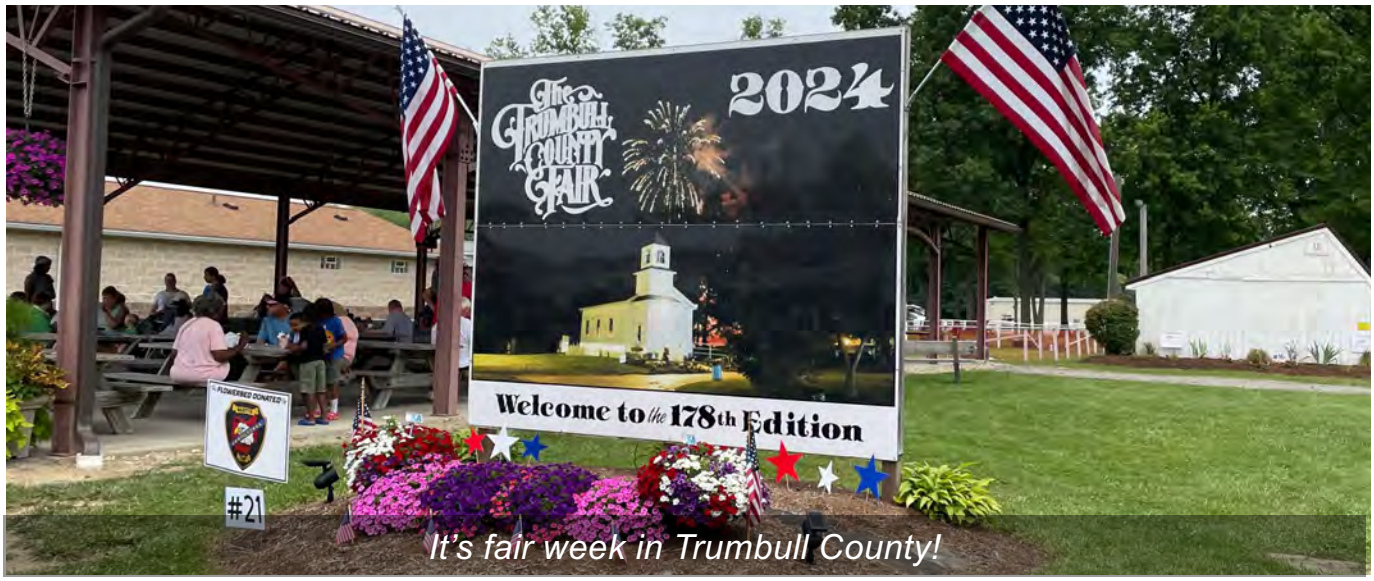
CFAES

OHIO STATE UNIVERSITY EXTENSION

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for Ashtabula and Trumbull Counties

July 9, 2024



It's fair week in Trumbull County!

In This Issue:

Hello Northeast Ohio Counties!

The Trumbull County Fair is happening this week! Stop out to see all the displays, talk with the 4-H youth about their projects, and get one of the best milkshakes in Ohio. You can find the full schedule of events at trumbullcountyfair.com

Much of our region is approaching or currently in moderate drought conditions. The remnants of hurricane Beryl may provide some moisture, but not likely enough to make up for the deficit.

Stay safe and see you at the fair!

Lee Beers
Trumbull County
Extension Educator

Risk of Corn Grain Contamination with Vomitoxin in Ohio in 2024: July 8 Projection

By Jason Hartschuh, Pierce Paul, Stephanie Karhoff
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2024-22/risk-corn-grain-contamination-vomitoxin-ohio-2024-july-8

Mycotoxins, specifically deoxynivalenol (DON), commonly referred to as vomitoxin, has become a significant problem for Ohio corn growers. What was once considered an every-ten-year problem, has now become a yearly challenge in some sections of the state. DON contamination of grain is often associated with Gibberella ear rot (GER), a disease caused by the fungus *Fusarium graminearum*. The Ohio State University Cereal Pathology Lab led by Dr. Pierce Paul has been researching and developing weather-based models to predict when weather conditions are favorable for DON contamination of corn grain. The current models have an 80% accuracy at predicting when conditions are favorable for grain to be contaminated with at least 1 ppm DON, meaning that based on data collected so far, the models are correct about 8 out of 10 times at predicting whether DON contamination will reach or exceed 1 ppm.

