

In this Issue

The Amazing Sunflower

RPMGA:

Rotary Gardens Tour
 New Bylaws Approved
 July Coffee Chat
 August Plans: a Day in Rockford

Rotary Gardens:

Botanical Talks:
 The Prairie Eco-system and Its Plants
 Bumble Bees of South-Central Wisconsin
 What's in Bloom? Tour

Volunteer Opportunities

Event for Fun

Houseplant Swap

More Training Coming Up

in July and Beyond

The Amazing Sunflower (Helianthus annuus)

The story of the delightful plant we know as the sunflower is indeed amazing. The wild sunflower is native to North America but commercialization of the plant took place in Russia.

It was only recently that the sunflower plant returned to North America to become a cultivated crop. It was the Native Americans who first domesticated the sunflower into a single headed plant with a variety of seed colors including black, white, red, and black/white striped. Today three countries dominate the production of sunflowers, and there the irony begins. Those countries are The Ukraine, The Russian Federation, and Argentina. (As you no doubt know, today the Russian Federation is waging war against The Ukraine.) There are about 81 other countries (including the USA) that raise and export sunflowers for their food value and for their oil, but none come close to the volume of production that the top three achieve.

The Sunflower has come to mean more than just commercial oils and livestock feed. It has become the symbol of the people of The Ukraine. First Lady Dr. Jill Biden had sunflowers embroidered on the cuffs of a



"[Congratulations-on-the-Independence-Day-of-Ukraine](#)" by www.tOrange.biz is licensed under [CC BY 2.0](#).

Websites

MGV Hours Reporting:
mastergardener.
extension.wisc.edu/
report-your-hours/

**Canvas UW Online
Classroom:**
<https://canvas.wisc.edu/>

RPMGA Blog:
rpmga.blogspot.com

RPMGA on Facebook:
Hit control/click on this
link:
[RPMGA on Facebook](#)

Rotary Gardens:
rotarybotanicalgardens.
org

**Wisconsin Master
Gardener Program:**
mastergardener.
extension.wisc.edu

**Wisconsin Master
Gardener Association
(WIMGA):** wimga.org

blue sheath dress she wore for the first State of The Union Address by her husband, President Joe Biden. She also had a sunflower embroidered onto a white face mask she wore that day as well. People all over America are showing their solidarity with The Ukrainian people by planting sunflowers in their gardens this year.

Native American Uses of Sunflowers

According to a history published as part of the 20th International Sunflower Conference, held in Novi Sad, Serbia from June 20 to 23 of this year the story of the sunflower began in North America. Archeological evidence suggests that the sunflower was cultivated by Native Americans in what is known today as Arizona and New Mexico. Some archaeologists suggest the sunflower may have been domesticated before corn as far back in history as 3000 BC.



"MPW 5780" by Michael-Wilson is licensed under [CC BY-NC-ND 2.0](#).

The Native American tribes used sunflowers in many ways. The seed was ground or pounded into flour for cakes, mush or bread. Some tribes mixed the meal with other vegetables such as beans, squash, and corn. The seed was also cracked and eaten for a snack. There are references of squeezing the oil from the seed and using it to make bread.

Non-food uses include a purple dye used for textiles, body painting and other decorations. Parts of the plant were used as medicines ranging from a treatment for snakebite to other body ointments. The oil of the seed was used on the skin and hair. The dried stalk was used as a building material. The plant and the seeds were widely used in ceremonies.

Introduction to Western Europe

Sometime around 1500 AD Spanish explorers took the sunflower to Western Europe where it became widely accepted as an ornamental plant. Soon medicinal and culinary uses began to be developed. By 1716, an English patent was granted for expressing oil from sunflower seed.

continues on page 12

RPMGA Notes

Art Hilker Leads Guided Tour of Rotary Gardens, Tuesday, July 12 or Thursday, July 14, 10 a.m.

