

May 2024

# **WIMGA**

WISCONSIN MASTER GARDENERS ASSOCIATION
Serving its members since 1992

## **Volunteer Hours Are Important**

Marilyn Gorham, St Croix Valley MG

Bit by bit, spring is emerging in our gardens and the birds are returning to their summer homes. **WIMGA Vision** - The Wisconsin Master Gardeners Association is the collective voice for local Master Gardener Associations and individual members in active support for their horticultural projects and services; build networks to enhance outreach, share ideas and promote projects.

Many of our Associations are deep into plant sales, planting community gardens, answering questions and educating others. Another period of peak volunteer service has begun and every volunteer hour you contribute illustrates how much we contribute to our communities.



Yes, your volunteer hours are needed to maintain good standing with the Program Office, but they do much more. They vividly illustrate how much we do. We provide important service to our communities. We teach them about topics ranging from pollinators, to integrated pest management, to best varieties of vegetables and trees and more. We answer their questions during the growing season. We provide access to fresh produce to many who

have no other source or means to access it. We expose their youth to the fun, joys, challenges, and rewards that growing their own food can bring and we watch another generation prepare to step into our shoes as gardeners. This is just a sampling of what we do together.

Recently some Master Gardeners have commented that they intend to report only the minimum number of hours needed to remain in good standing not all the hours they did. They feel it's "not worth" reporting the total number of hours. If you are considering this, please don't. Please log every hour that you contribute into ORS. Our volunteer hours are priceless. They give us a voice. They show our strength. They confirm we do care about and are engaged in this Program.

Our hours speak. Our voice is strong.

Marílyn Gorham, WIMGA President

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#### **WIMGA Board Member At-Large Elections**

WIMGA welcomes **Jeanne Mueller** to the WIMGA Board of Directors. She will serve as one of the three WIMGA At-Large Directors, serving a three-year term. The At-Large Directors represent all Master Gardeners throughout the state versus the 12 District Directors who represent only those Master Gardeners located within their District. The At-Large Director serves a three-year term on the Board.

Jeanne has been volunteering with Ozaukee Master Gardeners since 2007. WIMGA looks forward to using her talents on various committees such as website, newsletter and social media.



### **Continuing Education Opportunities**

The Continuing Education Committee had a very busy winter, bringing you topics from Container Gardening, Trees for 2024 and our latest in April on Adaptive Gardening. The series, Environmentally Sound Landscaping in a Changing Climate with Diana Alfuth, Retired Horticulture Educator, was well received. We look forward to working with Diana in the future on educational opportunities. The committee will take a break for the summer and will have some new programs ready to go this fall.

#### **Upcoming Calendar:**

September October 1, 2024, 6:30pm TBD, Growing Herbs Nick Ternes, Botanophilia Inc. – Shade Plants

## **Summer Lights**

by: Donna Mae Stohlmann, St Croix Valley MG

When you were a little girl or boy, do you remember catching Lightning Bugs or Fireflies on a hot summer night? I sure do, and they are still around where I live today, but I don't run and try to catch them anymore. I just watch them talk to each other. Let's look at this beetle that has a light in its butt!

"Firefly" or "Lightning Bug" is the common name for nocturnal luminous insects that are neither flies nor bugs, but beetles belong to the family Lampyridae.



UW-Madison https://hort.extension.wisc.edu/articles/fireflies/

Wisconsin has three kinds of fireflies:

- 1. daytime fireflies, do not glow or flash
- 2. night fireflies that do flash
- 3. glowworms, non-flying female fireflies that live on the soil, and they live here all year round but are in larvae form for 1-2 years. Their larvae live underground during winter, mature during spring, and then emerge in early summer anywhere from the third week in May to the third week in June.

All beetles undergo complete metamorphosis with four distinct stages: egg, larva, pupa, and adult. Fireflies love to live where there's water. They tend to gather where there is a



water source, in marshy areas, near ponds or pools, and in other moist areas with standing water. That means that adding a fountain, small pond or other water feature to your yard makes it even more attractive to these little bugs.

They have a lifespan of about 2 months. Fireflies give off a friendly vibe. They do not sting or bite. They will not eat your crops or become a pest in the garden. Fireflies mostly use their light to "talk" to other fireflies

and find a mate. They have special organs under their abdomens that take in oxygen. Inside special cells, they combine the oxygen with a substance called luciferin to make light with almost no heat. They use this light, called bioluminescence, to light up the ends of their abdomen.

