Hello Northeast Ohio Counties!

Harvest is rolling along quickly. Dry weather has provided fantastic harvesting conditions and about by the end of today more than half of the soybeans will likely be harvested. Yields are about average and considering the weather this summer that is pretty good.

Corn shelling will start shortly and that will be a great opportunity to evaluate your different varieties for yield and look for tar spot. Tar spot is widespread throughout our region so take note of the severity and hybrid to assist your seed selection for next year.

Stay safe and have a great harvest!
Tar Spot Spotted in NE Ohio Corn Fields
By: Andrew Holden and Lee Beers

A new fungal disease has been found in many corn fields throughout Northeast Ohio this fall. Tar spot is a foliar disease that occurs when the spores of the fungus Phyllachora maydis land on susceptible corn varieties during cool, humid, and wet condition. Tar spot was first observed in the United States in Northwest Indiana in 2015. Since then it has spread across the corn belt and into Southern Canada. (See Fig. 1)

Climate and weather conditions near Lake Erie are favorable for tar spot. Tar spot was first found in Ohio in 2018 near the Michigan border, and has been detected in more counties each year. Now in 2022 we are finding it in Ashtabula and Trumbull Counties in many fields. The fungus likely was present in NE Ohio in past years, but cool, wet conditions in the late summer provided an opportunity for the disease to flourish. Tar spot has been found in fields that received a fungicide application between VT and R2 growth stages. Most of the cases of in Ashtabula and Trumbull Counties are not severe and should not limit yield. There are a few fields with more severe symptoms, but because the disease arrived so late the damage should be minimal.

What does tar spot look like?
For this disease the name is very literal, with visual symptoms appearing as if someone took a paintbrush, dipped it in tar, and flung it toward a leaf, leaving many raised black dots scattered across the corn leaf, and sometimes event the stalk and ear. The black dots can vary in size and shape and are slightly raised on the leaf surface. Tar spot cannot be rubbed off, unlike rust or other fungus. You can see tar spot on both green and dry corn leaves. Occasionally, the spots will have a lesion form around them, creating a ‘fish-eye’.

Corn with tar spot found in Trumbull County.
What is the impact of tar spot?
Like previously mentioned, the tar spot found in the area showed up fairly late in the season, and in mild amounts. Hopefully we do not see any yield reduction from tar spot this year. Corn stage at time of infection will determine the severity of yield loss. Purdue Extension found that in the worst infected fields, before dent, yield loss could range from 20 to 60 bushels per acre.

What can be done to impede tar spot?
Now that tar spot is prevalent in the area, producers are promoted to take steps to prevent the fungus from building up to help mitigate possible yield loss. The first step that can be taken is selecting a resistant hybrid. Many seed companies offer tar spot resistant ratings that can aid in choosing a variety. Hybrid disease resistance is your first (and usually best) approach to reducing your risk for yield loss due to disease. Second, maintain a good crop rotation. Planting crops other than corn allows for the decomposition of the corn residue, and therefore destroying the habitat for the fungus to survive on. Finally, fungicide can be applied to corn to help lessen tar spot severity. While there is still not an abundance of research on fungicide treatments for tar spot, the current studies show that multiple modes of action have been able to reduce the disease. Michigan State has found that the best application timing is likely between VT/R1 and R3. Like most fungicide applications, timing is critical, and it can be difficult to determine when the best time to apply is. The university of Wisconsin has a Tarspotter app that can be used to forecast tar spot and decide when to apply fungicide, if any. Producers are encouraged to track the disease and scout their fields in order to make effective decisions for fungicide timing.

What do I do if I find tar spot?
Keep a close eye on your corn crop here in NE Ohio. If you believe you have found tar spot and would like to confirm it, please contact your local OSU Extension office. If you’re in Ashtabula call or email Andrew Holden at 440-576-9008 or holden.155@osu.edu. If you are in Trumbull County, contact Lee Beers at 330-638-6783 or beers.66@osu.edu.

If tar spot is present in your field, or in your area, preventing yield losses next year starts with selecting a resistant hybrid and crop rotation. Then, during the season scouting and tracking the disease and applying fungicide if necessary. If you have questions about hybrids, crop rotation, or which fungicides are most effective against tar spot, call the Extension Office for more information.

