Hello Northeast Ohio Counties!

I hope everyone was able to celebrate Independence Day and have a fun and relaxing weekend! Producers are making the most out of this drier weather and putting down fertilizers and making hay. Our Extension Atmospheric Scientist is predicting a drier week ahead in our second article, but warns of the damage that can be done to shallow rooted crops by the excessive heat.

If you're looking to have some fun this week, grab some friends or the family and head down to the Trumbull County Fair. The fair runs till the 14th of July.
2019 Agriculture Challenges FAQ Webpage Now Live

The unrelenting rains this spring and summer have created many challenges that the farming community is now sorting through. In order to help with decisions, OSU Extension has created a Frequently Asked Questions webpage. This page provides the most up-to-date answers to questions about topics ranging from MFP and disaster payments to cover crops, forages, livestock concerns, management of crops that are out of sync with normal planting dates, as well as answers to more questions as information becomes available. There is also an option to submit questions that you would like answered. Webinars with more detailed information will also be shared here. The page is available at go.osu.edu/AgCrisis. Since the situation we are facing is constantly evolving, be sure to check back for the latest information available to help you.

Drier Week Ahead with Excessive Heat Possible Next Week

By Aaron Wilson

This past week featured a very summer-like pattern, with average temperatures running 2 to 8 degrees Fahrenheit above average and isolated but locally heavy thunderstorm activity. The largest differences compared to average occurred over northwest Ohio, where a lack of crop cover allowed surfaces to dry quickly and temperatures to rise efficiently. Much of the storm activity was found from parts of northwest Ohio, through east-central Ohio, and into the southeast counties, where widespread 2-3 inches fell with local amounts in excess of 5 inches. A CoCoRaHS (cocorahs.org) observer 0.7 miles north of Williamsport in Pickaway County reported 3 separate events over 2 inches this week for a total of 6.70 inches.
The upcoming week features a drier pattern on average across the state, as high pressure settles in over the region early in the week. This initial high will slide to the east on Wednesday and Thursday providing a better chance of isolated storms. High pressure will build back in for the weekend as well. Currently, the Weather Prediction Center depicts much less than 1 inch of rain for the entire state over the next 7 days (Figure 1), with a few localized heavier totals likely to occur with storms, most likely in the east. Temperatures will remain near to above average. Normal highs this time of year are in the mid to upper 80s with lows in the low to mid 60s.

Looking ahead at the 8-14-day outlooks, the NOAA Climate Prediction Center indicates a greater probability of above-average temperatures for the period July 16-22 (Figure 2). In fact, there is a slight (moderate) chance of excessive heat over the entire state (northern Ohio) during this period as well. This heat may challenge poorly established root systems and rapidly increase stress. This is accompanied by a slightly elevated probability of above-average precipitation (Figure 3). Rainfall for this period averages between 0.85 and 1 inch. The 3-4-week outlooks (not shown) generally indicate equal chances of above, below, or near-normal temperatures for all of Ohio, but there are signals indicating an increased probability of drier than average conditions across the northern third of the state. The latest CPC outlooks may be found at https://www.cpc.ncep.noaa.gov/.
What is the Nutrient Value of Wheat Straw?
By Ed Lentz and Laura Lindsey
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2019-21/what-nutrient-value-wheat-straw

