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NORTHEAST OHIO AGRI-CULTURE **NEWSLETTER**

Your Weekly Agriculture Update for Ashtabula, Portage and Trumbull Counties June 21, 2022



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Hello Northeast Ohio Counties!

We got some hay weather here in NE Ohio over the weekend. Many hay producers took advantage and put up some quality forages! The forecast currently has another window for hay later in the week.

The decent weather also allowed most crop planting to be completed and a lot of side dressing of corn to be done. Now's a great time to start scouting for weed in your fields if you haven't done so already!

Make sure to stay hydrated in these high temperatures and have a great week!

Lee Beers **Trumbull County** Andrew Holden Ashtabula County

Angie Arnold Portage County Extension Educator Extension Educator Extension Educator

Farm Succession Planning with Second Marriages

By: Robert Moore, Attorney and Research Specialist Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-18/double-cropsoybean-production-northern-ohio

Second marriages can present a unique challenge for farm succession planning. The challenge occurs when one or both spouses have children from a prior marriage. The spouses often want a plan that will ensure the surviving spouse has adequate income for the remainder of their life but at the death of the surviving spouse they will usually want their assets to go to their children, not their spouse's children. So, the issue becomes, how to establish a plan to take care of the surviving spouse while ensuring the deceased spouse's assets go to their own children?

Consider the following example, a typical second-marriage, farm succession scenario. Mark and Mindy each have two children from previous marriages. Mark farmed his whole life and built a large farming operation prior to marrying Mindy. Mindy is not involved in the farming operation. Mark's two children plan to take over the farming operation. If Mark dies before Mindy, he wants to make sure Mindy has adequate income for the rest of her life. However, he wants his assets to ultimately go to his children and not Mindy's children.

Let's first look at what a bad plan might look like. If Mark and Mindy do not have an estate plan or a simple estate plan where everything goes to the surviving spouse then to the children, Mindy's children could end up with some or all of Mark's assets. Let's assume they each have a will that says everything to each other then to the children. If Mark dies first, all of his assets will go to Mindy. At that point, Mindy will have total control of the assets and could sell them all or leave them all to her children. For second marriages, no plan or a simple plan is usually not adequate to meet the goals of a farm succession plan.

The better plan is to use a trust. The trust can hold the deceased spouse's assets in trust for the surviving spouse's life, thus providing income. Then, at the surviving spouse's death, the assets are distributed to the deceased spouse's children. The surviving spouse never has ownership of the deceased spouse's trust assets so the assets are never in danger of ending up with the surviving spouse's children. Using the example above, Mark establishes a trust with the following terms: "Upon my death, my assets shall be held in trust for the life of Mindy. While held in trust for Mindy, my Trustee shall distribute all income to Mindy. Upon the death of Mindy, my Trustee shall distribute the assets to my children." This trust will provide income to Mindy but ultimately distribute the assets to Mark's children.

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Sometimes we may want some assets to go directly to the deceased spouse's children at death and some held in trust. This is very common for farm plans. When children will be taking over the farming operation, we may not want to tie up the operating assets in trust but instead have those go directly to the farming children. To implement this plan, the trust may have these provisions: "Upon my death, my Trustee shall distribute all my farm machinery, grain, crops and other farm operating assets to my children. The remainder of my assets, including my farmland, shall be held in trust for Mindy. While held in trust for Mindy, my Trustee shall distribute all income to Mindy. My Trustee shall offer to lease the farmland to my children for 80% of the county cash rent average. Upon the death of Mindy, my Trustee shall distribute all remaining trust assets to my children."

As the examples show, trusts can be very effective at establishing plans for second marriages. The surviving spouse can be provided with adequate income while protecting the assets for the deceased spouse's children. A simple plan or no plan can result in some or all of the deceased spouse's assets being inherited by the other spouse's children. A trust can be designed with a great deal of flexibility and creativity. Farmers in second marriages should consult with legal counsel to determine if a trust may be best for their succession plan.

Less Than Sweet Honeysuckles

By: Christine Gelley

Source: https://u.osu.edu/beef/2022/06/15/less-than-sweet-honeysuckles/

You can pick the flowers, but please destroy the honeysuckle plant!

