

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula and Trumbull Counties

May 2, 2023



Field work is still paused due to weather, so we have another flower picture this week

In This Issue:

- May is Here, Planting Considerations for Corn and Soybean
- On Our Watchlist: Seedcorn Maggot and Alfalfa Weevil
- The Ohio End of Maple Season Report
- Timing of Fertilizer Application for Forages
- Ohio State Expert: Expect To See More Ticks Statewide This Season
- Mental Health Resources
- Lee's Monthly News Column

Hello Northeast Ohio Counties!

We're still waiting on the weather to break to make significant progress on planting. Oats have emerged, and the wheat has perked up after a good nitrogen application and cooler weather. The forecast looks favorable in the next few weeks to get rolling.

Have a great week!

Lee Beers
Trumbull County
Extension Educator

Andrew Holden
Ashtabula County
Extension Educator

May is here, planting considerations for corn and soybean

By Osler Ortiz, Stephanie Karhoff, and Laura Lindsay

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-12/may-here-planting-considerations-corn-and-soybean>

May is here, and the planting season will speed up with better weather in the coming days/weeks. According to the USDA-NASS report for the week ending 04/23/23, 6% of Ohio's soybean and 6% of Ohio's corn acres were planted. Relative to the 5-year average (2% planted, both crops), that suggests a quicker start for the same period before.

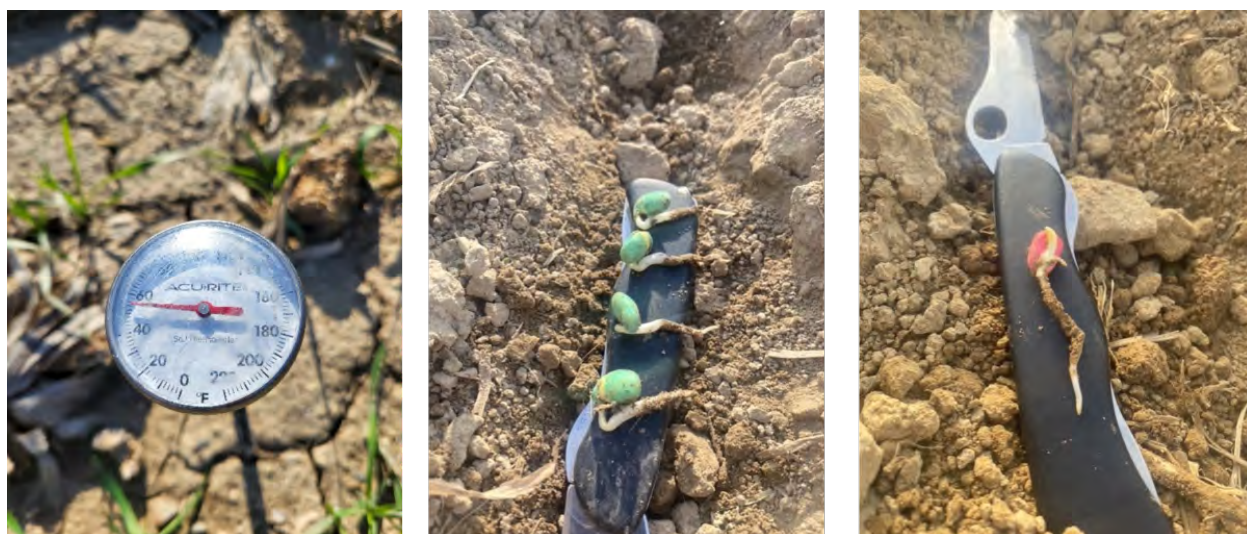


Figure 1. Soil temperature measurement and germinated soybean and corn seeds planted 1 to 1.5 inches deep in mid-April, Ohio.

Early planting dates can bring advantages and disadvantages for both crops.

Following the OSU Agronomy Guide recommendations, below is a list of key reminders/considerations for planting season this year:

1. Soil Temperatures:
 - Planting corn and soybeans after soil temperatures reach the 50°F mark is recommended.
 - We recommend measuring ½ - 2 inches below the soil surface in the early morning.
 - Generally, early planting comes with the risk of late spring frost, insect/disease losses, and slug damage. However, timely planting is important to maximize yield. In Ohio, we have measured a 0.5 bu/acre

reduction in yield for each day soybeans were planted after the end of April. Similarly, grain yield can decrease to 1.75 bu/acre per day for corn if planted after the end of April.