Each firefly species has its own unique flashing pattern. When a male firefly wants to communicate with a female firefly, he flies near the ground while he flashes his light every six seconds. Once he's near the ground, a female can more easily tell if he's from the same species as she is. Most female fireflies can't fly. She answers his flashes by turning on her lights. Then the male finds her. Predators, such as birds or toads, get a different message from these lights. Although they can easily spot fireflies by their glow, they rarely eat them. That's because fireflies release drops of toxic, foultasting blood. Their flashing is a warning light to predators to stay away.

#### **FUN FACTS About Fireflies**

- ☆ They are neither a fly nor a bug.
- ☆ Not all fireflies light up as adults.
- ☆ There are about 2,000 different species and some are pollinators.
- ☆ They undergo complete metamorphosis.
- ☆ They are toxic.
- ☆ Firefly larvae are voracious predators.
- ★ Large groups of fireflies sometimes blink in unison, or at the same time.
- Firefly's light can be yellow, green, or orange, even their eggs glow.

https://kids.nationalgeographic.com/animals/invertebrates/facts/firefly



"When you get to be my age, things don't work like they used to."

**Grant Funding** budgeted for the 2024 year is \$8,850. Application forms and WIMGA Educational Grant Criteria can be found on the WIMGA website. This is a great opportunity for your association to fund your educational community projects with the help of WIMGA. Visit <a href="https://www.wimga.org/grants-1">https://www.wimga.org/grants-1</a> for more information. Electronic submissions are recommended and due by October 1. Please email your grant application(s) to <a href="mailto:treasurer.wimga@gmail.com">treasurer.wimga@gmail.com</a>.

#### **Children's Planting Experience**

By Jill Falstad, Plant Sale Chair, North Central Wisconsin MG

Every year the NCWMG Association holds a plant sale where community members have an opportunity to buy healthy large pots of a variety of plants at low prices. We have a reference table that provides information to the public and members available to talk and answer questions. We also feature a free children's planting area. In 2022, we had a huge crowd show up for our event. We not only sold out of plants (over 4500 pots) in about 3 ½ hours but we also ran out of supplies for the free children's planting area. We asked for the \$100 WIMGA grant to buy soil, flowering annuals and trinkets to ensure we had plenty of supplies for all children attending could enjoy the experience.

On May 20, 2023, we held our annual Plant Sale Event. We promoted our free children's planting area on our flyers, in a newspaper ad and via our social media. The children who attended our event took a clean modified milk jug and scooped soil into the bottom. They were then able to select a colorful flowering annual and plant it

themselves into the jug.

Each child then decorated their garden with insects, little marble gazing balls, magnifying glasses and other trinkets. The child wrote their name on a card and attached it to the handle with a ribbon. They were provided a card on how to care for their plant as far as sunshine, watering and general care. We had many happy children and appreciative parents. We had plenty of supplies thanks to the generosity of WIMGA and a private donor who matched the grant with another \$100.



Due to the popularity of this event, we replicated the free children's planting experience



at a local community's First Thursday on the River event held June 1 in Mosinee. At this event we had about 45 more children enjoy the experience of planting their own little garden to take home with them. Thanks to the WIMGA grant we had enough supplies to cover this event. We bought fresh new annuals. We received positive feedback from the public as to the work of our local Master Gardener Association and we are planning more events in the future.

#### **Sunlight: Important for You and Your Garden**

By Jim King, North Central Wisconsin MG

The following discussion offers ways to deal with the sun in the spring and summer while working in the garden. Sunlight is both a positive and a negative for life on earth. Ultraviolet light is one spectrum of the sun.

Some ultraviolet light has germicidal properties, and some ultraviolet light helps to maintain the ozone layer above earth. The ozone layer absorbs most of the more harmful ultraviolet light coming to earth. Ultraviolet light also helps create Vitamin D3 in the human body. However, ultraviolet light can create sunburn, cataracts, and cancers, most notably skin cancers.

The sun provides us with heat and is key to photosynthesis, the process used by plants to change light energy into chemical energy.

Back around 1985, it was discovered that an ozone hole existed above Antarctica. It started out small and grew over the years. The less dense ozone allows for substantially increased ultraviolet light to reach us and the earth's surface. While this density is worse in the southern hemisphere the density of ozone is also reduced in the northern hemisphere. For some time, scientists did not know what caused it. The theory now, is that it is the pollution from released man made gases. Chlorofluorocarbons, CFCs, are the main culprit, and the free chloride ions released from the CFC attacks the ozone molecules in the stratosphere. CFCs are molecules once used in refrigeration, air conditioning, aerosol sprays, foams and fire suppressants. Other pollution gases are possible and may add to the attack of ozone. There are also natural gases that can enter into the attack. At this time the use of these CFC gases has been reduced or eliminated worldwide and there are some small improvements in the ozone density in the southern hemisphere. The hope is that this ozone density will significantly improve over the next 30 to 70 years.

