

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula and Trumbull Counties

June 20, 2023



Hay making continues before more rain

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Hello Northeast Ohio Counties!

June is flying by!

Crops are enjoying the rain we received last week, and the forecast is calling for more towards the weekend. Many corn growers are looking to get nitrogen down while conditions allow it.

Have a good week!

Lee Beers
Trumbull County
Extension Educator

Andrew Holden
Ashtabula County
Extension Educator

Weather Update: The Skies Opened Up

By: Aaron Wilson

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2023-18/weather-update-skies-opened>

May 21st through June 10th was quite the dry spell across Ohio, with moderate drought conditions declared across 62% of the state by the US Drought Monitor on June 8th. These extended dry conditions compelled CFAES to activate its Rapid Response Team, which has created an early drought response resource site for Ohio's farmers and communities. However, a change in the weather pattern this past weekend brought a strong cold front and Gulf of Mexico moisture to the region over the weekend. A wide swath of 1-2" of rain fell along and to the northwest of about I-71, with pockets of much heavier precipitation north of Dayton and in the Cleveland area (Figure 1).

A CoCoRaHS observer west of Troy reported 3.41" of rain during Sunday-Monday's event, with Miami, Loraine, Cuyahoga, and Lake Counties reporting multiple locations with 2-3" of rain. However, northwest and southeast counties were not as lucky, and although lighter rain certainly was a joy to experience, much drier than normal conditions continue across these areas. Except for areas that received the heaviest rainfall from this past weekend's event, most of Ohio is running 10-50% of normal precipitation over the last 30 to 60 days. This event has slowed the progression of drought for many of us, but drought conditions continue. We encourage you to continue to submit observations and impacts for your location by visiting https://go.osu.edu/drought_cmor.

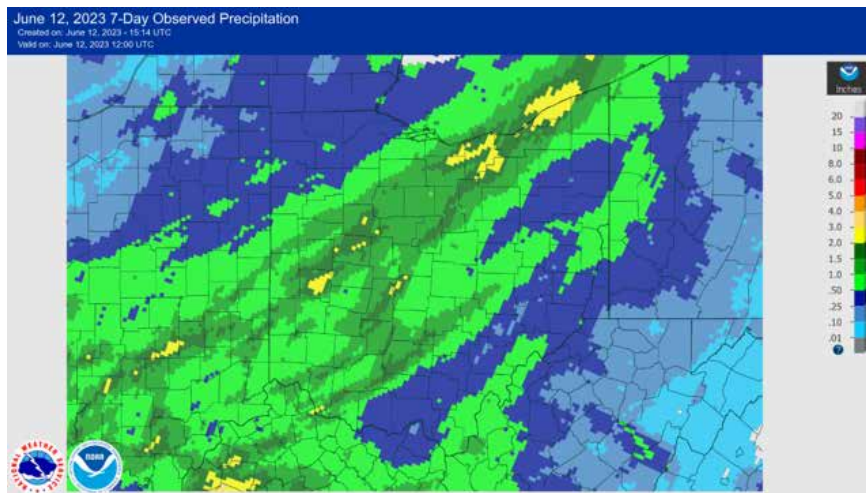


Figure 1: Total precipitation over the last 7-days ending June 12, 2023. Figure courtesy of the Advanced Hydrologic Prediction Service.

Forecast

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After calm weather on Monday, a closed low pressure over the northern Great Lakes will bring northwesterly flow and the development of showers and isolated storms on Tuesday through Wednesday morning. Temperatures will be cooler than average, with highs generally in the 60s to low 70s and overnight lows in the 50s. A warming trend, with highs in the 80s, is expected for most of the state (cooler downwind of Lake Erie) from Thursday through Sunday. Weak disturbances will move across the region though, bringing periods of showers and storms across the state during this time. The current forecast shows another 1-2" could fall across most of Ohio over the next 7 days (Figure 2). If realized, this will continue to help improve drought conditions, crop health, and water supplies.