2. Planting Depth – Soybean:

- Plant soybeans 1 – 1.5 inches deep where tillage practices are being used.
- If in no-till fields, $\frac{3}{4}$ - 1 inch deep is recommended.
- Shallow planting may emerge more quickly, but early planting may have a higher risk of herbicide exposure.
- Higher risk of losses from soil crusting at greater planting depths if soil crusting is a concern.
- Check planting depth consistency.

3. Planting Depth – Corn:

- Plant corn 1.5 – 2 inches deep.
- Adjust depth for field and weather conditions as needed.
- Greater planting depths may delay emergence.
- Shallower depths may cause poor root development, with nodal roots not developing properly and potentially leading to “floppy” or “rootless” corn.
- Check planting depth consistency.

4. Seeding Rate – Soybean:

- For May planting dates, 100,000 – 120,000 plants per acre is recommended as the target plant population in soybean.
- The seeding rate in soybean is recommended to be ~25% higher than the target plant population.
- It is recommended to factor in crop value and seed cost to determine the optimal economic seeding rate.

5. Seeding Rate – Corn:

- Depending on the hybrid and production environment, recommended plant populations (or final stand) have ranged from 24,000 to 34,000+ plants per acre.
- Adjusting the seeding rate to factor in germination and emergence losses is necessary.
- To calculate the planting rate (seeding rate) in corn, consider the following formula: $Planting\ Rate = \text{Desired Population per Acre} / (\text{Germination} \times \text{Expected Survival})$

Example: target stand at harvest – 30,000 plants per acre
Seed tag indicates 95% seed germination
Assume 97% survival (3% plant mortality)
 $Planting\ rate = 30,000 / (0.95 \times 0.97) = 32,556$ seeds per acre

As planting season picks up, we wish the best for everyone. If you have any questions about planting or outside of planting, do not hesitate to contact us. Follow planting and other Agronomic Crop Updates here (C.O.R.N. Newsletter) or visit the [Ohio State Agronomy YouTube](#) channel.

Resources:

OSU Agronomy Guide, 15th edition: [Ohio Agronomy Guide](#)

Soybean Research & Information Network for Early Season Soybean Management from the Science for Success Team: <https://soybeanresearchinfo.com/science-for-success/early-season-management/>

On Our Watchlist: Seedcorn Maggot and Alfalfa Weevil

By Kelley Tilmon and Andy Michel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-12/our-watchlist-seedcorn-maggot-and-alfalfa-weevil>

There are two insect pests in particular that we're wary of at the moment: Seedcorn maggot (in corn and soybean) and alfalfa weevil.

Seedcorn maggot is most likely to be a problem in fields where cover crops or other green vegetation has been disked in, or manure applied, a handful of days previous to planting. The nice rotty smell attracts the adult flies to lay eggs in the soil, which hatch into the maggots that can feed on seeds and seedlings of corn and soybean. Insecticidal seed treatments typically provide good protection against the maggots. However, if these crops were planted early into cold soils the seeds will be slow to germinate and there is a greater likelihood that the seed coating will wash off before germination. These products are very water-soluble which is how they work – they are taken up by the germinating seed and transported through the fluid transport system of the plant to be incorporated into the new growth. But if the seed sits in the soil too long before germinating, much of the product may be lost into the surrounding soil instead of being incorporated



Image of seedcorn maggot by Mariusz Sobieski, Bugwood.org

into the plant for its protection from maggots and other early season pests. Stubbornly cold soil temperatures in April may have delayed germination for early plantings, which is why we Seedcorn maggot is on our watchlist. There is no rescue treatment once damage begins, but replanting is always an option if stand loss is severe enough.

Alfalfa weevil is on our watchlist too. Cold temperatures last week may have slowed feeding but the temperatures haven't been cold enough to kill the weevil larvae. We are concerned that as soon as it warms they will speed up their feeding again with a vengeance. Scout your fields now, not when excessive feeding grabs your attention. Keep in mind that at a certain point, early harvest is preferable to treatment. General scouting and management information was provided in last week's newsletter: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-11/alfalfa-weevil-update-%E2%80%93-believe-it-or-not-heat-units-are>

The Ohio End of the Maple Season Report

By: Les Ober, ANR Extension Educator

I think everyone would agree the 2023 maple season was anything but normal. It started with a fierce snowstorm in late December and ended with a mixture of warm and cold days. If you are a maple syrup producer this is what you are supposed to be looking for. However, this winter was either too warm, too cold, or just right. Depending on where you live, and when you tapped, it was either all good or all bad. Once again, Mother Nature had the final say.