The fungus that produces DON infects corn ears during pollination while silks are wet (R1 growth stage). Each week, we will be updating the models and share estimates of the chance of grain in various parts of the state being contaminated with at least 1 ppm DON. This information will be made available through the C.O.R.N newsletter. Predictions generated by these models should only be applied to corn pollinating during the model's prediction model's prediction window, which is specific for each area of the state and field within that area. As a result, each week predictions will likely change for the corn that is pollinating based on changes in weather conditions. Similarly, during any given week, predictions will likely change from one field to another based on hybrid maturity, planting date, and weather condition, all of which affect the silking/pollination window.

It is important to remember that weather conditions are only one part of the disease triangle, and that all three sides of the triangle are needed for disease development, and in this case, for DON contamination to occur. The other two sides of the disease triangle are a susceptible corn hybrid and fungal spores being present at the time and growth stage when weather conditions favor infection,

disease development, and toxin production. Consequently, the actual level of DON contamination will vary from field to field, depending on the susceptibility of the hybrid planted, tillage, and crop rotation, as well as weather conditions. Under favorable weather conditions, a highly susceptible hybrid planted no-till into corn stubble will likely be contaminated with DON well above 1 ppm compared to a tilled field of a moderately resistant hybrid planted after beans.

DON model predictions are based on data from publicly available weather stations located at OSU-CFAES research farms and airports around the state. The two weather factors used to make predictions are temperature and relative humidity as number of hours within certain ranges or above certain thresholds. These factors can vary significantly over a few miles or with changes in elevation. **Based on weather data collected from the Piketon (Pike Co), Jackson (Jackson Co), Eastern (in Noble Co), Western (Clark Co), and Columbus CFAES weather stations, corn fields in those areas of the state that reached the R1 growth stage over the weekend or will reach that growth stage during this week have more that an 80% change of yielding grain contaminated with ≥ 1 ppm DON. However, this prediction does not guarantee lower or higher DON than levels set by grain buyers. The current models were not developed to predict whether DON will be 2, 5, 8, or 10 ppm, they only predict whether DON will be ≥ 1 ppm, but not how much greater.**

Use predictions as one piece of information to help guide your DON management decisions. You should also use information about the susceptibility of your hybrid (see our previous CORN newsletter article for more on hybrids reaction to DON: https://agcrops.osu.edu/newsletter/corn-newsletter/2024-06/osu-deoxynivalenol-don-resistance-screening-program-2024) and production practices when making management decisions. Again, when weather conditions are favorable as suggested/predicted by the models, fields of highly susceptible hybrid planted no-till after corn will likely yield grain with DON above 1 ppm compared to a tilled field of a moderately resistant hybrid planted after beans.

Effective management of DON requires the combination of multiple strategies. The model prediction given above can help you determine if a fungicide for DON management would be beneficial. Of the many fungicides available for corn disease management, two are considered to be the most consistently effective at suppressing GER and DON. These two products are Proline and Miravis Neo. They have shown the best results when applied when silks are still wet (early- to mid-R1). The fungicide must penetrate the canopy and reach the corn silks when they are still wet to be effective. Applications made after silks are dry and brown are considerably less effective at reducing DON.

Hybrid resistance is critical even with a fungicide application in achieving low DON levels at harvest. A hybrid with partial resistance will have lower DON at harvest than a susceptible hybrid when both have received a fungicide application for DON management. Extended harvest periods allow more time for DON production, particularly if harvest is delayed by wet conditions. An additional tool is to scout fields that pollinate during high-risk times for GER and plan to harvest those fields early.
These models are the first step towards the development of a prediction tool that would be available to growers to run daily to assess DON risk at their field location during pollination. The current model development has been generously supported by the Corn Marketing Board through your corn check-off.

Estimates of the risk of DON contamination of corn grain are provided at no cost within the state of Ohio. The model developers, The Ohio State University, and funding agencies cannot guarantee prediction accuracy. Users should always consult extension educators and state and field specialist when making disease and mycotoxin management decisions.

