

# NORTHEAST OHIO AGRICULTURE NEWSLETTER

Your Weekly Agriculture Update for  
Ashtabula, Portage and Trumbull Counties

October 19, 2021



*Soybean Harvest – NE Ohio*

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## ***Hello Northeast Ohio Counties!***

Thus far we have had decent weather for harvesting crops. However, our weather conditions have also led to an increase in combine fires. Please check out the first article in our newsletter for tips on preventing combine fires.

Have a great week!

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Trumbull County  
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Educator

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## **Prevent Combine Fires During Fall Harvest**

By: Dee Jepsen, Wayne Dellinger, CCA

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-36/prevent-combine-fires-during-fall-harvest>

Autumn weather conditions have led to an increase in combine fires. Two recommendations to prevent injuries and property damage include: preventative maintenance and pre-planning for fire emergencies. Ohio ranks fourth in the nation for combine fires. Other states leading the list include Minnesota (1st), Iowa (2nd), Illinois (3rd), Kansas (5th), Nebraska (6th) and South Dakota (7th).



The majority of harvester fires start in the engine compartment. Contributing factors for heat sources include faulty wiring, over-heated bearings, leaking fuel or hydraulic oil. The dry crop residue makes a ready source for rapid combustion to occur when the machine is operated in the field. Birds and wildlife are known to make nests in the engine compartment or exhaust manifolds – which can add fuel sources for unsuspecting combine operators.

### **TIPS TO PREVENT COMBINE FIRES INCLUDE:**

- Have a daily maintenance plan during the harvest period. Keeping machinery well maintained plays a large role in preventing fires from these sources. Cleaning up spills, blowing off chaff, leaves, and other plant materials on a regular basis, proper lubrication of bearings/chains, and checking electrical connections should be part of the daily routine. Farmers may choose to do their daily maintenance in the morning while waiting for the dew to burn off the crops. However, performing maintenance at night will highlight any hot-spots or smoldering areas as the machine is cooling down. Removing chaff at the end of the day will reduce the amount of debris available to spark a fire.
- Eliminate static electricity. A chain may also be mounted on the bottom of the machine to drag on the ground while in the field. This decreases the buildup of static electricity.

**IF A FIRE BREAKS OUT, IT'S IMPORTANT TO HAVE AN EMERGENCY PLAN IN PLACE:**

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- Call 911 or your local first responders at the first sign of a fire. Don't wait to know if you can contain a fire yourself, rapid response is important to saving valuable equipment. Combine fires are often in remote locations where a specific address may not be available and access is limited. Emergency response times will be longer in these situations.
- Have (2) ABC fire extinguishers mounted on the combine. A 10-pound ABC dry chemical fire extinguisher in the cab or near the ladder of the cab is quick access to protect the operator. A second extinguisher (20-pound ABC) is recommended to be mounted on the outside of combines where it is accessible from the ground. It's possible that one unit will extinguish a small fire; having the second unit will help with any additional flare-ups. Don't forget to check that the extinguishers are fully charged at the beginning of the season. Not having extinguishers ready when needed leads to a helpless feeling of watching one of your most expensive pieces of equipment go up in flames.
- Have a water truck positioned by the field. Hot mufflers and catalytic converters from other vehicles driving in the field can pose a risk to the dry field fodder. Smoldering materials may go by 15 to 30 minutes before being noticed. A small gust of wind could rapidly turn that smoldering into a fire. In extreme dry conditions, a water truck may help protect against field fires. Never use water on fires that are electrical or fuel-sourced.
- Have an emergency plan in place and discuss it with the other workers or family members. Knowing what to do in the event of a fire emergency is important. Knowing the address to the field and how to contact fire departments directly instead of through the 911 system are important safety conversations for the entire harvest crew.

Don't get caught thinking it can never happen on your farm. Take preventative action and be prepared.

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## ***Prevent Plant Winter Wheat...What to do With Your Seed***

By: Laura Lindsey, Alexander Lindsey, Pierce Paul, Andy Michel, Curtis Young, CCA

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-36/prevent-plant-winter-wheat...what-do-your-seed>

The combination of slow soybean harvest and rainfall in Northwest Ohio has made wheat planting challenging for some. What should you do with your wheat seed if you weren't able to plant?

