

# GREEN THUMB PRINTS

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

June 2020

## Upcoming Events:

All in-person activities for the Master Gardener Volunteers are on hold through July 6 or until further notice from Karl.

Our June 11 meeting will be held at 7:00 PM on ZOOM.



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## *Coordinator's Corner*

Another month in 2020 has passed. The businesses are starting to open and the weather has been as strange as everything else. Rain, cold, hot, back to cold. I hope that everyone has been able to spend the time and get your gardens ready for the coming months. I certainly have. My vegetable garden is planted except for sweet potatoes, landscaping beds are completed, and 177 bags of mulch is done.

OSU restrictions put in place in March still apply. As of this writing on May 28, we still are not allowed to do anything that is not virtual until July 6. Whether you agree with this or not, that is the rule that we are working with from Ohio State President.,Michael Drake.

Webinars are a good way for you to get your education hours in for the year. You can review our website at <https://hancock.osu.edu/program-areas/master-gardener-volunteers>. All MGVs will be required to complete 10 hours of continuing education in 2020. At this point we are requiring each of you complete 20 hours of service hours as well. I will work with the interns on their requirements as soon as we open and can do more projects.

If you were not able to join the last monthly meeting, you should have been able to view it from the recording sent to you on email. I look forward to our next Zoom monthly meeting on June 11.



*Karl Farwig*

## *Rambling Rose* *June 2020*

Is there a more beautiful sight than a garden in bloom in June? It is a vision to the eyes of everyone, but especially to all of us Master Gardener Volunteers. Welcome to my favorite month!

While we may not be able to be as active a Master Gardener Volunteer group as we normally are in June, I hope that your spirits and soul are refreshed from the sunshine days filled with our personal gardening. I have a plaque that says "My Garden Feeds My Soul" and it is true. I find joy, peace and fulfillment in working the dirt and seeing the end result. I know you share this joy.

I am looking forward to July when we may be able to work together again. Until then, stay strong, positive, and find the joy in every day.

Since our first zoom call was enjoyed by all, we will have a zoom meeting on June 11 at 7:00 pm. Information and directions for the call will be forthcoming. It was good to hear your voices and feel the connection we all have.

Till then, enjoy the sights and smells of glorious June.

*Rose*



**Hancock County Master Gardener Volunteer  
Meeting Minutes-May 14th  
Respectively submitted: Reuben DeBolt-Secretary**

President Rose Morrison called the meeting to order at 7:10pm.  
Meeting was conducted remotely using Zoom conferencing, with Karl Farwig coordinating.  
The meeting was recorded so that those unable to attend could still review the meeting.

Volunteer Coordinator Report – Karl Farwig:

Updates from OSU and the Executive Committee, which has been meeting (virtually) every two weeks:

- The President of OSU has prohibited any in-person contact until after July 6
- Education hours – MGV's should use seminars to get their 10 hours in
- Service hours – MGV's should seek ways to get 20 hours. We will review for exceptions at the end of the year
- Hours should be entered into VMS by the end of each month

Project Updates:

- Administrative
  - \*Newsletter continues as normal
  - \*Facebook & website continue to be used
  - \*Membership – continue to update hours on VMS
  - \*Apparel – postponed for now, on permanent hold from state
- Social & Fundraising
  - \*Wreath Class – planning can continue
  - \*Summer Picnic – planned for Marlene Brunswick's house in July. To be discussed further before deciding if it will be as planned
  - \*Christmas Potluck – planning to continue
  - \*Refreshments – not needed until we meet in person
  - \*Plant Exchange – originally planned for May, now postponed indefinitely, possible cancelled for this year
- Service
  - \*OSUE Garden, Community Garden, Phenology Garden – no activity allowed as a group until OSU lifts restrictions
  - \*Mugs of Joy – Planning can continue
- Teaching
  - \*Courier Articles – continue to write monthly articles
    - Judi Clymer needs articles for August, September & December
  - \*Speakers Bureau & Library Programs – can continue only if virtual format is possible
  - \*Mother's Day Let's Go Gardening – cancelled
  - \*Fair Booth – planning can continue. But be aware that fair could be cancelled

