

August 2015

# Green Thumb Prints



Newsletter of the Hancock County  
Master Gardener Volunteers

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

## WHAT'S INSIDE THIS ISSUE:

- August Flower, Butterfly Bush -by Bill Jones.
- Community Gardens Update
- Cut Flower Basics
- Plantains—Weed or Not
- Attracting Beneficial Insects, More . . .

## Dates to Remember!

**Monday, August 3:** Library presentation by Bill Jones on “Seed Saving,” 6:30 PM.

**Wednesday, August 5:** Green Industry Summer Session, See page 9. Meet at the OSUE Office at 9:30 AM to carpool to Owens.

**Thursday, August 13:** MGV Monthly Meeting, Extension Office, 7:00.

**Sept. 2—Sept 7:** Hancock County Fair, Info forthcoming at monthly meeting.

## Upcoming Events

**September 10:** Brown Bag presentation by Christa Gupta on “How does your garden taste.”

**September 14:** Library Presentation by Bill Lanning.

**October 5:** Library Presentation by Pat Flinn on “Preserving Produce.”

**Dec. 2, 6, 7, 19:** Wreath Classes.

## Coordinator's Corner

*by Bill Jones*

What a summer to enjoy the floral show especially with the daylilies. With all of the rain with which we have been blessed, we have had to do very little watering of our gardens so far this year. Of course, the growing conditions have provided a perfect environment for the weeds, too. We actually have experienced the least growth degree days in the past decade so far this year. This has delayed the ripening of tomatoes and coupled with the high moisture it has created a tough year for fungal infections on our plants. Remember we can't heal fungal infections with fungicides, only prevent their spread.

The Owens Green Industry Summer Session is being held on Wednesday, August 5, and there appears to be some good seminars for us to attend. I will be leaving from the OSUE office parking lot at 9:30 AM that morning. Please let me know if you are planning to carpool.

We should be receiving our new MGV shirts by our next meeting on August 13. Hopefully, we will be pleased with the new shirts. There will be an additional small charge for shipping that we will discuss at the meeting.

*(Continued on page 2)*

## Coordinator's Corner—Continued

(Continued from page 1)

Look for Christa Gupta's article in the Courier on August 22, on essential herbs. I really appreciate each of you who volunteer to write these articles for the Courier. We get so much good publicity from them and they seem to be so appreciated. Please consider writing one in the coming months.

We will be having the same big booth this year at the Hancock County Fair as we had last year. The Fair runs from Wednesday, September 2 through Monday, September 7. There is an opportunity for each of us to take a potted plant to include in the booth display. A work schedule will be sent out later this month for us to sign up for a shift or two. Please let Marilyn Beltz know if you are willing to help setting up and taking down the booth.

There are three judged flower shows and three judged flower arrangement shows at the fair this year. Please consider showing some of your roses, dahlias, and daylilies this year and putting together an arrangement to show your creativity.

Many thanks to Bill and Anita Lanning for opening their home to us for the MGVS Summer Picnic. We

had a great time in spite of the rain. The food was great and the fellowship was warm and enjoyable. We didn't go home until after 9:00 PM.

Dr. Ed Lentz is working on our MGVS Classes for February and March 2016. If you can work on a committee to help make this a successful class please let me know. The current plan is to hold our classes the same days as the Seneca County MGVS hold theirs so that we can each use the same speakers. The classes will be held during the day rather than in the evenings.

If you haven't seen the demonstration garden yet, please drive by the Community Gardens on Blanchard Street and see what the Farwigs and the MGVS volunteers have done. There has been a lot of produce provided to the MGVS and to Chopin Hall and City Mission.

Hopefully, each of you are finding many opportunities to share your expertise this summer and remember to read the BYGL each week to keep up-to-date on what's happening in the landscape. Dr. Lentz sends this to us each week along with other important happenings for us to be aware.

### *Twinkle, twinkle, buggy star—*

Is there a more adorable arthropod than the ladybug? From kindergartners to gardeners, everybody loves them. Did you know that ladybugs aren't really bugs at all, they're beetles!



Entomologically speaking, the term *bugs* applies to insects of the order Hemiptera. Ladybugs belong to the order Coleoptera, or beetles. Europeans have called these dome-backed beetles by the name ladybirds, or ladybird beetles, for over 500 years. In America, the name ladybird was replaced by ladybug. However, scientists usually prefer the common name lady beetles.