Honeysuckle is a commonly found plant that often draws attention of passersby with its pleasantly fragrant blossoms from April to July. The sweet nectar inside its tubular flowers is edible by many animals and even people. There are over 180 known honeysuckle species in the northern hemisphere. It's beauty and fragrance lead to the introduction of many nonnative honeysuckle species to North America in the 1800s primarily for ornamental use. Despite the sweetness it adds to the air, the impacts it has on our environment are certainly not sweet.

Unfortunately, four of these introduced species are extremely aggressive in our landscapes and have created an imbalance in natural systems due to their ability to outcompete native

plants for resources. The types of honeysuckles which are damaging to these spaces are Japanese honeysuckle, which is a vining type, and three bush type honeysuckles-

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amur, morrow's, and tartarian. Some species form dense thickets of shrubs and some spread with vast creeping vines that can strangle neighboring plants. These honeysuckle species are commonly found in pastures, woodlands, reclaimed sites, and waste spaces.

Because of their invasive status in Ohio, it is every landowners' legal responsibility to control their spread. Although they can be used as a food source for some wildlife, allowing their unimpeded growth reduces the success of other plants that produce nuts and berries with greater nutritional value for birds, insects, and mammals. The reduction of native plant species leads to a reduction in the diversity of native wildlife as well.

Honeysuckles are easy to identify by their aroma and their flowers. On all four invasive species the flowers change to a buttery-yellow color as they age and resemble clusters of popped popcorn. Although color can vary by species, most often newly blooming flowers are white and grow in pairs along the plant's stems. Differences between species can be defined by closely examining the leaves, stems, and berries. The easiest way to distinguish Japanese honeysuckle from the two common vining native species- trumpet and wild honeysuckle, is to compare berry color in the fall. Japanese honeysuckle berries will appear black while trumpet and wild honeysuckle berries appear red. However, the bush type honeysuckles also have red berries, so berry color alone cannot confirm the plant's identity. In my experience, almost all the honeysuckles we encounter are one of the four invasive types.

For simplicity, recommendations for honeysuckle species are typically communicated for vining honeysuckle and bush honeysuckle, because treatment methods and identification features of the bush types are very similar. Honeysuckles reproduce by seed, which is often spread by birds, and by creeping stems and root sprouts. Thus, the most effective treatment methods for honeysuckle include removing or killing the root tissue.

Mechanical control for small infestations can be employed by digging or pulling plants up by the roots, tillage, mowing if plants are small, burning, or by using land clearing machinery in cases where large thickets have formed. Multiple herbicides provide 80% or better control of honeysuckle depending on the method of application and the time of year. These include products containing metsulfuron methyl, dicamba, 2,4-D, and/or triclopyr, while glyphosate products are only 60-70% effective on honeysuckle.

Foliar application with these products is often preferred in the late-fall because honeysuckles retain green leaves longer than most other surrounding plants making identification easier and any herbicide overspray less damaging to surrounding desirable plants. Honeysuckles can also be treated with basal bark or cut stump treatments. Basal bark treatments can be effective anytime that temperatures are above freezing, except during spring sap flow. Cut stump treatment can be effective in the

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summer, fall, or winter. Springtime treatment is least effective because herbicides are less likely to be translocated to the root tissue at that time and the plant will easily regrow from the unharmed root system.

With honeysuckle blooming now across the state, I encourage admirers to pick all the flowers they want to use in arrangements for their tables and loved ones, because every flower removed stops seed development. After enjoying the flowers, remember to return to execute the remainder of the plant in order to help preserve the environment for our beneficial natives!

Time to Start Scouting for Potato Leafhoppers in Alfalfa

By: Kelley Tilmon, Mark Sulc, Andy Michel

Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-18/time-start-scouting-potato-leafhoppers-alfalfa

We are receiving reports of near or at-threshold levels of potato leafhopper in alfalfa. As second-cut alfalfa grows, farmers should scout for resurging numbers in their fields. Younger alfalfa is more susceptible to damage at lower leafhopper numbers. If alfalfa is more than 7 days from a cut and plants are under normal stress, a good rule of thumb for a treatment threshold is: when the number of leafhoppers in a 10-sweep set is equal to or greater than the height of the alfalfa. For example, if the alfalfa is 8 inches tall and the average number of leafhoppers per sample is 8 or higher, treatment is warranted. If the average is 7 or lower, the grower should come back within a few days to see if the population is higher or lower. Vigorous alfalfa can tolerate higher numbers, and stressed alfalfa can tolerate fewer. Special attention should also be paid to alfalfa fields that were damaged by fall armyworms last year.

