# **GREEN THUMB PRINTS**

Gardening is our Passion ..... Education is our Purpose

August 2020

#### **Upcoming Events:**

Our next ZOOM meeting will be held on Thursday, August 13th at 7:00 PM. Karl will be sending out an invitation.

If you are interested in volunteering for a project please contact:
Brint Simmons-Community Garden
Jerry Lenhart-OSU Extension Gardens
Rose Morrison-Phenology Garden



Photo by: Marilynn Beltz



IN THIS ISSUE....

| Upcoming EventsPg 1                                      |
|--|
| Coordinator's CornerPg 2                                 |
| Rambling RosePg 3  |
| Hancock County Master Gardener Spotlight-Jeri WengerPg 4 |
| From Phenology to PhotoperiodismPgs 5-6                  |
| MG ActivitiesPgs 7-8                                     |
| Ask A Gardener Q&APg 9                                   |
| Watering the Garden Just RightPgs 10-11                  |

It's Time To.....Pg 12

## Coordinator's Corner

Dry weather and heat in July. Cannot say I have recently remembered so many days over 90 degrees in July. I have hickory nuts and acorns falling already. Wildlife is coming out in many areas eating plants. I know I had deer stripping my pumpkins, melons, and cucumbers and eating enough of my tomatoes, beans, sweet potatoes to stunt the growth. Most was resolved by placing chicken wire over the vegetation. I had to put fencing around my plot of gladiolus at the Community Garden since the deer were eating the blooms as fast as they developed. With that said, I am now ready to harvest many of the fruits, vegetables, and flowers in my gardens.

Early July, we got notice that many of the burdensome restrictions were removed from the rules on outdoor projects. Thanks to all of you for volunteering for the outdoor projects. The office and phenology garden look much better and we are off to producing produce for the food needy in Hancock County. Again, there should be no face to face work on projects other than our outdoor projects. Should you think you have work that needs to be done, please contact me first before continuing.

I sent out an email about an individual trip you might want to take to the trial gardens in Michigan. It would be a good day trip to get you out of the house and go see the variety of flowers and plants in this garden area.

I also sent out an email about how we plan to report hours this year. Everyone will get 30 hours reported to COVID-19 activities, therefore certifying you for 2021. This will cover all the miscellaneous things you may be doing during these times. I will be putting them into VMS for each of you. We do appreciate all efforts you can put towards our approved projects. Also, the education webinars are a good to learn.

I expect most if not all our face to face contact will be prohibited throughout the remainder of the year. Should something change, I will update you, but at this point do not plan for upcoming face to face meetings.

Should you need anything, please contact me.

Karl Farwig



## Rambling Rose August 2020

The dog days of August are upon us. Although with the weather the last couple of weeks, I think they came early this year! I'm sure all of you have been doing rain dances daily! Such a dry, hot July!

I have enjoyed being able to work on outdoor Master Gardner Activities and to see some of you in person. As most of you know, the Hancock County Fair has been cancelled. I will miss the opportunity to interact with residents and spread the joy of being a Master Gardener Volunteer.

Master Gardener Volunteers are allowed to work on outdoor projects that do not involve face to face contact with the public. This includes the Community Garden, OSU Extension Office gardens, and the Phenology Garden. There are rules which include 6 foot distance or masks required, bringing your own tools, water, and hand sanitizer and several other requirements. Ask A Master Gardner continues with no face to face contact with the public.

Thank you to Brint Simmons for personally planting and tending the Master Gardener community garden plots. It was a huge undertaking for him and it is much appreciated. Thank you to the MGVs who have volunteered to assist him in this project to help feed the community. Anyone interested in assisting, please contact Brint.

Thank you to Jerry Lenhart and Tim Brugeman for their work in the front garden at the extension office. We cleared out 9 bags of weeds and debris. Due to the rules, we are not able to do new plantings or renovations this year. We are going to mulch and continue to maintain the existing plantings. If you are interested in helping, please contact Jerry.

Thank you to Betsy DeFrancesco, Linda Laux, Jeri Wenger, and Vipan Bhalla for the work in the Phenology Garden. During lockdown, the garden fell into a major eyesore. We were able to remove all the large weeds and overgrowth. The garden looks like a garden again. It needs additional and consistent grooming. If you are interested in assisting in this project, please contact me.

Thank you to all for maintaining a positive attitude and dedication to the Master Gardner Volunteer Program during this difficult time.

Enjoy August and pray for rain!





- 1 Master Gardener Class: Class of 2019
- **2** Gardening Interests or Areas of Expertise: Jeri is a beekeeper and is interested in trees and pollinating plants. She enjoys vegetable gardening, birds and wildlife.