### *Take advantage of that space!*

The true "intensive gardener" uses every inch of garden space all season long. As soon as one crop is harvested, another is planted to take its place. To practice "spot" gardening, always have something ready to plant in any spot that becomes available. For example, in the spring have lettuce seeds or seedlings or radish seeds on hand to fill any bare spots. In the summer, keep a bag of onion sets in the fridge and plant the sets in vacant areas to produce scallions throughout the season. Bush beans are also great for popping into bare spots for a fall harvest.

## When Is It Ripe?



Picking a ripe watermelon is not the easiest thing to learn, but there are indicators to look for.

Watermelon mature rapidly during hot weather. Most are ripe about 32 days after blooming.

Deciding when to harvest a melon is most difficult early in the season when vines are green and healthy.

Some indicators of a watermelon's maturity are: tendrils or pigtails on vines change from green to brown, the ground spot on the belly of the melon turns from white to yellow, and the thumping sound changes from a metallic ringing when immature to a soft hollow sound when mature.

Watermelons should be handled carefully to avoid rolling, bumping or dropping and thus prevent internal bruising of the flesh.

Store watermelons at temperatures ranging from 60 to 70 degrees F. Temperatures below 50 degrees or above 90 degrees for extended periods will increase flesh deterioration. Once the melon is cut, it can be refrigerated in wedge form or in small chunks in plastic-covered containers.

Good quality melons are usually firm, symmetrical in shape, fresh, attractive in appearance and of good color. The external rind color may vary from deep solid green to gray, depending on the variety.

## ***Reminder and Thank You —***

Thanks to Ann Woolum, Marjorie Miller, & Donna Johnson for volunteering to provide refreshments at the August MGV monthly meeting.

## ***Community Gardens***



Many thanks to Karl, Lynn, Ann, Kathy, Bill, and the many others who has volunteered to work at the gardens. This project is such a success!

Harvesting is continuing. Onions have been pulled. Snap peas have finished their production and have been pulled and composted. The first planting of sweet corn was picked as we noticed signs of coon and human coon in our corn. Cauliflower, broccoli and cabbage have been picked. Lynn and Karl picked probably 3 gallons of green beans from the Blue Lake row and donated them to City Mission. Also, the herbs were cut again and donated to City Mission.

All the lettuce was pulled and donated to City Mission and Bill Jones tilled that area. Zucchini will probably be planted in that area. The onion and snap pea rows were sprayed for weed control as well as several other areas.

Unfortunately, we are having a theft problem. Two cabbages (plant and all), an eggplant, large green pumpkin, some sweet corn, potatoes, and other vegetables were stolen. The United Way had items stolen and is in the process of installing night vision cameras.

Bill Jones and Karl conducted a walkthrough of the garden for those interested. Some of the topics for discussion included weed control options, weeds, insect issues, and disease issues.

As a concern your safety, be aware of who is around you whenever you go to the gardens. Carry your cell phone and let others know where you are going. It's safer and more fun to work with a buddy.



## Cut Flower Basics

Plant material must be in good condition. Use flowers that have just opened, include buds as well. Flowers should be picked early in the morning or in the evening. Stems are apt to wilt quickly if cut in mid day when the plants are losing water.

Whenever possible cut the flowers just above a side branch on which another flower is forming. Make the cut with a clean, sharp knife or shears. Try not to crush or bruise the stems. Strip off some of the leaves and plunge the stems in warm water as quickly as possible. Most people make the mistake of using cold water - thinking this will freshen the flowers. The life processes within plants, as in other living things, are stimulated by warmth and slowed down by cold. Since it is critical for the flowers to take up water after they've been cut it follows that they should be placed in warm rather than cold water.

Florists put new shipments of flowers in vases of 100-110°F water then put the vases in a cool place until the stems have become completely filled with moisture. The combination of warm water around the stems and cool air around the tops seems to do the trick.

Take a wide-mouthed vase or bucket of warm water with you to the cutting garden and plunge each stem into it the instant you cut it. When the container is full but not crowded, let it stand in the coolest part of your house.

After the flowers are sufficiently conditioned by the warm water and cool air treatment -- this usually takes about two hours, they are ready for arranging. Strip off any leaves that would fall below the water line in the arrangement. If left on, they will decompose and create unpleasant odor and also foul the water with bacteria, clogging the flower's water-conducting apparatus and hastening its death.

