

Master Gardener Update

September 2018

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Websites

UW Extension Rock County:
rock.uwex.edu

RPMGA Blog:
rpmga.blogspot.com

Rotary Gardens:
rotarybotanicalgardens.org

Wisconsin Master Gardener Program:
wimastergardener.org

Wisconsin Master Gardener Association (WIMGA): wimga.org

mixes it with saliva creating a paste and pushes it down into the scopa or pollen basket located on her legs giving her tight control over her harvest. A mason bee, on the other hand, is less fastidious when foraging. She packs her harvest in a ball against her abdomen and when foraging lands on a flower making a ‘belly-flop’ spreading her loosely held pollen hither and yon. She is much more likely to leave a trail of pollen grains behind her as she moves from flower to flower which greatly increases the likelihood of successful pollination. Orchard managers have learned they need far fewer mason bees per acre than honey bees.

Mason bees have a 95% pollination rate, whereas honeybees have a 5% pollination rate.

The mason bee’s brood season is early spring. Once the young bees emerge they promptly mate, search for empty tubes (hollow plant stems, man-made wooden nest blocks or bamboo or paper tube houses, such as the man-made bee house shown here) that are the right size and shape and begin establishing their brood. The favorite food for their brood is fruit tree pollen and nectar. Females collect the food, bring it to their nests, and knead it into a ball by mixing it with their own saliva. Once they have a food store that is large enough, they lay an egg on top of the mass, add material that will later be used by the larvae to build a cocoon and seal off the chamber by building a mud wall. They work this way until there are five to ten cells each stocked with food, cocoon materials and an egg. At the end of each tube they seal the entrance with a thicker mud wall. Having laid all the eggs they were born with (about 34) and after six to eight weeks of constant work, their biological imperative will have been satisfied, and they will die.



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By the end of summer, the larvae metamorphose into pupae using the stored materials to spin cocoons and later on into adults, each safe inside a cell. They emerge the following spring usually in perfect timing with the blooming of peach or apple trees.

Mason Bee Fast Facts:

- Brood cells often suffer predation from birds. The cells closest to the entrance will be preyed upon first. When creating her brood cells the female bee will fertilize the eggs in the brood cells farthest from the opening. These fertilized eggs will mature to be females. She will leave unfertilized eggs near the front of the brood cells. These will mature to be males. Since females are more important to the continuation of the species, having the males as a barrier increases the likelihood of survival of the species. If they survive the males will emerge first. They then wait for females to emerge and immediately begin mating.
- Males live only long enough to mate, up to 2 weeks, and females live just long enough to establish their brood – about 6 weeks.
- During their short lives blue orchard masons only venture about 300 feet in any direction.

Sources:

Blue Orchard Mason Bees (Osmia lignaria) – US Forest Service

Wisconsin Bee Identification Guide – UWEX

Building and Managing Bee Hotels for Wild Bees – Michigan State University

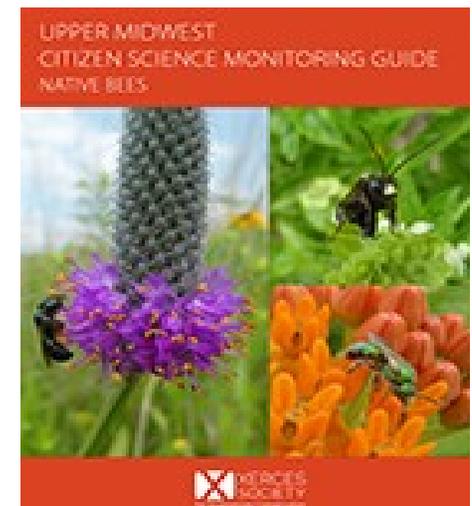
Mary Kay Thompson

Pollinator Project Links

The Xerces Society for Invertebrate Conservation

We've all heard that bees are threatened—not just honey bees, but native bees as well. Just how bad is the problem? You can help The Xerces Society in a citizen science project to get a reliable picture of where things are right now. Check out this link for more information, or if you just want a very helpful native bee identification guide: [Upper Midwest Citizens Science Monitoring Guide Native Bees](#) - A publication of the Xerces Society for Invertebrate Conservation.

“The Xerces Society for Invertebrate Conservation is a non-profit organization that protects wildlife through the conservation of invertebrates and their habitat. Established in 1971, the Society is at the forefront of invertebrate protection, harnessing the knowledge of scientists and the enthusiasm of citizens to implement conservation programs worldwide. The Society uses advocacy, education,



habitat restoration, consulting and applied research to promote invertebrate conservation.” (Excerpt from the Upper Midwest Citizen Science Monitoring Guide Native Bees). For more information about the Society, visit its website at Xerces.org.