The people in the northern hemisphere have high enough skin cancer rates that they need to take better care of themselves. Some of the things we can do to reduce our risks of skin cancers is to try to work smarter in our gardens:

- People are fortunate that vitamin D3 is available in an over-the-counter form and does not have to come from sunlight. The dose for most people is about 600 IU to 800 IU per day with a doctor's recommendation. Vitamin D3 is vital for assuring calcium and potassium absorption into our bodies. Getting sunlight can still affect our mood, and we need sunlight for that stabilizing effect.
- In the sun, it is recommended by dermatologists to wear large hats, cover up as much as possible, wear sunglasses with UV-A and UV-B protection, and wear sunscreen on open skin surfaces like the face, arms and legs.
- Work outside when the sun's UV index is below 3, it means the sun is low in the sky and/or it is overcast and much of the sunlight is reflected back to space or is absorbed into the atmosphere.

- For scheduled work with medium to large groups outside, work when the sun's elevation angle is less than 45 or 48°(degrees). Maybe on a few occasions to 56° during the spring-summer season in more overcast conditions.
- Limit the time of work in elevation angles greater than 48° to short periods of time during the spring-summer season.
- On open blue-sky days, try to work in the sun when the sunlight intensity is lower, and work in the shade, when the sun intensity is higher. All this while keeping our sun elevation goals in mind.

For scheduling days in the summer for gardening, look at the movements of the earth and sun in relation to each other. Assume little to no pollution, low humidity, and bluesky days.

The earth moves about the sun in an elliptical pattern with its axis tilted and the earth spinning. In the northern hemisphere we are fortunate that our spring and summer occur when the earth is farther away from the sun and the sun's intensity is lower than when the earth is closer to the sun. Also at the summer solstice, the northern hemisphere's tilt is toward the sun by about 23.4 degrees. This is called the tilt angle.

The earth is marked with lines of latitude and longitude which helps to describe where we are in respect to others and the sun. The latitude lines are circles around the earth which start at the equator as 0° and proceed either north or south from there. Each latitude line is equidistant from the equator and from each other line. The range of latitudes angles for Wisconsin are about 42°, 30 minutes North, at the southern Wisconsin state line and about 47°, 4 minutes North, at the northern most point of Devil's Island in Lake Superior. If we live on an east-west line of latitude of about 45°, North, we will see the sun at an elevation angle of about 68° at the local summer solstice high noon. The sun angle from vertical is given as the latitude angle minus the tilt angle.

The lines of longitude are not the same as the lines of latitude. They meet at the poles and travel north-south to the opposite pole. They are half-circles spaced one degree apart around the earth. The zero point by convention is Greenwich England. This allows the 180-degree longitude line (also called the international date line) to occur in the Pacific Ocean away from any major land. The label for the lines are either 'East' or 'West' to 180°. Since we live in North America our longitude lines are marked with a 'West' direction. All the places with the same longitude line have the same local summer solstice high noon time. There are 360° of longitude and 24 hours in a day of the earth's spin, so in an hour the earth covers about 15° of longitude. For a discussion of longitude and latitude with diagrams you can go to Humboldt.edu .

There are two phenomena that occur to give the sun its intensity, one is the angle of the elevation of the sun. With more elevation comes more intensity. Also around solstice, the sun remains higher in the sky for much longer than most would anticipate and the daylight is longer. This also adds to the intensity. It increases the total energy transferred to the northern hemisphere during the spring and summer. The intensity of sunlight varies during the day. It starts out low in the morning and builds to a high level at around noon and then ends in the late afternoon as low again.

Schedule your day in the garden in the early morning. At this time of day there is low sun intensity, it is cooler, and it maintains our circadian rhythms, and we sleep better at night. Other benefits of working early in the day are that we can accomplish more tasks with plenty of energy which in turn helps to manage our weight. With daylight saving time, we gain an extra hour to work. This pushes our local high noon closer to 1:00 pm CDT in Wisconsin.

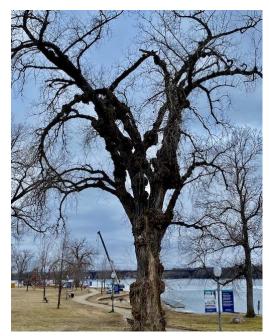
The sun's elevation angle is available on-line at National Oceanic and Atmospheric Administration - <u>NOAA Solar Angle Position Calculator</u>. Enter date and time of interest for a major city near you.