Stems should also be trimmed at this point. Many tests have been made to determine whether stems should be cut straight across or on a slant, with a knife or with shears. These factors have no bearing upon the life of the flowers. Squeezing stems may compress some of the cells and restrict the easy intake of moisture, and for that reason most florists use a sharp knife or a keen two-bladed pair of shears rather than the blade-and-anvil type of clipper.

Most commercial preservatives do help flowers. Along with quick energy sugar, they also provide other useful substances; a bacteria-inhibiting material to control the spread of those organisms that clog the ends of the stems; an acidic material to lower the alkalinity of the water and to reduce the growth of microorganisms; metallic salts to maintain color in the petals; and respiratory inhibitors to cut down the flowers metabolic rate. Under the best of circumstances these preparations can double a cut flower's life. If you want to use them, begin to use them as soon as the flowers are cut; put the preservative into the vase or pail of water you carry to the garden.

Nothing helps to keep cut flowers more than a scrupulously clean environment. Make sure the container you use is free of any dirt left from a previous flower arrangement, and give the flowers fresh water at 100-110°F, not cold - every day. If you have time, remove the flowers entirely and refill the container. If a preservative is used, it is not necessary to change the water; simply add fresh warm water daily to replace that used by the flowers. Cut flowers will also last longer if they are kept out of drafts and strong sunlight, both of which speed up the transpiration process.

Source: [www.burpee.com](http://www.burpee.com)



## ***MGV Summer Picnic!***

Even though the weather didn't want to cooperate, we had a wonderful time at the MGV picnic hosted by the Lannings. They were gracious and generous hosts and provided us with a fun-loving atmosphere. Thanks so much!!

## **Another use for a laundry basket**

If you don't need a laundry basket for hanging clothes on the clothesline, maybe you should buy one for growing potatoes. You can purchase a laundry basket (or two) at the local dollar store and fill these with about 2" of soil & compost. Then put a seed potato into each basket (each potato was cut into about 3 pieces with 2-3 eyes each). Cover the potato with soil. As the potatoes grow, gradually fill the baskets with soil, simulating "hilling" the potatoes in a garden. Each basket should yield 8-10 lbs of potatoes. It's fun to grow because this is different and because the potatoes grow out of the holes in the sides of the baskets. Be sure to keep the baskets watered well (slow watering since the water has a tendency to run out the sides of the basket). Instead of a laundry basket, other types of containers can be used. Just remember to keep the potatoes watered.



Source: [thevegetablegardener.com](http://thevegetablegardener.com)

## ***Danger Zone***

MGVs participated in the *Danger Zone* at the community July 4th celebration at the Hancock County Fairgrounds. The *Danger Zone* area deals with child safety. Approximately 258 individuals passed through the MGV display on poisonous plants. The weather was good and the evening was very busy!



# August Flower of the Month – Butterfly Bush

By Bill Jones



*Buddleja*, often misspelled *Buddleia* and with the common names of Butterfly Bush or Summer Lilac, honors Reverend Adam Buddle (1662–1715), who was a botanist and a rector in Essex, England. It is now included in the figwort family.

As garden shrubs *Buddlejas* are 20th-century plants, with the exception of *B. globosa*, brought from southern Chile to Britain in 1774. The most popular cultivated species is *Buddleja davidii* from central China. Another common garden species is *Buddleja alternifolia* with lilac-colored flowers. Horticulturists are still combing the Himalayan foothills for as-yet undiscovered *Buddleja* varieties. Heronswood Nursery lists three acquisitions from recent expeditions to China and Sikkim: new specimens of *B. colvilei*, *B. fallowiana*.

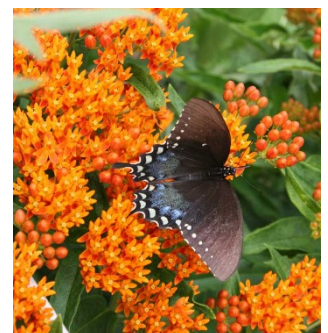
Butterfly bushes form the foundation for numerous butterfly gardens and are prized for their long, summer bloom period. Many cultivars will flower from June through October (if deadheaded) with peak bloom in July and August. They produce 5- to 12-inch-long panicles (i.e. long, slender flower clusters) in white, blue, lavender, pink, purple, yellow and many intermediate shades. The flowers are a nearly irresistible nectar source for butterflies, bees, lady beetles, and other pollinating insects as well as the occasional hummingbird. Additionally, their flowers have a pleasant fragrance. The shrubs are essentially round in outline and form an excellent backdrop for perennial borders. Removing old flowers will encourage new blooms.