Wheat harvest is now underway. What is the nutrient value of the straw? The nutrient value of wheat straw is influenced by several factors including weather, variety, and cultural practices. Thus, the most accurate values require sending a sample of the straw to an analytical laboratory. However, “book values” can be used to estimate the nutrient values of wheat straw. In previous newsletters, we reported that typically a ton of wheat straw would provide approximately 11 pounds of N, 3 pounds of P₂O₅, and 20 pounds of K₂O.
The nitrogen in wheat straw will not immediately be available for plant uptake. The nitrogen will need to be converted by microorganisms to ammonium and nitrate (a process called “mineralization”). Once the nitrogen is in the ammonium and/or nitrate form, it is available for plant uptake. The rate of which mineralization occurs depends on the amount of carbon and nitrogen in the straw (C:N ratio). The USDA reports a C:N ratio of 80:1 for wheat straw which means there are 80 units of carbon for every unit of nitrogen. Mineralization rapidly occurs when the C:N ratio is ≤ 20:1. At a C:N ratio of 80:1, mineralization will be much slower. (For comparison, corn stover is reported to have a C:N ratio of 57:1.) Rate of mineralization is also influenced by soil moisture and temperature. Since mineralization is a microbial-driven process, mineralization will be slowed (halted) in the winter when temperatures are cold. Thus, no N credit is given for wheat straw since it is not known when the N will mineralize and become available to the following crop.

Besides providing nutrients, straw has value as organic matter, but it is difficult to determine the dollar value for it. Removal of straw does lower soil potash levels. If straw was removed after heavy rainfall, some of the potash may have leached out of the straw, lowering the nutrient value of the straw. However, a soil test should be done to accurately estimate nutrient availability for future crops.

**Safe Or Scary? The Shifting Reputation Of Glyphosate, AKA Roundup**

By Dan Charles

Source: https://www.npr.org/sections/thesalt/2019/05/30/727914874/safe-or-scary-the-shifting-reputation-of-glyphosate-aka-roundup

John Draper and I are sitting in the cab of a tractor on the research farm he manages for the University of Maryland, alongside the Chesapeake Bay. Behind us, there’s a sprayer.

"So, away we go!" Draper says. He pushes a button, and we start to move. A fine mist emerges from nozzles on the arms of the sprayer.

We're spraying glyphosate, killing off this field's soil-saving "cover crop" of rye before planting soybeans.
Farmers have been using this chemical, often under the trade name Roundup, for about four decades now.

But now it's under fierce attack, accused of causing cancer. In three civil cases so far, U.S. juries have ordered Roundup's inventor, Monsanto, now owned by Bayer, to pay enormous damages to cancer survivors. Thousands more lawsuits have been filed. For this chemical, and for Monsanto, it's a stunning change in fortunes.

Farmers felt that they could spray glyphosate with a clear conscience. It doesn't persist in the environment as much as, say, DDT did. It doesn't build up in groundwater like another widely used herbicide, atrazine. And it's certainly less toxic than some alternatives.

"If we were spraying Gramoxone [the trade name for paraquat, another herbicide], even for you to be standing next to the sprayer, you'd have to have a respirator on. I'd have to wear a respirator even in the tractor, spraying," says Draper.

Monsanto started selling Roundup in 1974. For 20 years, it didn't attract much attention. That was Act 1 of the glyphosate drama: the quiet years.

Act 2 began in the late 1990s. In 1996, Monsanto started selling genetically modified crops, or GMOs. They were modified so they could tolerate glyphosate. This meant that farmers could now spray this chemical right over their "Roundup Ready" soybeans, corn and cotton, and the crops would be fine but the weeds would all die.

It was a farming revolution built on glyphosate. Monsanto quickly became the world's biggest seed company. And farmers started spraying a lot more Roundup. Sales of the chemical increased more than ten-fold.

It all happened so fast that it scared a lot of people. There were anti-GMO protests around the world, and glyphosate came under increasing scrutiny.

The International Agency for Research on Cancer, part of the World Health Organization, decided to carry out a new assessment of glyphosate's risks.
On March 20, 2015, IARC announced its conclusion: Glyphosate is "probably carcinogenic to humans."

That conclusion rests on three kinds of studies. First, IARC found "strong evidence" that glyphosate can damage DNA in cells. This kind of damage, inducing mutations, is the first step in causing cancer. Second, there are studies showing that when mice ate glyphosate, they got more tumors. Kate Guyton, a senior toxicologist at IARC, told reporters at a news conference that "these two studies gave sufficient evidence of cancer in animals."