For a video on scouting techniques visit https://forages.osu.edu/video/scouting-potato-leafhopper-alfalfa?width=657px&height=460px&inline=true#colorbox-inline-51399545

For a video with detail on damage, ID, and control options visit https://forages.osu.edu/video/potato-leafhopper-identification-and-damage-alfalfa?width=657px&height=460px&inline=true#colorbox-inline-397628030

Our extension factsheet on potato leafhopper in alfalfa is at https://ohioline.osu.edu/factsheet/ENT-33

A great resource for other forage-related questions is the Forage Page at https://forages.osu.edu/home

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Ukraine: The Breadbasket of Europe

By: Ian M. Sheldon

Source: https://origins.osu.edu/read/ukraine-food-war-agriculture

After Russia launched its <u>invasion of Ukraine</u> on February 24, 2022, international agencies such as the Food and Agriculture Organization (FAO) of the United Nations (UN) expressed significant concern about the war's impact on global agricultural commodity markets: the disruption to Ukrainian agricultural production and exports and the expected knock-on effects to the world price of staples such as wheat and to the food security of developing countries.

While one would expect an organization such as the FAO to be informed on food questions, the sheer number of stories in the popular media suggest the wider world had been unaware that Ukraine is so important to the world's food supply.

In fact, since the <u>collapse of the Soviet Union</u> in 1991, Ukraine has returned to its prerevolutionary position as a major agricultural exporter of key commodities. It has a significant global market share by volume in wheat (10%), barley (13%), corn (15%), and sunflower oil (50%) and is ranked the fifth, second, third, and first largest exporter respectively of these crops.



Figure 1 Wheat harvest on a collective farm near Lviv, Ukraine, 1991.

Ukraine has close to 104 million acres of agricultural land, of which 79 million are currently cultivated, an area larger than Italy, making it one of the most highly cultivated countries in the world. It has several advantages in producing agricultural commodities:

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OHIO STATE UNIVERSITY EXTENSION Ashtabula, Portage and Trumbull Counties

a favorable climate and high-quality soils, half of which are the fertile *chernozem* or black soils; lower costs of production than its European and North American competitors; and access to deep seaports on the Black Sea.

Ukraine's emergence as a principal player in global agricultural markets has evolved over the past two decades. Before its breakup, the USSR was an importer of grain largely due to a decision in the early 1970s to expand the livestock sector as a means of increasing consumption of meat and dairy products.

Through subsidies, as well as price and trade controls, meat production increased by over 60% between 1970 and 1990. However, the Soviet Union could not produce enough animal feed to support its growing livestock sector and, as a result, it became a major importer of animal feed to the benefit of North American and Australian farmers. During the late-Soviet period of 1987-91, 35 million tons of grain were imported per year.



Figure 2 Soviet propaganda in Ukraine promoting the agricultural developments of the ninth Five Year Plan from 1971-1975. (Image by daves archive1)

Following the collapse of the Soviet Union and its subsequent economic transformation, expansion of the livestock sector was reversed as subsidies were largely eliminated. Russia, Ukraine, and Kazakhstan all became net meat importers. At the same time, between them they ended up exporting 36 million tons of grain per year by 2010, with Ukraine accounting for 40% of those exports.

The grain trade turnaround in Ukraine has been impressive, but during the transition in the 1990s, its agricultural sector witnessed a significant drop in production as it moved

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away from a legacy of distorted prices, inefficient collectivization, and government intervention. It was not until the late 1990s that structural reforms in the agricultural sector really began to occur, with privatization and restructuring of collective farms.

Looking back to the collapse of the Soviet Union, it would have been rather optimistic to have forecast Ukraine's rise to being a major agricultural exporter, but land reform and technological change made it possible.