1. **Check with your seed dealer.** Your seed dealer may have options available to return seed. Check with your seed dealer to see what your options are.
2. **Store seed in a climate and humidity-controlled environment.** If you are unable to return seed or have bin-run seed, store the seed in a climate and humidity-controlled environment if possible. High temperature and high relative humidity increase the rate of seed deterioration, and the combination of the two is the most detrimental. In general, if the temperature in °F and the percent relative humidity added together are less than 100, then the environment should be OK to store the seed and maintain viability. Relative humidity can affect internal seed moisture content and keeping this lower is key to slow the rate of deterioration in wheat. Wheat stored at 77°F and 45% relative humidity for one year had a decrease in viability and vigor by 15-20% compared to storage at 40°F and 45% relative humidity.
3. **Protect seed from insect infestation.** Wheat seed stored for a year or more is at risk of being infested by insect pests, especially Indian meal moth (IMM) and possibly grain weevils. This is one of the reasons for running a germination test before using wheat seed stored for more than a year. Protecting this seed from insect infestation can be difficult because of what it is typically stored in and relatively small quantities being store. However, there are products that can help protect the grain. Storcide II (chlorpyrifos-methyl + deltamethrin) is registered for use on small grains such as wheat. It is effective against a broad spectrum of stored grain pests, including grain weevils. Bacillus thuringiensis (Bt) (Biobit, Dipel) is registered for use on all grains including wheat but is only effective against IMM caterpillars. If the wheat seed is being stored in a grain wagon, the wagon could be covered with a tarp and a no-pest strip (DDVP, Dichlorvos) hung from a rib under the tarp. This insecticide is very effective against flying insects especially IMM adult moths. The wheels, frame and tongue of the wagon could be sprayed with a synthetic pyrethroid (e.g., Tempo) to protect the wheat seed from crawling insects.
4. **What about seed treated with fungicide?** Fungi are among the major causes of seed deterioration in stored seed if conditions are favorable for their growth and spread. However, once seeds are adequately treated and stored under cool, dry condition, fungal growth will be greatly reduced. We routinely store fungicide-treated seeds (albeit small amounts) from year to year under cool, dry conditions without seeing a significant reduction in viability.
5. **What about seed treated with insecticide?** Some wheat seed can also be treated with insecticidal seed treatments and are mostly the same type used for corn and soybean. These treatments will control Hessian fly, aphids, and

other early season pests. The data is limited on how long these seed treatments last while in storage. Keep in mind, though, that the efficacy of the insecticides is short-lived in corn and soybean, lasting about 4 weeks. However, wheat planted past the Hessian Fly-Free date will likely not need a seed treatment anyway, since this date works well to prevent infestation of the main early-season insect pests of wheat.

6. **Test germination prior to planting in 2022.** Seed quality is key to establishing a good crop, with a major component being physiological quality (seed germination and vigor). Over time, the physiological quality of a seed lot can change, especially because of its storage environment. Variability in temperature and humidity can cause reductions in germination as well as vigor (ability to emerge under less-than-ideal conditions). At minimum, any seed saved should have a standard warm germination test prior to planting in fall 2022. Based on the germination test, seeding rate may need to be adjusted. A seed vigor test can provide further insight into how a seed lot may perform in the field under stressful conditions compared to other seed lots. This information could help producers plan for what lots should be planted early vs later, as well as positioning fields that are typically more stressful for seedlings. A higher vigor score is usually more tolerant of adverse conditions than a lot with a lower vigor score. Common seedling vigor tests for small grains would be an accelerated aging test or a tetrazolium (TZ) test.

**Reference:**

Strelec, I., Popovic, R., Ivanisic, I., Jurkovic, V., Jurcovic, Z., Ugarcic-Hardi, Z., and Sabo, M. 2010. Influence of temperature and relative humidity on grain moisture, germination and vigor of three wheat cultivars during one year storage. Poljoprivreda 16:20-24.

## ***Harvesting Corn Fields with Moldy Leaves and Stubble***

By: Pierce Paul, Dee Jepsen

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-36/harvesting-corn-fields-moldy-leaves-and-stubble>

Dark Dust Clouds during Harvest: There have been reports of huge dust clouds blowing up behind combines during harvest. It is certainly not uncommon to see dust during harvest as fragments of dead, dry plant parts and soil particles are usually suspended into the air as the combine drives through the field. However, the concern this year is that the dust seems excessive and particularly darker in color than usual. One possible explanation for this could be the fact that leaves in several corn fields died prematurely as a result of mid- to late-season diseases

such as tar spot, gray leaf spot, and particularly, northern corn leaf blight. These leaves were then exposed to wet, humid conditions which caused them to produce lots and lots of fungal spores. For instance, under wet conditions, northern corn leaf blight lesions produce large amounts of dark-colored spore that are easily suspended in the air once the plants are disturbed by the combine. In addition, saprophytic fungi such as Alternaria, which also produce dark-colored spores, may also grow on dead plant tissue exposed to wet, humid late-season conditions, adding to the amount of dark particles in the dust cloud during harvest.