Finally, IARC says there's "limited evidence" that people exposed to glyphosate had higher rates of a particular kind of cancer — non-Hodgkin lymphoma.

Guyton has been studying the causes of cancer for decades. Nothing she has ever done, she says, provoked as much of a reaction as the glyphosate announcement. "The Internet kind of exploded," she says.

Anti-GMO groups felt vindicated. Monsanto's top executives were furious and launched a public relations campaign attacking IARC and its report.

And in the small town of Orange, Va., a personal injury lawyer named Michael Miller started lining up clients — people with non-Hodgkin lymphoma who'd used Roundup. "I decided that these people needed a voice in the courtroom," he says. The scientific picture got more complicated, though. Other government agencies, including the U.S. Environmental Protection Agency and the European Food Safety Authority, took a fresh look at glyphosate. And they concluded that it probably is not giving people cancer.

David Eastmond, a toxicologist from the University of California, Riverside, helped conduct one of these glyphosate reviews for another part of the World Health Organization, the Joint FAO/WHO Meeting on Pesticide Residues.

"From my reading of things, if glyphosate causes cancer, it's a pretty weak carcinogen, which means that you're going to need pretty high doses in order to cause it," he says. Eastmond says that there are several reasons for this apparent disagreement between IARC and the other agencies.
First, IARC just looks at whether glyphosate can cause cancer; regulators, on the other hand, have to decide whether it actually will, considering how much of it people are exposed to.

Second — and most important, according to Eastmond — different agencies considered different evidence. Eastmond's committee and regulatory agencies like the EPA considered a large number of studies that aren't publicly available because Monsanto paid for them and submitted them to the agencies. "I have never seen a chemical with as many animal cancer studies as glyphosate," Eastmond says. IARC, however, didn't look at most of this research because it accepts only studies that are publicly available. This allows any other scientist to see exactly what IARC's conclusions are based on.

Eastmond, for his part, thinks company-financed studies are credible and valuable, despite the potential conflict of interest for companies carrying out those studies. The labs, he says, have to follow strict guidelines.

Finally, scientists sometimes look at the same data and disagree about what it means. Eastmond says that he and Guyton had "animated discussions" about some of the data. "We just evaluated the evidence differently, but, you know, these are honest disagreements [among] people who I think are well-meaning," Eastmond says.

Then Act 3 arrived. Glyphosate went to court. There were three civil trials in or near San Francisco.

Lawyers for Bayer, which now owns Monsanto, repeatedly reminded jurors that regulatory agencies had concluded that glyphosate is not a cancer risk. Lawyers for the cancer victims, though, suggested that those same regulators couldn't be trusted because they'd been manipulated or fooled by Monsanto. Miller and his legal team showed the juries a whole collection of internal Monsanto emails. In one, company executives described phone calls with an official at the EPA. As Miller describes it, the official said, "I don't need to see any more studies. I'm going to declare Roundup safe, and I'm going to stop another agency from looking at it." Another Monsanto executive discussed ghostwriting papers on glyphosate's safety that scientists could publish under their own names.

"I think the jury was rightfully offended," Miller says.

All three trials ended with resounding verdicts in favor of the cancer victims. The juries ordered Bayer to pay huge punitive damages. In the most recent case, the damages totaled $2 billion.
Bayer is appealing these verdicts — and the damages probably will be reduced. But more lawsuits are waiting. The total value of Bayer's stock has fallen $40 billion since the first verdict was announced.

Alexandra Lahav, a professor at the University of Connecticut School of Law, says that one lesson of this case so far is that attempts to get favorable decisions from regulators can backfire in court.

"They then open themselves up for the jury to say, 'Wait a minute — you're trying to convince the regulator not to regulate you, and now you want me to believe that the regulator is completely objective,' " Lahav says.

When regulators are seen as weak or ineffectual watchdogs, she says, their seal of approval also carries less weight with the public — and with juries. The next glyphosate trial is set for August in St. Louis.