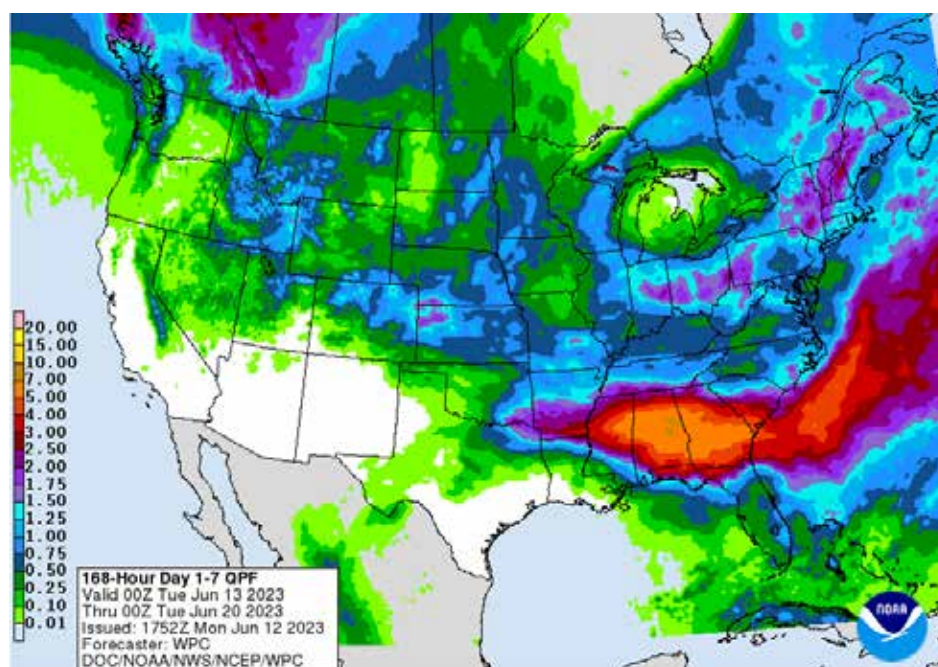


Figure 2).
Precipitation
forecast from the
Weather Prediction
Center for 8pm
Monday June 12 –
8pm Monday June
19, 2023.

The Climate Prediction Center's 8-14 Day Outlook and the 16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center indicate that the temperatures will be close to average with the possibility of near to below average precipitation for the period June 20-26, 2023 (Figure 3). Climate averages include a high-temperature range of 80-84°F, a low-temperature range of 60-64°F, and average weekly total precipitation of 0.85-1.15 inches.

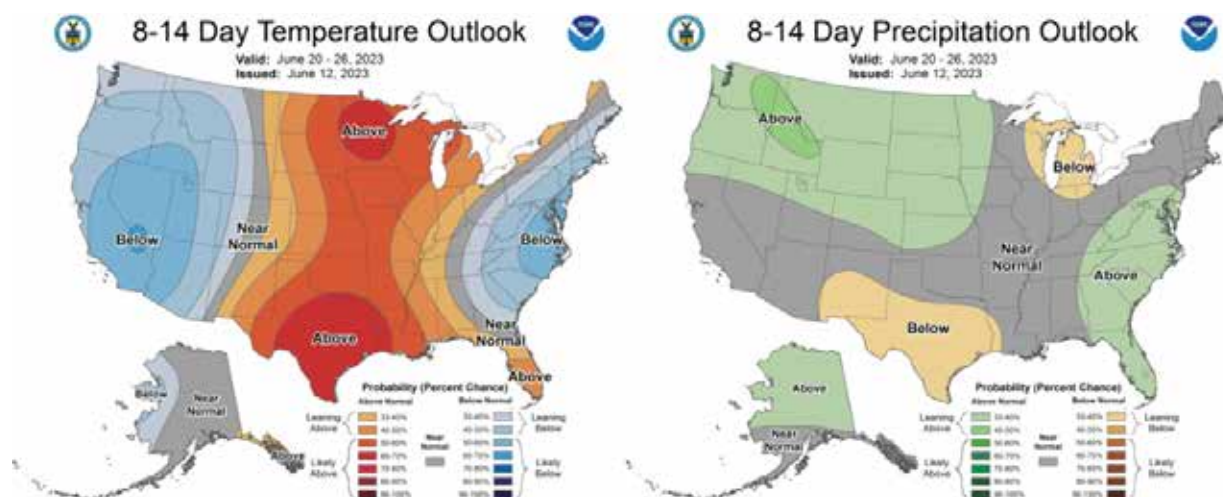


Figure 3) Climate Prediction Center 8-14 Day Outlook valid for June 20-26, 2023, for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