Resources:
Additional Resources:
Tarspotter, the Corn Tar Spot Disease Forecaster App:  
https://ipcm.wisc.edu/apps/tarspotter/

Fungicide effectiveness charts:  

******

Andrew Holden is an Agriculture & Natural Resources Extension Educator for Ohio State University Extension. Andrew can be reached at 440-576-9008 or Holden.155@osu.edu

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu

---

Fig. 1) Current map of tar spot in U.S. and Canada. Soon to be expanded.  
Source: https://corn.ipmpipe.org/
Business Entity Discounts
By: Robert Moore
Source: https://farmoffice.osu.edu/blog/thu-10062022-1146am/business-entity-discounts

Business entity discounts can be a valuable tool in farm succession planning. This strategy provides a method of reducing the values of assets that will be in an estate without the need for gifting. Discounting can be used with any kind of entity; the key is to draft the entity’s controlling agreement to maximize the discount.

Discounting is based on two important factors: lack of marketability and lack of control. Lack of marketability reflects the disinterest that an outside buyer would have in buying into a closely held entity. Lack of control reflects the inability of an owner to singularly control the entity. These two factors overlap somewhat but they essentially measure the discount that would be needed to make an arms-length buyer interested in buying an ownership interest in the entity.

The amount of discount is scrutinized by the IRS. Owners of entities have abused the discounting strategy in the past as a scheme to transfer ownership without incurring gift taxes or estate taxes. A typical discount for an ownership interest that is fully subject to lack of marketability and lack of control may be around 35%. Discounts in excess of 35% may be challenged by the IRS as excessive. The discount is usually determined by an accountant or other financial professional that has expertise in determining business entity discounts.

Discounting can best be explained using examples. Let’s say Mom and Dad own 400 acres of farmland valued at $3 million. If Mom and Dad were to die with the land titled in their names, the land would be valued at $3 million in their estates. The land is valued at its full value because either Mom or Dad can cause the land to be sold at any time through partition and they would presumably receive full, fair market value.

Now, let’s say Mom and Dad transfer the land into an LLC. The LLC’s operating agreement includes the following provisions:

- Land may not be sold without majority consent of ownership
- Money cannot be distributed out of the LLC without majority consent
- The LLC cannot be dissolved without majority consent
- Ownership may only be transferred to the descendants of Mom and Dad

Additionally, Mom and Dad gift a 0.5% ownership interest to each Son and Daughter. After the gift, Mom and Dad are each 49.5% owners of the LLC. Now, neither Mom nor Dad can singularly control anything that happens with the LLC. Due to the lack of marketability and lack of control created by the terms of the LLC operating agreement
agreement and the minority ownership (49.5%), Mom and Dad can expect to receive around a 35% discount on their ownership.

Using discounting, Mom and Dad have reduced the value of their estate by over $1 million by setting up an LLC and transferring their land to the LLC. At a 40% estate tax rate, Mom and Dad have potentially saved Son and Daughter over $400,000 in estate taxes. Entity discounts can same many thousands, if not millions, of dollars in estate taxes for some farm families.

The primary downside of using a business entity for discounts is the cost of establishing and maintaining the LLC. An LLC will need to be established, an operating agreement drafted and deeds executed to transfer the land to the LLC. Perhaps the initial startup and deed expense will be around $5,000. The LLC will need to maintain a bank account to collect rent and pay expenses such as real estate taxes. Additionally, the LLC will be required to file a tax return each year. While there are startup and maintenance costs for the LLC, the savings in estate taxes usually makes establishing business entity discounts and easy decision.

It should be noted that some presidential administrations have sought to eliminate the entity discounts for family-held businesses. So, the business entity discount can be abolished with a stroke of a pen at any time. However, as long as discounts are available, they can be a very valuable tool in farm transition planning.

For those farmers and landowners who may be concerned about estate taxes, a business entity may be a relatively simple but effective tool to reduce the value of the estate. An attorney should be included in the process of establishing the LLC to be sure that the necessary provisions are included in the operating agreement to maximize the discount. Also, a tax advisor should be consulted to ensure a thorough understanding of the tax ramifications of establishing an LLC.