The Xerces Society takes its name from the now extinct Xerces Blue butterfly (*Glaucopsyche xerces*), the first butterfly known to go extinct in North America as a result of human activities.

The Why Files – The Science Behind the News

This website was a publication of the UW Board of Regents. Though no longer being actively added to, it remains online and available. Follow [this link](http://whyfiles.org) (whyfiles.org) to the home page where you can do keyword searches for all manner of topics. The word "pollinator" came up with these interesting articles in a matter of seconds.

[Spring forward: birds and flowers in a warming world!](#) – Published in 2015

[Flowers: More Seductive Than Ever](#) – Published in 2013

Why would you want to read articles that are several years old? Perspective. By reading these articles you can come to better understand the history behind issues like colony collapse, or the vanishing Monarch butterfly.

Mary Kay Thompson

It's Time to Recertify as a Master Gardener Volunteer...

If you plan to continue as a certified Master Gardener Volunteer next year, you need to have completed at least 24 hours of volunteer time and 10 education hours during the past year. If you're short a few hours, there's still time. Timesheets showing your hours are due in the County Extension office by October 1. If you'll be close but not quite there, contact the Extension office and discuss your situation. Something can probably be worked out.

Need the form? Timesheets can be printed from this website: <https://wimastergardener.org/toolbox/>. Click on the paperwork box, and select the 2018 form in either format (pdf or excel). Once completed, mail forms to UW Extension – Rock County Attn: Tara Hanley, 51 S. Main Street, Janesville, WI 53545.

And Renew Your Association Membership(s)

It's also time to renew your association memberships if you choose to join. The Rock Prairie Master Gardener Association presents monthly programs to help you get your education hours and organizes projects like to Pollinator Project and MGV presence at the Farmers Markets in Janesville and Beloit. RPMGA's goal is to help make your MGV experience easier and more rewarding. RPMGA dues are \$15 for the year for the first MGV in each household, and \$5/year for each additional MGV in the same household.

The Wisconsin Master Gardener Association (WIMGA) is a statewide resource for MGVs. They produce a monthly newsletter, put on the statewide annual conference, manage a speakers' bureau, award grants for MGV projects and serve as a resource for individuals. WIMGA dues are \$5/year.

If you are joining or renewing for both associations, please write a single check payable to RPMGA for both and send it along with your timesheet to the office by October 1. RPMGA will forward your info and dues to WIMGA.



RPMGA September Program: Nature at the Confluence Tour, Thursday, September 6, 1:00-3:00 p.m.

Nature at the Confluence is a new urban environmental center that opened in 2017 just a little south of downtown Beloit, over the state line in South Beloit. It's located on property surrounded by the Rock River, Turtle Creek and Kelly Creek, and the goal of the center is inspire a love of nature in people and to foster environmental stewardship. As part of the process, they have worked at restoring their site at the confluence of the waters. Working on its own and in conjunction with the Welty Environmental Center, Nature at the Confluence offers educational programs, walks, and more, for people of all ages. They're also part of Monarch Watch and are a registered Monarch Waystation.

Of particular interest to us, the campus offers a 5-acre prairie restoration, plus 5 additional learning gardens: a pollinator garden, Italian heritage garden, sensory garden, pizza garden and tasting garden. We've lined up a tour guide to help us explore the gardens and discover what type of resources Nature at the Confluence offers. You may discover it's a place you'd like to volunteer.

Date/Time: Thursday, September 6, 1:00-3:00 p.m.

Location: 306 Dickop Street, South Beloit, IL. Meet us there, or if you'd like to car pool from Janesville, see below.

Car pool info: Meet at noon in the parking lot of the main entrance to Rotary Gardens.

Rotary Gardens Event: Botanic Talk: The Basics of Canning, Thursday, September 27, 6:30-8:00 p.m.

Welcome Joey & Holly Baird of the Wisconsin Vegetable Gardener Show! Holly Baird is an award winning state fair canner. She will teach you how to can safely, how to get started in canning, and canning methods and techniques.

Joey and Holly enjoy making presentations at garden Expos throughout the Midwest. They make videos on YouTube about how to grow your own food organically, reusing found items (or items you may just throw away), what to do with the food you grow, home canning and simple home living. Joey and Holly host the only gardening radio show in SE Wisconsin on Saturday mornings from March through October.

Cost: \$7 non-member, \$5 RBG Members; includes printed and note taking materials (where applicable), admission to Rotary Botanical Gardens, and light refreshments. Tickets to this event may be purchased at the door, or online, in advance.

Please note: if you would like to view the Gardens, please arrive with time prior to the beginning of the presentation as the Gardens close at 8:00 p.m. Those under 16 must be accompanied by an adult, who is also required to purchase a ticket.