Pasteurization inactivates highly infectious avian flu in milk, study suggests

Source: American Society for Microbiology
(via https://www.sciencedaily.com/releases/2024/07/240703131735.htm)

In March 2024, dairy cows in Texas were found to be infected with highly pathogenic avian flu, or H5N1 bird flu, in the first known case of the virus spreading to cattle. Since then, H5N1 has been found in about 200 animals -- and 3 people -- across 12 states, according to the Centers for Disease Control and Prevention. The virus was soon detected in raw milk, leading researchers to investigate whether dairy products pose a risk to consumers.

"How far is the virus getting through?" asked Erica Spackman, Ph.D., a virologist at the U.S. Department of Agriculture (USDA) in Athens, Ga. To find out, she and her collaborators tested nearly 300 milk products from 132 processors.

The researchers found no infectious virus in the samples, Spackman and her collaborators report this week in the *Journal of Virology,* a journal of the American Society for Microbiology.

"Milk is safe," she said. "Just like bacterial pathogens that occur in milk, or other viruses that could occur in milk, the sanitation processes that are in place are getting rid of the pathogens."

The milk processing pipeline includes multiple layers of protection, Spackman said. Microbiological surveillance of milk products can identify pathogens, and milk from cows with mastitis or other disease conditions does not enter the food supply.

Finally, heating during the pasteurization process can destroy H5N1 and other, more common bacterial pathogens.

Bird flu primarily infects and spreads among migratory birds and can be transmitted to domestic poultry, but the virus has been detected in other animals as well.

Recently, those have included cats, dogs and juvenile goats, as well as a polar bear in Alaska and elephant and fur seals in the Antarctic.

However, the discovery of H5N1 on dairy farms in March was a surprise -- the virus had never been found in dairy cattle before.

Soon after the discovery, diagnostic testing revealed that an infectious form of the virus was present in raw milk, suggesting the virus passes from cow to milk.

That finding led the U.S. Food and Drug Administration and the USDA to investigate whether pasteurization effectively eliminated risks posed to consumers.

Between April 18 and April 22, 2024, researchers used real-time PCR to analyze 297 samples of pasteurized retail milk products, including 23 types of products, collected from 17 states.

"We did a viability assay to detect live virus and went as sensitive as we could to get even the least little bit of virus, but couldn't detect anything," Spackman said.

Using PCR, the researchers did identify viral genetic material in 20% of samples.

"It looks like the virus is just totally inactivated," she said.
Spackman said the new findings "give us reassurance that what we have been doing -- pasteurization -- is keeping us safe from what we don't know about."

Gifting Strategies to Reduce Federal Estate Taxes: A Guide for Farmers

By Robert Moore
Source: https://farmoffice.osu.edu/blog/thu-06272024-1212pm/gifting-strategies-reduce-federal-estate-taxes-guide-farmers

The landscape of federal estate taxes is poised for significant change in 2026, with the potential reduction of the federal estate tax exemption on the horizon. Currently, the exemption stands at $13.61 million per person for 2024. However, without congressional intervention to extend or make permanent the current exemption, it is expected to drop to around $7 to $7.5 million, adjusted for inflation, in 2026. This looming reduction brings a sense of urgency for farmers and individuals with substantial estates to consider strategic planning to mitigate future tax liabilities.

The OSU Agricultural & Resource Law Program has released a comprehensive bulletin, "Gifting to Reduce Federal Estate Taxes". This bulletin delves into the nuances of gifting as a viable strategy to reduce federal estate taxes. It explores various gifting options, their implications, and the potential benefits and drawbacks associated with each approach.

Types of Gifts and Their Implications

The bulletin categorizes gifts into two primary types: annual exclusion gifts and lifetime credit gifts.

1. **Annual Exclusion Gifts:** These are gifts of up to $18,000 per person, per year, to an unlimited number of recipients. This type of gift is not subject to federal gift tax for either the giver (Giftor) or the receiver (Giftee). For example, a grandparent can gift $18,000 to each of their ten grandchildren, amounting to $180,000, without incurring any federal gift tax. This strategy is particularly effective for those slightly over the estate tax exemption threshold, as multiple small gifts can cumulatively reduce the taxable estate.
2. **Lifetime Credit Gifts:** These are larger gifts that exceed the annual exclusion limit and count against the federal estate tax exemption. For instance, if a mother gifts a farm worth $1,018,000 to her daughter, the excess amount over $18,000 (i.e., $1,000,000) reduces the mother's estate tax exemption. While no immediate gift tax is due, the exemption is decreased by the value of the large gift. This strategy can be advantageous

for gifting appreciating assets, as future value increases occur outside the Giftor's estate, effectively reducing potential estate tax liabilities.

