THANK YOU for Supporting the MGV Plant Sale!

Coshocton County Master Gardener Volunteers would like to thank everyone who patronized our plant sale on June 1! We also extend a big thank you to everyone who donated plants or gardening items or otherwise helped to make the sale a success.

Earnings from the sale, our only fund-raiser, will be used to support MGV projects and educational endeavors – for example: educational speakers and materials used for our displays, newsletter, speaking engagements, plant markers, fair booth, and much more. Your support is very much appreciated!

Programs Coming Up

Coshocton County Master Gardener Volunteers will have a display at First FARM Friday on Aug. 2 from 5 until 7:30 pm on Main Street in Coshocton. Stop by with your questions!

Follow the Sun!

By Margaret Lowe, Coshocton County Master Gardener Volunteer

Early in the morning young sunflowers stand facing the east and sunrise, then follow the sunlight through the day from sunrise to sunset. This is called “heliotropism” and it is a mystery exactly how sunflowers do it through the day. Researchers have discovered that the sunflower’s internal clock and ability to detect light work together. Genes related to growth, at just the right time, allow young stems to bend with the arc of the sun. However, stems of fully-grown plants do not bend and the flowers always face east according to researchers. Not surprisingly, the majority of sunflowers are plants that require full sun. The botanical name, Helianthus, is from the Greek helios, meaning “sun” and anthos, meaning “flower.” They are native to North America.

Sunflowers are popular because of their many varieties of height and size. From dwarf to mammoth, they grow in small beds and even in large fields with acres of flowers. All are sturdy, easy-to-grow plants with showy flowers in yellow and gold. Dwarf plants may grow from one to two feet; however, some mammoth varieties can grow over ten feet tall with huge seed heads containing hundreds of seeds.

Sunflowers attract beneficial insects to the garden and their seeds provide winter food for a variety of songbirds. After harvesting the blooms, hang them in a warm, dark place to dry. They should be checked often as varmints and birds will quickly eat the seeds.

Squirrels and birds love sunflower seeds. However, before feeding wildlife, you might want to fry or steam sunflower buds to make a delicious artichoke-like snack. If you are that adventurous you may find a recipe for steamed sunflowers in the book, “Cooking with Flowers.”

Learn more about sunflowers at: http://extension.missouri.edu/publications/DisplayPrinterFriendlyPub.aspx?P=g4290
Give Black Chokeberries a Chance: Notes from A Farm Wife
By Dallas Ann Lonsinger, Coshocton County Master Gardener Volunteer

Are you a prejudger of foods before you try them? For goodness’ sake, open your mind (and mouth) and try black chokeberry, *Aronia melanocarpa*. (In our family, we like to say that you need to try a little… you just might like it!) The chokeberry or Aronia is a new one for us. In fact, the seedlings came from the Soil & Water Conservation District’s annual seedling sale just this year, so we will have to wait about three years for significant berry production.

We are always looking for ways to be healthier, so we thought we would try ten new shrubs of what one news service calls the “North American Superberry” to begin our new adventure. Or venture? I just read online that 10 pounds (about 10 quarts) of fresh, frozen, certified organic Aronia berries are $98.00. Okay then!

I located a new planting area with full sun, good drainage, and fertile soil with plenty of room to place the plants ten feet apart for best berry production. The little eight-inch tikes will grow up to about six to eight feet tall in just a couple of years. Aronia is native to our area and grows in zones 3-8, so no worries about cold hardiness. The soil test through the OSU - Coshocton Co. Extension Office indicated a need to amend; Aronia prefers slightly acidic soil, between 6 and 7 pH. I was advised by a Conservation District employee that my variety is self-pollinating and I will not need to search out another cultivar to add to this group of plants. However, if I do choose to add another cultivar, it will increase the size of my berries and crops…hmm, note to self: search the nursery catalog for another variety. The Conservation District offers their plants for a very good price, but they are small and will need time to grow. I found a compatible cultivar for additional pollination… whoa, 1-gallon size for $19.99 plus shipping.

We are almost done with the planting and I have to say that this part of the berry orchard doesn’t look like much now but give it time. Three years from now, when the first child graduates from college, we will be enjoying these antioxidant-rich berries in jellies, juices, and mmm… maybe even muffins!

While considering all the plusses including the health benefits, I found no real disadvantage of Aronia. Some studies claim that the high amount of antioxidants in the berries may help protect against some health issues as well as boosting the immune system. The plants are disease-, insect-, drought- and pollution-resistant and require little care and upkeep. Hmmm, sounds like a win-win for the Lonsinger family. You might like to try them!

