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RIVER CITY CHAPTER - GRAND RAPIDS, MI

Wild Ones is a not-for-profit environmental education and advocacy organization that promotes environmentally sound landscaping and the preservation, restoration, and establishment of native plant communities.

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www.rivercitywildones.org / www.wildones.org (National Headquarters)

facebook.com/rivercitywildones

April Program: Grand Rapids Urban Forest Project

Monday, April 21, 2014 - 7:00 PM - Bunker Interpretive Center
Calvin College - 1750 East Beltline Ave. SE

Lee Mueller - Certified Arborist and Program Manager for the [Friends of Grand Rapids Parks](#) will discuss the [Urban Forest Project](#), programs, and goals. Lee will cover what the Urban Forest Project has been doing and discuss on-going programs that are of interest to the outdoor enthusiast and plant-lovers everywhere. He'll pay particular attention to promoting urban forests, the role urban forests play in our environment, and what you can do at home.



May Program - River City Wild Ones 3rd Annual Garlic Mustard Pull and Native Plant Exchange

Monday, May 19, 2014 - 6:30 PM - Ken-O-Sha Park School - 1353 Van Aucken S.E.
Grand Rapids

Come and help eradicate the menace Garlic Mustard plant and then afterwards take part in our annual native plant exchange!

Plant Exchange Rules of Etiquette:

The purpose of the Plant Exchange is to foster natural landscaping with native plants. Please bring plants to share from your garden that you **know** to be true native species, please no invasive exotics!

Respect Plants – Plants may not get planted immediately, pot them up well so they can survive.

Please provide species labels for the transplants or seeds you bring to share.

Respect Yourself – Just starting out? Don't have plants to bring? Of course you may still take plants! In fact, that is one of the main purposes of the Plant Exchange. We all had to get started somehow, and when native plants start doing really well in your yard, bring some back to share. It is the "Plant It Forward" concept!

Respect Others – If there are only a few pots of a particular species, please take only one so that others may have a chance to get one too.

Passing the Torch!

Since we were unable to hold our February program due to inclement weather our March program was full of activities! We bid a fond farewell to our past president Amy Heilman and welcomed our new president Mike Bruggink.



L to R - Past President Amy Heilman with River City Chapter Founder Carol Phelps and New President Mike Bruggink

(Photo courtesy of Patricia Pennell)

March Program Overview (Bees)

By Ron Cammel



Keep some soil bare on your property and put up a wooden bee nest.

Those are two ways to help native bees during these times of trouble for our apian friends, according to the speaker at Wild Ones' March 17 meeting.

Rufus Isaacs, of Michigan State University's Department of Entomology, added that native plant lovers might be helping bees survive. "There's some evidence that diversity helps bees defend themselves against diseases," he said.

Plus, the nearly 400 bee species native to Michigan have diverse tastes for nectar and pollen and different needs for habitat, he said. So creating some natural areas with a variety of native plants may help keep bees busy.

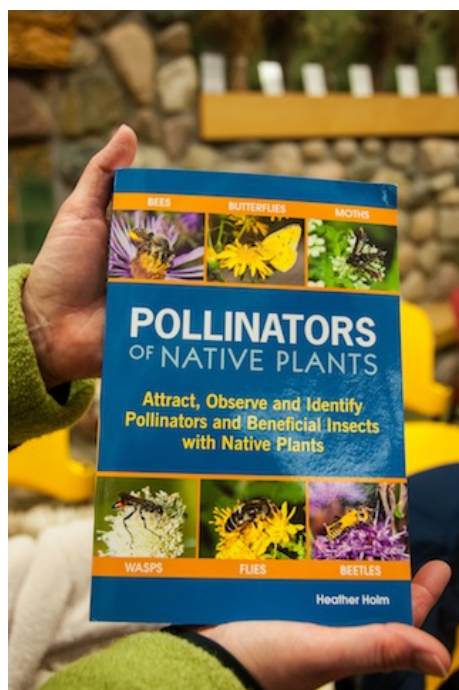
And we need them to keep busy. About 80 percent of flowers, including those of many food crops, are dependent on bees for pollination, Isaacs said. But bees have been on the decline. Honey bees, particularly, have seen drops of 30 percent to 40 percent in recent years. These European imports have been declining since the mid-1940s, he said.

Native bees have not fared so well either, but we can help.