**Risk Management Agency moves date for harvesting cover crops on Prevented Planting acres**

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

Source: [https://farmoffice.osu.edu/blog/fri-07052019-859am/ohio-ag-law-blog-risk-management-agency-moves-date-harvesting-cover-crops](https://farmoffice.osu.edu/blog/fri-07052019-859am/ohio-ag-law-blog-risk-management-agency-moves-date-harvesting-cover-crops)

With many farmers in Ohio unable to plant before the Final Planting Date for crop insurance, questions are arising about planting and harvesting cover crops on those prevented planting acres. USDA Risk Management Agency (RMA) rules allow operators to plant cover crops on prevented planting acres and to hay, graze, or cut the cover crops for silage after the posted “harvest date.” In previous years, the harvest date for cover crops was November 1. If an operator harvested the cover crop before that date, the prevented plant payment would be reduced from 100% to 35%.

The RMA has changed the harvest date for 2019, however. In response to reduced livestock feed supplies that will result from the loss of planted acres this year, the RMA has moved up the cover crop harvest date to September 1. An operator who plants a cover crop after the Final Planting Date and then cuts the crop for forage on or after September 1 can still receive 100% of the prevented plant payment, even if the operator sells the forage and regardless of whether the operator planted the cover crop during or after the Late Planting Period. The Final Planting Date in Ohio was June 5 for corn and June 20 for soybeans; the Late Planting Period ended on June 20 for corn and runs until July 15 for soybeans. Note, too, that a cover crop that was in the ground before the Final Planting Date but was not terminated because the operator couldn’t plant the
intended corn or soybean crop can also be harvested for forage on or after September 1.

The RMA’s chart below illustrates payment scenarios for cover crops planted and harvested on prevented planting acres.

<table>
<thead>
<tr>
<th>Cover Crop Planted</th>
<th>Disposition</th>
<th>Pay 100%</th>
<th>Pay 35%</th>
<th>Pay 0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Final Planting Date (FPD) of the Prevented Crop**</td>
<td>Hayed/Grazed/Cut for silage during or before the end of the LPP</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hayed/Grazed/Cut for silage after the LPP, but before Sept 1</td>
<td></td>
<td>X*</td>
<td></td>
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<tr>
<td></td>
<td>Hayed/Grazed/Cut for silage on or after Sept 1</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Harvested for grain or seed at any time</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During Late Planting Period (LPP) of the Prevented Crop</td>
<td>Hayed/Grazed/Cut for Silage before Sept 1</td>
<td>X</td>
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<td></td>
<td>Hayed/Grazed/Cut for silage on or after Sept 1</td>
<td>X</td>
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<td>X</td>
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<td>Hayed/Grazed/Cut for silage before Sept 1</td>
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<tr>
<td></td>
<td>Harvested for grain or seed at any time</td>
<td>X*</td>
<td></td>
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</tr>
</tbody>
</table>

*Provided the crop claimed as a cover crop is not the prevented crop and all other policy provisions are met.
**Example: Fall-Planted Cover Crop; Spring PP Crop

**Other requirements for cover crops**
While the cover crop harvest date seems pretty straightforward, don’t be fooled--crop insurance provisions can be tricky. Farmers planning to put out cover crops on
prevented plant acres should work closely with their crop insurance agents to ensure that all policy provisions and documentation requirements are met.

An initial requirement is that the cover crop planted must meet the definition of an “acceptable cover crop” for crop insurance purposes. The RMA considers an acceptable cover crop as one that is recognized by agricultural experts as agronomically sound for the area for erosion control or other purposes related to conservation or soil improvement and planted at the recommended seeding rate. OSU agricultural experts can help provide guidance on acceptable cover crops.

Operators should also be aware that many seed licenses, particularly for bio-engineered seeds, restrict the use of the seed to grain production only. In those situations, planting the seed for a cover crop or harvesting it for silage would violate the seed licensing contract and create a liability situation for the operator.