Strategic Gifting to Optimize Estate Planning

The bulletin outlines several strategies to optimize estate planning through gifting:

1. **Annual Exclusion Gift Strategy:** By consistently making annual exclusion gifts, individuals can gradually reduce their taxable estate. This method is beneficial for those with many potential gift recipients and can effectively lower estate value over time. However, for those with significantly higher estate values, this strategy may have limited impact due to the relatively small amount per gift.
2. **Lifetime Credit Gift Strategy:** Making large lifetime credit gifts before the 2026 exemption reduction can be a powerful tool. For example, a high-net-worth individual might gift $13.62 million in 2024, capturing the higher exemption before it potentially decreases. This preemptive action can save heirs millions in future estate taxes, although it requires careful consideration of the Giftor's financial security post-gifting.
3. **Appreciating Assets:** Gifting assets expected to appreciate significantly can maximize the benefit of lifetime credit gifts. By transferring these assets out of the estate, future appreciation is not subject to estate taxes, providing a substantial tax-saving advantage.

Considerations and Potential Drawbacks

While gifting can offer substantial benefits, it is not without potential drawbacks. The bulletin emphasizes the importance of understanding these implications:

- **Loss of Stepped-Up Basis:** Gifting eliminates the possibility of a stepped-up basis at death, potentially increasing capital gains tax for the Giftee upon the sale of the gifted asset.
- **Loss of Control and Income:** Gifting requires relinquishing control and ownership of the asset, which can be difficult for those reliant on the income generated by the asset.
- **Risk of Mismanagement:** The risk of the Giftee mismanaging or losing the gifted asset to creditors is a concern, which can sometimes be mitigated through business entities or irrevocable trusts.

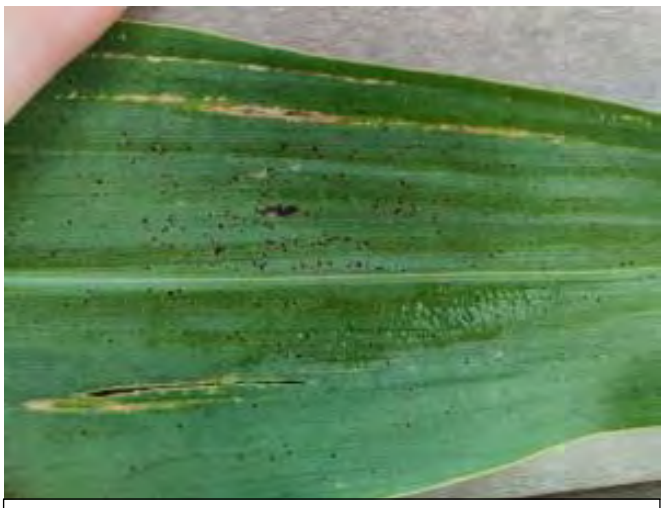
The OSU Agricultural & Resource Law Program's bulletin provides valuable insights into the strategic use of gifting to reduce federal estate taxes. As the potential reduction of the estate tax exemption looms, understanding and implementing these strategies can significantly impact future tax liabilities for farmers and individuals with substantial estates. However, due to the complexity and potential consequences of gifting, it is crucial to seek professional legal and tax advice before taking action.

For a detailed discussion on gifting strategies and their implications, access the full bulletin "Gifting to Reduce Federal Estate Taxes" at farmoffice.osu.edu.

Early Reports of Tar Spot in Indiana and Michigan – What to Scout for

By Stephanie Karhoff and Pierce Paul
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2024-21/early-reports-tar-spot-indiana-and-michigan-—-what-scout

Tar spot has been found in Indiana, Michigan, and other parts of the Midwest already this growing season, so what does this mean for Ohio growers?



Signs of tar spot include small, raised black spots or stromata.