Isaacs said 75 percent of bees nest in the soil. These girls (very few are males) need areas where they can burrow and lay eggs. So the mulch that suburbanites find irresistible limits the bees' real estate. They need exposed, non-tilled, well-drained, moist soil for their housing developments. And as far for flowers: "A small path of wild flowers is better than none," Isaacs said.

Mason bees and leaf-cutter bees live inside holes in wood. Simple bee houses, purchased or home-made, can attract them. He recommended CrownBees.com for instructions on caring for wood-nesting bees.

He also suggested learning from his experience. He used to keep nests of dormant bees in his garage over winter so they did not bear the brunt of the cold weather. In the extreme warm-up of March 2012, he got a call from his wife, who was frantic about bees all over the car. The heat brought them out earlier than expected. He said a shed or bail of straw may be better places for overwintering



(Photos courtesy of Patricia Pennell)



Update from the Treasurer \$\$\$\$ - Harriet Bromberg

River City Wild Ones Chapter Update

We have many new members and our chapter has grown by leaps and bounds over the past two years to a count of 84.

Here is an update on how our chapter acquires our funding, what community projects we are involved with, and how you can get involved and help our chapter continue to fund these worthwhile projects.

Membership Dues

RCWO receives \$11.10 of the \$37.00 dues with \$25.90 going to National Wild Ones headquarters. When you choose to renew by credit card the fee that National is charged by the credit card company is deducted from our \$11.10.

Fundraising

Our fundraising events help us to raise money for our community projects, school programs, and grant awards. In the past two years we have sold custom Wild Ones tee shirts and hats, pruners, soil knives, and various books. Our largest fundraiser has been our annual auction.

Community Projects

Ada Park & Roselle Park, Ada Township

Prairie Wolf Park, Gaines Township

Collins Park (Reeds Lake), E. GR

Sunrise Park, Hudsonville

Sand Lake Library, Sand Lake

Our Largest Ongoing Project-Inner City Christian Federation (ICCF)

This is our third year of working to convert the traditional gardens at ICCF into our own River City Wild Ones Native Plant Demonstration Garden! Please lend a hand on one of our scheduled work sessions as we begin work on phase II and prepare for our first community celebration *Look, Learn & Libations* on July 21st. ICCF is located at 920 Cherry Street SE, GR.

School Projects & Educational Programs

Palmer School, Grand Rapids

East Grand Rapids Middle School

Pinewood Middle School, Kentwood

Forest Hills Eastern, Grand Rapids

East Rockford Middle School

Sparta Elementary & High School

Plant It Forward Grants

Sparta Middle School-Native Prairie

The Dominican Center at Marywood-Native Prairie

Get Involved

Volunteer to help on our many outdoor projects

Consider an additional donation over and above your yearly dues

Volunteer on the fundraising committee

The Board values your input on speakers, programs, & fundraisers

Provide an article, photos, or book review for our newsletter

"Like" us on Facebook

Wildflower Association of Michigan Conference Recap

By Ron Cammel



“Be a gracious host,” Steve Keto said at this year’s Wildflower Association of Michigan conference. Of course, he was not talking about wining and dining house guests, but providing for insects and any other creatures that happen upon your yard.

“Invite them all: the stingers, the biters, the eww, the ick,” he said. “The more the better.”

Keto, the natural areas and preserves manager at Western Michigan University, inspired and informed in a high-energy presentation at the March 2-3 conference. He will give a similar presentation at the June 14 Gardening for Nature event, which Wild Ones is supporting.

In the A-to-Z’s of ecology, A is for annuals, an under-emphasized player in native ecosystems, Keto said. They serve an important role in providing seeds, nectar and pollen to wildlife, as well as covering soil.

Native plant enthusiasts know grasses play a role, but Keto went further, calling grasses, sedges and rushes “the foundations of every native community.” Even more important is the soil: “Below our feet is exactly what keeps us alive on this earth,” he said. “We need to care for the soil.”

Taking care of it all means humans strategically replace the former natural forces that shaped a landscape. “I am the bison, I am the lightning strike, I am the manure,” he said.

In a talk that touched on a lot of our responsibilities for maintaining biodiversity in our landscapes, he wrapped up with a Z word: zen. “Relax,” he said. “You’re really not going to screw it up that bad.”

The conference’s keynote speaker, Rick Darke, recently co-authored a book with Doug Tallamy, “The Living Landscape: Designing for Beauty and Biodiversity in the Home Garden,” to be released in June.

Sticking with the book’s theme, Darke said property owners should consider function, not just native status, in their landscapes. Deer are native, he said, but quite destructive. Meanwhile, tall grasses do not fit the conditions of his property, but a row of grasses keeps deer away from plants they would otherwise devour. And the grasses do OK.