Butterfly bushes are amazingly tough plants and grow well under a variety of conditions. The one critical requirement is well-drained soil, as their roots will quickly rot when waterlogged. Full sun is needed to ensure adequate flowering, and they prefer a soil pH of 6.0 to 7.0. Like most shrubs, they benefit from a 2- to 3-inch layer of organic mulch. Once established they are fairly drought tolerant and only require moderate fertilization. Mulch in the fall and cut back to about a foot high in late winter, before new growth appears. This produces larger flowers in the summer and a neater-looking shape.

Butterfly bushes are relatively trouble free. However, spider mites can be a problem when the plants are drought stressed. Pesticide use on these shrubs is discouraged, particularly when in bloom, because of the wide variety of beneficial insects present at that time. The foliage may irritate some people with sensitive skin.

*Buddleja* hybridizes easily; volunteer seedlings may not resemble the original bush. This tendency to be a weedy colonizer, along with its exotic (non-native) status in North America, is now making *Buddleja* a cautious addition to the garden. It is included in the book, *Invasive Plants* [Brooklyn Botanic Garden, Handbook #149, 1996].

Do not confuse the Butterfly Bush with Butterfly Weed. Some people mistakenly call another well-known butterfly attracting plant “butterfly bush”, but this is incorrect. “Butterfly Weed” is the common name for the flame-orange milkweed native wildflower, *Asclepias tuberosa*. It grows in dry soil and full sun from Canada to Florida, and can be a summer beauty. Unlike the more common milkweed, Butterfly Weed forms a multi-branched clump only about 2 feet tall. It is also available in colors other than orange.





# Plantains — Is it a weed or not a weed?

It's difficult to imagine this, but *Plantago major* used to be greeted with more respect than it gets in today's world. It was part of an herbal apothecary that the majority of the people grew as part of their healing garden. This unassuming and invasive weed (which is how we know it) has medicinal qualities that folks in earlier times relied upon daily. It was considered one of the Nine Sacred Herbs of the Ancient Saxons and is still known as *Slan-lus* in the Highlands of Scotland, which translates to 'plant of healing'. The ancient Romans knew it, as well as more ancient Mesopotamians.

Broadleaf plantain grows in low rosettes, often in sunny, waste places and disturbed ground. Originally native to eastern Europe and Eurasia, it has naturalized world-wide. Lance-leaf plantain, *Plantago lanceolata* is a closely related species with many of the same properties. It also grows in low rosettes in the same type of conditions. However, the leaves are narrower and the blooming stalks differ. People used both of these plants hundreds of years ago for many purposes.



Plantains are edible and the young leaves are often used as a potherb. (This is nothing I'd like to eat!) They do get tough and stringy as they age, but in earlier times, they were often harvested when people were foraging for the earliest greens after a long winter with no fresh food. The leaves have

significant amounts of riboflavin, Vitamin B1 and Vitamin C. Even the seeds are used, although they are so tiny, that it takes a long time to gather enough to be significant. They are a good source of fiber and the early folks used the ground seeds as a flour extender.

It is in the medical field where this plant shines. The leaves are antibacterial, astringent, anti-inflammatory, an expectorant and have haemostatic qualities (they stop bleeding.) Early uses included treatments for asthma, coughs, ulcers, irritable bowel, fevers and a vermifuge (this means it can get rid of worms and intestinal parasites.). Modern medicine has validated many of these properties including adding it to preparations to help smokers quit.

Some of the earliest uses are more folklore than folk medicine though. Plantain was thought to cure leprosy and rabies, which it absolutely cannot do. Native peoples also believed that carrying the root with them would ward off snakes and pouring the powdered root into a snakebite would neutralize venom. While it isn't advisable to ingest any plant you are not sure of and to treat yourself for medical conditions without a doctor's guidance, hikers should familiarize themselves with these plants because they can be quite handy if trail mishaps occur. The crushed leaves applied to wounds help stop bleeding and also soothe bug bites and poison ivy.