In Ohio the season kicked off early despite a surge of extremely cold weather at Christmas time. Warm weather arrived shortly after New Year's Day. The one thing Ohio producers have learned, when it looks and feels like tapping weather, you tap. This year many producers in both Northern and Southern Ohio started tapping in January. Those tapping in early January would see strong runs into February, but after that the sap flow declined into March. The weather in February largely determined the success of your season. Southern Ohio Producers saw the sap flow and the sap quality end around the first week of March. The Jet Stream kept the cold air in the north and the abnormally warm temperatures in the southern part of the state. This kept the sap flowing in the north, with strong runs into St. Patrick's Day and beyond. For the calendar tappers, who traditionally waited until mid-February to tap, the season was average at best. The result was the best season in decades for the Northern Ohio Producers and one of the worst years in recent memory for producers in Southern Ohio. The amazing thing was that the quality held up remarkably well for a season with so much variability.

The 2023 season saw a lot of Golden Delicate and Amber being produced. The flavor was excellent for the most part until the warm weather ended the season. Even then a

lot of lighter grade syrup was made right up until the last boil. The biggest problem was filtering, excessive niter made it very difficult to filter. One of the reasons for outstanding yields was the good sugar content of the sap, averaging close to 2%. Once again, the best yields were achieved on high vacuum tubing systems, but many bucket/bag producers had a good season as well.

Geauga County is the number one maple syrup producing county in Ohio. Geauga County Producers have a reputation for making good tasting light colored syrup. This year the county lived up to its reputation in a big way. Production records were set across the county. It was not uncommon to see a half gallon up to one gallon of syrup per tap being produced. Be assured that there will be no shortage of Pure Maple Syrup in Ohio, especially Northeastern Ohio.

Timing of Fertilizer Application for Forages

By Lee Beers

Source: <https://www.farmanddairy.com/columns/timing-of-fertilizer-application-for-forages/768423.html>

Here in northeast Ohio, many welcomed the unusually warm and dry weather we've had in April. The dry weather allowed for anhydrous application, tillage, planting oats, and some courageous folks even planted soybeans. Pastures and forages made good use of the sunshine and warm temperatures to push out some green growth. If you're like me, you were not expecting the rapid growth of hay fields just yet and are a bit behind on fertilizing. It's not too late to make those fertilizer passes.

Nitrogen

Nitrogen (N) application should be made during initial green-up to supply adequate nutrients for first cutting, so you should get N on your fields as soon as possible to get the most return. Total yearly application rates of 100 to 180 pounds of actual N provide good economic returns for cool season grass and mixed grass forage stands.

Highly productive stands may require higher rates, but a good rule of thumb is to apply approximately 45 pounds of N for every dry ton of forage expected. The total rate should be split into multiple applications to match the production of your forage stands. Typically, your first cutting grass crop will have the highest yield, therefore it will require more nitrogen than a subsequent crop.

Legume forages like alfalfa and clover can fix nitrogen from the atmosphere and pure stands will not need nitrogen fertilizer. If your older alfalfa stand is more grass than alfalfa, you may see a benefit of nitrogen application if grass makes up 70% or more of the field area.

Phosphorus

Phosphorus (P) fertilizer should be applied based on soil test results. If your soil test levels are in the maintenance range of 30-50 ppm, it is a sound strategy to apply crop removal rates to maintain phosphorous in your forage stands. Each ton of dry forage removes approximately 12 pounds of P_2O_5 , or 23 pounds of MAP (11-52-0). Using this method is relatively straightforward and will provide adequate nutrients for crop production.

Potassium

Potassium (K) fertilizer should also be applied based on soil test results. Studies from Wisconsin have found that there is no benefit to alfalfa or forage stands from excess K in the soils, and yields plateau when soil test K is between 120 and 140 ppm. When applied in excess, plants can take up K that does not result in an increase of yield — often called luxury consumption. Luxury consumption of K in the forage can result in high K levels of the harvested forage. This can cause milk fever in dry and recently fresh cows.

Managing the timing and rate of K fertilizer applications can help reduce luxury consumption. It is often suggested to apply potash (0-0-60) fertilizer after first cutting, and/or the last cutting in the fall and not more than necessary. Research from Purdue has demonstrated that fall K applications can help increase the winter hardiness and survival of alfalfa.