Focusing on function might help convince some property owners to go native, he suggested.

For example, asking about the function of mowed land would leave many people unable to defend their large lawns, he said. But homeowners want well-designed landscapes, so we cannot simply tell them to change their attitudes. “They need solutions,” Darke said.

So if someone does not want plants that lose leaves mid-summer, suggesting spring ephemerals will not help. With photos of his own gorgeous property, he proved that native plants can provide beautiful solutions for landscapes, even providing “structures” to replace hardscapes.

Such solutions will be important to young people, Darke noted.

“To get 20-year-olds interested in ecology,” he said, “We can’t just talk about the loss of species, but of the possibilities.”

Natives to Know - Mayapple (Podophyllum peltatum)

By Joyce Thuarsky

It's no coincidence that many of our [native woodland plants](#) flower in early spring. They are taking advantage of the sunshine that hits the forest floor before the trees fully leaf out. Many of these plants have flowers that point downwards, beneath their foliage, to tempt early insects emerging close to the ground. To see these flowers, you often have to get down to ground level.

One such early plant is the [Mayapple](#) (*Podophyllum peltatum*). Perhaps the showiest aspect of this perennial is its large, twin, umbrella-like leaves on a solitary stem. The leaves remain closed as the stem lengthens, unfolding 6–8 inches across when the plant has reached a height of 1-2 feet. Each leaf is rubbery yet smooth, deeply lobed, and composed of 5-7 wedge-shaped divisions.

In May or June, one pure white drooping flower will emerge between the axil of the 2 leaves. These flowers are about 2 inches wide and shaped like a cup, with 6–9 waxy white petals and many stamens.

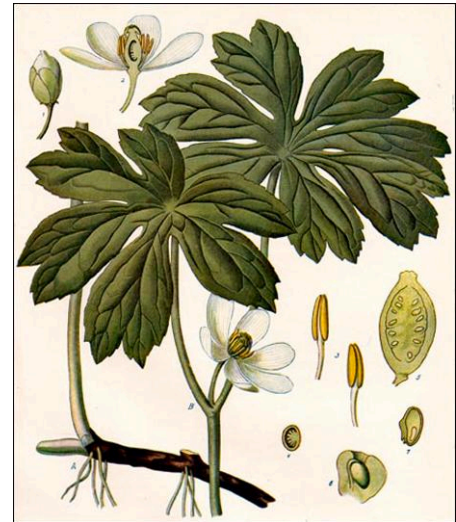
Pollinated flowers will produce large yellow fruits in fall. The fruit is lemon-shaped, fleshy, contains many seeds....and is a favorite food of box turtles! The ripe fruit (lemon-like flavor) is also edible in limited amounts by humans and has been used to make preserves and marmalade. However, CAUTION: all other parts of the Mayapple (leaves, roots, and unripe fruit) are poisonous.

The root of the Mayapple is composed of many thick tubers, fastened by fleshy fibers, which spread greatly underground. Over time, the plant can spread to form large colonies.

Interestingly, Mayapple flowers require cross-pollination with another Mayapple to set fruit (they are self-sterile). But since the plant often grows in clonal colonies, a

given flower may not produce fruit if a Mayapple of a different genetic line is not nearby.

Mayapple contains podophyllotoxin which is used to synthesize drugs for treating certain cancers and leukemias. Currently, the commercial source of podophyllotoxin is from an endangered species of the Himalayas. Recent studies have concluded that the leaf blades of the North American Mayapple could serve as an alternative source of podophyllotoxin.



Mayapples are excellent for naturalizing in moist woodland settings or native plant gardens with partial sun. However, like many other early spring “ephemerals,” the plants slowly wither as they go dormant later in summer. Therefore, Mayflowers are not considered a good border plant.

FOR MORE INFORMATION AND PHOTOS

<http://plants.usda.gov/core/profile?symbol=POPE>

<http://www.illinoiswildflowers.info/woodland/plants/mayapple.htm>

<http://www.nyctophilia.net/plants/mayapple.htm>

(Drawing - mvgazette.com)

A Message from Monarch Joint Venture



MONARCH JOINT VENTURE

Partnering across the U.S. to conserve the monarch migration

www.monarchjointventure.org

The Monarch Joint Venture is a partnership of federal and state agencies, non-governmental organizations, and academic programs that are working together to protect the monarch migration across the lower 48 United States.