Ohio eminent domain bill meets resistance

By: Peggy Kirk Hall, Attorney and Director, Agricultural & Resource Law Program

Source: <https://farmoffice.osu.edu/blog/fri-06162023-1135am/ohio-eminant-domain-bill-meets-resistance>

minent domain is one of those topics that always generates concern among farmland owners. That may be part of the reason behind an eminent domain bill sponsored by Representatives Darrell Kick (R-Loudonville) and Rodney Creech (R-W Alexandria), [who introduced House Bill 64 in February](#). According to the sponsors, the bill would “reform current eminent domain laws to provide landowners with more rights and support.” But HB 64 now faces significant resistance and uncertainty.

What HB 64 proposes

Ohio’s [Legislative Service Commission summarizes](#) the procedural changes HB 64 proposes as follows:

- Voids appropriations (the taking of property through eminent domain) that do not follow statutorily mandated procedures.
- Increases the taking agency’s (the government or private entity appropriating property) burden of proof in appropriation proceedings.
- Narrows factual presumptions made in favor of taking agencies in appropriations proceedings.
- Prohibits a taking agency from reducing any offer it makes in an effort to acquire

- property, if the attempts may result in appropriations proceedings, or subsequently arguing for a lower valuation in an appropriation proceeding.
- Expands required attorney fee, cost, and expense awards due to property owners in appropriation actions.
- Allows property owners who allege their property has been appropriated outside of the required judicial process to sue for inverse condemnation.
- Requires courts hearing inverse condemnation cases to award successful property owners' attorneys' fees, costs, and expenses.
- Requires court hearing appropriations cases to award property owner damages if the taking agency uses coercive actions.
- Lengthens certain appropriation proceeding deadlines.

In addition to revising eminent domain procedures, HB 64 would also prohibit the use of eminent domain to obtain property for recreational trails and to maintain recreational trails—a controversial issue tracing back to the [Mill Creek Metroparks bike trail](#) project in Mahoning County.

Committee hearings on HB 64

HB 64 has yet to pass out of the House Civil Justice Committee since being referred to the committee on February 28. Three parties testified in favor of the bill a hearing on March 14—Ohio Farm Bureau, Ohio Dairy Producers, and Ohio Council of Retail Merchants. The parties commended the additional protections given to landowners facing eminent domain proceedings and stated that the reforms in the bill would “prevent excess and unnecessary use of eminent domain.” Committee members raised several questions about the proposal at that time, and the bill then stalled for two months.

On May 16, the committee accepted a [substitute bill](#) that [changed](#) several provisions regarding recreational trails, compensation offers and awards, and relocation assistance—all questions raised in the earlier committee hearing. Changes in the substitute bill include:

- A limit the prohibition on using eminent domain for recreational trails, stating that eminent domain could not be used to take property if the primary use of the property would be for a recreational trail and the property is not adjacent to a public road and within a road right of way.
- Restoration of an agency's authority to reduce a compensation offer amount if it discovers conditions that it could not have discovered when it make the original compensation offer.
- Revised amounts that would be awarded to a landowner if a jury's award of compensation is higher than an agency's most recent good faith offer and removes a percentage limit on mandatory cost and expense awards.

Despite the substitute bill revisions, 37 parties representing a wide variety of interests submitted opponent testimony at the fourth hearing for the bill on May 23. Local governments and associations such as the County Commissioners Association of Ohio, County Engineers Association of Ohio, Ohio Municipal League, and Ohio Mayors Alliance testified against the bill. Business interests such as American Electric Power, Ohio Oil and Gas Association, and Ohio Chamber of Commerce also opposed the bill, as did transportation and recreational interests such as Central Ohio Transit Authority, Mid-Ohio Regional Planning Commission, Rails-to-Trails Conservancy, and Ohio Parks and Recreation Association. Several common themes appear in the [opponent testimony](#): that Ohio's current eminent domain laws are not "broken" but instead effectively balance landowner rights against public needs, that the bill would create negative financial and taxpayer impacts, and that it would hamper economic development and infrastructure and public works projects in Ohio.