#### Galls vs Burls

Article & Photos by: Donna Mae Stohlmann, St Croix Valley MG

On a warm spring sunny day, I was walking along the St Croix River in Hudson with my dog, Juju. While looking at all the trees to see if they were budding yet, I found several big lumps on this popular tree! I wondered what it was, so I did some research with the UW and called Mike Mroz, the Public Works and Park Director of Hudson to get more information. Mroz stated, "The "lump tree" is in fact a Cottonwood, and it's become a very notorious tree within the community. The city monitors its overall health every year to make sure it does not become a public hazard.

Burls are rounded humps that are found on numerous tree species. They are also known as "burrs" or "burr knots," depending on your location. They typically affect hardwood trees and conifers, rather than softwoods. Sometimes you will see them growing high up on tree trunks, close to limbs, but they are commonly found near



the roots. While burls have smooth, rounded surfaces, galls are rough and may have significant surface knots and bumps. Galls may be discolored, whereas burls are always the same color as the surrounding bark. Some conifers can develop both burls and galls, the former are far more common on hardwood species. Galls are small and form along twigs and leaves. Burls are much larger and are found on major branches or trunks. Burls are a part of the tree itself, while galls grow outside and independent from the tree.

R. Chris Williamson, UW Turf and Ornamental Specialist, says, "Galls are abnormal growths on plants that can result from the feeding of living organisms such as bacteria, fungi, nematodes, insects, and mites. There are numerous galls that are caused by insects, the most common of which, in Wisconsin, are ash flower gall, hackberry leaf gall, hickory pouch gall, horned and gouty oak galls, and maple bladder gall. Gall formation often disfigures twigs and foliage leading to aesthetic damage, but rarely affects the health or vigor of host plants. However, horned, and gouty oak galls can cause significant injury to oak trees.

For most of their lives, gall making insects live inside gall tissue, sheltered from insecticide sprays. The timing of pesticide applications for their control is difficult as is treating with insecticides on taller trees. Yet, because galls are conspicuous, gall-making insects are easy targets of natural enemies such as predators and parasitoids. Because most galls do not kill trees, the best management approach simply is to tolerate their presence.

Many of the galls on hackberry leaves are induced by psyllids or jumping plant lice. Adult psyllids look like miniature cicadas. In the fall, the adults leave the galls seeking places to hibernate, often invading homes. Remove and destroy old galls before eggs hatch in the spring. Dormant oil sprays may help reduce the hackberry gall problem. No insecticide treatment is necessary because the galls will not harm the tree. Many hickory galls are caused by the feeding of aphid-like insects called phylloxera. One species produces pouch-like growths on twigs and leaves. Severely infested foliage often turns a yellow-brown color and drops from the tree. The pouches open and phylloxera leave the galls in early summer to continue their life cycle. This insect overwinters as eggs in crevices of old galls.



Burr knots can be welcoming habitats for insects and animals, which can cause infection over time. If you are a carpenter, sculptor, or artisan who works with wood, then burls can be absolute treasures. Since the wood inside burls grows in intricate, swirling patterns, these knots can or carved into extraordinarily beautiful bowls. They can also be transformed into sculptures or even made into furniture pieces, if they are large enough. Although tree galls are referred to as plant "cancers," they cannot be transmitted to humans, mammals or birds. The infection can spread to other plants via grafting. "Many galls can be easily pruned. Typically, you want to use sanitized pruners, and you'll want to cut about 8 inches down on the branch when removing galls," according to Diana Alfuth, Horticulture Educator.

#### **Events**

## Fond du Lac County MG Plant Sale

Saturday May 11, 9:00am--3:00pm Fond du Lac County Fairground Cow Palace

Annuals, Perennials, Native Plants, Herb & Vegetables. Over 28 varieties of tomatoes; 17 of which are heirlooms! 19 different varieties of peppers! Master Gardener Shop too! Come find a garden treasure!

All sales are cash or check only.

#### **ANNUAL SPRING PLANT SALE**

Saturday, May 18, 11:00am - 2:00pm
Courthouse Annex Parking Lot
1462 Strongs Avenue, Stevens Point
Portage County Master Gardeners:
Grasses, Perennials, Herbs, Vegetables
(and a selection of local, nursery grown
perennials). Master Gardener
Volunteers will be on hand to answer
your questions and help you choose
wisely.