Forages are heavy users of K, and for every ton of dry forage harvested, you are taking approximately 49 pounds of K_2O . That equates to 81 pounds of potash fertilizer that needs to be replaced. Many dairy farms rely on manure as a primary K fertilizer, but dairy manure does not typically have the concentrations of K to adequately replace what is usually removed during harvest. Potassium deficiencies may limit yields if additional fertilizer is not added to maintain proper soil test levels.

Fertilizer prices have dropped significantly in recent months but will remain a significant expenditure for your farm. Soil testing is always recommended to maximize crop production without applying more nutrients than necessary. Purchasing soil tests from your local ag retailer or extension office is a good investment with excellent returns.

Ohio State expert: expect to see more ticks statewide this season

By Tracy Turner

Source: <https://cfaes.osu.edu/news/articles/ohio-state-expert-expect-see-more-ticks-statewide-season>

COLUMBUS, Ohio—Backyard lovers, campers, outdoors enthusiasts, and pet owners beware. If you thought last year's tick season was bad, just wait. This year has the potential to be even worse.

Ticks—and the diseases they carry—are on the rise in Ohio and will likely continue to increase. There has been a steady increase in tick-vectored disease numbers in Ohio each year, and officials don't expect to see a reverse of the trend, said Tim McDermott, an educator with Ohio State University Extension, the outreach arm of The Ohio State University College of Food, Agricultural, and Environmental Sciences (CFAES).



*Photo of nymph and adult female Asian longhorned ticks, top view.
Photo: Centers for Disease Control and Prevention*

“While you can encounter a tick during any season, spring marks the beginning of heavy tick season, and this year, the tick population statewide is expected to continue to rise,” he said.

McDermott said there are multiple factors contributing to the increase in tick-vectored disease, including global climate change, tick range expansion, and increasing numbers of wildlife living in close proximity to people.

“Ticks are extraordinarily adaptable and can travel on host animals,” he said. “Ticks expand when their habitat range expands due to global climate change. They take advantage of what they can take advantage of to move to new spaces. So now, every year going forward has the potential to be bad, and you should go into each tick season thinking about how you can keep you and your family tick-safe.”

For example, 20 years ago, the American dog tick was the only tick in Ohio that was of medical importance to humans, companion animals, and livestock, McDermott said. Now, there are five ticks in Ohio that are of concern: the American dog tick; the blacklegged tick (also known as the deer tick); the Lone Star tick; and

most recently, both the Asian longhorned tick and the Gulf Coast tick, both of which were first confirmed in Ohio in 2020.

“In fact, we are also up to seven counties in Ohio with Asian longhorned tick as of right now, including Franklin County,” he said. “We will be closely monitoring to see if we add any new Ohio counties with Asian longhorned ticks in 2023.

“We have seen the first case of disease from this tick in Ohio when a beef cow was vectored theileria, a protozoal parasite, last summer.”

With the rising tick population comes the risk of contracting tickborne illnesses such as anaplasmosis, babesiosis, Rocky Mountain spotted fever, and Lyme disease. And in some cases, in some people, Lone Star ticks can cause an allergy to red meat after the person is bitten by the tick.

“In Ohio, ticks are most active from April through September, although they can be active any time of the year,” he said. We have had positive cases of Lyme disease diagnosed in every month of the year in Ohio.

“It’s not just walking out in the woods when you can encounter ticks. Some can do fine in a pasture, hayfield, or even your backyard lawn,” he said. “I have already had two ticks on me while working in my demonstration garden at Waterman Agricultural and Natural Resources Laboratory.”

McDermott said that while the risk of encountering ticks in Ohio is high, and the number of ticks that are carrying diseases is high, there are things people can do to keep themselves safe. One way to control ticks is through proper management of their habitat.

“Keep your yard mowed, and do not allow brush or leaf litter to accumulate,” he said. “Remove brush, tall weeds, and grass in order to eliminate the habitat of rodents and other small mammals, which serve as hosts for ticks as well as serve as prime tick habitat.”