MG Art Hilker has been volunteering as a tour guide at Rotary gardens for the last 15 years and he's willing to share his insider's view of the recent changeover in the Gardens to a more sustainable focus (more perennials, fewer annuals). He's also ready to share what he knows about the history of the gardens, its physical aspects, some of the more interesting plants (including a special dahlia garden this year), plus how the gardens provide therapeutic benefits. This year's garden art display of turtles will be on view as well. Art is looking forward to getting stories and insights from other master gardeners and guests as well, making the tour an interactive event. **Tram Available:** Art has reserved Rotary's Tram for both dates, so if anyone has difficulty walking or gets tired along the way, up to 7 people can hop a ride.

Two dates to choose from: **Tuesday, July 12** (2 spaces available) OR **Thursday, July 14**. (14 spaces available)

Time: plan to arrive around 9:45 so we can all check in. The tour begins at **10:00 a.m.**

Fee: You pay only for garden entry. Free to RBG members, \$7 for seniors or \$9 for adults.

Space is limited to 20 people per tour. First come, first served, so sign up soon to assure your place. **Email Ruth Flescher** (yafello2@gmail.com) with the date you plan to come. (If you won't know if you can join us until the last minute, we'd still love to have you, but aim for the Thursday date if possible.)



Above and center: "[Rotary Botanical Gardens](#)" by [vabarqer](#) is licensed under [CC BY-NC-ND 2.0](#). Right: Rotary Garden, Janesville by Milomingo

New Bylaws Approved Unanimously!

Everyone attending RPMGA's online meeting on June 2 voted in favor of the proposed changes to RPMGA's bylaws. So those changes are now our official operating rules. You should have received a link from our secretary, Susan Wood, to the revised bylaws, which are available in Google Docs. Or connect directly at https://docs.google.com/document/d/1LOTISOuGh0zCDManiZI5ccRCzZxitJ_i/edit and print out a copy for yourself.

Next Coffee Chat: Tuesday, July 12, 1 p.m. online

Don't forget this month's virtual coffee chat with Rock, Jefferson and Walworth county MGVs. It's a great place to hear the latest, meet MGVs you may not know, and generally feel more connected. Julie Hill will send out an email with the link to the Zoom session before long. Hope you can be there!

Coming in August: A Day in Rockford, Tuesday, August 9

Anderson Japanese Garden. Nicholas Conservatory and Garden. Klehm Arboretum and Botanic Garden. That's a lot of garden riches and they're just down the road a piece. So we're heading south to Rockford, IL, on Tuesday, August 9 (rain date: Wednesday, August 10). We're planning so you can mix it up and set your own agenda for the day. Here are your choices:

Option 1: A guided tour of Anderson in the morning. (Counts for continuing education hours.)

Option 2: Nicholas Conservatory and Gardens. We won't have a guided tour there (so no education hours), but their signage is excellent. Bring a lunch and settle in to relax or wander at will.

Option 3: A tram tour of Klehm in the early afternoon. (Counts for continuing education hours.)

You choose if you're up for all three gardens or just one or two. Watch for more information, coming to your inbox soon!



ANDERSON
JAPANESE
GARDENS





Botanical Talk: The Prairie Eco-System and Its Plants, Wednesday, July 13, 5:30-7:30 p.m. (Rain Date: Thursday, July 14, 5:30-7:30 p.m.)

Explore the prairie ecosystem by learning about its history in southern Wisconsin and the diverse types of prairies found here. Along with RPMGA member Ann Pedder Reilly, you will visit the RBG prairie to view the unique plants that grow there. Learn about prairie restoration efforts and how you can be part of the movement. This program includes educational materials about prairie plants you can grow in your yard. Note: Between 40 minutes and 1 hour of this program will be spent walking the Gardens. Please dress or

bring clothes and footwear suitable for some time outdoors. Fee: \$10 for RBG members/\$17 for the general public. Register online by July 11 at <https://rotarybotanicalgardens.org/event/the-prairie-ecosystem-and-its-plants/>

**Botanical Talk: Bumble Bees of South-Central Wisconsin,
Wednesday, August 3, 5:30-7:30 p.m. (Rain Date: Thursday, August 4, same time)**