#### **3** Hancock County Master Gardening Activities:

- \*Wreath Making Classes
- \*County Fair
- \*Public Speaking and Volunteerism

#### **4** Community Activities:

- \*Council person at Village of Vanlue
- \*Vanlue Women's Gardener Club
- \*Vanlue Park Committee
- \*Northwest Ohio Beekeeper Club Member

#### **5** Other Interests or Interesting Information:

Jeri is happily retired after being a physical therapist for 24 years. She is interested in photography, soapmaking, promoting her community/ neighbors and learning crocheting. She has also been a volunteer firefighter and a paramedic.

Jeri has 2 grown sons who are married and 3 wonderful grandchildren. She also loves to travel.

# From Phenology to Photoperiodism By Bill Jones

Phenology has been shown to be a helpful tool for gardeners to plan the succession of blooms in their gardens and to anticipate the appearance of insects and how to time the best controls for them. We know that when the Japanese tree lilac is in bloom, the bagworm egg hatch is taking place. We also know that when the linden tree is in bloom, the Japanese beetle is emerging to devour our roses. While the insect's life cycle is controlled primarily by temperature or growth degree days, we observe that plant flowering is not only controlled by growth degree days but often also by a phenomenon known as photoperiodism.

The Ohio State University Phenology Calendar lists horticultural events up to 2195 gdd or around the middle of August. We know that there are still plants to bloom in the landscape after this time, such as, chrysanthemums, asters, goldenrod, ironweed, sedum, monkshood, etc. One reason that the Phenology Calendar does not include these plants is that insect activity affecting horticulture has either already begun or has already run its course. We have also learned that the blooming of these later season plants do not correlate well with growth degree days. Our own observations from the Phenology Garden show the following bloom dates for several of these later blooming plants in the hottest year (2016) in the past decade and the coolest year (2014) as we compare growth degree days (gdd) and the end of September.

|                  | 2014 (1636 gdd) | 2016 (2097 gdd) |
|------------------|-----------------|-----------------|
| Coneflower       | 6/22            | 6/20            |
| Rose of Sharon   | 7/25            | 7/19            |
| Autumn Joy Sedum | 8/20            | 8/23            |
| Monkshood        | 9/27            | 10/3            |

The blooming of these plants don't seem to be correlated to gdd but rather seem to bloom at about the same date each year regardless of the amount of heat experienced. The phenomenon affecting these plants is similar to that which determines when the trees lose their leaves. It is a result of photoperiodism.

Photoperiodism was discovered in 1920 during tests on tobacco plants. The tests revealed that plants responded to light and darkness in very different ways. The misconception was that plants performed better with more exposure to light. However, the tests proved that it was the amount of darkness that determined when the plants bloomed and how many blooms were produced. Some plants performed better when they were exposed to longer periods of darkness. These plants are known as short-day plants. Plants that did better with fewer hours of darkness are known as long-day plants. Further research determined that there were plants that did not respond differently to the length of darkness. These plants are known as day-neutral plants.

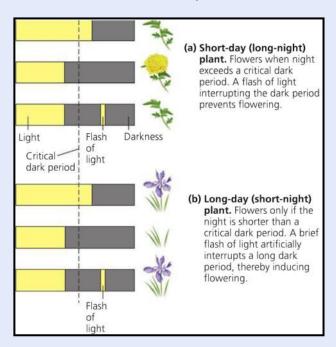
For a short-day plant to bloom, there must be less than 12 hours of daylight. The plants that bloom in the spring or later in the fall are considered short-day plants. Kalanchoe, Salvia, chrysanthemum, poinsettia, monkshood, sedum, dahlia, green onions, soybeans, and some varieties of strawberries require at least 12 hours of darkness to bloom in the garden.

(CONTINUED)

## From Phenology to Photoperiodism (CONTINUED)

Long-day plants need about eight hours of darkness to start flowering. The long-day flowers that grow well in the home garden are lettuce, spinach, petunias, coneflower, radish, rose of Sharon, hibiscus, Amaranthus, oats, and potatoes. Lettuce is classified as a long-day plant because it is during the long days of summer that the plant flowers, or bolts. A characteristic of some long-day plants, such as potatoes, is the formation of bulbs and tubers. In our latitude of 41 degrees, we should raise either long-day or day neutral onions, otherwise bulb formation is poor. Onion varieties like Walla Walla, white sweet Spanish, and yellow sweet Spanish are reliable varieties.