Now is the time though to monitor fields and make informed management decisions. Corn planting dates were highly variable this year and current growth stages range from anywhere between V2 and R1. Tar spot was observed this past week in the "Battle for the Belt" research plots at the Western Agricultural Research Station in South Charleston, Ohio. The corn was planted on March 25 and was at R1 (silking) growth stage. Tar spot incidence and severity on the ear leaf was low. For more information, please see this week's Battle for the Belt Update by clicking here.

When scouting for tar spot, prioritize earlier planted fields with a history of tar spot, and especially those that are irrigated as this can increase disease risk. Focus first on the lower canopy and look for small, raised black spots called stromata. Early in the season, insect frass can easily be confused with tar spot stromata. If the spot can be scratched or rubbed off with a wetted finger than it is not tar spot.

We also recommend using the Tarspotter disease forecasting app to determine if weather has been favorable for the development of the tar spot fungus. Moderate temperatures (64-73˚F), relative humidity greater than 75%, and short periods of leaf wetness are required for infection.

Fungicide applied between tasseling (VT) and R3 (milk) when disease is active has the most consistent return on investment based on research in Ohio and Indiana. Products with multiple modes of action are most efficacious against tar spot as well. You can find a fungicide efficacy table for corn diseases at https://cropprotectionnetwork.org/publications/fungicide-efficacy-for-control-of-corn-diseases.

If you suspect tar spot, please send an image or sample to the OSU Plant and Pest Diagnostic Clinic (ppdc@osu.edu). Leaf samples should be placed in a zip-seal bag as soon as it is collected and mailed to the address below using next-day or two-shipping option. If hand-delivering sample, please coordinate with Dr. Rotondo at 330-263-3721 or rotondo.11@osu.edu ahead of time.

OSU Plant and Pest Diagnostic Clinic
ATTN: Francesca Rotondo Department of Plant Pathology
Selby Hall – Room 234
1680 Madison Avenue
Wooster, OH, 44691

Ohio Farm Custom Rates 2024

By Barry Ward, Eric Richer, John Barker, and Amanda Bennett
Source: https://farmoffice.osu.edu/blog/mon-07012024-900am/ohio-farm-custom-rates-2024

Farming is a complex business and many Ohio farmers utilize outside assistance for specific farm-related work. This option is appealing for tasks requiring specialized equipment or technical expertise. Often, having someone else with specialized tools perform tasks is more cost effective and saves time. Farm work completed by others is often referred to as “custom farm work” or more simply, “custom work”. A “custom rate” is the amount agreed upon by both parties to be paid by the custom work customer to the custom work provider.

Custom rates increased for the majority of field operations in 2024 as compared to surveyed rates in 2022 but the increases did vary by operation. Examples include an increase of 6% for Planting Corn (30 Inch Rows with Fertilizer Application),

5.6% for Harvesting Corn (Combine, Grain Cart, Haul Local to Farm), 21% for Spraying (Self-Propelled Sprayer, Crop Protection Chemicals) and 24% for Field Cultivator.
New field operations in this year's survey and summary include drone/UAV application and cover crop seeding.

Ohio Farm Custom Rates
The "Ohio Farm Custom Rates 2024" publication reports custom rates based on a statewide survey of 333 farmers, custom operators, farm managers, and landowners conducted in 2024. These rates, except where noted, include the implement and tractor if required, all variable machinery costs such as fuel, oil, lube, twine, etc., and labor for the operation.

Some custom rates published in this study vary widely, possibly influenced by:

- Type or size of equipment used (e.g. 20-shank chisel plow versus a 9-shank)
- Size and shape of fields
- Condition of the crop (for harvesting operations)
- Skill level of labor
- Amount of labor needed in relation to the equipment capabilities
- Cost margin differences for full-time custom operators compared to farmers supplementing current income

Some custom rates reflect discounted rates as the parties involved have family or community relationships. Discounted rates may also occur when the custom work provider is attempting to strengthen a relationship to help secure the custom farmed land in a future purchase, cash rental or other rental agreement. Some providers charge differently because they are simply attempting to spread their fixed costs over more acreage to decrease fixed costs per acre and are willing to forgo complete cost recovery.

Charges may be added if the custom provider considers a job abnormal such as distance from the operator's base location, difficulty of terrain, amount of product or labor involved with the operation, or other special requirements of the custom work customer.