Figure 3 A carriage transports hay near Ivano-Frankivsk Oblast, Ukraine in 2012.

Land reform resulted in the development of large-scale, privately-operated farms with owners investing in new technology and introducing best management practices. The net result has been increased crop area, especially for corn and oilseeds, and higher productivity.

By 2018, cereal yields had increased by almost 40%. Ukraine re-established itself as the "breadbasket" of Europe. In the language of economist David Ricardo, Ukraine is now truly exploiting its "comparative advantage."

With Russia currently controlling a large portion of Ukraine's cultivated agricultural land in the south, as well as blockading ports on the Black Sea, a significant amount of grain for export is stranded in Ukraine.

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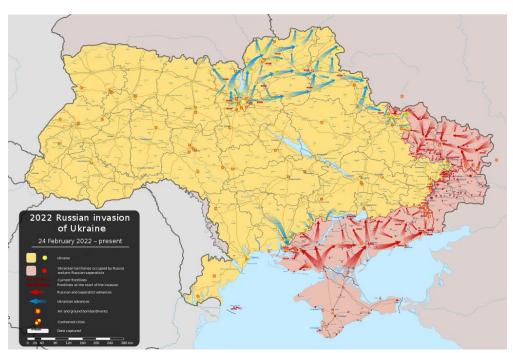


Figure 4 Map of the situation in Ukraine as of June 7, 2022. Yellow represents territory held by Ukrainian forces and red represents Russian held territory.

There has also been a significant reduction in the planting of spring crops this year. Prior to the invasion, 90% of Ukraine's exports went through the Black Sea ports at 5 million tons per month, a rate currently down to 0.5 million tons per month, most of which is being transported by rail to Ukraine's western border.

Not surprisingly a market shock of this magnitude has affected both the volatility and level of grain prices. In turn, the increase in grain prices is having a significant effect on global food prices and hence food security. The G7 countries predict 43 million people are being pushed towards famine.

The UN World Food Program estimates that the cost of buying food will rise by \$23 per month – a significant increase to those living on \$1.90 per day, the World Bank definition of poverty. Countries in the Middle East and North Africa such as Egypt, Lebanon, and Tunisia are very dependent on grain imports from both Ukraine and Russia. The risk of food price inflation could stir up political and social unrest.



Figure 5 Empty shelves at a supermarket in Germany, 2022. (Image by 7C0)

In addition, other exporting countries are adopting "beggar-thy-neighbor"-type controls on grain exports to protect their own populations that will simply intensify the food price spike.

Importantly, even before the invasion, global food markets were under pressure from the effects of the pandemic, climate change and an energy price shock. Disruption to Ukrainian agricultural production and trade is simply adding to what *The Economist* magazine recently described on its front-page as "The Coming Food Catastrophe."

Learn More:

- Joseph W. Glauber and David Laborde, "How Russia's Invasion of Ukraine Is Affecting Global Agricultural Markets," AEI, May 2022. https://www.aei.org/research-products/report/how-russias-invasion-of-ukraine-is-affecting-global-agricultural-markets/
- International Food Policy Research Institute, https://www.ifpri.org/landing/war-ukraine-blog-landing-page
- Tom Philpott, "How War in the World's Breadbasket 'Changes Everything'," https://www.motherjones.com/food/2022/03/wheat-russia-ukraine-war-scott-reynolds-nelson-oceans-of-grain/
- Franco Ordoñez, "Russians wreak havoc on Ukrainian farms, mining fields and stealing equipment"

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Automated drones could scare birds off agricultural fields

By: Washington State University. "Automated drones could scare birds off agricultural fields." ScienceDaily. ScienceDaily. 1 June 2022

Source: www.sciencedaily.com/releases/2022/06/220601092156.htm

In the future, cameras could spot blackbirds feeding on grapes in a vineyard and launch drones to drive off the avian irritants, then return to watch for the next invading flock. All without a human nearby.

A Washington State University research team has developed just such a system, which they detail in a study published in the journal *Computer and Electronics in Agriculture*. The system is designed to have automated drones available to patrol 24 hours a day to deter pest birds, like European starlings or crows, that cost growers millions of dollars a year in stolen or ruined fruit.