Additionally, note that crop insurance provisions prohibit harvesting the cover crop for grain or seed, and an operator who does so will lose all of the prevented plant payment. The cover crop harvest can also impact other provisions, such as the farm’s Actual Production History (APH) yields. These and other provisions highlight the importance of a close working arrangement with the crop insurance agent in order to comply with RMA’s cover crop provisions.

For RMA’s guidance on Prevented Planting Flooding, go to this page. The site contains a comprehensive list of questions and answers on prevented planting, along with information about the 2019 cover crop provisions.

**Rain Damage to Hay**

By: Rory Lewandowski, OSU Extension Educator, Wayne County
Source: [http://u.osu.edu/beef/2019/07/03/rain-damage-to-hay/](http://u.osu.edu/beef/2019/07/03/rain-damage-to-hay/)

It’s turned into another challenging and frustrating year to make hay as above normal rainfall continued through the end of June. I recently read an article in Hay and Forage Grower on-line entitled “Cursing the raindrops”, in which author Mike Rankin addressing this year’s weather patterns said, “Those putting up high-moisture forage have an uphill battle. If you’re in the dry hay business, it’s a Mount Everest situation.” The age-old question for anyone trying to make hay with rain in the forecast is mow sooner rather than later and risk rain on the cut forage, or wait for a weather break and lose quality as the forage continues to mature?

Rain on mowed forage causes a reduction in quality and can result in dry matter (quantity) losses as well. According to a July 2017 University of Delaware blog post quoting Brian Pugh, Oklahoma State Extension Area Agronomy Specialist, there are...
four ways rain reduces forage quality and causes dry matter loss. Rain results in leaching of soluble carbohydrates, vitamins and minerals, rain can increase and prolong plant respiration, can cause leaf shattering and can increase the microbial breakdown of plant tissue. The extent of the rainfall damage depends upon the moisture level of the forage when rain occurs, the amount of rainfall received, the intensity of the rain, and the length of time over which the rainfall occurs.

The best-case scenario for rain and mowed forage is a quick rain shower within a few hours or less after mowing, followed by sunny skies and drying weather. In this situation leaching of soluble nutrients is minimal, plant respiration is very minimally affected, no leaf shattering occurs, and microbial breakdown is not an issue. The goal in dry hay production is to get mowed forage moisture level below 30% as quick as possible because plants continue to respire and burn up soluble carbohydrates above that moisture percentage. Research has demonstrated that the highest respiration losses occur with forage above 40% moisture. The rate of respiration loss slows greatly below 40% moisture.

According to a University of Wisconsin fact sheet entitled “Rain Damage to Forage During Hay and Silage Making”, normal dry matter losses due to respiration of mowed forage is about three to four percent of the dry matter harvest. The publication says, “Each time cut forages are wetted by rain, respiration is prolonged or begins again in cases where cured forage is already below 30 percent moisture.” Some Wisconsin research looked at the impact of a one-inch rain on alfalfa following one day of drying. The dry matter loss was 22%.

Researchers in Michigan examined the effect of a 0.7-inch rain on field-cured alfalfa spread over a period ranging from one to seven hours. In that study, dry matter loss ranged from four to thirteen percent with the highest losses reported for rainfall spread out over a prolonged time. Back to that University of Delaware blog post, it cited research from the University of Kentucky that reported a loss of five percent dry matter per inch of rain on mowed forage with forage digestibility reduced by ten percent or more due to leaching of nutrients and leaf shatter.