Respiratory Alert – Harvesting fields with dry, moldy leaves may expose farmers to dust. Dust in grain harvested from fields that were severely affected by foliar disease contain a mixture of tiny pieces of diseased leaves and fungal spores, all of which may cause irritation and allergic reactions. Breathing dust can have adverse effects on the human respiratory system. For field with ear rots, dust (pieces of moldy cobs and husks) may also be contaminated with mycotoxins. Wearing a disposable, 2-strap N95 mask (respirator) helps protect the worker from breathing in dusty, moldy and toxic substances. This type of personal protection equipment will filter out at least 95% of the dust and mold in the air. The 1-strap mask does not have this level of protection, and is basically worthless in agricultural environments.

#### How to wear the N95 correctly

Make sure you wear the N95 whenever working in dusty and moldy environments, especially at the grain storage and handling bins.

- The mask should have a tight fit over your nose and mouth, and requires contact with smooth skin. Facial hair, eyeglasses and certain dental appliances can prevent the mask from making a seal around your face.
- The N95 respirator is available in many sizes and various configurations, making sure the proper fit can be made.
- Always use both straps to hold the mask in place and prevent air from leaking in around the edges.

#### How to test your respirator for proper fit

Ideally the N95 should be fit-tested for each worker. Once a fit-test is performed, the worker will know which type provides the best fit. Then before each use, perform a seal test to be sure the mask fits snugly

- Negative pressure check: Place both hands completely over the mask and inhale sharply. The mask should pull into your face. If you feel any air leaking around your face or eyes, adjust the nosepiece and straps for a tighter fit.

- Positive pressure check: Place both hands completely over the mask and breathe out sharply. Be sure to cover the exhalation valve if your mask is equipped with one. No air should leak out of the mask if it fits properly. If air leaks, adjust the nosepiece and straps for a tighter fit.

When to throw out the N95 mask

Consider the N95 respirator similar to the air filter in your vehicle.

- When the mask gets clogged beyond a comfortable condition, replace it with a new mask. Likewise, if the inside of the mask becomes dirty, dispose of it.
- Replace masks if they become wet, torn or have stretched out straps
- N95s are made to be disposable, they cannot be cleaned or disinfected.

There are no recommendations for how many minutes or hours a mask will last in agricultural environments. A face mask filter is rated to absorb a total mass of 200mg, however on the farm, the time to reach this level is not known. Each respirator will be affected by personal hygiene, breathing resistance and density of the air contaminants. Each job will vary - as will the heat, humidity and other environmental conditions while performing the job.

A 2-strap N95 respirator is the best form of protection from moldy and dusty grain dust. Protect yourself and all workers exposed to grain dust during the Ohio c harvest.

For more information on respirators for farm use, consult the OSU Extension Factsheet: Dust and Mold, AEX 892.2.11 <https://ohioline.osu.edu/factsheet/aex-892211>

## ***New Laws and New Resources on Wind and Solar Facility Siting in Ohio***

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Wednesday

Source: <https://farmoffice.osu.edu/blog/wed-10132021-438pm/new-laws-and-new-resources-wind-and-solar-facility-siting-ohio>

Large-scale wind and solar energy development has generated both opportunity and conflict across Ohio in recent years. For several months, we monitored the progress of Senate Bill 52, a proposal intended to address community and landowner concerns about wind and solar facilities. This past Monday marked the effective date for Senate



Bill 52, passed by the Ohio Legislature in June, and we've been busy developing new resources to help explain the laws that are now effective.

The legislation expands local involvement in the siting and approval of large-scale wind and solar facilities in several ways:

- County commissioners may designate “restricted areas” where such facilities may not locate.
- County citizens may petition for a referendum to approve or reject restricted area designations.
- Developers must hold a public meeting overlooking a proposed facility in the county where it would locate.
- County commissioners may prohibit or limit a proposed wind or solar facility after learning of it at the public meeting.
- County and township representatives must sit on the Ohio Power Siting Board committee that reviews facility applications.

The new laws also require wind and solar developers to submit decommissioning plans and performance bonds to address removal of a facility at the end of its lifetime.

Our two law bulletins and video series on Senate Bill 52 are now available. The resources work through each part of Senate Bill 52 and explain which types of facilities will be subject to the laws. You'll find the new resources in our energy law library on the Farm Office website at [go.osu.edu/energylaw](http://go.osu.edu/energylaw).

## ***EXTENSION TALK: Armyworms and BQA***

By: Andrew Holden

Hello, Ashtabula County! Farmers are slowly making headway on their harvest here in NE Ohio as they face delays from untimely rains. With shorter days and cooler nights, a rain shower can mean a delay of a couple of days. From my observations, we are just over 50% done with soybean harvest and only just starting to

harvest corn. While not yet behind, a good stretch of weather would be great for a punctual harvest. So far, there has been reports of average to above average yields for soybeans in the county. Plant date and weed control seem to be two of the main factors affecting yields this year.