Get acquainted with the bumble bees found in south-central Wisconsin. This program explores the biology of bumble bees, their flower preferences, and how to identify our local species. RPMGA member Ann Pedder Reilly has been observing bumble bees for the Wisconsin Department of Natural Resources' Bumblebee Brigade community science program for a number of years. In addition to sharing her expertise and bumble bee photos, Ann will lead a walk through the gardens to observe bees and see what species can be found. You may even see one of the endangered rusty patch bumble bees! Learn how you can help sustain bee populations. This program features Ann's bumble bee photos. Note: Between 40 minutes and 1 hour of this program will be spent walking the Gardens. Please dress or bring clothes and footwear suitable for some time outdoors. Fee: \$10 for RBG members/\$17 for the general public. Register online by August 1 at <https://rotarybotanicalgardens.org/event/bumble-bees-of-south-central-wisconsin/>



*"Bumble bee" by [Tim Simpson1](#)
is licensed under [CC BY 2.0](#).*



"What's in Bloom? Tour" Wednesday, July 20, 6-7:00 p.m.

Enjoy a tour of Rotary Gardens led by Director of Horticulture, Michael Jesiolowski. He provides a behind-the-scenes look at what's blooming each month and answers any questions you may have. What's in Bloom? Tours take place on the 3rd Wednesday of the month (April- August) and the 4th Wednesday of September. The tours are free for RBG members, or \$10 for non-members. To register, please call 608.752.3885 or sign up in person on the day of the tour.

Volunteer Opportunities

Rotary Gardens is always looking for assistance. **General Garden Volunteers** tend beds, help plant and weed, water, and more. **Garden Ambassadors** needed for Tuesday evenings, Saturday afternoons and evenings, and Sunday afternoons. Additional **Tour Guides** wanted for the many tours that are being booked for this year. Sign up for **Sunday Watering** at <https://signup.com/go/kJZRkCp>. You can contact Carla Edgar with any questions about volunteering at Rotary: volunteer@rotarygardens.org

Congdon Gardens Workdays The crew helping to maintain Congdon Gardens in Delevan invite you to join their regular Thursday morning workdays, throughout the summer. The time is 8:30 to 10:30 a.m. Bring water and your favorite weeding tools. If you have questions, contact Dottie Kahabka (dorthk@charter.net) or Lynda Suskey (lyndamgs@aol.com).

Welty Environmental Center Opportunities at Welty include naturalists for education programs, writers for their blog and newsletter, design and distribution work for their PR efforts and educational displays, help with special events, and—of course!—gardening and invasives removal. Ask for more information at <https://weltycenter.org/contact-us/>

Nature at the Confluence Wednesday Workdays. Hours: 10 a.m. till noon. Drop in any week as the “Green Team” gets busy taking care of the land. Jobs vary: you might work on pulling garlic mustard or other invasive plants, or you might help tend the Pollinator Garden and Learning Gardens, or work on trail maintenance. Bring your own gloves. They supply water and snacks. For more information and the required waiver form to sign, go to <https://natureattheconfluence.com/event/wednesday-work-day-be-part-of-the-green-team/2022-05-04/>

Kettle Moraine Land Trust 4th Saturday Stewardship KMLT has a workday on the fourth Saturday of each month, usually from 1-3:30 p.m. Locations and tasks for each workday vary. To find out more on each month’s event, go to their calendar <https://kmlandtrust.org/events/>

Event for Fun

Sinnissippi Houseplant Swap, Saturday, July 16, 1-3 p.m.

Nicholas Conservatory & Gardens, Rockford, IL

Calling all houseplant enthusiasts! Enjoy a casual afternoon of socializing and trading with other houseplant fanatics. Bring a few cuttings or potted plants to swap. We may even have some retired plants from NCG available! Houseplants only, please. Potted plants must be in 6” pots or smaller. Swap is OUTDOORS and FREE!

Note: The Conservatory building will be open until 3pm (regular admission rates apply for Conservatory entry).

"Houseplants In 2014" by F. D. Richards is licensed under [CC BY-SA 2.0](https://creativecommons.org/licenses/by-sa/2.0/).



