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.

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 a staff of two and the help of landscape architect Osian 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 the western side of the university to the University Botanical Gardens and Nichols Arboretum to the University.

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 through 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 threat to our ecological systems. What can we do 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 systems. 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 gardening and natural areas.

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 alien. Did you know that such common species as daisies, daylilies and Queen Anne’s lace are not native? These are 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 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.

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? 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 deeper, richer blades. Your mow will be reused as they decompose – allowing you to use 1/5 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 lower and be easier for droughers. Visit these websites for details on caring for your lawn in a more eco-friendly way www.hrwc.org/ie/yardgard.htm and http://www.healthylandscapes.com/ or, if you aren’t in S.E. 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, or 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 let at least during the growing season we have many options. And besides, all we 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 this. Coffee has a big impact on the environment.

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 (Elaegnus angustifolia)

Winged spindle tree or burning bush (Euonymus obtus)

See photos of these species throughout the newsletter...

They are the ones you do NOT want in your yard!

Invasive burning bush

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mbgna.editor@umich.edu

Dorothea Coleman

Friends of Matthaei Botanical Gardens and Nichols Arboretum
behind BOG Spring 2006, Vol. 2, No. 3

Dorethea Coleman, Editor
mbgna.editor@umich.edu

For more information on how to get rid of these and other invasive species, please check out the website of the University of Michigan Extension Invasive Plant Specialist: http://www.hrwc.org/ie/yardgard.htm

See photos of these species...
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 the 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. I now invite you to become part of 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, our friends, 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.

As this is 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 what it stands for, what it captures water that the plants then use the 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 horticulturist, 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, T.J. 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’d also like to extend a heartfelt wish for happiness to each of you in your new circumstance! practices and what value you receive from the relationship. I now invite you to become part of the Development Team so together we will all 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!

David Michener

If “green roofs” conjure hazy childhood images of tales where cows graze on roofs or imps lurk behind 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 transparent 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-native, especially Eurasian sedums. The plants are “severely” cost for individual benefit. 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.

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Getting 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 invasive sales, and that you are interested in native and non-invasive plants for your landscape. (They will not change their offerings unless they know your customers are concerned.) You can take the message to your homeowners association to see if your association 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.

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 environment. As we have progressed in new gardens in the formal plantings at the Gardens, lawn will be greatly reduced. We’re working more with 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 build on 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.

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 in 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 invasion 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 plant species available, and advice as to where to attract birds or butterflies to your garden to give an aerial dimension to your world.

Professor of Horticulture
Dr. Tedra Reader
The Reader Center at Nichols Arboretum: Monday, May 8, 8:30 – 10:00 am
The track and ground remotely open from down until start daily at both Nichols Arboretum and Matthaei Botanical Gardens.

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 contact your Community Education Brochure or the website www.masseemaker.umich.edu/mbgna. To register for classes, please call 734-647-7605.

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

Oura Helibana (ADULT EDUCATION)
1, 8, 15, 22 and 29. May, 7 – 9 pm
Learn how to arrange flowers in this Japanese style. Materials fee: $10.
Fee: $120 (Members: $108) #06-AE-33

3000 Years of Chocolate (ADULT EDUCATION)
2, 9, 16 and 23, Tuesdays, 7 – 9:30 pm
Dor Choc returns with more chocolate and its story. Lists of chocolate.
Fee: $100 (Members: $90) #06-AE-34

Inspired by the Outdoors: Plein Air Painting (ADULT EDUCATION)
3, 10, 17, 24 and 31. Wednesdays, 9 am – 12 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

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

Secret Spaces and Natural Places (YOUTH and FAMILY)
4, 11, 18 and 23. 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) #06-TE-Y

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 Rollers” (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: $275 (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. Saturday and Sunday, 9 am – 4:30 pm
Open to the Public

Whitegold Wunder (ADULT EDUCATION)
13, 20, June 3 and 10
Saturday, 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-TE-Y