Day-neutral plants do not depend upon the amount of darkness or daylight hours. These plants respond to the aging process. As the plant matures, it flowers and sets fruit. Sunflowers, peas, tomatoes, corn, cucumbers, dandelions, and tomatoes are considered day-neutral.



Nurserymen can get short-day chrysanthemums to bloom in summer by keeping them in the dark for more than 12 hours each day. Poinsettias can be induced to bloom if they get 10 or more hours of darkness for a week or so. Indoor lighting and the light from street lights can be enough to prevent short-day plants from blooming. (Moonlight isn't bright enough, though.) Florists can get long day plants to bloom early (say, for Easter or Valentine's Day) by holding them under grow lights for a few hours more than the normal late winter daylight.

Some plants are tricky in that they have photoperiod and temperature requirements. For example, the Christmas cacti will form flower buds if the nighttime temperature is between 50 and 59 F, regardless of day length. If the temperature is between 59 and 70 F, however, this plant requires 13 hours of uninterrupted darkness every 24 hours for eight weeks to form flower buds. If the temperature is above 70 F, they need 15 hours of darkness for eight weeks.

Our Phenology Calendar is valuable in relating growth degree days with spring blooming shrubs and trees and with insect life cycles, but to understand bloom times for late summer perennials and ornamentals we need to think beyond the growth degree days accumulated and consider the effect of the length of the day (night) in stimulating the plant to bloom. The late summer and fall plants tend to follow the calendar more than the accumulation of degree days.

## **MG Activities**

# Ag Center Gardens Refreshed! Tim Brugeman

Thanks to MASTER GARDENERS, the OSU Extension Office / Ag Center entry gardens are cleaned and trimmed. Our "home base" looks much better. Nine bags of debris was cleared, a tree has been removed and mulch will be spread soon. As our first small group project and test of new working-together guidelines from OSU, it went well.

Compliance was no problem, we could still tease Rose about trying to out do us guys.

Future plans being discussed, when allowed to proceed, include some shrub removals and adding sustainable landscaping as we learned from last March's seminar. This landscaping would include seasonal color, native plants and easier maintenance. An interpretive sign about the plants and mentioning the MASTER GARDENER program to visitors may be planned as well.

Your input welcome.

Other MGV volunteers for the mulch are still needed. Please contact Jerry Lenhart at 419-722-1176 or Tim Brugeman 419-672-8897 with your best times. We will pass the word on final date.







#### **Community Garden**

#### **Brint Simmons**

The Community Garden project is going well. We have harvested some cabbage, zucchini and radishes. We should begin harvesting tomatoes in the next couple of weeks. Later there will be squash, carrots, cucumbers, onions, white potatoes and sweet potatoes. Hopefully, we will have a bountiful harvest for the folks at City Mission. Many thanks to Bill Jones, Bill Lanning, Karl Farwig, John and Linda Leiendecker, Lisa McClain, Reuben DeBolt, Rose Morrison, Ann Woolum and Linda Finsel for their help. Anyone interested in helping should contact Brint Simmons (<a href="mailto:brintsimmons@sbcglobal.net">brintsimmons@sbcglobal.net</a> or 419.306.5446).

## **MG Activities**

(CONTINUED)

#### Phenology Garden Clean Up

The phenology garden was cleaned on July 23, 2020 with all major weeds being removed. Another clean up date has not been scheduled at this time, but anyone wishing to help may go out at anytime and weed the pathways. They are clearly marked since the other weeds have been removed.







## **Courier Article**

# "Preserve Your Harvest This Summer" Patrick Flinn

If you haven't done so already check out Patrick's timely article on preserving this year's harvest so you can enjoy it throughout the year.



# Ask-A-Gardener Q&A June Report

#### **Submitted by Doris Salis**

Carpenter Bees Are Putting Holes in Deck Call a professional such as Critter Getter or someone else who deals with insects

**Can I Eat the Berries from a Weeping Cherry?** Research suggests NO! The cherries are hard and sour and the pits are large and poisonous.

My Elm Tree Is Dropping Leaves Sent client a sample list of arborists. He should call for a specialist.

Ask to Identify Small House Moth from Picture JW not able to contact client by phone. DS got her e-mail and is waiting for her response.

*Old Oak is Not Doing Well.* Gave random list of area tree specialists and suggested he pick one.

**How Do I Kill Poison Ivy Safely?** Sent site with ways to kill poison ivy that won't harm animals or use harsh chemicals

**Where are the Finches?** About 65% of finch range has been lost in Ohio. Also, they prefer food in nature to feeder seeds. Try getting fresh seed and dispose of old feed. See if more finches show up in mid-late July when they nest.