More Training Available in July and Beyond

Looking for Level 2 MGV training--The Plants Plus modules? You can find them in the online classroom, Canvas, which you access with your UW NetID at <https://canvas.wisc.edu/> As of now, Plants Plus modules are ONLY available in Canvas. Check regularly for new modules!

Olbrich Botanical Gardens, Madison, WI

Classes are in person at the Gardens unless otherwise noted. Fees listed are for Olbrich Members/General Public. For more info, copy and paste this address: <http://www.olbrich.org/education/classes.cfm>



"Front ex-lawn" by [Gardener Susan](#) is licensed under [CC BY 2.0](#).

Registration for this class has closed, but try calling to see if they'll let you in at the last minute: 608-246-4550.

July 6, Fantastic Ferns and How to Grow Them Walk, 6-7:30 p.m., \$16/\$20. Register by June 29.

Registration is open for these classes. If a class is shown as "filled," see if you can get on a waiting list. Cancellations do occur.

July 13, Summer Container Garden Walk, 6-7:30 p.m., \$16/\$20. Register by July 6.

July 14, Evening Meadow Stroll, 5-6:00 p.m., \$16/\$20. Register by July 7.

July 21, Sustainable Success Garden Walk, 6-7:30 p.m., \$16/\$20. Register by July 14.

July 27, A Walk Through Olbrich: Replacing Lawn in Your Garden, 6:30-8:00 p.m., \$24/\$30. Register by July 20.

August 3 (rain date: August 4), Discovering Olbrich's Insects Walk, 6-7:30 p.m., \$16/\$20. Register by July 27.

Wisconsin Horticulture Update, Fridays at 9:30 a.m. or Recordings in the Canvas Classroom

The Wisconsin Horticulture Update is a 1-hour weekly review of statewide growing conditions, degree days, insect and disease activity and more, plus special topics. Updates are already in the Canvas Classroom for the expected outlook for 2022 on insects and plant diseases. May 6 will cover the general forecast for 2022 on invasives and weeds. After May 6, the update will go back to its standard weekly format, which include updates from both Brian and PJ's labs (Plant Diseases and Insects, respectively) as well as updates from around the state. No registration required. Recordings will be posted in the Canvas Classroom, so you can catch up on any you missed. Use this link on a Friday morning to log into the live presentation (goes directly to the Zoom meeting). [Log into the WHU on Friday at 9:30am](#)

**Green Thumb Gardening – Summer Series, online or in person,
Mondays, 6:00-8:00 p.m.**

The Green Thumb Gardening class series gives you the practical knowledge to keep your home garden thriving! Dane County Extension educators and local horticulture experts will provide in-depth and accessible information for everyone from the novice to the experienced gardener. Register for individual classes at \$12 each. Attend virtually from home or in person at the Extension office in Madison. For Online classes: [Click here](#) For In-person classes: [Click here](#)

July 11: Weeds and Weed Management

July 18: Native Plants and Pollinators

July 25: Disease Management in the Garden

August 1: Perennials for Shade



**Reading the Landscape: Prairies and Savannas, 2 Saturdays: July 9 & 23,
UW Arboretum, Madison, 9-11:00 a.m.**

In this two-part class (July 9 and 23), explore the hidden treasures of Curtis Prairie, Greene Prairie, and the Grady Tract oak savannas. Learn to identify plants, distinguish the characteristics of prairies and savannas compared to woodlands, and find out about the restoration and management of these communities. Instructor: Sylvia Marek. Outdoor class, takes place rain or shine except in unsafe weather. Meet at the Arboretum's Visitor Center. Fee: \$40. Register by July 4 at <https://arboretum.wisc.edu/classes/reading-the-landscape-prairies-and-savannas/> Weather make-up date: July 24.