**(CONTINUED)**

**Hancock County Master Gardener Volunteer  
Meeting Minutes-May 14th  
(CONTINUED)**

- Education
  - \*Brown Bag – can do only if we can do virtually. Committee can decide
  - \*MGV Training Classes – continue planning for Feb/Mar 2021
  - \*Seminar – Ed has asked that we do a small public evening event in the fall to stimulate community interest.-planning to continue
  - \*Ask-A-Gardener – continuing as normal, but no face-to-face contact
  - \*Field Trips – June trip to Fostoria has been cancelled, maybe try again next year. In the meantime, any suggestions would be appreciated
  - \*Mentors – can continue with virtual contacts
- Website – Karl gave a brief overview of the local Master Gardener website which has been thoroughly overhauled to be a better resource for MGV's and for the community. There are now links to all the OSU webinar recordings, our Green Thumb Prints, etc.

Minutes of the previous meeting February meeting was devoted to Committee work, so the January meeting minutes had not been approved at that time. The minutes of the meeting of January 9, 2020 were approved on (thumbs up) vote after motion by Jerry (or Linda Casey), seconded by Carolyn Lavender

Treasurer's Report – Ann Woolum

Accounting has been divided up into three distinct funds because some funds were restricted:

General Fund – Community Garden – Education. The restricted education fund has now been depleted after reimbursing seminar fees.

Community Garden Fund – \$1,379.80

General Fund – \$7,268.72

Motion to approve Lisa McClain, 2<sup>nd</sup> by (not clear). Motion passed with at least 21 votes

Old Business

- No old business

New Business

- Policies – new or revised policies were previously e-mailed to all MGV's. The following policies were briefly reviewed prior to a vote to approve them all together. Motion to approve by Reuben DeBolt, 2<sup>nd</sup> by Tim Brugeman. Motion carried.
  - \*Honorarium – to be paid to Hancock County Master Gardeners, Inc not to an individual
  - \*Memorial – to be based on wishes of family
  - \*Education & Advanced Training Stipend – up to \$50 per year for courses of at least 3 hr
  - \*Volunteer Hours – 20 hr service and 10 hr education required

**(CONTINUED)**

## **Hancock County Master Gardener Volunteer**

### **Meeting Minutes-May 14th**

#### **(CONTINUED)**

- \*Emeritus Membership – 5 yr active service, member can request Emeritus status. Must be approved at a regular meeting of the membership
- \*Conflict of Interest – recommended by State Attorney General, requires disclosure of any financial interest in an outside business by a member conducting MGV business with that business
- \*Records Retention – compliance with OSU policy
- Policy – Financial Control policy is still being revised, should be available for vote at the next meeting
- Budget – Reviewed layout and line items of the 2020 Budget, which is something new for us. Committees each proposed budgets, which were reviewed and sometimes adjusted by Karl & Rose based on events that were anticipated. Expected year end cash balances are \$6,500 General Fund and \$1,179 Community Garden Fund. Motion to approve the 2020 Budget by (not clear), 2<sup>nd</sup> by Linda Casey (and also Carolyn Lavender). Approved on vote.
- Emeritus Status for Noreen Walters – Noreen has requested Emeritus status. After a number of favorable comments, it was put to a vote to approve Noreen’s application. Approved. And with a suggestion to send best wishes.
- Discussion about virtual meeting – many favorable comments
- Next Meeting June 11 at 7:00pm