Illustrating Nature for students aged 8-13 (YOUTH and FAMILY)
13, 20, June 3 and 10
Saturday, 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-TE-Y

Wilderlifl Wander (ADULT EDUCATION)
13, Saturday, 10 am – 12 pm or 2 – 4 pm at Nichols Arboretum
14, Sunday, doors open at 12 pm or 2 – 4 pm at Matthei Botanical Gardens
Join MBGNA docents on a spring foraging tour on Tuesday, May 9.
Fee: Free! But do register as space is limited! #06-AE-22

For more information | 734-647-7600 | www.masseemaker.umich.edu/mbgna

How Else Can I Help?, continued from page 3

GIFT SHOP NEWS
Ah, gardening season, finally! Whether you are a seasoned gardener with a green thumb or a beginner with thumb is unkind, 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.
Shakespeare in the Arboretum

This year’s offering brings you Love’s Labours Lost, another romantic comedy full of great dialogue, mistaken identity and fantastic inventiveness gone wrong. Director Kate Mandeloff brings it all together in the natural beauty of the Nichols Arboretum to create one of Ann Arbor’s most memorable theatrical 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, 15, 16, 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, please see our website: www.lsa.umich.edu/arthetnavo 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 Mayor at 734-647-8528. Ushers are needed to attend an hour-long orientation prior to volunteering. All volunteers get a free t-shirts!

June

Grasses, Grasses, Grasses (ADULT EDUCATION)
1. Thursday and Friday, 6 – 9 pm, Saturday, 9 am – 12 pm or 1 – 4 pm
21. May 27, 10 am – 2 pm
Great Lakes Judging Meeting
17. Saturday, Lecture at 11 am; Judging 1 – 4 pm
Horizon Valley Rose Society Annual Banquet
18. Sunday, 1:30 – 4:30 pm
Sierra Club Meeting
20. Tuesday, 7:30 – 9:30 pm
Michigan’s Green Eagle Under Governor Milton
http://michigan.sierraclub.org/huron/
Audubon Society Meeting
21. Wednesday, 7:30 – 9 pm
Meeting Fleeming Creek: Stream Ecology 101 (ADULT EDUCATION)
23. Thursday, 6 – 9 pm, and Saturday, 9 am – 1 pm
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 fun and the focus and reasons for our restoration work. Dress to work outside! Use our tools or yours. Please bring your own. Please call Connie Bailie at 734-647-8528. Ushers are required to wear good walking shoes! For more information, please see our website: www.lsa.umich.edu/arthetnavo if you will need mobility assistance during the performance, please call 734-647-7600.

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Andy Goldworthy Natural Sculptures at the Gardens (YOUTH AND FAMILY)
10, 17, and 24 Saturday, 9 am – 1 pm
Please see May’s listing for complete details.
Arthur Botanical Restoration Workday
10. Saturday, 9 am – 12 pm
Please see May’s listing for complete details.
Huron Lake Bog (ADULT EDUCATION)
10. Saturday, 9:30 am – 1:30 pm
Visit Huron Lake Bog, another property managed by MBGNA and not open to the public. These classes may be taken singly or as a whole. Fee: $30 (Members: $26) 06-AE-25
Huron Valley Rose Society Meeting
13. Tuesday, 7:30 – 9:30 pm
Wild Ones Meeting
Native Plant Nursery
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 they flow.

When it rains on an impervious surface such as asphalt, the water just flows off of it. In the process it picks up the oils and other fluids that leak 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.

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. For example, purple loosestrife is a voracious beetle that keeps it under control. If left unchecked, the population of purple loosestrife would become so large that it soon would overwhelm the native plants. Invasive species such as purple loosestrife have no natural predators in North America.

Invasive: dame's rocket

Humans Accelerate Change

In our global economy, humans are changing places faster than nature can adapt. When human beings 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.