To prevent tick bites when in areas where ticks might be active, McDermott recommends that you do the following:

- Wear light-colored clothes, including a long-sleeved shirt tucked into your pants and long pants tucked into your socks or boots.
- Apply a tick repellent according to label instructions.
- Wear footwear and clothing that have been treated correctly with permethrin. These can be purchased through many outfitters and clothing companies.
- Do frequent tick checks of your body while outside, and do a thorough inspection at shower time.
- Protect your pets with an anti-tick product recommended by a veterinarian.

- Keep dogs on a leash, and avoid allowing them into weedy areas.

If you find a tick attached, do the following:

- Do not crush or puncture it.
- Grasp the tick as close to the skin as possible using pointy tweezers or a tick removal tool. Pull straight up and out with steady, even pressure.
- Thoroughly wash the bite site, your hands, and the tweezers or removal tool with warm soap and water.
- Place the tick in a container with rubbing alcohol or hand sanitizer. Record the day the tick was likely to have attached.
- Take the specimen with you to a healthcare professional if you develop flu-like symptoms, a rash, or anything that is unusual for you.

“If you think you might have been exposed to a tick bite, contact your physician right away to get a diagnosis,” McDermott said. “It’s very important to receive the appropriate treatment as soon as possible.”

More information on ticks can be found at *Ticks and Tick-Borne Diseases*, and *Asian Longhorned Ticks in Ohio*, both of which are Ohioline fact sheets. Ohioline is OSU Extension’s free, online information resource and can be found at ohioline.osu.edu. More information related to tick safety can also be found at u.osu.edu/bite/ticks.

Mental Health Resources:

- **Ashtabula County Mental Health and Recovery Services Board** is committed to bringing Ashtabula County residents high quality, evidence-based mental health and substance abuse treatment and prevention services. More information can be found at <https://www.ashtabulamhrsboard.org> or by calling 440-992-3121.
- **Community Counseling Center** is a non-profit behavioral health provider focused on engaging the community in recovery. Services include Case Management, Children's Day Treatment Program, Counseling, Medication-Assisted Treatment, Prevention Services, Psychiatry, Supported Employment, and Substance Use Disorder Treatment. More information can be found at <https://cccOhio.com/> or by calling 440-998-4210.
- **Signature Health** primarily serve Medicaid and Medicare patients, with a sliding fee scale available to eligible individuals without insurance. Their services range from counseling to alcohol and drug recovery programs, to primary care, to infectious disease services. More information can be found at <https://www.signaturehealthinc.org/locations/ashtabula/> or by calling 440-992-8552.

- **NAMI** plays an active role in providing support, education, and advocacy throughout Ashtabula County. NAMI utilizes volunteers to teach classes, facilitate support groups, provide referral services to local resources, and create awareness and understanding of mental illness. More information can be found at <https://namiashtabula.org> or by calling 1-800-950-NAMI (6264).
- **Ohio Mental Health Resource Guides by County** can be reached by visiting <https://go.osu.edu/countyresourceguide>
- If you are experiencing suicidal thoughts, call, or text the **National Suicide and Crisis Lifeline** by dialing 988. You can also chat at 988lifeline.org.

Lee's Monthly News Column

Hello Trumbull County! Mother Nature has been teasing us a bit this year with warm, and then cold temperatures. I've written about this before, but weather patterns like we are experiencing this year increase the risk of loss for our fruit and ornamental crops. What makes the risk exceptionally high this year was the extreme warm and dry period the week of April 10th. Temperatures in the 80's and about 10 days without rain forced many of our plants to not only break dormancy but resume normal growth for spring.

In 2016, my first spring Ohio, we had an unusually warm February. There was some concern about our crops then, but unless high temperatures (70+) persist for multiple weeks, most plants still won't take the bait to resume growth in February. This is because soil temperatures are still cold, or maybe even frozen, and there are still more hours of darkness in a day than sunlight. Both are significant cues that plants use to know when it is time to grow. It is also likely for temperatures to drop below freezing relatively soon after the warm temperatures, essentially stopping any plant growth.

In contrast to February 2016, the warm spell in April of this year included days longer than night, soils without frost, and soil temperatures above 50 degrees Fahrenheit all followed by temperatures above freezing. If there was a check list of requirements to begin spring growth, we checked them all in April.

I've noticed most apple and peach trees, blueberries, and a few strawberries are in bloom across Trumbull County. Flower tissue is the most sensitive to freezing conditions. Freezing temperatures cause ice crystals to form within the cells of the plants, which poke holes in the cell membranes. When this happens all the water spills out of the cells, and this is why plants appear water soaked two to three days after frost damage. Sometimes the damage from the frost is not so visible.