Some other key points about rain damage to mowed forage, summarized from the University of Wisconsin publication are:

- For a given rainfall amount, a low intensity rain results in more leaching of soluble compounds as compared to a high intensity rainfall event.
- Leaching of soluble carbohydrates results in a percentage increase of structural fibers (acid and neutral detergent fiber) in rained on forage. Research indicates that forage digestibility of rained on hay is reduced anywhere from six to forty percent.
- With rain on the horizon, producers are tempted to bale hay too soon, beyond safe moisture limits. Wet hay can result spontaneous combustion and barn fires. I’ll close
with some words about monitoring wet hay excerpted from a recent article in the OSU Extension CORN newsletter by Mark Sulc, OSU Extension Forage Specialist:

*Use a hay temperature probe and monitor the internal temperature of the hay during the first three weeks after baling. It is normal for hay to go through a “sweat” in the few days after baling. Internal temperatures of 110 F in the first five days after baling are quite common in our region and are not a big concern.*

*Hay bale temperatures of 120 to 130 F will likely result in mold growth and will make the protein in the hay less available to animals. While those temperatures are not high enough to cause hay fires, the concern is if the mold growth continues and pushes temperatures upward into the danger zone. If the temperature in the hay continues to rise, reaching 160 to 170 F, then there is cause for alarm. At those elevated temperatures, other chemical reactions begin to occur that elevate the temperature much higher, resulting in spontaneous combustion of the hay in a relatively short time period.*

**Do Not Let a Tick Bite Make You Allergic to Dinner**

By: Tim McDermott DVM, OSU Extension Educator, Franklin County


The Lone Star Tick, a tick species that entered Ohio over the last decade, has become known for causing an allergic syndrome in people called Mammalian Muscle Allergy.

Livestock producers have had a lot on their plates lately. The weather including constant rain has damaged pasture as well as made timely hay making difficult. While I do not want to add to this list of worries, I want to make sure to educate producers that there is a new-ish tick concern that can dramatically affect the lifestyle of a producer of swine, cattle and small ruminants. Over the last decade we have seen an increase both in the spread of new tick species into our region as well as new diseases and allergic syndromes that can be vectored to producers from these invasive species. Lyme disease was seldomly diagnosed over ten years ago and has now become commonplace with the spread of the Black Legged (Deer) Tick. Viral diseases vectored to humans that had not been found before outside of Asia are now being diagnosed with increasing regularity in the United States. Today we are going to discuss an allergic syndrome that a producer can develop after getting bitten by a fairly new to the Midwest tick invader.

The Lone Star Tick (Amblyomma americanum) is a tick species that entered Ohio over the last decade from the south and has spread now throughout the state. It is an aggressive feeder of producers, livestock and companion animals. It prefers a wooded
habitat but can also be found along the perimeter of pasture and hay fields extending into the grass in many cases. This tick is a known vector for many bacterial and viral diseases but is not known for transmitting Lyme disease. What it has become known for is an allergic syndrome called galactose alpha–1,3-galactose (alpha gal) allergy, better known as Mammalian Muscle Allergy. If a human is bitten by the Lone Star Tick and has an allergic reaction to the alpha-gal carbohydrate in the tick saliva, they can show food allergy symptoms including hives, itching, nausea, vomiting, diarrhea and swelling after eating mammalian muscle such as pork, beef, lamb and venison. In severe cases, the individual may suffer anaphylactic shock. One unusual presentation of this allergy is that while most food allergies will cause the person to suffer symptoms soon after eating the food, mammalian muscle allergy commonly does not cause the allergic symptoms in the affected person for several hours after ingesting meat. This delayed onset of symptoms can make diagnosis challenging in many cases. The only way to prevent these symptoms is to abstain from mammalian meat by switching to fish, chicken or vegetable-based proteins. It is not completely known how long this allergy lasts within the individual. Scientists are studying this syndrome to determine the exact cause of the allergy and if more than just the Lone Star Tick is a suspect.