Today, I am sharing Fall armyworm updates and two Beef Quality Assurance trainings coming up shortly.

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The Fall armyworm is back again! More accurately, it has never left, the species has completed its lifecycle and is back to the caterpillar stage. This pest, which arrived on winds coming up from the gulf as moths, was first discovered a few weeks ago as it caused damaged to lawns and fields of forages. The sub-tropical insect is unable to over winter this far north and the hope was that cooler temperatures would mean that the FAW would fail to produce another generation before succumbing to cold temps. Unfortunately, we did not reach the temperatures needed for a complete kill and are now seeing the offspring of the last invasion of armyworm. While we are just starting to get reports of this pest again, by time this is published they will be far along in their feeding cycle as it is very short. We are encouraging everyone to scout their forages and lawns for FAW as they need to be treated when small for the best effect. New wheat fields are especially venerable. Please call our office at 440-576-9008 with any questions! More information can be found online here: <https://bygl.osu.edu/node/1859>

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There will be two Beef Quality Assurance trainings and certifications at the Bloomfield Livestock Auction, in North Bloomfield, OH. Located at 2211 Kinsman Rd NW, North Bloomfield, OH 44450. Training dates are October 20, 2021, and November 10, 2021 with both trainings being held at 6:00 pm. If your BQA Certification is set to expire, or you still need to become certified, we encourage you to attend. No reservation is necessary for these events.

If you have questions about BQA, your certification status, or the event, please call the Ashtabula County Extension Office at 440-576-9008. Questions about the venue and event can also be directed to the Bloomfield Livestock Auction at 440-685-4487.

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**Reminder: The Ashtabula County Cattlemen's Association will be holding the 32<sup>nd</sup> Ashtabula County Beef Banquet on Saturday, November 6th at the Expo Building at the Ashtabula County Fairgrounds in Jefferson.** The dinner will begin at 7:00 p.m. Banquet activities will include an excellent prime rib dinner, entertainment; ticket drawing prizes; and fine fellowship. Tickets for the banquet can be purchased from the Directors of the Cattlemen's Association. To purchase/reserve banquet tickets, call or text a director: David Nye 330-559-9846, Bryan Elliot 330-240-5533, Zach Ward

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440-666-3793, Garret Love 419-566-6570, Evan Flack 440-221-1668, OSU Extension 440-576-9008. Tickets are \$30 per person. Call the Ashtabula County Extension office at 440-576-9008 for more information or to purchase a ticket. Ticket reservations should be made prior to October 29<sup>th</sup>, 2021.

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**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](mailto:Holden.155@osu.edu)**

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## **Latest Ashtabula County Plat Book now \$10 off!**

By: Jenna Hoyt

The latest edition of the Ashtabula County Plat Book is now on sale for \$10 less and can be purchased for \$15 + tax at Ashtabula County - OSU Extension Office located at 39 Wall Street in Jefferson. Premium wall maps are also available. For more information contact the office at (440) 576-9008. 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. Visit [mappingsolutionsGIS.com](http://mappingsolutionsGIS.com) for digital versions of Ashtabula County landowner maps. Mapping Solutions is the publisher.



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# Ashtabula County 32<sup>nd</sup> Annual Beef Banquet



**November 6th, 2021 - 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.

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

Zach Ward 440-666-3793

Garret Love 419-566-6570

Evan Flack 440-221-1668

OSU Extension 440-576-9008

New this year: Tickets can now be purchased through **Venmo**

Send your name(s) and \$30 per ticket to @ashcattlemans or scan QR:

Ticket reservations are required by October 29<sup>th</sup>, 2021 to

ensure adequate meal preparations can made.



**venmo**



# 2021 VINEYARD SOILS MANAGEMENT WORKSHOP

WEDNESDAY, NOVEMBER 17, 9:30 A.M. TO 12 P.M.

Soils are the unsung hero of viticulture, providing the nutrition and water required to produce high quality fruit and healthy vegetation each year. However, its management is often one of the most misunderstood aspects of vineyard management. Join us as we host speakers from **OSU Extension, Westover Viticulture Advising, and Cornell Cooperative Extension** in this webinar event devoted to understanding and improving the health of your soils and vines.

9:30 A.M. • Introduction to Basic Soil Science • OSU Extension

10:15 A.M. • Vine Nutrient Management • Fritz Westover • Westover Viticulture Advising

11 A.M. • Alternative Under-Vine Management Strategies • Alice Wise • Cornell Cooperative Extension

**Location:** Zoom webinar

**Cost:** Free to attend

**Registration:** <https://go.osu.edu/grape21>

**Contact information:** Andrew Kirk ([kirk.197@osu.edu](mailto:kirk.197@osu.edu)) or Maria Smith ([smith.12720@osu.edu](mailto:smith.12720@osu.edu))