"Growers don't really have a good tool they can rely on for deterring pest birds at an affordable price," said Manoj Karkee, associate professor in WSU's Department of Biological Systems Engineering and the study's corresponding author. "With further refinement and industry partnerships, this system could work."

For the study, the team ran two separate tests: detecting birds and deploying drones automatically. Over a few years, Karkee's team developed a camera system and algorithm that would find birds and count them as they flew in and out of fields. The team customized very small drones and deployed them for flight tests on small plots with simulated birds.

Technologically, the system resembles drone package delivery systems. It will be several years before this particular technology would be commercially available for growers because there are still several hurdles, including making sure it works at scale, complies with federal drone regulations, and continues to deter birds even if drones are commonly flying around.

"Birds are really clever," said Karkee, who is also affiliated with WSU's Center for Precision & Automated Agricultural Systems. "They often find ways around deterrents. We don't want a system that only lasts for a few months or years before they stop being scared off."

For now, the birds are scared off just by the motion and whirring noises made by drones. But Karkee said that sounds, like distress calls or predatory bird noises, could be added. Builders could even design special drones for the job.

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"We could make drones look like predators, or have reflective propellers that are really shiny," he said. "All of these working together would likely keep birds away from those vineyards and fields. We need to research that over multiple years to make sure."

The automation research is the third in a series of three studies concerning drones and bird pests. The first showed that manually operated drones, doing random flights, successfully drive off or keep birds away from vineyards. They found that drones reduced bird counts four-fold.

The second project showed the impact driving off the birds can have on crop yield. Karkee's team followed up on the fields where they manually drove birds off. Those fields had around 50% reduction in damaged fruits.

Karkee plans to meet with growers, technology companies, and other stakeholders to start next steps on working toward a commercially available automated drone system. "It takes time," he said. "But the results so far are exciting. We're looking forward to doing more work on this project."

<u>Upcoming Extension Programs</u>

The following programs have been scheduled for NE Ohio farmers. Check back each week as more programs are added to the calendar

<u>FACT 3 Hour Session – Portage County Extension Office</u> June 22th, 2022 9AM-12PM



Fertilizer Applicator Certification Training

June 22, 2022 9 A.M. – 12 P.M.

Do you apply fertilizer to 50 acres or more for crops that are primarily for sale? If so, you are required by Ohio law to attend a training session or take a test to become certified. OSU Extension Portage County is offering a training session (no test) that will meet all certification requirements. **Pre-Registration is required a week in advance.** Cost for this training session is \$35/person and includes training materials, and handouts. To register online with a credit or debit card please visit https://go.osu.edu/portagefertilizer2022. You can also register by completing the back portion of this flyer and mail with check to the address below. Please make checks payable to OSU Extension

Location: OSU Extension Portage County, 705 Oakwood St., Suite 103, Ravenna, OH 44266

Cost: \$35/person

Contact information: 330-296-6432 or arnold.1143@osu.edu

portage.osu.edu





OHIO STATE UNIVERSITY EXTENSION

2022 Fertilizer Applicator Training Portage County

Name			
Address			
City	State	Zip	
Phone	Email _		
Number of People Attending	g:	_ X \$35/person	_

Please make checks payable to: **OSU Extension**

OSU Extension Portage County, 705 Oakwood St., Suite 103, Ravenna, OH 44266

For questions, contact Angie Arnold at 330-296-6432 or by email at arnold.1143@osu.edu





DATE: Saturday, June 25th, 2022 TIME: 8:00 AM to 4:00 PM LOCATION: Gateway Elementary School Auditorium & Outdoor Learning Center, 229 Gateway Avenue, Conneaut, Ohio 44030

Join us for a day of pollinator education and celebration in beautiful Conneaut, Ohio. The 2022 Northeast Ohio Pollinator Summer Symposium is an all-day pollinator focused event that will feature a variety of speakers, tours, and vendors. The morning sessions will cost \$10 to attend and feature two speakers, Michele Colopy, Executive Director and co-founder of LEAD for Pollinators, and Debra Knapke, author, public speaker and garden consultant known as "The Garden Sage". The afternoon session will be free to the public and offer many different activities, learning opportunities, networking, and vendors. So far, the afternoon will include Native Plant Vendors, Nature Organizations, Guided Tours, Guided Hikes, Kids Activities, Tree Planting demos, Native Tree Giveaways, Musical performances from The Nurseryman Band & Pickle Milk, and local Food Trucks, with more to come!