What happens next with the eminent domain bill?

The strong resistance to HB 64 certainly signals problems for its adoption and highlights a need for agreement on whether Ohio's eminent domain law effectively balances public needs and private property rights. Even so, there are several routes the bill could take from this point: the committee chair could schedule a committee vote on the bill, the sponsors could hold further "interested party" meetings with the intent to further revise the bill, a Senate sponsor could introduce a similar bill and try to move it through the Senate, or the bill could simply die an early death.

Civil Justice Committee Chair Brett Hillyer (R-Uhrichsville) did not schedule the bill for a fifth hearing and potential vote for the committee meetings held on June 6 and June 13. Several opponents encouraged additional "interested party" negotiations and further changes to the proposal. Based on the resistance to the bill in its current form, if such discussions don't take place or are not successful, the bill will likely die that early death or arise in a different form in the future.

[Read more about and follow HB 64 on the Ohio Legislature's website.](#)

Don't rock the boat while breeding heifers

By: [Steve Boyles](#), OSU Extension Beef Specialist

Source: <https://u.osu.edu/beef/2023/06/14/dont-rock-the-boat-while-breeding-heifers/>

The topics of Reproduction and Nutrition are only two of the topics that participants will explore during the Ohio [Stockmanship & Stewardship](#) program on September 29 and 30 in Caldwell. The summary below of the research project [Nutritional Management Post-AI to Enhance Pregnancy Outcomes](#) from 2013 Range Beef Cow Symposium by S.L.

Lake, R. Arias, P. Gunn, and G.A. Bridges further examines why reproduction and proper nutrition are closely related.

'Nutrition during the 21 days post breeding

Maternal recognition of pregnancy takes place around days 15-17 post-insemination and that transporting animals near this time compromises conception. However, moving heifers within the first 5 days post-insemination does not cause this reduction. Although, research suggests that conception rates are compromised when heifers are placed on early growth pasture forages. Researchers hypothesized that feeding this high moisture pasture forage at turnout is limiting dry matter intake which in turn causes a temporary energy deficiency that results in temporary heifer weight loss during the critical stages of early embryonic development and maternal recognition of pregnancy. Therefore, it is beneficial to ensure heifers maintain the same plane of nutrition after breeding, at least until day 25 when the embryo should be completely attached to the uterus. If this is true, maintaining a positive plane of nutrition on heifers after breeding will increase 1st service conception rates, improving herd fertility and longevity.

Some spring-born heifers are developed from weaning to breeding in a dry-lot pens. Estrous synchronization and AI may be conducted while in the dry-lot to take advantage of proximity to corral/breeding facilities. Following AI, heifers are may be moved to pastures to expose them to clean-up bulls. The researches hypnotized (Lake et al. 2013) this shift in diet quality and quantity of nutrients, may negatively impact metabolism, body weight gains, and ultimately reproductive efficiency.

Investigators at Purdue University and the University of Wyoming jointly examined the role of post-insemination nutrition on AI pregnancy rates in beef at two locations (Purdue; n = 53, Wyoming; n = 99) heifers were fed at 125% of NRC maintenance requirements (approximate ADG of 1.5 lbs/d) from weaning until estrous synchronization and AI. Immediately following estrous synchronization and AI, feed delivery to heifers was tightly controlled as heifers were specifically fed diets formulated to:

1. 125% of maintenance requirements
2. 100% of maintenance requirements, or
3. 80% of maintenance requirements

Heifers remained on these diets for 21 days following AI. Heifers that returned to estrus during the 21-day dietary treatment were inseminated and following the conclusion of the dietary treatment all heifers were comingled and placed with fertile bulls. Pregnancy diagnosis was conducted at 30 days post-AI to determine pregnancy success following the initial AI and 30 days after the breeding season to determine 2nd service AI pregnancy rates and overall breeding season pregnancy rates.