October is here, harvest considerations for corn grain
By: Osler Ortez, Alexander Lindsey
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-34/harvesting-and-handling-ear-rot-affected-corn

Despite a late start in many areas on the 2022 crop season, during the last days of September and early October, combines started to roll around the state. On October 3 (week ending 10/02/2022), USDA reported 7% of corn harvested from grain in Ohio (slightly behind the 10% harvested last year and the 5-year average for this time of the year). You can access their full report here. On the same report, >90% was dented, and >50% was mature. According to this report, corn condition was rated 64% good to excellent, which held close to reports earlier in the growing season.
Despite 2022 being another challenging year, yield forecasts (see Table 1) show a high probability of near or above long-term average yields in Ohio (between 207 and 250 bu/Ac for the analyzed locations). Certainly, this would apply if adequate conditions persisted in the growing season. Fields planted too early, too late, or affected by other factors (e.g., replanting, soil crusting, dry periods, pest, disease) would not be expected to yield that well.

Whichever is the case, the field season is not complete until harvest is done. Here is a list of considerations as corn harvest decisions are being made:

**Physiological Maturity**
The R6 growth stage happens approximately 55 to 65 days after silking (R1 stage). Physiological maturity comes right after the milk line in the kernel has disappeared. Also, it is important to note that physiological maturity technically happens before one can see the black layer in the kernel tips. However, checking for the presence of the black layer inside kernels is the common method used to verify that the R6 stage has been achieved. The R6 stage is the time when maximum kernel dry weight is reached. The moisture of kernels is close to 30-35 percent, but this can be variable, depending on factors like the genetics and the environment.

**Field drydown**
Various factors can drive slow or delayed grain drydown of mature corn grain before harvest, resulting in higher grain moisture at harvest. Harvesting higher moisture grain brings more drying costs (and time). Overriding observations on the in-field grain drydown of mature corn grain from Indiana included (Nielsen, 2013):

- **Weather conditions (sunshine, rainfall, temperatures, wind) strongly influence drydown.**
- **Plant characteristics (husk coverage, husk thickness, number of husk leaves) can also influence drydown.**
- **Early grain maturation usually means faster drydown.**
- **Later grain maturation usually means slower drydown.**

In general, the combination of warmth, sun, and lower wind speeds all encourage drydown compared to colder temperatures, cloudy skies, and low wind or high humidity/rain. Conditions favorable for drying tend to be present earlier in the fall rather than later.
**Plant standability, grain quality, and harvest losses**

Although the crop can be physiologically mature, non-favorable conditions can compromise the standability of stalks or lead to ear rots (decreasing grain quality or marketability). Several years back, an Ohio study evaluated the effects of plant populations (24K, 30K, 36K, and 42K plants/Ac) and three harvest dates (early-mid October, November, and December) on the agronomic performance of four hybrids (with different maturity and stalk quality). The results of this study provided insights into yield losses, changes in grain moisture, and stalk quality associated with delaying harvest.

Key findings of this work:

- Nearly 90% of the yield loss associated with delayed corn harvest occurred when delays extended beyond mid-November.
- Grain moisture decreased by nearly 6% between October and November harvest dates. Delaying harvest after early to mid-November achieved almost no additional grain drying.
- Higher plant populations increased grain yields when harvest occurred in early to mid-October. When the harvest was delayed until mid-November or later, yields declined at plant populations above 30K/acre.
- When the harvest was delayed, hybrids with lower stalk strength ratings exhibited greater stalk rot, lodging, and yield loss. An early crop harvest of these hybrids eliminated this effect.
- The highest increase in stalk rot incidence occurred between October and November harvest dates. Stalk lodging increased mainly after early mid-November.
- Harvest delays had little or no effect on grain quality characteristics such as oil, protein, starch, and kernel breakage.