**Identifying Common Lawn and Garden Weeds, Univ. of IL Extension,
Tuesday, July 12, 1:30-2:30 p.m., online**

All too often, homeowners struggle with invading weeds. They believe they are trying to control one species when, in fact, they have another species entirely, resulting in poor weed control. Don't let this happen to you! Join Michelle Wiesbrook, Extension Pesticide Safety Education Program specialist, to learn about proper weed identification. Knowing what to look for and where to look makes weed identification considerably easier. Four Seasons Gardening Webinar series, U of IL Extension. Free, but registration required. Go to <https://web.extension.illinois.edu/registration/?RegistrationID=25788>



Plants for Pollinators Garden Tour, Wednesday, July 13, UW Madison Arboretum, 7:00 p.m.



"Wild Bergamot (Monarda fistulosa)" by [wackybadger](#) is licensed under [CC BY-SA 2.0](#).

Learn about summer-blooming native and ornamental species in Arboretum gardens. Susan Carpenter will highlight plants and gardening practices that support essential pollinators in urban/suburban landscapes. Free, no registration required. Meet at the Visitor Center.

July Blooms in the UW-Whitewater Nature Preserve, Wednesday, July 20, 6:00-7:00 pm.

Over 100 acres on the UW-Whitewater campus's northeastern border are being restored and actively managed as a native prairie and woodland. You will learn more about native plant species found in prairie and savanna ecosystems as well as the history and future development dreams for the UW-Whitewater Nature Preserve. Limited to 15. Free, but registration required by noon on July 19. Go to https://uw-whitewater.ungerboeck.com/prod/emc00/Public-SignIn.aspx?&SessionID=fbnfdpfc1ffkcofao&Lang=*

Fall Gardening Season, Monday, July 25, 6:30 p.m. online

Part of the Wisconsin Master Gardener Association's Continuing Education Series. Meg McAndrews Cowden is the author of "Plant Grow Harvest Repeat" and resides in the western Twin Cities. She will share her top succession planting tips for how to extend your vegetable gardening into late fall, well beyond first frost, using both direct seeding and indoor sowing methods. With a formal background in natural resource management, her current wheelhouse includes stay-at-home mother, volunteer, writer, photographer, and her 'day job' as full-time resident gardener. Meg relishes the challenge of gardening year after year in such a cold climate, and is never short on growing challenges and new ideas. With each passing season, new ideas are field tested and refined. If you can't make the presentation, a recording of it will be available at www.wimga.org under the Members Only tab, until August 25. Free, but registration is required. Go to https://us06web.zoom.us/meeting/register/tZAucuihqj8uHNFwca_91FLBa_qcvJ1bggN- Note: The promotional email for this class said the program was at 7:00, with the Zoom meeting room opening at 6:45. HOWEVER, the registration form and confirmation email both say 6:30.



"802" by [EarlRShumaker](#) is licensed under [CC BY 2.0](#).

**Nicholas Conservatory (Rockford)
Outdoor Gardens Guided Walking Tour,
Thursday, July 28, 10:30 a.m.-noon**

Join our volunteer docent on a tour of the outdoor gardens at Nicholas Conservatory & Gardens. Learn about native and exotic plants, shade and sun loving plants, and NCG/Sinnissippi history and fun facts. Dress for the weather. Walking shoes and a bottle of water are recommended. Tour will last 1-1.5 hours. Meet at Nicholas Conservatory entrance. Free? but registration required. Go to: <https://web2.myvscloud.com/wbwsc/ilrockfordwt.wsc/search.html?Subtype=INSTRUC&Type=NCG&display=detail&module=TP&sort=begindate>

**Native Grasses Garden Tour, Wednesday, August 3,
UW Madison Arboretum, 7:00 p.m.**

Susan Carpenter, Wisconsin Native Plant Garden curator, will focus on color, size, and features of native Wisconsin grasses, from tiny mustache grass to big bluestem. Free, no registration required. Meet at the Arboretum's Visitor Center.



"Big Bluestem" by [Arilenamay](#) is licensed under [CC BY-SA 2.0](#).