Analyses revealed that heifers that were fed to continue their pre-breeding plane of nutrition (125% maintenance) for 21 days post-AI had greater ($P = 0.04$) AI pregnancy

rates compared to both groups of heifers that had a decrease in dietary plane of nutrition (100% maintenance and 80% maintenance). In addition, heifers in the 100% NRC and 80% treatments had decreased ($P < 0.05$) 2nd service AI pregnancy rates and decreased ($P < 0.05$) overall breeding season pregnancy rates. If heifers are transitioned to pasture immediately following AI are supplemented with a concentrated feedstuff such as distillers grains to prevent post-AI weight loss, pregnancy rates are not negatively impacted.

Embryo Quality

It was hypothesized that day 6 embryos collected from heifers that were fed restricted, sub-maintenance diets would have poor embryo quality. This study was conducted at the University of Minnesota and South Dakota State University (SDSU). All heifers were on a common diet during development. Estrus was synchronized and timed-AI was conducted. On the day of AI, heifers were placed in one of two nutritional treatments:

At UMN

1. 120% maintenance requirements
2. 80% maintenance requirements

At SDSU

1. 125% maintenance requirements)
2. 50% maintenance requirements

Dietary treatments were fed until embryo collection was done using non-surgical embryo flush techniques six days after AI. Recovered embryos were microscopically evaluated and graded on a 1 to 5 scale (1 = excellent, 2 = good, 3 = fair, 4 = poor, and 5 = degenerate) to evaluate embryo quality.

Results across both locations were combined to illustrate the effects of nutrient restriction on early embryonic development. Nutrient restriction immediately following AI resulted in poorer quality embryos that were developmentally retarded as indicated by being at an earlier stage of development and having fewer total blastomeres. In addition, embryos from nutrient restricted heifers had a decreased ($P = 0.01$) percentage of live blastomeres.

These results suggest that the early embryo, oviduct, and uterus are sensitive to immediate changes in nutrition. Nutritional inputs to reproducing beef cows must be managed to allow for the animal to be in a positive energy balance. However the researchers indicated caution is warranted as over-nutrition may also compromise various reproductive parameters.

EDITOR'S NOTE: Reproduction and Nutrition are only two examples of the topics participants will explore during **Stockmanship & Stewardship**, being hosted at the OARDC Eastern Agricultural Research Station in Caldwell on September 29 and 30, 2023. **Stockmanship & Stewardship** is a unique two-day educational experience

featuring low-stress cattle handling demonstrations, Beef Quality Assurance educational sessions, facility design sessions to best run your operation and industry updates you won't find anywhere else. Learn from stockmanship experts Curt Pate, Ron Gill and others and get BQA certified! Find more details or register at <https://www.stockmanshipandstewardship.org/>

No Fertilizer? No Problem! – Establishing Native Warm Season Grasses for Haying and Grazing

By: [Jason Jones](#), Ohio Grasslands & Grazing Coordinator, Pheasants Forever, Inc. and Quail Forever

Source: <https://u.osu.edu/beef/2023/06/14/no-fertilizer-no-problem-establishing-native-warm-season-grasses-for-haying-and-grazing/>

Native warm season grass forages are growing in popularity across the Midwest and South in recent years. Native warm season grasses (NWSG) include species like switchgrass, indiangrass, big bluestem, eastern gamagrass, and little bluestem. They are well adapted to our climate and yield an enormous amount of forage throughout the summer months (June-August). The timing is convenient to many grazing operations in Ohio, because it compliments existing cool season grass forages. Cool season grasses are active in the spring and fall but experience a deficit in the summer (referred to as the summer slump). Converting a percentage of pasture ground to NWSG is an economic win, because native grasses are at their optimum growth June through September. NWSG can offset the summer slump and allow cool season forages, like fescue, to be stockpiled for more grazing days.

In addition to the rapid forage production and high yields, one of the greatest advantages of native grasses is the lack of fertilizer needed to produce those high yields. NWSG are very long lived and have massive root systems – these adaptations allow them to be dependable producers year after year without expensive inputs. Many producers who have planted NWSG consider it to be a great long-term investment for their farm.

The most common myth I hear amongst livestock producers is that NWSG take three to five years to establish. After working on many projects throughout the state, I have found this not to be true at all. *In fact, most producers are growing good stands of NWSG that can be grazed within one year after planting.* See examples above and below.