Flowers attract pollinators in many ways, including UV reflection from flower petals. When petals are damaged, by frost, insects, or other mechanical means, pollinators are

less likely to visit the flowers resulting in poor pollination. To the human eye, the flowers may look fine, but to a honeybee they might as well be garbage. Dissecting flowers to look at the ovules a few days after a frost is a reliable method to determine the severity of frost damage. Michigan State University has a great publication with pictures showing frost damage in different fruit crops. You can find a copy of the publication on our OSU Extension Trumbull County Facebook page.

This leads us to the risks the weather poses this week. Overnight frosts on Monday and Wednesday have the potential to cause significant damage to our regions fruit crops, and even the lilacs in your garden. Temperatures at 28F will lead to approximately a 10% loss of apple blossoms, and 90% loss can be expected at 26F. We reached 28F in Champion on Tuesday morning, and lower lying areas may have experienced colder temperatures. When we include loss of pollination with the physical damage to flowers, we will not get the full picture of damage for several weeks when fruit begins to develop.

Until then, if low temperatures are expected you can protect your plants from the frost by covering them loosely with old sheets, towels, burlap, or any other fabric lying around. If you are going to drape a cloth over your shrubs, be sure that any wind will not cause it to flap against the flowers. If you have any questions give us a call at the OSU Extension Office in Trumbull County, or drop off samples to our office at 520 West Main St, Cortland, OH 44410.

Stay safe!

 THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES		
Lee Beers Trumbull County Extension 520 West Main Street Cortland, OH 44410 330-638-6783 beers.66@osu.edu trumbull.osu.edu	Andrew Holden Ashtabula County Extension 39 Wall Street Jefferson, OH 44047 440-576-9008 holden.155@osu.edu ashtabula.osu.edu	Angie Arnold Portage County Extension 705 Oakwood St., Suite 103 Ravenna, OH 44266 330-296-6432 arnold.1143@osu.edu portage.osu.edu
<small>CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: http://go.osu.edu/cfaesdiversity.</small>		



PROGRESSIVE AGRICULTURE SAFETY DAY®

Saturday, June 3, 2023 from 9:30 a.m. – 2:00 p.m.

This years event will be at the:

Ashtabula County Antique Engine Club

This **FREE** event is for children ages 4 and up.

Families are welcome to stay!

Registration will be in person only and begin at 9:00 AM

A packed lunch is required for all participants



Topics Include

Water/Pond Safety Chemical Safety
PTO Safety Animal Safety
Equipment Safety Grain Safety

Sign up for shirt sizes here



For additional information contact
Rachel Kalas: 440-789-9131 or
asht.co.pafsd@gmail.com

BUNGE **Nutrien** **CHS** **TC Energy**



FARM CREDIT

ENBRIDGE



Cargill

CORTEVA
agriscience





THE OHIO STATE
UNIVERSITY
EXTENSION

DATE:

**Sunday, May 7th
2:00- 4:00 pm**

TOUR LOCATION:

We will meet in the barns across from

**7533 Noble Rd.
Windsor, OH 44099**

Women in Ag- Ashtabula County

Farm Tour: Marshy Meadows Grass-fed Beef Farm

Join us for this tour of a woman owned beef operation. Mardy Townsend raises Hereford-Angus cross Black Baldies on a grass-fed, rotational grazing system. Come learn about her journey into agriculture, the reasons for raising grass-fed animals, and how she manages to build the organic matter in her soil year after year.

Rain or Shine! Please wear mud boots and be prepared to walk!

PLEASE RSVP to Julie Wayman at wayman.31@osu.edu or 440-576-9008



Women in Agriculture

Ashtabula County Farm Tours

Beef, a Backyard Garden, & Berries

Join us for one or all of this 3-part series featuring women owned farms!

Mardy Townsend
Marshy Meadows

Alexa Sandella
Backyard Garden

Lois Wright Morton
Outwash Terrace

Save the date! Rain or shine!

Please wear boots, bring water, and be prepared for walking

Windsor, OH

Sunday, May 7th
from 2-4 p.m.

Kingsville, OH

Sunday, July 30th
from 2-4 p.m.

Pierpont, OH

Sunday, Sept. 10th
from 2-4 p.m.

To RSVP, call or email Julie Wayman 440-576-9008 or wayman.31@osu.edu



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

ashtabula.osu.edu

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