Two Fundraisers at Rotary: Fall Plant Sale and Garden Art Auction

Fall Plant Sale: Beautiful blooming mums and asters are the usual highlights of Rotary's annual Fall Plant Sale, though hardly the only ones. There will be lots of perennials, bulbs, flowering kale, grasses and shrubs available for fall planting as well. Compost will also be available for sale. And of course, proceeds help support the gardens.



The sale takes place September 6-9 at the Hort Center. Hours: Thursday: 4:30 to 7:30 pm (members only), Friday: 9 am to 6 pm, Saturday: 8 am to 5 pm, Sunday: 10 am to 4 pm. If you're a member at Rotary Gardens, you can shop the members only pre-sale on Thursday evening, enjoy light refreshments, and get your pick of the plants. The sale opens to the general public Friday through Sunday, though regardless of the day, members get a 10% discount on purchases (you must provide proof of membership).

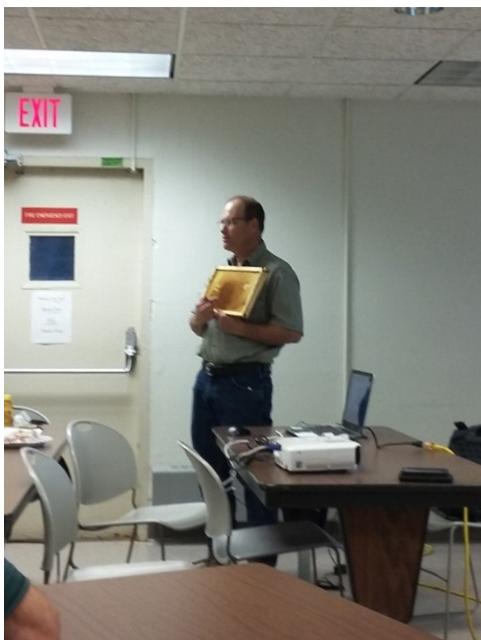
Note: You can also volunteer to help staff the sale. See Volunteer Opportunities, below, for more info.

Garden Art Auction: Thursday, September 13 @ 5:30 pm - 7:30 pm.

This year's Garden Art Exhibit was themed "Hop to It." As always, an auction of the artworks will conclude the Garden Art Display. You're invited to bid on the projects and take home your very own piece of garden art. All funds raised will help to sustain the Gardens. Preview of auction items and cash bar opens at 5 p.m. The live auction begins at 5:30 p.m. Please arrive with enough time to secure a bidder number. For details of the terms of the auction, please see <http://www.rotarybotanicalgardens.org/event/garden-art-auction-3/>.

Autumn at the River; WIMGA Annual Conference, Eau Claire, Friday and Saturday, September 21 and 22.

Learn from innovators in the Master Gardener Volunteer community. Join with Master Gardeners from around Wisconsin for a fun-filled and educational two days in Eau Claire, Wisconsin. Autumn at the River will be held at the new Lismore Hotel located at the confluence of the Chippewa and Eau Claire Rivers. On Friday you have 3 tour options of area horticultural attractions and an evening dinner and keynote talk by Rotary's own Mark Dwyer. Tour one is to Silver Springs Horseradish, a local CSA and a garden center. Tour two takes you to a vineyard/winery and a fruit orchard. Tour three is a walking tour of Phoenix Park and the Mayo Clinic Gardens. Saturday morning begins with a visit to the Eau Claire farmers market to learn about its history and how it works. Back at the hotel, the day continues with your choice of a dozen break-out sessions and a keynote address from Allen Centennial Garden's Ben Futa. The conference also includes a raffle and silent auction of garden-related goodies. Registration information is available at www.wimgaconferences.com/register. 2018 WIMGA Conference hosted by Barron, Chippewa, Dunn, Eau Claire & St. Croix Valley MGVA associations.



Bee Inspector gives eye-opening presentation

On Thursday, Aug. 30, MGVs from Rock and Walworth Counties spent a couple hours talking with the one of the Department of Agriculture's bee inspectors, Dan Zeihli (left). Dan talked first about the life cycle of honey bees. For example, did you know that male bees (drones) come from unfertilized eggs? Or that the type of royal jelly given to a fertilized egg determines whether the bee will be a worker or a queen? Or that queens develop faster than any other kind of bee?

Another surprise was that a large amount of the pollen honeybees collect comes from trees, especially in the spring. Something to keep in mind when planning what to plant for pollinators. And when nectar and pollen are scarce, bee-keepers supplement the bees' feed. In the photo at right, the clear jar contains a 50/50 combo of sucrose and corn syrup.

