy.

New Members

Welcome New Members November 1, 2005 – February 28, 2006

Oliver & Suzie Aheimer
Gerard & Lizabeth Anderson
Elizabeth Bednarz
Gerald & Veronica Brennan
Peggy Britt & Louis King
Natalia Bruneau & Alexander Ganago
Daniel & Phyllis Cable
Andrew & Gayle Camdon
Christine Chabot
Greg & Lori Ches
Matthew & Margaret Compton
Diane Coxford
Julia Darlow
Ann Delvin
Jene & Nancy Eavy
Moosan & Valerie Eninsche
Kathryn Enright
Merle Feldbaum & Julia Borquez
Sandra Gast & Geg Kolecki
Sylvia George
Budge & Anne Gere
Bonnie Guest
Yunzhou Guo
Gary Hansma
Gail Haynes
Yong Heo & Alicia Rowe
Nina Homel

Steve Howard
Alan & Michele Hufnagel
Mary James & Michael Head
Tracy Jensen & Nick Cucinelli
Gloria Jones
Erica Kempter & Michael Levine
Jens & Carol Kuehne
Sandra Lambert & Trisha Gravel
Metta Lansdale
Alan & Donnamarie Lapczynski
Pablo & Wendy LaValle
Kristin & Neil Lobron
Jerry Martin
Richard Mascotto
Ben & Debra Mattison
Beverly May
Edward & Susan McGuire
Monica Milla
Patricia Weise Mitchell
Ruth Moline
Catriona Mortell & Brian Windecker
Tammie Nagra & Lee Hollander
Joe & Linda Neely
Roger & Coco Newton
Lai-King Ng
Patrick O'Brien & Suzanne Admiraal

Sam & Ellen Offen
Roy & Anna Oliva
John & Mary Remmers
Ralph & Nicole Rocha
Catherine Sanok & Basil Dufallo
Kesari & Candace Sarikonda
Bella Sherman & Jim Hoyt
Teresa Sorensen & Kristen Adkins
Simon & Carolyn Thorpe
Uyen Tonnule
Scott Tyrrell
Jarrett Way & David Brough
William & Carol Whalin
Rachel Yu

Congratulations!

These lucky people won a MBGNA membership by entering the lobby drawing:

November: Richard Mascotto
December: Nina Homel

2006 Bulb Sale

We are pleased to announce the 2006 Bulb Sale. This sale gives members an opportunity to buy top quality spring-flowering bulbs at a reduced price. Everyone is welcome to order bulbs, but non-members won't receive the discount. Encourage your friends to join our Friends and save!

The bulb sale order form is available on our website:

www.sitemaker.umich.edu/mbgna, where you can also look at lovely photos of the flowers. Order forms may be printed and mailed or faxed to the Botanical Gardens by June 15th. In addition, we will have paper copies available at the Gardens and the Arboretum, or, we will be happy to fax or mail a copy to you – just call the number below.

We are very excited about this year's sale. We have several new varieties this year, including *Narcissus* 'Marieke,' the lovely yellow trumpet daffodil used in the art installation "Imagine/Align" at the Arb. All the bulb varieties planted in the spectacular Gateway Garden display this April at Matthaei – *Narcissus* 'Dutch Master,' 'Mount Hood,' 'Professor Einstein,' 'Red Goblet,' 'Sempre Avanti,' 'Cheerfulness,' 'Yellow Cheerfulness,' 'Tête-à-Tête,' *Muscari armeniacum* and *Muscari* 'Blue Spike.'

If you have any questions or suggestions for next year, please call Adrienne at 734-647-2618 or e-mail her at amobrien@umich.edu.



For information:

734-647-7600
www.sitemaker.umich.edu/mbgna

Matthaei Botanical Gardens
1800 N Dixboro Rd
Ann Arbor, MI 48105

Nichols Arboretum
1610 Washington Heights
Ann Arbor, MI 48104

U-M Regents

David A. Brandon
Laurence B. Deitch
Olivia Maynard
Rebecca McGowan
Andrea Fischer Newman
Andrew C. Richner
S. Martin Taylor
Katherine E. White
Mary Sue Coleman (*ex officio*)

 Printed using 30% recycled fiber
content paper and soy inks

Non-Profit
Organization
U.S. Postage
PAID
Ann Arbor, MI
Permit No. 144

DATE SENSITIVE MATERIAL

Help Us Create a Celebration to Remember

As you've read in this issue, our Centennial is coming in 2007. Planning is already underway. The major activities include a kickoff event at the Gardens in February 2007 and a party at the Arb in summer 2007. Exhibits, displays and lectures centered on four themes will fill three-month slots throughout the Centennial year. Special items to commemorate our 100th year, such as publications and unique mementos, are being considered as well.

But in order to bring these seeds of ideas to fruition, we need your help, time, and enthusiasm. Separate working groups for each of the activities (February kickoff party, summer party, four thematic programs) are being formed, and will

work as subcommittees to a Centennial Steering Committee.

If you are willing to chair, co-chair, or serve on a working group, please contact Barbara Major at bamajor@umich.edu or 734-647-8528 as soon as possible.

The Gardens and the Arb today are dynamic representations of the many people such as you who have so graciously given their time, talent, and support to us over these nearly 100 years. Please join us in helping create a Centennial celebration worthy of both our storied history and the bright future of our next 100 years.



Above: The extremely invasive garlic mustard. Learn more about this and other species that belong on the "Not In My Back Yard" list on page 3.