The Northeast Ohio Pollinator Symposium is a combined effort of the Ashtabula Soil and Water Conservation District, Ashtabula County Master Gardeners, Ashtabula County Beekeepers Association, and OSU Extension of Ashtabula County.



BLUESTONE

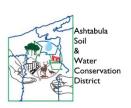




We will have water stations, so bring your reusable water bottle
For more information or to sign up, visit www.go.osu.edu/neops



Ashtabula County
Beekeepers Association



DATE: Saturday, June 25th, 2022 TIME: 8:00 AM to 4:00 PM

LOCATION: Gateway Elementary School Auditorium & Outdoor Learning Center, 229 Gateway Avenue, Conneaut, Ohio 44030

Morning Session (\$10 Admission)

8:00-8:30 – Registration and Check-In \$10 Admission if attending morning presentations.

8:30-10:00 – Michele Colopy, Executive Director and co-founder of LEAD for Pollinators, 'Understanding the Pollinator Crisis and How You Can Help'

From the four "p's" impacting honeybee health to deciphering fact from fiction, you will learn how you can take action to support managed and native pollinators vital to a sustainable agricultural and environmental landscape.

10-10:30 - Break

10:30-12:00 – Debra Knapke, author, public speaker and garden consultant known as "The Garden Sage," 'Gardening for Pollinators by Season'

Our garden pollinators – bees, butterflies, and more – are threatened on many fronts. We know that they only thrive if they have a constant food source: the right flowers at the right times. Debra will offer strategies to help you give pollinators what they need to survive and flourish.

Afternoon Session (Free to attend)

12:00 to 4:00 – Celebration of pollinators at the Outdoor Learning Center

- Native Plant Vendors Over 10 of Ohio's best nurseries will be selling quality trees, shrubs, and perennials
- Nature Organizations and Exhibitors promoting their organizations
- Guided Tours of the award-winning Outdoor Learning Center Butterfly & Pollinator Garden
- Guided Hikes led by the area's finest naturalists
- Kids Activities led by local non-profit service groups
- Tree Planting Demonstration for homeowners
- Native tree giveaway courtesy Ashtabula County Soil & Water
- Musical Groups including The Nurseryman Band & Pickle Milk
- Food Trucks will be available for lunch.

We will have water stations, so bring your reusable water bottle

Ashtabula

To attend the morning session please register on our website (Registration opens <u>April 1st</u>). If attending the free afternoon session, please RSVP on our website (Not needed if attending morning session).

www.go.osu.edu/neops



Ashtabula County
Beekeepers Association



Ever wonder why the winning entry at the flower show won?

Back by popular demand, Phyllis Mihalik, Geauga County Master Gardener and veteran flower show judge explains what catches a judge's eye. She'll offer advice on how to get the best from your flower beds and tips on how to show your entry in the best possible way. If possible, bring a sample entry/flower for hands on learning!

Date: June 28th, 2022

Time: 6:30 PM - 8:00 PM

Cost: \$5.00 collected at the door

Location: Ashtabula County Fair

Grounds - Bob Barnard Pavilion (Call for directions)

RSVP: Please call the office at (440) 576-9008 or Email Holden.155



Ashtabula County Master Gardeners

Do you have a home, yard, or garden question? Need expert advice but don't know where to turn?

Call the Ashtabula County Master Gardener Hotline!
Starting May 2nd until October 31st
Every Monday, 9 AM to Noon and every Thursday, 1 PM to 4 PM
To contact the Hotline, call 440-576-9008

Call during listed hours to speak with a volunteer or call anytime and leave a message. The hotline can be also be reached via email at Ashtabula.1@osu.edu and in person by stopping in at the Ashtabula OSU Extension Office – 39 Wall St. Jefferson, Ohio 44047.

For your home horticultural question call the Master Gardener Hotline today!