The plastic bag contains a pollen substitute. The frame in the picture shows the typical "rainbow" pattern, where eggs are laid toward the bottom center, surrounded by pollen, then in the top and corners, honey gets stored.



More surprises: Honey bees have defined territories. Bees far from home may join a different hive. Mites are a problem in all beehives these days. Hive inspections are free and give information about the presence of several possible diseases as well as overall health of the hive. Dan's advice for planting to support honeybees: plant in large blocks to make



it easier for the bees, have at least three varieties in bloom during each season of the year, and, perhaps because honey bees originated in Europe, they seem to prefer plants that also originated in Europe.

Left: MGVs Susan Wood, Rose Last and Cheryl Demro listening to the bee inspector's presentation.

Volunteer Opportunities:

September 1, 8, 15, 22. Ecological Work Parties, UW Arboretum. Saturdays, 9:00 am to noon, various locations within the Arboretum. Check the website for details.

September 6-10: Rotary Gardens Fall Plant Sale. Shifts available for prep, cashiers, yard help (helping customers find the right plants). To sign up for any of the above, contact Laura Boettcher at Rotary Gardens--608-314-8415--or go to <http://signup.com/go/EysCYOr>.

Two unique opportunities: Hummingbird Banding September 8, and Monarch Tagging September 15 ... Volunteers and families are needed to assist with hummingbird banding at Larry and Emily Scheunemann's residence at 11703 Berg Rd. in rural Whitewater on Saturday, September 8 at 7:30 a.m. Volunteers will have an opportunity to release hummingbirds from their hand when the banding is complete.

Volunteers and families are also needed for Monarch Butterfly tagging on Saturday, September 15 at 1:00 p.m. You will meet at Emily and Larry Scheunemann's home at 11703 Berg Rd. in rural Whitewater. A sunny day is needed for this event. If it is raining, it will not be held.

September 14: Plant Adoption Day at Allen Centennial Gardens. 3:00 to 7:00 p.m. This event aims to provide a free houseplant to more than 500 UW-Madison students. For more info, contact the garden.

Composting Talk for October 2. Several MGVs have committed to giving a 1 1/2-hour talk on composting at Hedberg Public Library on October 2 at 6:00 p.m. We're using the presentation developed for the Master Composters but would like to make it as "real life" as possible. We could use help developing the "live" aspects of the presentation and help demonstrate (or talk) at the presentation. Contact Ruth Flescher, yafello2@gmail.com or Mary Thompson, mastergardenermary@gmail.com

September Education Calendar

For details on any of these education opportunities, search the web using the program title and/or organization name.

OBG = Olbrich Botanical Gardens, Madison; UWA = UW Arboretum, Madison; RBG = Rotary Botanical Garden, Janesville; WEC = Welty Environmental Center, Beloit; MFAI = Michael Fields Agricultural Institute, East Troy; ACG = Allen Centennial Garden, Madison; WHPS = Wisconsin Hardy Plant Society, Madison; UI = University of Illinois Extension, Winnebago County, Rockford, IL; UWH = Univ. of WI-Madison Dept. of Horticulture, Madison; NCG = Nicholas Conservatory Gardens, Rockford, IL.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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2 Curtis Prairie Colors Walk UWA	3	4	5	6 Nature at the Confluence Tour RPMGA/Mini Succulent Cork Planters ACG	7	8
9 Fall Flowers Walk in Grady Oak Savannah and Greene Prairie UWA/Fungus Among Us UWA/	10	11 Landscape for a Dry Basement OBG/Spring Flowering Bulbs Webinar UI	12 Overwintering Tropicals at Home OBG	13	14	15 Edible Landscaping UWA
16 Native Gardening Conference UWA/ Grassland Hues Walk UWA	17	18	19 Book Club: Second Nature, a Gardener's Education ACG/ Small Conifers in the Garden WHPS	20	21 Autumn at the River MGV Conference WIMGA	22 Autumn at the River MGV Conference WIMGA/Fall in the Native Plant Garden Tour UWA/Autumn Equinox Night Tour UWA/

23 Autumn Woodlands Walk UWA/Seasonal Changes Program UWA	24	25 Apple Mania WEC/Making Your Compost Cook Webinar UI	26 Midwest Mechanical Weed Control Field Day MFAI/Farm to Flavor Dinner UWH	27 Basics of Canning RBG/Fall Bulb Planting OBG	28	29
30 Underutilized Woody Plants OBG		Wings of Wonder: The Lorikeet Exhibit all month at NCG				

Looking Ahead to October:

Making and Using Compost in Your Backyard, Tuesday, October 2, 6:00 to 7:30 p.m., Hedberg Public Library, Janesville.

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UW-Extension Rock County, 51 S. Main Street, Janesville, WI 53545