### **Master Gardener Volunteer** **Horticulture Lunch and Learn/Happy Hour** **Information and Registration**

**It’s not too late to receive continuing education hours  
through the OSU Master Gardener Volunteer site.**

**Register Here: [go.osu.edu/mgvlearn](http://go.osu.edu/mgvlearn)**

**Webinars will continue until the end of June then resume this winter.**

**Courier Article**  
**Planting Sustainability in the Home Garden**  
**Doris Salis**  
**May 30,2020**

**<http://findlaycourier.oh.newsmemory.com/?publink=131778302>**



# Master Gardener Spotlight

## Marilynn Beltz

**1 Master Gardener Class: Class of 2008**

**2 Gardening Interests or Areas of Expertise:** Mostly flowers, but also enjoys vegetable gardening. Marilynn likes to can tomatoes, beans and beets. She enjoys seed starting and plant propagation

**3 Hancock County Master Gardening Activities:** Marilynn has been involved in all of them as past coordinator and president.

**4 Community Activities:**

Men and Women's Garden Club

Hospice Volunteer

EM at St. Michael's Church

Member of BFS fellowship

Former BVMA Auxiliary

Pumpkin Painter for Brinkman's

**5 Other Interests or Interesting Information:**

Marilynn enjoys quilting, embroidery and cross stitch, painting and reading. She was born and raised in Leipsic and spent 38 years working at BVH. She has also worked at Feasel's and Brinkman's greenhouses, done landscaping for private residences and floral work for T Mercantile. She enjoys working at the flower triangle on Tiffin Avenue and Route 12. Mostly Marilynn feels lucky and blessed to have met and become friends with so many people who enjoy her same interests.

**THANKS FOR ALL YOU HAVE DONE MARILYNN!**

# Common Earthworm

Submitted by: Linda Casey



SCIENTIFIC NAME: *Lumbricus terrestris*

TYPE: Invertebrates

DIET: Herbivore

AVERAGE LIFE SPAN IN THE WILD: Up to 6 years

SIZE: Up to 14 inches

WEIGHT: Up to 0.39 ounces

My husband and I were weeding recently when he held up his newest discovery—a 12 inch-long earthworm! It almost looked like a small garden snake, which I abhor! Well, I had him put the big guy back in the garden to do his job. I thought you might enjoy learning a little about earthworms and the value they provide. So, hear goes!

Typically only a few inches in length, some members of this species have been known to grow to a serpentine 14 inches (Only slightly larger than the one we found!). Earthworms are invertebrates composed of many segments, called annuli. These segments are covered in setae, or small bristles, which the worm uses to move and burrow. They don't have bones and move by contracting and relaxing the body segments in sequence.

Night crawlers are so named because they are usually seen feeding above ground at night. They burrow during the day, and while they typically keep close to the surface, they are capable of digging down as deep as 6.5 feet. The worm's first segment contains its mouth. As they burrow, they consume soil, extracting nutrients from decomposing organic matter like leaves and roots. An earthworm can eat up to one third its body weight in a day.

Most earthworms have both male and female organs. Typically, however, they still need a partner to reproduce. When earthworms mate, they lay side by side in reverse position. At that moment they exchange sperm. The sperm of the partner is stored in little chambers called spermathecal apertures. These are positioned in front of the egg-producing organs. After mating, the swollen external gland, called clitellum, produces egg cases called cocoons. A cocoon case slides slowly forward, picking up eggs and sperm as it moves over the head of the earthworm. From 3-to-1,000 cocoons can be produced per year, depending on species and environmental conditions. Typically, an earthworm will produce 20-to-30 cocoons per year, with each cocoon containing 1-to-10 eggs. Peak cocoon production is in the spring or early summer. The eggs in the cocoons hatch when conditions are ideal.

**(CONTINUED)**



## Common Earthworm (CONTINUED)

It may take as much as five months for the eggs to hatch and then take from 3-to-12 months before these worms are sexually mature. Worms typically live only a few months because of the many environmental threats they face. They have been observed to live for 10 years in a protected environment.