The Amazing Sunflower, continued

The Sunflower became very popular as a cultivated plant in the 18th century. Most of the credit is given to Peter the Great, the tsar of all the Russias. The plant was initially used as an ornamental, but by 1769 literature mentions the sunflower as being cultivated for oil production. By 1830, the manufacture of sunflower oil was being done on a commercial scale. The Russian Orthodox Church increased its popularity by forbidding most oil foods from being consumed during Lent. Sunflower was not on the prohibited list and therefore gained in immediate popularity as a food.

By the early 19th century, Russian farmers were growing over 2 million acres of sunflower. During that time, two specific types had been identified: oil-type for oil production and a large variety for direct human consumption. Government research programs were implemented. Vasilii Stepanovich (V.S.) Pustovoit developed a very successful breeding program at Krasnodar, an industrial city in southwestern Russia, on the Kuban River. Through his work oil quality and yields were increased significantly. Today, the world's most prestigious sunflower scientific award is known as The Pustovoit Award, the equivalent of the Sunflower Nobel Prize.



"Sunflower" by [metin.qui](#) is licensed under [CC BY 2.0](#).

Back to North America

By the late 19th century, Russian sunflower seed had found its way to the US. By 1880, seed company spring catalogs were advertising the 'Mammoth Russian' sunflower seed. That particular seed name was still being offered in the US in 1970, nearly 100 years later. A likely source of this seed movement into North America may have been through Russian immigrants. The first commercial use of the sunflower crop in the US was silage feed for poultry. In 1926, the Missouri Sunflower Growers' Association participated in what is likely the first processing of sunflower seed into oil.

On to Canada

In 1930 Canada started its first official government sunflower breeding program. The basic plant breeding material utilized came from the gardens of Russian Mennonite immigrants. Acreage spread because of oil demand. By 1946, Canadian farmers built a small crushing plant in Altona, Manitoba, the sunflower capital of Canada. Acreage spread from Canada into Minnesota and North Dakota. In 1964, the Government of Canada licensed the Russian cultivar called Peredovik, a seed that produced high yields and high oil content. Acreage

increased in the US with commercial interest in the production of sunflower oil. Sunflower was hybridized in the mid-1970s providing enhanced yield and improved flavor as well as disease resistance.

Back to Europe

U.S. acreage escalated in the late 1970's to over 5 million acres because of strong European demand for sunflower oil. This European demand had been stimulated by Russian exports of sunflower oil in the previous decades. During this time, animal fats such as beef tallow for cooking were negatively impacted by cholesterol concerns. However, the Russians could no longer supply the growing demand, and European companies looked to the fledging U.S. industry. Europeans imported sunflower seed that was then crushed in European mills. Western Europe continues to be a large consumer of sunflower oil today, but depends on its own production. U.S. exports to Europe of sunflower oil or seed for crushing is quite small.

Today's Sunflower

The native North American sunflower plant has finally come back home after traveling a very circuitous route. It was the Native Americans and the Russians who completed early plant genetics and the North Americans who put the finishing touches on it in the form of hybridization. Today the sunflower is a familiar flower in gardens around the world.

Educational materials about sunflowers:

https://www.xerces.org/sites/default/files/2018-05/12-045_01_XercesSoc_NativeBeePollination_Hybrid-Sunflowers_web.pdf

<https://www.grow-it-organically.com/support-files/farming-for-bees-xerces-society.pdf>



International Sunflower Association website: <https://www.isasunflower.org>



This is the most recent edition of The National Sunflower Association's publication, The Sunflower magazine. Follow this link to their website: <https://www.sunflowernsa.com/magazine/>

Mary Kay Thompson

The **Master Gardener Update** is developed by and distributed online monthly by the Rock Prairie Master Gardener Association, Incorporated, for master gardener volunteers and other interested people who have ties to Rock County, Wisconsin. Current officers of the association include Ruth Flescher, president (yafello2@gail.com); Mary Kay Thompson, vice president (mastergardenermary@gmail.com); Sue Wood, Secretary (woodslibrarymedia@gmail.com) and Deb Grams, treasurer (debgrams@yahoo.com).

Mailing Address: Rock Prairie Master Gardener Association, c/o Sue Wood
1616 Holly Drive
Janesville, WI 53546