**Corn Drydown Calculator**

Iowa State University has made available an online corn drydown calculator that can help users to estimate grain drydown in fields located in the Corn Belt region. Access the tool here: [https://crops.extension.iastate.edu/facts/corn-drydown-calculator](https://crops.extension.iastate.edu/facts/corn-drydown-calculator)

**A Field Loss Calculator for Field Drying Corn**

Additionally, the University of Wisconsin developed a Harvest Field Loss Calculator Excel spreadsheet. That can be accessed here: [http://corn.agronomy.wisc.edu/Season/DSS.aspx](http://corn.agronomy.wisc.edu/Season/DSS.aspx). The Excel file allows calculating the costs of harvesting versus letting the crop stay in the field and harvest later. The spreadsheet includes scenarios for higher drying costs versus grain losses during field drying. It also accounts for elevator discounts and grain shrink.
Resources
Field Drydown of Mature Corn Grain (Nielsen, 2013):  
Field Drying and Harvest Losses in Corn (Thomison, 2017):  
Grain Fill Stages in Corn (Nielsen, 2021):  
https://ohioline.osu.edu/factsheet/plpath-cer-04  
Harvesting and Handling Ear Rot-Affected Corn (Hartschuh and Paul, 2022):  
https://agcrops.osu.edu/newsletter/corn-newsletter/2022-34/harvesting-and-handling-ear-rot-affected-corn

Another Article about Fall Herbicides?!  
By: Alyssa Essman  
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-35/another-article-about-fall-herbicides

In the past couple of weeks, Mark Loux and Mark Sulc gave us some good reminders about the value of fall applied herbicides. They can be read here: Our Annual Article to Nag about Fall Herbicides and Cressleaf Groundsel and AVOID A NIGHTMARE NEXT SPRING!!!!!!!.

We are persistent about this because fall applications are the most effective treatment for overwintering species. Winter annuals like marestail, cressleaf groundsel, and purple deadnettle are at the beginning of their life cycle and are most susceptible to herbicides at this growth stage. Biennials like wild carrot and poison hemlock that are ending the first year of their life cycle are sending nutrients down to the roots in preparation for winter. Systemic herbicides (glyphosate, 2,4-D) applied now will translocate down to the roots along with these nutrients and achieve a better kill than waiting until spring. In the spring these plants resume growth, start sending nutrients back up to the leaves, and are less susceptible to control efforts. This also applies to simple perennials like dandelion and creeping perennials like Canada thistle.

The above articles and links within provide fall herbicide recommendations for forage systems and following harvest in corn and soybean. Another consideration this time of
year is the management of overwintering weeds in wheat production. The weeds listed above interfere with the early development and growth of wheat and other small grains. Burndown products labeled for use prior to wheat emergence include glyphosate, Gramoxone and Sharpen. Recommendations for burndown applications in no-till wheat were covered in this article: Life In A Time of Glyphosate Scarcity – Part 1 - Burndown In No-Till Wheat. Fields that don’t receive a burndown before planting or crop emergence also have the option of postemergence herbicides. Efficacy ratings for postemergence herbicides in small grain production can be found here: Weed Response to Postemergence Herbicides in Small Grains. Some products of note are those that control wild garlic. Contamination of wild garlic aerial bulblets in harvested wheat and other small grains can cause substantial dockage.

2022 Agricultural Policy and Outlook Conference

Tuesday, November 15, 2022
8:30am-3:00pm

Location: Nationwide & Ohio Farm Bureau 4-H Center (2201 Fred Taylor Dr., Columbus, OH 43210)

The Agricultural Policy and Outlook Conference is the premier annual forum related to Ohio’s agricultural and food industry, covering issues important to producers, agribusinesses, and elected officials.

Faculty experts from the Department of Agricultural, Environmental, and Development Economics will discuss:

- Energy Market Outlook (Brent Sohngen)
- Ohio Farm Income Outlook (Ani Katchova)
- Labor Market Outlook (Margaret Jodlowski)
- Inflation and Macroeconomic Outlook (Mark Partridge)
- International Economic Outlook (Ian Sheldon)
- Grain Market Outlook (Seungki Lee)

We are pleased to welcome Scott Irwin (Laurence J. Norton Chair of Agricultural Marketing and Director of the farmdoc Program at the University of Illinois, Urbana-Champaign) and Aaron Wilson (Ag Weather and Climate Field Specialist at The Ohio State University Byrd Polar & Climate Research Center) who will examine "More land or higher yields: How do we increase US agricultural output?".