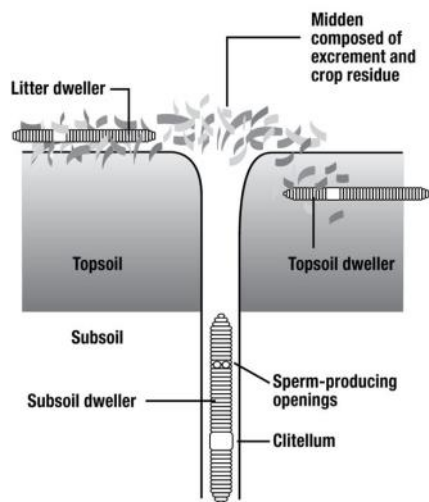
### Types of Earthworms

There are more than 1,000 earthworm species, that can be placed into three groups:

**Litter dwellers** or *epigeic* species live in crop or forest litter. They are not common in most agricultural soils. These species do not ingest large amounts of soil. The manure or red worm, *Eisenia foetida*, is an example of a litter dweller.

**Topsoil dwellers** or *endogeic* species live in the upper 2-to-3 inches of the soil. They live primarily from partially decomposed organic matter that is already incorporated in the soil. They eat their way through the soil, creating horizontal burrows that they fill with their excrement. These species ingest large amounts of soil that they mix with digested crop residue in their guts.

**Subsoil dwellers** or *aneic* species live in permanent vertical burrows that can be 5 or 6 feet deep. These earthworms need surface crop residue to live. Their burrows remain open, although they cap the top with crop residue that they pull to the entrance. These species ingest substantial amounts of soil that they mix with digested residue in their guts. Their excrement is primarily deposited at the surface of the soil. The nightcrawler *Lumbricus terrestris* is the most prominent member of this group.



### Benefits of Earthworms

Only a few decades ago, it was thought that earthworms were not important for agriculture. We now know how interactions between crops, climate, soil, and living organisms play important roles in sustaining our agriculture. Earthworms are among the most visible of soil organisms and now receive considerable attention.

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## **Common Earthworm (CONTINUED)**

The burrowing and feeding activity of earthworms have numerous beneficial effects on overall soil quality for crop production. The following soil properties can be improved by earthworms:

- Some earthworm species create vertical burrows, while other species live in horizontal burrows in the soil. The vertical burrows are typically open, although the worms cap the top with residue and excrement. The vertical burrows are important points of entry for quick water infiltration into the soil, especially in no-till systems.
- Air-filled porosity is necessary to plant roots. Because earthworms improve soil porosity, they improve the exchange of oxygen and carbon dioxide with the atmosphere. Earthworms increase porosity by creating permanent burrows and improving soil aggregation. Aggregation is improved by the mixing of soil and organic matter in the earthworms' guts. These highly stable aggregates are deposited by some earthworms in their burrows, and by others at the surface of the soil. In one pasture study, earthworms annually consumed between 20 and 40 tons of soil per acre. In another study, earthworms were estimated to consume 4 to 10 percent of the top 6 inches of the soil annually.
- Soil compaction reduces the porosity of the soil. Because earthworms increase porosity, they reduce the effects of compaction. In addition, the excrement of earthworms has a stable structure, which makes the soil more resistant to compaction and improves its tilth.
- The importance of earthworms in mixing surface residue with soil becomes clear in soils that do not have any earthworms. In the Netherlands, some soils reclaimed from the sea at first did not have any earthworms. In these soils the formation of topsoil with reasonable organic matter content did not take place, resulting in poor crop growth. After the introduction of the earthworms, a dark topsoil layer was formed and crop growth increased substantially.
- Earthworm casts have higher available nitrogen, phosphorus, potassium, and calcium contents than surrounding soil, as well as a higher cation-exchange capacity. Some micronutrients, such as zinc and boron, are more available in the excrement of earthworms through chelation of the micronutrients.
- Soil passed through the gut of earthworms has a neutral pH. This is probably due to the pH buffering action of organic molecules produced in the gut of worms.
- Earthworms excrete material that has high concentrations of beneficial microbes that help decompose crop residue.
- Some earthworms eat harmful nematodes, decreasing the concentration of these harmful organisms in soil.