It is difficult to imagine how this would change the lifestyle of a livestock producer to not be able to ingest meat from the animals they raise without suffering from allergic symptoms than can become quite severe. How does a producer go about protecting themselves and their families? The goal with any tick-vectored disease or allergy is to prioritize not getting bitten at all. Wearing long sleeves, long pants and boots that have been treated with permethrin has shown to help prevent tick bites. Checking for ticks after working outside to detect them before attachment should be prioritized. Work with your veterinarian to develop a tick preventative protocol for your companion animals to prevent ticks entering the house on your dogs or cats. Finally, if you think you may have been exposed to a tick bite or show symptoms of alpha-gal allergy, contact your physician right away to get a diagnosis.
Extended Forecast – NOAA, Weather.gov, Cortland, OH

This Afternoon | Tonight | Wednesday | Wednesday Night | Thursday | Thursday Night | Friday | Friday Night | Saturday
--- | --- | --- | --- | --- | --- | --- | --- | ---
Mostly Sunny | Partly Cloudy | Mostly Sunny then Chance T-storms | Chance T-storms | T-storms Likely | Chance T-storms | Mostly Sunny | Mostly Clear | Sunny

Extended Forecast – NOAA, Weather.gov, Jefferson, OH

This Afternoon | Tonight | Wednesday | Wednesday Night | Thursday | Thursday Night | Friday | Friday Night | Saturday
--- | --- | --- | --- | --- | --- | --- | --- | ---
Sunny | Mostly Clear | Mostly Sunny then Chance T-storms | Chance T-storms | T-storms Likely | Chance T-storms | Mostly Sunny | Mostly Clear | Sunny
Don’t Miss It! JULY 30, 2019 @2 p.m.

CATHANN A. KRESS
VICE PRESIDENT AND DEAN

2019

DEAN’S CHARITY STEER SHOW

Local celebrity exhibitors partnered with a 4-H member and their steer.

Awards include: Best Steer, Showmanship, and People’s Choice.

A “sale,” (same as a livestock sale but no actual transfer of livestock) raising funds to benefit the Ronald McDonald House Charities® of Central Ohio.

cfaes.osu.edu/deanscharitysteershow

COORDINATED BY

The Ohio State University
College of Food, Agricultural, and Environmental Sciences

telhio Credit Union

Ohio Cattlemen’s Association
STATEWIDE HOP YARD OPEN HOUSE

July 20th, 10am - 2pm

1. Hirschfeld Hops
   18901 Fledderjohn Road
   New Knoxville, OH 45871

2. Hopyard 29
   13110 St Rt 29W
   Conover, OH 45317

3. Little Miami Farm
   3391 Cemetery Rd
   Xenia, OH 45385

4. Zachrich Hop Yard
   4850 Mechanicsburg Sanford Rd
   Mechanicsburg, OH 43044
Ohio's Tree Farm of the Year Tour

Snowy Oak Tree Farm

September 21st, 2019 - 9:30 AM to 3 PM

Paul and Joanne Mechling welcome family, friends, fellow tree farmers, conservationists, and the general public to their 365 acre Certified Tree Farm. Come explore 8 miles of trails, view forest management, examine 12 acres of wetlands, walk through warm season grasses and pollinator habitat, and learn how to plant wildlife food plots. Professional foresters will conduct interpretive tours of the property.

Location: St. Route 167 East, Pierpont Township, Ashtabula County, Ohio
Parking is at the Pierpont Township Fire Hall, 6006 Marcy Rd Pierpont, OH 44082. Shuttle service will be provided to the farm. See map on back.

Presentations/Displays/Exhibitors:

◊ Red oak regeneration
◊ Drone demonstration
◊ Over 140,000 trees planted, representing 21 species
◊ Walking tour with Dr. James Bissell of the Cleveland Museum of Natural History
◊ Maple tubing/sap production
◊ Kids activities
◊ Wetland construction/ WRP
◊ Various conservation organization displays
◊ Bridge construction
◊ Invasive plant control

This event will take place rain or shine! Hiking footwear required!
Fairly level terrain. Food and beverages available for purchase.

GPS Location (parking): 41.752243, -80.567792
Additional information: 614-309-6096
RSVP’s appreciated: ohiotreefarm2019@gmail.com
Make a weekend of it!

Come visit Ashtabula County—Ohio’s best perch, walleye and steelhead fishing. Explore our 23 wineries, 19 covered bridges and 4 scenic rivers. Check out more at www.VisitAshtabulaCounty.com for lodging and reservations.