Find more information here: https://www.extension.iastate.edu/news/2008/jul/423102.htm

Soil Test Results and Fertilizers

Soil should be tested before adding fertilizer; every two or three years should be sufficient. Your soil test results should give you specific instructions as to what ratio of fertilizer to use. The information below may answer some questions about the standard test results section of your analysis and the N-P-K rating on the fertilizer bag.

- **What is pH?** pH is a term used to express acidity or alkalinity of the soil. The ideal soil pH is between 6.2 and 6.5, the range where the most nutrients in the soil are available to your plants.
- The lime requirement index measures total soil acidity; this is important because the lower the lime index the more the soil will resist a change in the pH. Lime is calcium carbonate and it raises the pH. The acceptable lime range is 68-70. The best time to add lime is in the fall of the year, since it takes 4-6 months for the pH to react.
- **N-P-K** rating on your fertilizer bag corresponds with the test results section of your soil analysis.
  - N is for nitrogen; it is not measured on the soil analysis because it does not stay in the soil. Just like your body cannot store vitamin C, the soil cannot store nitrogen for any length of time. Nitrogen is important to plants in that it aids in the formation of chlorophyll. Chlorophyll is what makes your plants green and enables them to process sunlight into nutrients. However, excessive nitrogen can result in a lot of vines or leaves and very little produce.
  - P stands for phosphorus which is important in cell division, root development, emerging seedlings, flowering, pollen production and seed formation. However, too much phosphorus can inhibit the plant’s ability to absorb iron and other nutrients.
  - K stands for potassium and is important in fruit formation.
- Soil testing is available through the Coshocton County – OSU Extension office at 724 South 7th Street.

More information can be found at: https://ohioline.osu.edu/factsheet/hyg-1132 and https://extension.psu.edu/interpreting-your-soil-test-reports
Limit Your Contribution to Water Pollution
By Gail Piper, Coshocton County Master Gardener Volunteer

We have all heard about the algal bloom in Lake Erie and the effect it has on marine life and the water supply for neighboring cities. Coshocton County is not in the watershed that empties into Lake Erie, but we are in a watershed that eventually connects to the Gulf of Mexico. Run-off from our yards, gardens, and fields makes its way into our storm sewers, ditches, and streams, then into our local rivers; the Muskingum River flows into the Ohio which empties into the Mississippi which goes to the Gulf. There is a huge “dead zone” in the Gulf (estimated at over 8000 square miles in 2017) where low oxygen levels inhibit life – and it is mostly due to nutrient run-off.

What is nutrient run-off? Basically, it is excess nitrogen and phosphorus that is carried by water into our streams. The fertilizers we use on our lawns, gardens and fields contain those nutrients and so do pet waste, yard clippings and leaves. Rules intended to lessen run-off have been implemented for our agricultural community. As non-farm residents, we can help by following these suggestions from an article in Buckeye Yard and Garden onLine:

- Use the necessary amount of fertilizer [and pesticides!] and apply when rain is not in the forecast. Sweep up any excess fertilizer from your driveway or sidewalk.
- Properly dispose of grass clippings and leaves. Never dump yard waste in a storm drain, ditch, or stream.
- Ensure that all sewage from your home flows to your properly maintained septic system or the sanitary sewer.
- Remember to pick up after your pets!

Read more about this subject at: https://bygl.osu.edu/index.php/node/1291 and https://www.noaa.gov/media-release/gulf-of-mexico-dead-zone-is-largest-ever-measured

Deadheading for Longer Bloom

Many annuals require very little additional care to keep them attractive and blooming all summer. Some flowers fall off cleanly and do not need to be manually removed. Others require “deadheading.” An annual plant lives to produce seed: all of its energies are directed toward this purpose. If you deadhead - pick the spent flowers before they start to set seed - the plant will produce more flowers in an effort to produce seeds. This practice keeps annuals in the flowering stage longer and normally results in a greater number of blooms. Annuals such as salvia, geranium, cosmos and other spike or single-stem flowers really benefit from this, as it encourages additional branching, and therefore, more bloom.

For annuals such as petunias, marigolds, zinnias, and snapdragons, deadheading on a regular basis prevents seed formation and promotes additional flowering. It also prevents them from becoming too “leggy.” The flowering period of many perennials, such as coreopsis, garden phlox, and Shasta daisy, can also be prolonged by deadheading. Delphiniums may bloom a second time in late summer if the old stems are cut back after flowering.