On top of all of the benefits for humans, *Plantago* is also a host plant for a number of butterflies. Some of the more familiar ones that use it are the Common Buckeye, the Painted Ladies and the Crescents. So, leaving a few plants at the edge of the driveway is helping them out. If you can't bear the weeds, several ornamental cultivars have been developed that you can add to your perennial border. Plant it in a sunny place and let it grow. Dead head the flower stalks if you do not want seedlings.

Knowing about your local weeds is fun and also necessary. You never know when this knowledge might help in an emergency.

Source: Melody Rose, [www.davegarden.com](http://www.davegarden.com)

# *What about cukes?*



## *When should I harvest cucumbers?*

Harvest cucumbers every two to three days and promptly pick the fruits when they reach the desired size. Pickling cultivars should be harvested when the fruits are two to four inches long. Slicing cucumbers should be six to eight inches long and 1 ½ to 2 inches in diameter, but still dark green and firm. Over-mature cucumbers left on the vine inhibit additional fruit set.

## *Why are some of my cucumbers misshapen?*

Poorly shaped fruit are usually the result of poor pollination. Poor pollination may be due to cool, wet weather and improperly applied insecticides that limit bee activity. When insecticides are necessary, select an insecticide with a low toxicity to bees and apply it early in the morning or late in the evening to reduce the risk to bees.

## *Why are some of my cucumbers bitter?*

The bitterness in cucumbers is produced by the

compound cucurbitacin. Cucurbitacins are normally found in the leaves, stems and roots of cucumber plants. The cucurbitacins spread from the vegetative parts of the plant into the cucumber fruit when plants are under stress. Hot, dry weather is usually responsible for bitterness in cucumbers in Iowa.

Cucurbitacins tend to be concentrated in the stem end of the cucumber and just under the skin. To eliminate most of the bitterness, cut off the stem end of the fruit and peel the remaining portion of the cucumber.

To avoid this problem, try planting bitter free cucumber cultivars, such as ‘Sweet Slice’ and ‘Sweet Success.’ Watering cucumber plants once a week during hot, dry weather may also be helpful.

## *Why do some of my cucumbers rot at the blossom end.*

The rotting is probably due to blossom-end rot. Blossom-end rot is a physiological disorder that occurs on tomatoes, peppers, eggplants and cucurbits. On cucumbers and other vine crops, the blossom end of the fruit begins to rot and within a short time the entire fruit has rotted.

Blossom-end rot is caused by a lack of calcium in the developing fruit. In most cases, there is no need to apply calcium to the soil. Try to maintain an even moisture supply by watering once a week during dry weather. Also, do not over-fertilize plants. Uneven moisture supplies and excessive nitrogen inhibit calcium uptake.

Source: [extension.iastate.edu](http://extension.iastate.edu)

## *Summer days in the garden—*

can be long and hot. It is tempting to cut corners when the rush of spring planting is over and the heat of the sun drives us to the shade. But, there are tasks to do around the garden that will keep your plants healthy and your tools in prime shape. Clean, clean, clean. Now is the time to clean your tools. Diseases can be easily transmitted from an infected plant to a healthy plant with one cut of the bypass pruners. Sharpen tools. Clean cuts are the first defense against disease and insects that prey on damaged plant tissue caused by dull tools that rip or shred plant material. Clean up leaf litter. A messy garden bed, especially one littered with diseased plant material, can be harmful to your garden.



WEDNESDAY  
**AUGUST 5<sup>TH</sup>**  
11.00 A.M. – 4:30 P.M.

Owens Community College  
Audio Visual Center  
30335 Oregon Road  
Perrysburg, Ohio

For Further Information Contact:  
Lee Richter, OSU Extension at  
[richter.71@osu.edu](mailto:richter.71@osu.edu) or at  
419.578.6783

OHIO STATE UNIVERSITY EXTENSION

## 2015 Northwest Ohio Green Industry Summer Session



### 2015 Northwest Ohio Green Industry Summer Session

August 5<sup>th</sup> – Registration, & Light Lunch 11:00-11:45am

(Separate form to be completed for each individual)

*Fees: Registration deadline July 25<sup>th</sup> - \$30.00  
(plus ODA credit fees)*

*After July 25<sup>th</sup> or on-site Registration is \$35.00  
(plus ODA Credit Fees)*

Name \_\_\_\_\_  
Company Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone \_\_\_\_\_  
E-mail \_\_\_\_\_