PARTNERS

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U.S. Fish and Wildlife Service
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Wild Ones: Native Plants,
Natural Landscapes
The Xerces Society for
Invertebrate Conservation

University of Minnesota
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monarchs@monarchjointventure.org

Potential risks of growing exotic milkweeds for monarchs

Each fall, monarchs in eastern and western North America migrate to overwintering sites, where they form clusters in trees and stay in a semi-dormant state until the spring. However, some monarchs skip the traditional long-distance migration. In parts of the southern U.S. and California, the year-round persistence of tropical milkweed allows monarchs to breed throughout the winter. These year-round tropical milkweed patches foster greater transmission of the protozoan *Ophryocystis elektroscirrha* (OE), increasing the likelihood that monarchs become infected with the debilitating parasite. Therefore, we recommend that tropical milkweed (*Asclepias curassavica*) not be planted north of the latitude of Orlando, FL.

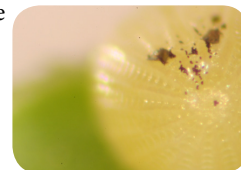
Tropical milkweed

Tropical milkweed (*Asclepias curassavica*) has a natural range that extends as far north as Mexico, but this plant is not native to the United States or Canada. Tropical milkweed is attractive and easy to grow, so it tends to be the most widely available milkweed at commercial nurseries. Because tropical milkweed historically occurred in the New World tropics, it is adapted to grow year-round in mild climates, whereas most native North American milkweeds die back seasonally and are absent during the winter months. When tropical milkweed is planted in the coastal southern U.S. and California, these plants continue to flower and produce new leaves throughout the fall and winter, except during rare freeze events.



What is OE?

Ophryocystis elektroscirrha (OE) is a debilitating protozoan parasite that infects monarchs. Infected adult monarchs harbor thousands or millions of microscopic OE spores on the outside of their bodies. When dormant spores are scattered onto eggs or milkweed leaves by infected adults, monarch larvae consume the spores, and these parasites then replicate inside the larvae and pupae. Monarchs with severe OE infections can fail to emerge successfully from their pupal stage, either because they become stuck or they are too weak to fully expand their wings. Monarchs with mild OE infections can appear normal but live shorter lives and cannot fly as well as healthy monarchs. Although recent research shows that tropical milkweed can lower OE replication within infected monarchs (due to high levels of cardenolide toxins), this might not benefit the monarch population. In fact, this could actually promote disease spread by allowing moderately infected monarchs that otherwise would have died quickly following eclosion to live longer and spread more parasite spores.



Project Monarch Health

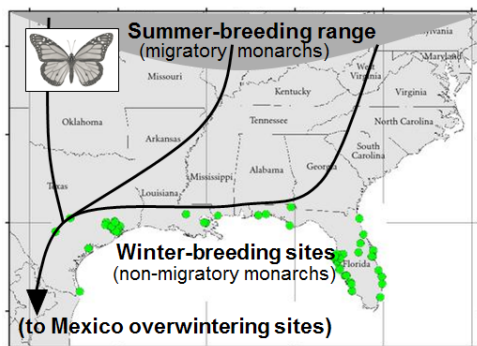
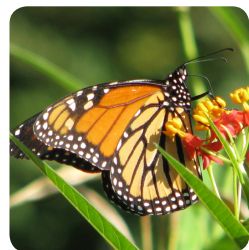
Project Monarch Health is a citizen science program focused on understanding the monarch parasite, OE. Learn more about this program and how to get involved by visiting the project website.

www.monarchparasites.org

A Message from Monarch Joint Venture - continued

Year-round monarch breeding

If milkweed is present year-round, then monarchs can breed year-round. In recent years, Journey North (www.learner.org/jnorth) and Monarch Larva Monitoring Project (www.mlmp.org) volunteers have reported many monarch larval sightings during the winter in the southern U.S., ranging from coastal Texas to the Carolinas. Almost exclusively, these caterpillars are feeding on tropical milkweed – often in very high densities. In mild climates, a single garden of tropical milkweed can harbor tens or hundreds of monarch eggs and larvae with multiple monarchs per plant, during December, January, and February. Scientists have reasons to think that winter-breeding is more common now than in the past, although data needed to test this trend are limited. It is not clear whether the eggs and larvae on tropical milkweed come primarily from resident monarchs or from migratory monarchs that halt their journeys once they encounter tropical milkweed. Regardless, winter larvae feeding on tropical milkweed face multiple threats, including a higher chance of becoming infected with OE parasites.