**(CONTINUED)**

## **Common Earthworm (CONTINUED)**

### **Food Supply**

Quantity, quality, and placement of food influence earthworm populations. Earthworms eat organic residue that needs to be present in sufficient quantity. The quality of residue also is important. Residue with a high carbon to nitrogen ratio is not good for earthworms. Manure can help make it more palatable. Packed manure is an excellent food source for earthworms. In some cases, residue has to undergo some weathering before earthworms are able to digest it. Topsoil dwellers need smaller particles than subsoil dwellers, which can use large leaves, for example. The placement of food becomes a critical issue for some earthworm species. Topsoil dwellers prefer small organic residue particles incorporated into the soil, but subsurface dwellers need residue at the surface of the soil.

Providing earthworms with a diverse diet is important. Crop residue of leguminous species (low C:N ratio) is more palatable to earthworms than that of mature grass and grain species (high C:N ratio). However, a legume such as soybean produces very little crop residue, which limits the quantity of food available to earthworms. Earthworms thrive in grasslands and alfalfa. In one grassland study, 70 earthworms were counted per square foot (more than 3 million earthworms per acre). If crop residue is removed, earthworms lose their food source. Use of a cover crop that is left in the field or removal of only part of the crop are ways to feed earthworms. Manure is a food source for earthworms. It also makes crop residue with a high C:N ratio more palatable to earthworms. Manure stimulates crop residue production because of its fertilizing effect, increasing the food supply for earthworms. Liquid manure can have a temporary depressing effect on earthworms due to its ammonia and salt content. After this effect has subsided; however, earthworm populations tend to increase. Sludge and compost can greatly stimulate earthworm populations by providing a quality feedstock for them.

### **Looking for Earthworms?**

It is easy to determine whether you have an adequate population of earthworms in your soil. Look for their casts in the forms of little piles of soil, mineral particles, or organic matter at the soil surface. They can be seen moving over the soil surface or even breeding, particularly on warm, damp nights. Dump a spade full of moist soil into a bucket or onto a sheet of plastic, and sort through for earthworms. To find the deep burrowing species, pour a dilute mustard solution onto the soil. Many will quickly come to the soil surface in response to this irritant. Happy hunting!

Adapted from a Penn State Extension article prepared by Sjoerd Duiker and Richard Stehouwer.



## IT'S Time To.....

### HOME (Indoor plants and activities)

- Many indoor plants can be moved to shady locations outdoors now that the danger of frost has passed (I hope!). Plants will dry out more often outdoors, so keep a close eye on soil moisture. Sinking the pots in soil will help slow down moisture loss.
- Now is a good time to take cuttings of houseplants to increase a collection or share with friends. Stick cuttings to root in media, such as vermiculite, perlite or potting soil. Roots grown in water tend to be weak from lack of oxygen and do not adjust well to planting in soil.
- Fertilize houseplants according to label directions. Foliage plants require relatively high nitrogen fertilizer; flowering houseplants respond best to fertilizer high in phosphorus.

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

- Prune early spring flowering trees and shrubs after flowers fade.
- Plant balled-and-burlapped or container nursery stock, and water thoroughly.
- Remove and destroy overwintering bagworms from landscape trees and shrubs.
- Follow a spray schedule to keep home orchard crops pest free. While trees are in bloom, use fungicide sprays without insecticide to avoid injuring bees. Follow label directions.
- Thin apple tree fruits, if needed, about three weeks after petals fall. Apples should be about 8 inches apart. Mother Nature may have taken care of thinning fruit set this year!
- Apply fungicides to roses to control diseases such as black spot.
- If you are going to fertilize your lawn in May, apply 3/4-1 pound of nitrogen (N) per 1,000 square feet with a product that contains 50 percent or more of slow-release fertilizer. Try to schedule the application prior to a rain or irrigate following application to move the fertilizer off leaf blades.