This in-person event is limited to 100 registrants. All guests must register individually. Register HERE.
Registration and refreshments begin at 8:30am. Lunch is included. There is no charge for this event.

**EXTENSION TALK - Livestock Trailer Rollover for First Responders to be Offered 10/22 AND Farm Business Planning 101 Series on 11/2**

By: Andrew Holden

Hello Ashtabula County! October is here and harvest has begun! We have had some decent weather to start off the month that has allowed local farms to start harvesting soybeans. We are just starting to hear reports, but so far yields seem to be coming in around average. With so many factors throughout the year, like the extremely dry summer we had, you don’t truly know what yields you have until harvest is done. I wish all the producers in the county a safe and bountiful harvest. And encourage everyone to be safe on the roads and around equipment this time of year.

I’d like to thank everyone who attended the Ashtabula County Cattlemen’s Twilight Tour on the 5th. We had over 100 people in attendance to listen and learn at Stackhouse Farm. I also want to give the upmost thanks to the Stackhouse family for welcoming everyone to their facility, and to the Mezinger’s at Cherry Valley Processing for providing everyone a fantastic meal! We look forward to seeing you at the Beef Banquet on November 5th for the renowned prime rib dinner. Tickets are available for purchase from the OSU Extension Office or any of the Directors for $30.

Today, I wanted to share details on another livestock educational program, one that is specifically for first responders dealing with livestock trailer accidents. I also am announcing a farm business management program that will be offered next month online!

*****

The Ashtabula County Extension Office will be offering the NE Ohio Livestock Trailer Rollover and Emergency Training for First Responders on October 22nd. This event is free to any first responder, veterinarian, or anyone in the livestock industry interested in emergency response training. The event will be held at the Bloomfield Livestock Auction. Lunch will be served following the program, compliments of NE Ohio Farm Bureaus. If you would like to attend, please RSVP by October 17th to secure your spot and email Andrew Holden at Holden.155@osu.edu or Call 440-576-9008.

Livestock accidents add a level of complication to an already challenging situation. The objective of the Bovine Emergency Response Plan (BERP) is to develop a framework that local law enforcement, first responders, emergency management, and veterinarians can use to more appropriately address accidents involving cattle transport vehicles. This
framework is rigid enough to cover all the critically needed areas but flexible enough to fit the needs of local municipalities. Join OSU Extension Beef Specialist, Dr. Stephen Boyles and Ashtabula County Ag Educator, Andrew Holden, for this important 3-hour training that will help make NE Ohio more prepared in the case of livestock emergencies.

******

Whether you are new to farming, or in need of a refresh on some key farm management topics, the Ashtabula & Trumbull County Extension Offices are offering a Farm Business Planning 101 series. This three-part online series will address common questions for new farmers related to taxes, budgets, and liability. Participants will also be able to ask questions related to their operations after each session.

This program will be offered online via Zoom on the three evenings of November 2nd, 9th, & 16th. Each date will feature 2 speakers and run from 6:30 PM to 8:30 PM. You can attend one, or all three sessions to fit your schedule and interests. The sessions will be recorded for viewing on your own time. Cost for each session is $25, or you can register for all three sessions for $60.

‘Creating A Business Plan’ with Andrew Holden from Ashtabula County Extension and Using Enterprise Budgets with Eric Richer from Fulton County Extension will be offered on November 2nd to assist with budgeting for your farm. The November 9th program will focus on protecting your farm through LLC’s and insurance. This session will feature ‘LLC’s and Liability’ with Robert Moore, Attorney at the OSU Ag Law Program and ‘Intro to Insurance’ with Tony Nye from Clinton County. The final session on November 16th will feature ‘An Intro to Farm Taxes’ with Barry Ward, OSU Income Tax Director and ‘Farm Service Agency (FSA) Programs’ with Jenna Pollard, County Executive Director for Ashtabula, Geauga, & Lake Co.

To register for all or any one of these programs, visit WWW.GO.OSU.EDU/FBP22 For more information, please email Holden.155@osu.edu, call 440-576-9008, visit ashtabula.osu.edu, or trumbull.osu.edu.