The data from this survey are intended to show a representative farming industry cost for specified machines and operations in Ohio. As a custom farm work provider, the average rates reported in this publication may not cover your total costs for performing the custom service. As a customer, you may not be able to hire a custom service for the average rate published in this factsheet.

It is recommended that you calculate your own costs carefully before determining the custom rate to charge or pay. It may be helpful to compare the custom rates reported in this fact sheet with machinery costs calculated by economic engineering models available online. The following resources are available to help you calculate and consider the total costs of performing a given machinery operation.

- Farm Machinery Cost Estimates, available by searching University of Minnesota.
- Illinois Farm Management Handbook, available by searching University of Illinois farmdoc.
- Estimating Farm Machinery Costs, available by searching Iowa State University agriculture decision maker and machinery management.

Volatility in diesel price may sometimes cause concern for custom rate providers that seek to cover all or most of the costs associated with custom farm operations. The approximate price of diesel fuel during the survey period (January – April 2024) ranged from $3.20 - $3.50 per gallon for off-road (farm) usage. As a custom farm work provider, if you feel that your rate doesn't capture your full costs due to fuel price increases you might consider a custom rate increase or fuel surcharge based on the increase in fuel costs.

The complete "Ohio Farm Custom Rates 2024" publication is available online at the Farm Office website:
https://farmoffice.osu.edu/farm-management/custom-rates-and-machinery-costs

Planning for Future of Farm Workshop to be held in Cortland, Ohio

The OSU Extension offices in northeast Ohio invite you to participate in a **Planning for the Future of Your Farm** workshop on August 22, 2024 from 9:00 a.m. to 4:00 p.m. at the Trumbull County Extension office in Cortland, Ohio. This workshop is designed to help farm families learn strategies and tools to successfully create a succession and estate plan that helps you transfer your farm's ownership, management, and assets to the next generation. Learn how to have the crucial conversations about the future of your farm.

Click here for registration flyer

Workshop topics include: Developing Goals for Estate and Succession; Planning for the Transition of Control; Planning for the Unexpected; Communication and Conflict Management; Legal Tools and Strategies; Developing Your Team; Getting Your Affairs in Order; and Selecting an Attorney.

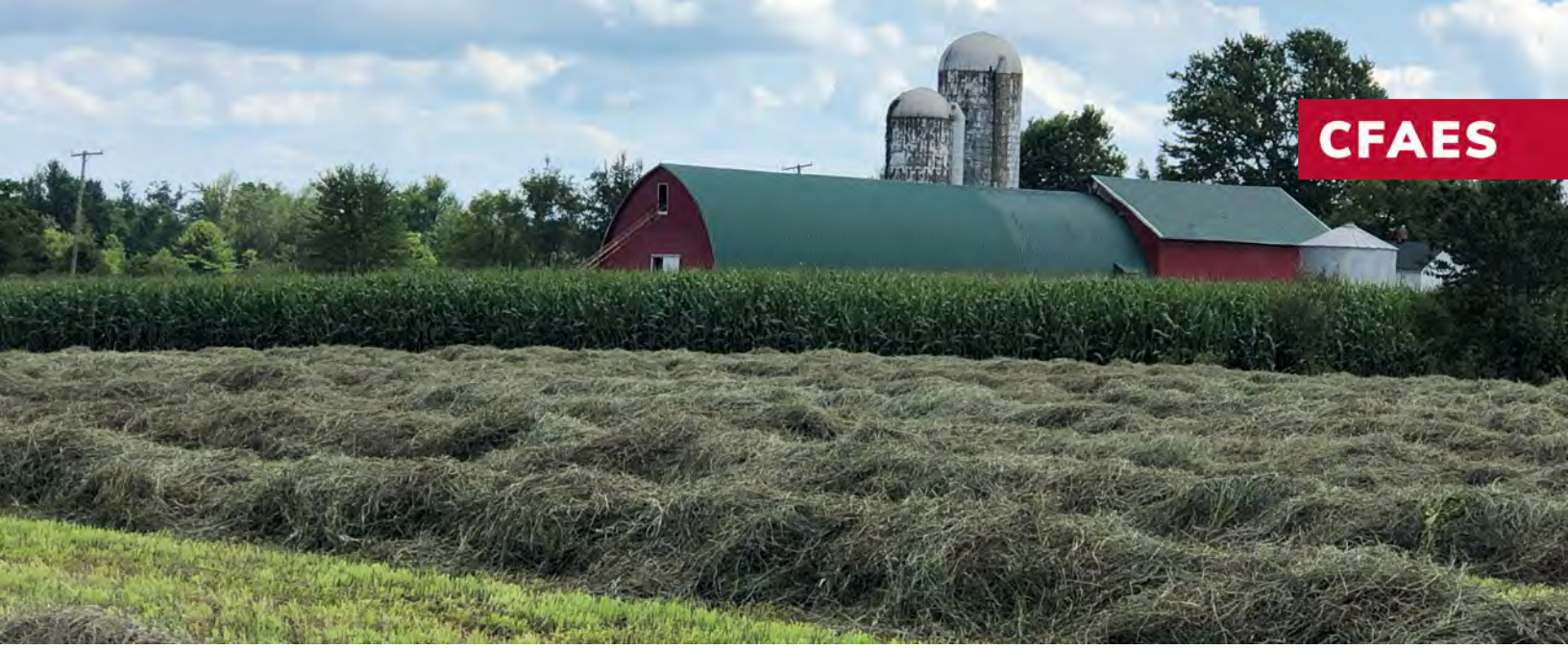
Our teaching team will help answer the following questions and much more!