Risks of year-round breeding

Monarchs that reproduce year-round on tropical milkweed face several challenges. Research in this area is ongoing, but recent work suggests that winter-breeding monarchs suffer higher risks of mortality and lower reproductive output due to:

1. **Infectious disease.** Winter larvae are more likely than migratory monarchs to become infected with the OE parasite. Citizen scientists in the program Monarch Health showed that 49% of winter-breeding monarchs were infected with this parasite, compared to 9% of migratory monarchs sampled in Mexico and 15% of migratory monarchs sampled in the northern U.S. and Canada. This effect is probably the result of monarchs using the same plants generation after generation, allowing the parasite to accumulate both in the local monarch population and on milkweed plants.
2. **Food shortages.** Because tropical milkweed plants often harbor high densities of monarch larvae during the winter, larvae sometimes eat plants to the ground and run out of food. Thus, compared to summer-breeding larvae, winter-breeding larvae face a higher risk of food limitation, leading to starvation or cannibalism.
3. **Freezing temperatures.** While winters in the southern U.S. and California are mild in most years, rare freeze events can kill tropical milkweed plants, leaving monarch larvae without food and adult monarchs with less nectar. This happened in many locations in early 2014.



Acknowledgements:

Photos

Larva on *A. curassavica* - S. Altizer
 Oviposition - P. Davis
 Spores on egg - J. de Roode
 Deformed/Infected adult - S. Altizer
 Aging milkweed - D. Satterfield
 Adult on *A. curassavica* - P. Davis
 Winter-breeding map - Modified from Howard, Aschen and Davis (2010)
 Larvae defoliating milkweed - D. Satterfield

Content contributed and approved by Sonia Altizer, Dara Satterfield, Karen Oberhauser, Lincoln Brower, Wendy Caldwell, and Kelly Nail.

What can you do?

- Plant only species of milkweed that are native to your region, whenever possible. The MJV Milkweed Information Sheet (monarchjointventure.org) provides more information on a few priority species for each region of the U.S.
- If you already have tropical milkweed in your garden, prune the milkweed stalks to about 6 inches in height during the fall and winter months to discourage monarchs from establishing winter-breeding colonies*. Cutting back the milkweed will also help to eliminate OE spores that may be present on the plant. Re-cut the milkweed every few weeks as leaves re-sprout. Tropical milkweed might pose fewer problems in the northern monarch breeding range because it dies back naturally when it freezes.

**These recommendations are not applicable in south Florida (south of Orlando), where a distinctive, non-migratory population of monarchs has long been established. However, native milkweed planting is still encouraged in this area.*

- Contribute to scientific knowledge about winter-breeding monarchs by participating in citizen science projects. **Project Monarch Health** involves volunteers in collecting parasite samples from wild monarchs (monarchparasites.org). Observers receive a report on the infection status of all monarchs they sample. Volunteers can also report observations about winter monarch sightings on



Journey North (learner.org/jnorth), and collect detailed information on monarch use of milkweed plants in any season for the **Monarch Larva Monitoring Project** (mlmp.org).

2014 Look and Learn Program Schedule



Loda Lake Wildflower Sanctuary

Saturday, May 10, 2014 from 1:00 to 3:00 PM

Location: 7 miles north of White Cloud - check www.rivercitywildones.org on the “Wild Events” page for directions.

After almost a year’s wait, the field trip to Loda Lake is less than 6 weeks away! Loda Lake is celebrating its 10th anniversary this spring. Several docents will be available so we will break up into smaller groups to explore the trails, view the numerous wildflowers and learn the history of how this sanctuary came to be. This is a “must see” place!

RCWO’s own Carol Phelps, founding member of our chapter, was instrumental in the development of this site which is a joint project of the US Forestry Service and the Federated Garden Clubs.

Tour of Ody Brook Nature Sanctuary

Saturday, September 20, 2014 from 1:00 to 4:00 Location: Check www.rivercitywildones.org for direction to the Cedar Springs, MI location.

Join us at Ody Brook Nature Sanctuary for a unique field experience. Ranger Steve Mueller, a member of our advisory committee, will give us a tour of his property and discuss plants and their communities. The tour of the property will start at 1:30. Members can continue to explore on their own until 4:00.

Ody Brook Nature Sanctuary is managed to enhance biodiversity. The sanctuary is located in the headwaters for Little Cedar Creek with both upland and wetland habitats. Over 100 bird species, 24 mammals, 11 herps and 51 butterfly species have been documented along with nearly 150 species of plants.