******

Andrew Holden is an Agriculture & Natural Resources Extension Educator for Ohio State University Extension. Andrew can be reached at 440-576-9008 or Holden.155@osu.edu

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu
2022 Ashtabula County Plat Book Available

The updated 2022 version of the Ashtabula County Plat Book is available for $25 + tax at Ashtabula County - OSU Extension Office located at 39 Wall Street in Jefferson. This full color edition makes the perfect gift for the hunter, hiker or outdoorsman! Traditional landownership maps by township and range, a landowner index for easy cross referencing, and other county information are all available in the new plat book. Premium wall maps are also available. Visit mappingsolutionsGIS.com for digital versions of Ashtabula County landowner maps. Mapping Solutions is the publisher. Proceeds from the sale of the books benefit the 4-H program.

Limited 2019 books are also available ON SALE for $10 OFF the original price of $25 + tax. For more information contact the office at (440) 576-9008.
November 5th, 2022 - 7:00 p.m.
Expo Building at the Fairgrounds
127 N Elm St, Jefferson, OH 44047

Tickets for the prime rib dinner are $30 per person. The dinner is dine-in only. Ticket includes your 2021 membership into the Ashtabula County Cattlemen’s Association. The proceeds from the Beef Banquet will fund the ACCA Student Scholarship, as well as multiple educational events throughout the year. This year’s banquet will include live entertainment, ticket drawing prizes, and a great Prime Rib Dinner!

To purchase/reserve banquet tickets, call or text a director:
David Nye 330-559-9846   Bryan Elliot 330-240-5533
Evan Flack 440-221-1668   Kate Cole 440-850-1600
Garret Love 419-566-6570   OSU Extension 440-576-9008
October 20
Berlin, Ohio
9 a.m. - 2 p.m. Berlin Farmstead Restaurant
4757 Township Rd 366, Berlin, Ohio

A free lunch will be provided.

Questions? Contact Austin Geist, ageist@nfo.org or call 641-750-7871.

Offering today's marketing and farm management tools to improve your profits.

Program sponsored in part by:
Livestock accidents add a level of complication to an already challenging situation. The objective of the Bovine Emergency Response Plan (BERP) is to develop a framework that local law enforcement, first responders, emergency management, and veterinarians can use to more appropriately address accidents involving cattle transport vehicles. This framework is rigid enough to cover all the critically needed areas but flexible enough to fit the needs of local municipalities. Join OSU Extension Beef Specialist, Dr. Stephen Boyles and Ashtabula County Ag Educator, Andrew Holden, for this important 4-hour training that will help make NE Ohio more prepared in the case of livestock emergencies.

Date: Saturday, October 22nd, 2022
Time: 9:00 AM – 2:00 PM, with lunch noon to 1:00
Location: Bloomfield Livestock Auction
2211 Kinsman Rd, N. Bloomfield, OH 44450
Cost: Free for First Responders
RSVP: Please register by October 17th to secure your spot
Email Andrew Holden at Holden.155@osu.edu or Call 440-576-9008
Ashtabula & Trumbull County Extension Presents

Does it Pencil Out?
Farm Business Planning 101

Whether you are new to farming or just need a refresh on some key farm management topics, look no farther than this Farm Business Planning 101 series. This three-part series will feature a wide range of management topics and offer time for audience participation and questions. Depending on your needs and interest, you may choose any of the programs offered in the series or save and attend all three. Sign up today to secure your spot!

**November 2nd**
- **Creating A Business Plan** with Andrew Holden - Ashtabula Co
- **Using Enterprise Budgets** with Eric Richer - Fulton County

**November 9th**
- **LLC’s and Liability** with Robert Moore - Attorney – OSU Ag Law Program
- **Intro to Insurance** with Tony Nye - Clinton County

**November 16th**
- **An Intro to Farm Taxes** with Barry Ward, OSU Income Tax Schools Director
- **Farm Service Agency (FSA) Programs** with Jenna Pollard - County Executive Director for Ashtabula, Geauga, & Lake Co.

To register, visit [WWW.GO.OSU.EDU/FBP22](http://WWW.GO.OSU.EDU/FBP22) or Email: Holden.155@osu.edu