- Who should we leave the farm to?
- How do we prepare the next generation to manage the farm in the future?
- How can we overcome family communication issues?
- How do we value sweat equity?
- What is the difference between a will and trust?
- Will I lose my farm to estate taxes or to the nursing home?
- What do we need to do to be better prepared to meet with an attorney and other professionals?
- What resources does OSU Extension have to assist us as we develop our plan?

Event sponsors include OSU Extension – Ashtabula, Trumbull & Geauga Counties, Farm Financial Management & Policy Institute and the Hertzer Family Trust. The featured speakers will be David Marrison (OSU Extension Field Specialist, Farm Management), Robert Moore (Attorney, OSU Agricultural and Resource Law Program) and Lee Beers (OSU Extension Educator, Agriculture and Natural Resource)

The registration fee is $25 per person which includes lunch, refreshments, and course materials. Registration deadline is August 16, 2024. This program is made possible at a discounted rate due to the generous support from the Hertzer Family Trust.

More information can be obtained by contacting Lee Beers at the Trumbull County Extension office at 330-638-6738 or via email at beers.66@osu.edu.



DATE:
August 22, 2024

TIME:
9:00 a.m. to 4:00 p.m.

LOCATION:
Trumbull County Extension
520 West Main Street
Cortland, Ohio 44410

OHIO STATE UNIVERSITY EXTENSION

Planning for the Future of Your Farm Workshop

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For more information, visit **go.osu.edu/farmsuccession**.

EVENT SPONSORS: OSU Extension - Ashtabula, Trumbull & Geauga Counties, Farm Financial Management & Policy Institute and the Hertzer Family Trust

THE OHIO STATE UNIVERSITY
EXTENSION

College of Food, Agricultural, and Environmental Sciences
Extension / Farm Office
farmoffice.osu.edu

Maintaining Farm Family Legacy Through Farm Transition and Estate Planning

Our teaching team will help answer the following questions and much more!

- *Who should we leave the farm to?*
- *How do we prepare the next generation to manage the farm in the future?*
- *How can we overcome family communication issues?*
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David Marrison, OSU Field Specialist, Farm Management

Robert Moore, Attorney, Agricultural and Resource Law Program

Lee Beers, Ag & Natural Resources Extension Educator

Planning for the Future of Your Farm Workshop Registration Form

Name(s) of Attendees_____
Phone Number_____ Email address_____
Address_____
City_____ State_____ Zipcode_____
County_____

Registration Fee Required

$25 Base Registration $_____
Number of Attendees x _____

Total Due **$_____**

Pre-registration is requested as seats are limited. Registration deadline is August 16, 2024.
Mail form and check payable to OSU Extension
Trumbull County Extension Office
520 West Main Street
Cortland, Ohio 44410