#### **Jefferson County Master Gardeners Plant Sale**

Partnering with the Jefferson High School FFA 700 W. Milwaukee Street, Jefferson, WI Friday - May 10 and May 17, 3:00 to 6:00pm Saturday, May 11 and May 18, 9:00 am to 1:00 pm

- Shade and sun perennials from master gardener gardens: black pussy willow, day lilies, hostas, iris, plus others
- JHS FFA: Vegetables, annuals, hanging baskets, and more
- Support your school and community
- Purchase locally grown plants

#### **Ozaukee Master Gardeners Annual Plant Sale**

Saturday, May 18, 9am - Noon Ozaukee County Fairgrounds, Cedarburg



## **Northern Lights Master Gardeners Association Inc. (NLMGAI)**

will hold its biennial **Garden Walk Saturday**, **July 13 from 9am - 4pm** (rain or shine). This self-guided walking tour features six all new private gardens as well as Harmony Demonstration Gardens - the home of NLMGAI. Please contact <a href="mailto:northernlightsgardenwalk@gmail.com">northernlightsgardenwalk@gmail.com</a> for more information.

Go to the <u>WIMGA website</u> for more information on association events around the state. Send your events to <u>news@wimga.org</u> for publication in the newsletter and on the website.

## Wood County Master Gardener 21st Annual Garden Walk



Saturday, July 20, 2024, 9am-4pm

- Tours of 6 Gardens
- Basket Raffle & Silent Auction
- Live Music
- •Artists with garden themed art for sale
- •Special features at each garden including live demos and Monarch Butterfly release

  More info on our Facebook page with QR Code



## 2024 PDDC Plant Disease Talks

Brian Hudelson, UW-Madison Plant Pathology



Each month in 2024, the University of Wisconsin Plant Disease Diagnostics Clinic will sponsor a free Zoom presentation on a plant disease-related topic.

To register for one or more talks, visit <a href="https://pddc.wisc.edu/">https://pddc.wisc.edu/</a>. Check at the bottom of the page for a link to the registration form.

Fundamentals of Plant Diseases March 27, 2024, 6:30 – 9:00pm

Plant Disease Management by Design: April 24, 2024, 6:30 – 8:30pm Preventing Plant Disease Problems During the Landscape Design Process

The Science (and Art) of Plant Disease Diagnosis May 22, 2024. 6:30 – 8:30pm Learn about the fascinating and complex process involved in identifying plant diseases. Learn about how to visually assess for plant disease symptoms, as well as about the range of lab tests that are often needed to confirm the identity of plant diseases.

**Plant Diseases in History** June 26, 2024. 6:30 – 8:30pm Learn about how plant diseases have impacted human history and how plant diseases continue to be important in our daily lives and in pop culture.

**Ten Diseases of Native Plants (and Non-Natives, Too)** July 24, 2024. 6:30 – 8:30pm Learn about common diseases of plants that are native to Wisconsin. This presentation will include information on how to identify these diseases, as well as information on how to manage them.



Additional Resources from the Extension Horticulture Program

#### **Ask the Experts:**

A Monthly Garden and Landscape Q&A Series

Sponsored by the UW-Madison Division of Extension Horticulture Program

Ask Your Gardening Question This site is monitored by Wisconsin Master Gardeners.





Hepatica - "Louise Koehler"

Check out the story behind the <u>Louise Koehler Hepatica</u> at the North Star Lily Society. Article ideas, events, contributions and any WIMGA related questions/concerns may be sent to <a href="mailto:news@wimga.org">news@wimga.org</a>.

## Wisconsin Master Gardeners Association (WIMGA)

Serving its members since 1992

The Wisconsin Master Gardeners Association Newsletter is published six (6) times a year (January, March, May, July, September and November). Articles, artwork and ideas are welcome, final selection and editing are the responsibility of the editorial staff. The opinions reflected in this publication are expressions from individual master gardeners or associations and not necessarily the viewpoint of the UW-Madison Department of Horticulture, Division of Extension Master Gardener Program Office.

## Visit the WIMGA Website at <a href="http://www.wimga.org/">http://www.wimga.org/</a>

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The **Wisconsin Extension Master Gardener Program** supports a network of individuals dedicated to horticulture education, service, and lifelong learning. Through unbiased university research-based horticulture training they are equipped to address needs and opportunities in their community and throughout the state. An EEO/AA employer, University of Wisconsin-Madison provides equal opportunities in employment and programming, including Title VI, Title IX, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act requirements.