How Often Should I Water a New Bed of Mixed Annuals and Perennials? Annuals require more water than perennials throughout their growth period. However, water new perennials well at least once a day to give their roots a good start. Watering may have to be increased to twice a day during a heat wave.

What Should I Do About Needle Drop from Blue Spruce? Possibly one of two fungal problems: 1. Rhizosphaera Needle Cast; 2. Cytospora Canker. Suggested client look these up and see if they look like his trees. Prune infected branches, but remove tree with top five feet dead. Missouri Botanical Garden website recommends not spraying for Cytospora.

# Watering the Garden Just Right! Linda Casey

As I write this, it's HOT! And the promised heavy rains keep going north or south of Findlay. Even if we had some rain and gardeners got a brief break from their watering chores, the respite is sure to be temporary. Seasonal thunderstorms may deluge some gardens with water while other areas, even those close by, may stay fairly dry.



Photo by John Orick

#### Get to know your soil

First, find out what soil type is in your garden. Different soil types dramatically affect how much moisture is available to garden plants. Sandy soils are prone to drying while soils with high clay content hold moisture much longer. Soils with proper amounts of organic matter will better retain moisture during drought. It may be necessary to add organic matter to your garden in the beginning of the season or after harvest each year. Compost or well-rotted manures are often used for moisture retention and can contain natural bacteria and microorganisms to boost soil health.

#### When to water

Most garden plants need 1-1.5 inches of water per week to maintain healthy leaves, flowers and fruit. When Mother Nature does not provide enough, it's up to the gardener to supply the rest. Not too little, not too much, but just right! Hmm...sounds like a Three Bears story!

When you do need to water, it's best to do a thorough deep application and then put the hose away for the rest of the week. The worst thing you can do to your garden is to sprinkle it lightly every day. Frequent, shallow watering only moistens the upper layer of soil, which encourages plant roots to stay shallow. In turn, that top layer of soil dries out quickly, making shallow-rooted plants more susceptible to drying. This applies to lawns as well as garden and landscape plants.

It is possible to kill your plants with kindness. Overwatering occurs when soil is kept too wet for too long, forcing valuable oxygen out of the soil. Oxygen is just as crucial to plant health as water. When heavy rains fall, or thorough irrigation is applied, don't water again until the soil begins to dry. While you don't want the soil to become so dry that plants begin to wilt, it is important to allow air to occupy some of the pore spaces in the soil between watering.

Measuring irrigation outputs from your sprinkler or other watering source will help you know how much irrigation is being applied. Many commercial sprinklers do not distribute water in an even pattern across the swath. If only using time as a method of measure, some of your vegetable plants may languish without enough water while others may be swimming.

Newly set plants will need to be watered more frequently until they have a chance to establish new roots. Young vegetable or flower transplants may need to be watered every day or two, especially if the weather is sunny, hot and/or windy. Newly planted trees and shrubs also may need to be watered more frequently. But as the new plants become established, try to cut back on the frequency of watering.

Many plant fungal diseases are spread by splashing water during rain or irrigation. Drip or trickle irrigation will deposit the water low to the ground, keeping foliage dry. That is the most efficient way to deliver water to only where it is needed. If watering must be overhead, try to water in the morning to promote quick drying and reduce loss due to evaporation.

(Continued)

## Watering the Garden Just Right!

(Continued)



The time of day when you water is as important as how much water. Long periods of leaf wetness can lead to certain diseases. Focus on watering during morning hours or mid-day when leaves will dry off quickly, and if possible, avoid overhead irrigation. This helps reduce the potential for disease infections. Watering in the morning also reduces water loss from evaporation.

#### **Conservation** is key

Many soils have adequate moisture-holding capacity. However, when soils don't have any vegetative covering or mulch, they dry out quickly, causing the beneficial microorganisms in the upper couple of inches of soil to be less effective. Organic mulch such as straw, shredded leaves, bark or compost conserves water in your soil by shielding the ground from the hot rays that evaporates moisture. Organic mulches don't have to be thick to be effective. Using a layer 1-3 inches deep in between rows or beds will be sufficient for at least one year. Coarse, fibrous materials such as shredded bark may provide cover for up to three years.

Soak the soil before you lay on mulch. Just as the mulch maintains soil moisture evaporation, it also slows penetration of water to the roots. It's more efficient to get the water down first then mulch. It may also initially save your plants from waiting for water to percolate through the mulch when they are accustomed to getting it right away. As an extra bonus, mulch suppresses those thirsty weeds trying to elbow their way in the garden. When plants are placed into beds instead of wide rows, the emerging canopy of foliage will act as a moisture conservation tool. When the foliage completely shades the soil, less moisture is lost and fewer competing weeds will germinate.