In order to control the growth of some annuals, pinching or the removal of the growing tip is suggested. This will encourage more compact growth and a neater habit. The tops of some plants, such as petunia and impatiens, may be cut back 6-8 inches in mid- to late summer after the first flush of flowers has subsided to promote a second flowering period in the fall. A good time to do this is right after the Fourth of July holiday. After cutting, fertilize and water well to encourage re-growth. The removal of faded flowers or deadheading annuals, perennials, and roses is an important gardening chore. Deadheading prolongs the blooming period and increases the number of later-season blooms.

<table>
<thead>
<tr>
<th>Bloom longer if deadheaded:</th>
<th>No need to deadhead:</th>
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<tbody>
<tr>
<td>Hardy geraniums</td>
<td>Grasses</td>
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<tr>
<td>Coreopsis</td>
<td>Sedum ‘Autumn Joy’</td>
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<tr>
<td>Petunias</td>
<td>Melampodium (Butter Daisy)</td>
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<td>Marigolds</td>
<td>Impatiens</td>
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<td>Snapdragons</td>
<td>Most flowering vines</td>
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<tr>
<td>Begonias</td>
<td>Most ground covers</td>
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<tr>
<td>Roses</td>
<td>Crocus</td>
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<tr>
<td>Campanulas</td>
<td>Other small spring-blooming bulbs</td>
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<tr>
<td>Blanket flowers</td>
<td>Torenia (Wishbone flower)</td>
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<tr>
<td>Delphiniums</td>
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<tr>
<td>Zinnias</td>
<td>*Coneflowers – birds like the seeds</td>
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<td>Sweet pea</td>
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<td>Salvia</td>
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<td>Scabiosa</td>
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<td>Annual heliotrope</td>
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<td>Geraniums (Pelargonium)</td>
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<td>Yarrow</td>
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Find more information at: https://extension.psu.edu/to-deadhead-or-not-your-final-answer-is
**July Garden Check List:**
✓ Start dividing tall bearded iris.
✓ Shear evergreen shrubs now.
✓ Raise the lawnmower to three inches during hot weather.
✓ Keep deadheading annuals and perennials to continue their length of bloom.
✓ Fertilize annuals with an all-purpose fertilizer to help them bloom.
✓ Water, water, water (...if it ever dries out!)
✓ Move the hammock under the shade tree...
✓ Pinch terminal shoots on mums to encourage branching.
✓ Harvest vegetables when ripe; rotting attracts insects.
✓ Harvest lavender stems for use in bath sachets or drying.
✓ Sprinkle compost starter to speed up composting for fall soil building.

**August Garden Check List:**
✓ Take time to enjoy the beauty of your garden.
✓ Sow seeds of fall vegetables and annuals.
✓ Prune summer-blooming shrubs after flowers finish.
✓ Start planning and ordering spring-blooming bulbs.
✓ Plant garlic now for spring harvests.
✓ Sow leaf lettuce, spinach, peas and radishes for a late crop.
✓ Consider getting your soil tested in lawns, vegetable and flower gardens.
✓ Take advantage of perennials on sale at your local nursery!

It’s wonderful to have fresh, seasonal produce! Whether harvesting from your own garden or buying produce at your local grocer, take care to wash veggies and fruit to remove residual pesticides or animal contamination before consuming.

We heard many comments about the fields of bright yellow blooms this spring. The plant was most likely an invasive weed called butterweed or cressleaf groundsel, which grew uninhibited due to the excessive rainfall.

**Upcoming Events**

- **July 12**  
  The Real Dirt on WTNS 99.3  
  9:00 – 10:00 am

- **August 2**  
  First FARM Friday  
  5:00 – 7:30 pm

- **August 9**  
  The Real Dirt on WTNS 99.3  
  9:00 – 10:00 am

- **April – October**  
  Diagnostic Clinics  
  Tu. 9 am – noon; Th. 1 to 4 pm

Watch for FREE copies of “Keep It Growing” bi-monthly at: OSU Extension Office, Coshocton Public Library, West Lafayette Library, Sprout Garden Center, Garden Patch Greenhouse, Auer Ace Hardware, Clary Gardens, Buehler’s, and Warsaw ShopWise. Available FREE via e-mail or the OSU-Coshocton County Extension website https://coshocton.osu.edu/ Subscribe for home delivery via USPS for $5.00 per year.

Have a suggestion or question for “Keep It Growing”? Contact Margaret Lowe and Gail Piper, Coshocton County Master Gardener Volunteers, in care of the Coshocton County Extension Office.

**Coshocton County Extension**

724 South 7th Street, Room 110, Coshocton, OH 43812  
Phone: (740) 622-2265

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