Invasives: Left: buckthorns Below: purple loosestrife

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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 at least five times the area of the surrounding lawn. One should check drainage patterns and judge whether water will flow into the garden from the surrounding areas.

Obviously, the deeper the good soil, the better. If you can’t dig out less and make fewer adjustments, let the soil drain. It can be large or small, designed in various shapes and easily added to any landscape. Some “recipes” for the ideal amended soil include the following:

Rain Garden Plants

When it comes to choosing plants, go native! Native plants, those that grew in the 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 native plants 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 more complete lists of Michigan native plants, see Ann Arbor’s Natural Areas Preservation website. http://tinyurl.com/c7gpq

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.

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. The City of Ann Arbor has even established a constructed wetland, provides a complex of different types of plant communities and wildlife habitat for local wildlife. The wetland is located in the middle of the surrounding development, and helps to reduce the amount of pollutants in the water. This is a great way to help preserve the environment and reduce the amount of pollutants in the water. This is a great way to help preserve the environment and reduce the amount of pollutants in the water.

Get lost in the Arb and Gardens…

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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 Forsythe Park.

Aunita got involved in Forsythe 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 Beverly 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 area 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 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.”
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). There 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), Curv’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 turfistlead (Oenothera glauca).

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

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

Connie Craemer Balle 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 the 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 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 Aurora Ericke (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.

Kirk Woods

Natural Areas Spotlight: Kirk Woods

ASK THE EXPERTS

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 two new plant catalogs — complete with large pneumatic tires — were delivered, thanks to member fees from friends of the 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 1960’s. Our diligent mechanic, Bob Schuhler, 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.

New Members

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

Oliver & Suzie Ahlers
Gerard & Linda Anderson
Elizabeth Beddor
Gerard & Veronica Brown
Peggy Britt & Louis King
Natalie Brunjes & Alexander Gogonea
Daniel & Phyllis Cable
Andrew & Gayle Canaday
Christine Chibot
Greg & Lori Chis
Matthew & Margaret Compton
Diane Corsofard
Julie Dorn
Ann Dukhn
Jeni & Nancy Eary
Moisman & Valerie Erenschke
Kathryn Enright
Marie Fidlarowski & Julio Borquez
Sandra Gast & Gek Kekolke
Sylva George
Budge & Anne Gare
Bonnie Guest
Yonetha Goi
Gary Haram
Gay Haynes
Yong Hee & Alissa Rowe
Nina Homel

Steve Howard
Alen & Michele Hufnagel
Mary James & Michael James
Tracy James & Nick Caccaviello
Gloria James
Erica Hampton & Michael Levine
Jens & Carol Kauzma
Sanja Lamber & Trisha Gravel
Misha Lameide
Alen & Donamanez Lopatynske
Pado & Wendy Lofdile
Krisin & Neil Loton
Jerry Martin
Rebecca Mora
Ben & Debra Marnus
Beverly May
Edward & Susan McGrue
Monica Miller
Piaora Wise Mitchell
Ruth Mainline
Caracina Murnell & Brian Windshier
Tammi Nohrer & Lee Hollander
Joe & Linda Neeley
Roger & Casco Newton
Lai-King Ng
Patrick O’Brien & Suzanne Admir

Sam & Ellen Offer
Roy & Anna Olivas
John & Harry Rammers
Rajal & Nicole Rachta
Catherine Saison & basil Dufilou
Kasin & Caroline Sarkodie
Bella Sherman & Jim Hoy
Teresa Sorensen & kristin Aikins
Simon & Carolyn Thorspey
Uyen Tommura
Zacch Tasslie
Jameson & Darryl Ewton
William & Carol Whalin
Rachel Yi

Congratulations!

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

November: Richard Massotta
December: Nina Homel

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 invited 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 ‘Markete’, 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’, ‘Sempervantii’, ‘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 734-467-2618 or e-mail her at amobrien@umich.edu.
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.