#### Soak 'em with soaker hoses and drip irrigation

There are a myriad of irrigation methods for vegetable gardens. The "smartest" types of irrigation are soaker hoses and drip irrigation systems. These two methods drastically reduce the quantity of water needed because water is concentrated at the root zone – right where it's needed – so less water is wasted. These systems also lay on the ground beneath the foliage canopy, providing water to the root system without wetting the foliage.



Soaker hoses and drip systems are often used with organic or inorganic mulch, with the mulch covering the hoses or tubing. This efficient method of watering allows moisture to be distributed to the root system while conserving water loss from evaporation.



#### **HOME** (Indoor plants and activities)

- Take cuttings from annual garden plants such as impatiens, coleus, geraniums and wax begonias to overwinter indoors. Root the cuttings in media such as moist vermiculite, perlite, peat moss or potting soil, rather than water.
- Order spring-flowering bulbs for fall planting.
- Cut flowers from the garden to bring a little color indoors or dry for everlasting arrangements.

#### YARD (Lawns, woody ornamentals and fruits)

- Check trees and shrubs that have been planted in recent years for girdling damage by guy wires, burlap or twine.
- Don't fertilize woody plants now. It stimulates late growth that will not have time to harden off properly before winter.
- Hand-prune and destroy bagworms, fall webworms and tent caterpillars.
- Pears are best ripened off the tree, so do not wait for the fruit to turn yellowish on the tree.
   Harvest pears when color of fruit changes usually from a dark green to a lighter green and when the fruit is easily twisted and removed from the spur.
- Prune out and destroy the raspberry and blackberry canes that bore fruits this year. They will not produce fruit again next year, but they may harbor insect and disease organisms.
- If weather turns dry, keep newly established plants well-watered. New plants should receive 1 to 1.5 inches of water every week to 10 days.
- Begin seeding new lawns or bare spots in established lawns in mid-August through mid-September.

#### **GARDEN** (Vegetables, small fruits and flowers)

- Keep the garden well-watered during dry weather and free of weeds, insects and disease.
- Complete fall garden planting by direct-seeding carrots, beets, kohlrabi, kale and snap beans early this month. Lettuce, spinach, radishes and green onions can be planted later in August and early September. Don't forget to thin seedlings to appropriate spacing as needed.
- Harvest onions after the tops yellow and fall, then cure them in a warm, dry, well-ventilated area. The necks should be free of moisture when fully cured in about a week's time.
- Harvest potatoes after the tops yellow and die. Potatoes also need to be cured before storage.
- Pick beans, tomatoes, peppers and squash often to encourage further production.
- Harvest watermelon when several factors indicate ripeness the underside ground spot turns from whitish to creamy yellow; the tendril closest to the melon turns brown and shrivels; the rind loses its gloss and appears dull; and the melon produces a dull thud, rather than a ringing sound when thumped.
- Harvest sweet corn when kernels are plump and ooze a milky juice when punctured with your fingernail. If the liquid is watery, you're too early; if the kernels are doughy, you're too late.
- Keep faded flowers pinched off bedding plants to promote further flowering and improve plant appearance.

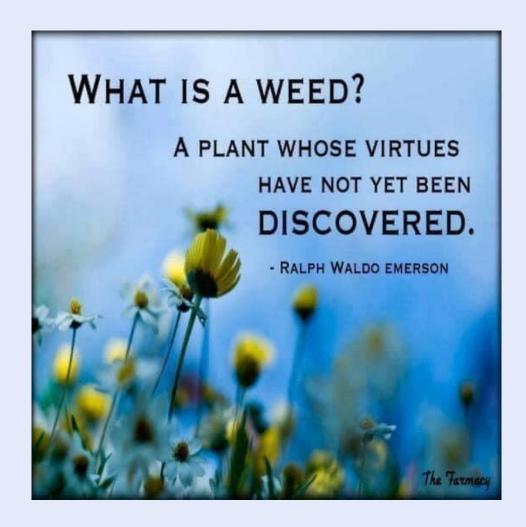
Submitted by: Linda Casey



Ohio State University Extension Hancock County 7868 County Road 140 Suite B Findlay, OH 45840 419-422-3851

Facebook: Master Gardeners of Hancock County Ohio

hancock.osu.edu



The Master Gardener "Green Thumb Prints" is a publication of the Ohio State University Extension, Hancock County, 7868 County Road 140 Suite B Findlay, OH 45840 419-422-3851.

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.