Place an X next to the session of your choice

Session #1 11:45 am – 12:45 pm

☐ Edible Landscapes

☐ Pollinators

☐ Weed Control

☐ Client's Lawn

Session #2 1:00 pm – 2:00 pm

☐ Top Ten Trees

☐ Alternative Products

☐ Hazards of Horticulture

☐ Turf Identification

Session #3 2:15 pm – 3:15 pm

☐ Bee Friendly Landscapes

☐ Irrigation Techniques

☐ Pruning

☐ Families of Fungicides

Session #4 3:30 pm – 4:30 pm

☐ Plant Identification

☐ Hazardous Algal Blooms

☐ Tree Fungus

☐ Turf Insects

### ODA Pesticides Recertification Credit of 1 hour each session

Requires an additional \$20.00 fee for EACH ODA credit

Please check each session where you would like to receive credit

Place X next to choice

Session #1 11:45 am – 12:45 pm

☐ Pollinators- Core

☐ Weed Control-6C

Session #2 1:00 pm- 2:00 pm

☐ Alternative Products- 6A

☐ Hazards of Horticulture-6A

Session #3 2:15 pm – 3:15 pm

☐ Bee Friendly Landscapes-CORE

Session #4 3:30 pm – 4:30 pm

☐ Plant Identification-6A

☐ Hazardous Algal Blooms-3A

\_\_\_\_\_ # Sessions X \$20.00 per credit = \$ \_\_\_\_\_ (additional monies  
beyond registration fee)

\*Fees collected for ODA certification paid to  
Ohio Pesticide Applicator Program

**Registration For The Day @ \$30.00 or \$35.00**

**Return Completed Registration Form & Payment Payable to:**  
**OSU Lucas Co.**

Phone: 419-578-6783

E-mail: [richter.71@osu.edu](mailto:richter.71@osu.edu)

Mail: OSU Lucas Co, 5403 Elmer Dr, Toledo, OH 43615



**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

## *Attracting Beneficial Insects*

Promoting beneficial insects is an important strategy in ecological management of insect pests. Attract these “**good bugs**” by increasing the diversity of plants in or near the garden. Select plants they prefer including those in the parsley or carrot family (Apiaceae formerly Umbelliferae) and the aster, sunflower or daisy family (Asteraceae formerly Compositae). There are lots to choose among. Aim to vary color, scents, textures and plant height.



You can spot members of the parsley or carrot family by their umbrella-shaped clusters of small 5-petaled flowers. The overall appearance is often a large flat head of white or yellow flowers. Think Queen Anne’s Lace (photo at left). The flower head provides a place to land for many insects, especially beneficial wasps. Using a variety of plants from this family that bloom at different times can provide season long food and habitat for beneficial insects as well as an attractive garden landscape.

A number of culinary herbs are also in parsley or carrot family including parsley, dill, caraway, cilantro or coriander, and fennel. These plants will spread quickly if left to go to seed. Remove flower heads after they stop producing nectar, but before seeds mature. Some are also biennials which means you won’t see flowers until the second year of growth.

The aster, sunflower or daisy family is characterized by flower heads that are actually made up of numerous small flowers growing together. Many have flowers composed of rays around a disk-like center. This is a large family of plants including many popular ornamentals like marigolds, dahlias, daisies, asters, cosmos, calendula, coreopsis, tansy, yarrow, zinnia, and sunflowers are. These plants usually produce more than one flower per plant with a long bloom time so provide season long food and habitat for beneficial insects.

Cover crops offer protection to beneficial insects when annual garden plants are not actively growing. Buckwheat is a cover crop that provides shelter and flowers to attract beneficial insect. It does self-seed readily so can become a weed. Consider a small permanent planting of buckwheat near the garden verses in the garden.

Source: [cornell.edu/horticulture](http://cornell.edu/horticulture)

The Master Gardener *Green Thumb Print* is a publication of the Hancock County Extension Office, 7868 County Road 140, Findlay, OH, 45840, 419-422-3851. The Master Gardener Volunteer Program Coordinator is Bill Jones.

Hancock County Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, sexual orientation, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

Keith L. Smith, Associate Vice President for Agricultural Administration; Associate Dean, College of Food, Agricultural, and Environmental Sciences; Director, Ohio State University Extension; and Gist Chair in Extension Education and Leadership.

For deaf & hard of hearing, please contact Hancock County Extension using your preferred communication (email, relay services, or video relay services). Phone 1-800-750-0750 between 8 am & 5 pm EST Monday-Friday. Inform the operator to dial 419-422-3851.