NWSG seedings today use well-developed preemergent herbicides, grazing varieties of NWSG, and post seeding maintenance to develop a dense stand much more quickly. Furthermore, we understand the ecology of these grasses much better to advance seedings and maintain them with suitable grazing management. The take home

message is – if producers are interested in grazing native warm season grasses, they can have a good stand within a year of seeding. Although offsetting grazing on newly seeded acres still presents a challenge, it is much more achievable than once thought. Farm bill conservation programs are a great way to reduce economic risk and receive detailed technical and financial assistance on new NWSG seedings. [Follow this link](#) to find your local USDA Service Center. Furthermore, USDA's Working Lands for Wildlife project in Ohio is located in 31 southern Ohio Counties, and funds conversions of cool season grasses to native warm season grasses.

If you are interested in planting NWSG, I suggest getting out in the field on a working farm using them. The Hopewell Culture National Historical Park is hosting a field day at their fields of NWSG that get hayed annually. It would be a great opportunity for producers to come and learn how you can incorporate NWSG on your farm. [This event](#) is being hosted by The Hopewell Culture National Historical Park and Ohio State University Extension on Thursday, June 22nd, 6:00 – 8:30pm at the Mound City Group Visitor Center, 16062 State Route 104, Chillicothe, Ohio 45601.



This is a one-year-old stand of big bluestem and indiangrass. The photo was taken in June in western Ohio.

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This image is a 5-month-old stand of big bluestem, indiangrass, and little bluestem. This photo was taken during a grazing workshop in August of the first growing season in southern Ohio.

CRISPR/Cas9-based gene drive could suppress agricultural pests

By: Christine Gelley, ANR Educator, Noble County OSU Extension

Source: North Carolina State University. "CRISPR/Cas9-based gene drive could suppress agricultural pests." ScienceDaily. ScienceDaily, 12 June 2023.

www.sciencedaily.com/releases/2023/06/230612200341.htm.

Researchers have developed a "homing gene drive system" based on CRISPR/Cas9 that could be used to suppress populations of *Drosophila suzukii* vinegar flies -- so-called "spotted-wing *Drosophila*" that devastate soft-skinned fruit in North America, Europe and parts of South America -- according to new research from North Carolina State University.

The NC State researchers developed dual CRISPR gene drive systems that targeted a specific *D. suzukii* gene called *doublesex*, which is important for sexual development in the flies. CRISPR stands for "clustered regularly interspaced short palindromic repeats" and Cas9 is an enzyme that performs like molecular scissors to cut DNA. CRISPR systems are derived from bacterial immune systems that recognize and destroy viruses and other invaders, and are being developed as solutions to problems in human, plant and animal health, among other uses.

Targeting the *doublesex* gene resulted in female sterility in numerous experiments as females were unable to lay eggs, says Max Scott, an NC State entomologist who is the corresponding author of a paper in *Proceedings of the National Academy of Sciences* that describes the research.

"This is the first so-called homing gene drive in an agricultural pest that potentially could be used for suppression," Scott said.

Gene drives can preferentially select, change or delete particular traits or characteristics and "drive" those edits through future generations, resulting in a sometimes far greater than 50% chance of passing those changes to progeny.

"Gene drive means biased inheritance," Scott said.

Researchers used a fluorescent red protein to mark the presence of the CRISPR/Cas9 genetic change to the fly's genetic blueprint, or genome. The gene drive systems transmitted that fluorescent protein to 94-99% of progeny, the paper reports.

The researchers also used mathematical modeling to predict how efficiently the gene drive system would suppress a given *D. suzukii* population in laboratory cages. The modeling showed that releasing just one modified fly for every four "wild" flies -- those not genetically modified -- could tank fly populations within approximately eight to 10 generations.

"Because *doublesex* is such a conserved gene required for female development in so many fly species, I think the homing gene drive strategy could be used for other pests," Scott said.

Scott and collaborators previously showed success in suppressing *D. suzukii* populations using a strain that produces only males and also used a similar method to reduce lab populations of the New World screwworm fly.

Next steps include contained trial experiments in cages in an NC State greenhouse.

"We're doing small population cage suppression experiments. We're hoping to learn if repeated fly releases with a 1:4 ratio will suppress fly populations in a cage like the modeling suggests," Scott said.