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

- Plant frost-tender plants after the danger of frost has passed (usually Mother's Day in Hancock County). This includes warm-season vegetables (such as tomatoes, peppers, eggplant, and vine crops), as well as most annual flowers and tender perennials (such as cannas, gladiolus, dahlias, tuberous begonias, and caladiums).
- Pinch chrysanthemums and annual flower plants to keep them compact and well-branched.
- Make successive plantings of beans and sweet corn to extend the harvest season.
- Thin seedlings of early-planted crops such as carrots, lettuce, spinach, and beets to their proper spacing.
- Harvest early plantings of radishes, spinach, and lettuce.
- Both asparagus and rhubarb season may be delayed this year due to the slow progression of spring.
  - \*Harvest asparagus by cutting or snapping spears at or just below soil level
  - \*Harvest rhubarb by cutting or grasping the stalk and pulling it up and slightly to one side.
- Control cucumber beetles (which are carriers of bacterial wilt) as soon as cucumber plants germinate or are transplanted to prevent disease.
- Remove blossoms from newly set strawberry plants to allow better runner formation.
- Remove unwanted sucker growth in raspberries when new shoots are about a foot tall.

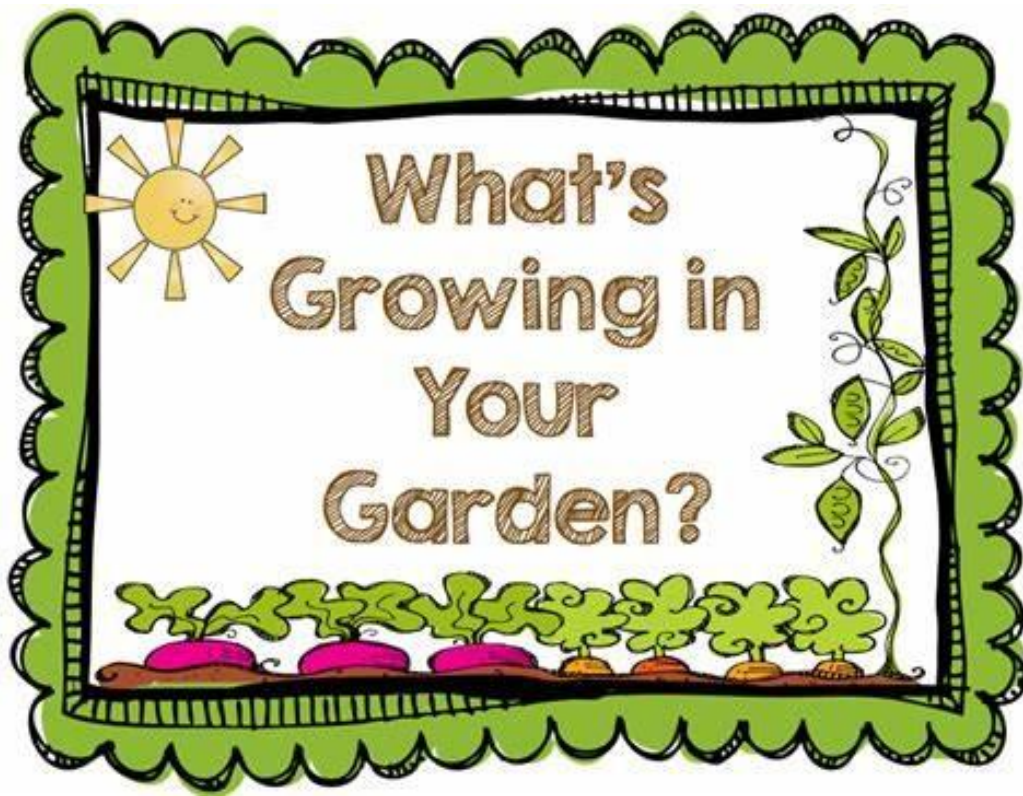
**Submitted By: Linda Casey**



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