Lend a Hand at the ICCF Garden!!

Inner City Christian Foundation (ICCF) Spring Garden Clean Up

Thursday, April 24, 2014 from 10:00 AM to Noon (Rain Day will be Friday, April 25 at the same time)

Location: Inner City Christian Foundation - 920 Cherry Street SE, Grand Rapids

Come lend a hand in helping to do some spring cleaning in the Wild Ones Native Plant Demonstration Garden!



"Spring" into Action at these Upcoming Events!!

April 22 - Earth Day!

WMEAC is hosting it's biggest event of the year - The Earth Day Celebration! April 23, 2014 from 6:00 - 9:00 PM. They'll be back at Frederik Meijer Garden and Sculpture Park with speakers including Grand Rapids Mayor George Heartwell, Past WMEAC Executive Director Roger Conner, and Women of Hope Honoree Katie Fahey!

The Crane Wives will be playing through out the evening, and your ticket will include your access to the world Frederik Meijer Garden Butterfly Exhibit!

Please RSVP online at www.wmeac.org/register

April 25 - Arbor Day!

May 3, 10:00 AM to Noon - Calvin College Ecosystem Preserve Native Plant Sale featuring more than 57 rare, unusual and favorite varieties of wildflowers, shrubs and grasses for all growing conditions. Proceeds benefit the Wetlands & Woodlands summer camp program. Click on this site to see species available - <http://www.calvin.edu/academic/eco-preserve/newsandevents/NativePlantSale.html>

May 17, 10:00 AM to 3:00 PM - Mark your calendars for Discover! Millennium Park (at the Hansen Nature Trail). This is a fun family event that MSU Extension Master Naturalist program and Kent County Parks are partnering together to host. Educational Stations, Live Animals, and AGAIN THIS YEAR; a Free shuttle will provide transportation from John Ball Zoo to Millennium Park and the Hansen Trail. Additional details can be found at www.facebook.com/DiscoverParksEvent

May 17 - Second Annual West Michigan Charity Birdathon and Nature Festival at Aquinas College. Check their website www.aquinas.edu/birdathon for details on how to compete in the Birdathon and for the line up of Nature Festival Activities which include a Live Birds of Prey Demonstration and Animal Presentation, along with guided bird / plant / insect walks on the campus.

May 21, 6:00 to 8:00PM - Kent Conservation District office hosts a workshop on Gardening with Michigan Natives for Pollinators to be held at 3260 Eagle Park Dr NE. Grand Rapids. Vern Stephens of Designs By Nature will present the workshop and provide the native plants for the sale below. \$5.00 Registration Fee. Register by calling 942-4111 ext. 100 or go to www.kentconservation.org

May 31, 8AM – 1:00PM Kent Conservation District's Native Plant Sale. You may order the night of the native plant workshop (posted above) or check their website for the pre-order form at www.kentconservation.org. Orders are due by May 23, 2014.



The Stewardship Network
West Michigan Cluster

Presents

Gardening for Nature

*Creating Sustainable Landscapes
for the Home, School, and Business*

Saturday, June 14, 2014

Calvin College Ecosystem Preserve

Bunker Interpretive Center
1750 E Beltline Avenue
Grand Rapids, MI 49546

8:00 a.m. to 4:30 p.m.

Gardening for Nature Conference

Creating Sustainable Landscapes for the Home, School and Business

Registration Fee: Stewardship Network Members \$35 • Nonmembers \$45
Lunch and Refreshments are included (provided by Calvin Catering).

Pre-registration is **required** as space is limited to 60 participants.

Enrollment Deadline: Wednesday, June 4, 2014.

Sorry, but registration at the door is not available.

To register: Visit The Stewardship Network Web page www.StewardshipNetwork.org and locate the West Michigan Cluster Web page by clicking on the 'CLUSTERS' tab along the top of the Web Site.

As you register, please indicate your intended Concurrent Session Track:

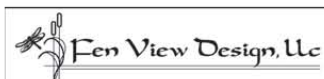
- Educator
- Homeowner, Business, Ground Managers

Continuing Education Credits offered by Kent ISD.

With Support from:



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Designs By Nature



Groundswell



For more information contact:
Michael Bruggink
Co-liaison West Michigan Cluster
616-803-5353
wmc@stewardshipnetwork.org

“The flowers of spring occupy places in our hearts well out of proportion to their size.”

- Gertrude S. Wister