Extension Talk – 2023 Ohio Wine Competition Winners Announced!

By: Andrew Holden, ANR Educator – Ashtabula County



Hello Ashtabula County! After weeks of no rain, we received upwards of 3.5 inches in the county last week. Water has been replenished in the county and crops that were waiting to germinate, or stagnant in growth are making up for lost time. As some may say, you could watch the corn grow if you looked close enough. The rain has provided a much needed break for many area farmers, as the old saying goes, “you have to make hay when the sun shines.” The dry weather has allowed for a lot of hay production and field work, without offering much time for a break. Now that rain is in the forecast many producers will likely still be busy catching up in the farm shop, fixing equipment, or cleaning up from planting season.

One way to enjoy a much needed break is by visiting one of our local wineries. NE Ohio wine country is right in our backyard, and we have some of the best wines in the state grown and made right here locally. While we now wait for the soil to dry out, I want to share some information about the 2023 Ohio Wine Competition that was held last month at the Geneva Lodge. I was able to assist in the facilitation of the competition that evaluated over four hundred Ohio wines and see the intricate process of judging so many wines. Continue reading to learn which wines won big and where to go try them this weekend!

The 2023 Ohio Wine Competition held May 16-17 at the Lodge at Geneva-on-the-Lake. The competition was coordinated by Kent State University Ashtabula Enology Program. There were 432 total wines entered this year, and 327 of them received

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medals. Of those 327 medal winning wines, 34 won double gold, 50 won gold, 134 won silver and 109 won bronze. It was an impressive showing of Ohio wines that continue to improve each year.

As part of my role on the Extension Enology Team, I assisted Kent State and Ohio State Universities in facilitating the event. The event is a major undertaking, and I was extremely impressed by those who organized the competition. To judge all of the submissions, there were four panels of four different judges. Each wine had to be labeled to keep them anonymous and four glasses from each bottle was poured to be tasted. I was also impressed by the judges who had such advanced palates and were able to taste 100's of wines throughout the day. The best of show wines were judged on the second day where the judges all tasted the class winners and selected the best overall wines. All of the medaling wines awarded are top quality and I encourage you to go out and try them at our local wineries.

Please see below the list of the best in class winners, overall best of show, and the best of Ohio awards. The Best of Ohio designations were awarded to the Best of Show/Class wines that are made from a minimum of 90% Ohio-grown American/Labrusca, Hybrid, and Vinifera grape varieties, and have received the Ohio Quality Wine seal designation.



Best of Show, Class, and Ohio Awards

Overall Best of Show and Best of Ohio: Hanover Winery Marquette

Best of Class White: 2021 D&D Smith Riesling

Best of Class Ohio White Wine: Dragonfly Vineyard & Wine Cellar LaCrescent Curves

Best of Class Red: 2021 Burnet Ridge Three Kings Cabernet Sauvignon

Best of Class Ohio Red Wine: 2021 Cask 307 Cabernet Sauvignon

Best of Class and Best of Ohio Blush/Rosé Wine: 2022 M Cellars Dry Rosé

Best of Class Fruit: D&D Smith Winery Whoopee! Wine (Elderberry)

Best of Class and Best of Ohio Sparkling Wine: Kosicek Vineyards Carbonated Riesling

Best of Class and Best of Ohio Dessert Wine: 2022 Ferrante Winery Grand River Valley Vidal Blanc Ice Wine

A complete list of this year's medal winners can be found at:

<https://findohiowines.ohio.gov/get-involved/news/2023-ohio-wine-competition-largest-one-yet>

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

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It's hot out. Is your fence?

By: Andrew Holden

Source: <https://www.farmanddairy.com/columns/its-hot-out-is-your-fence/774258.html>

Is your fence hot? I'm not trying to make a joke analogous with "Is your refrigerator running?" Having a "hot" fence simply means your electric fence is working correctly and sending strong current to everywhere it is supposed to. As we kick off grazing season and let livestock out to pasture after a long winter, it is important to take stock of your electric fence and make sure it is doing its job. Whether you are using the same old pasture fence, installing a new electric fence, or are completely new to the game of using electric to contain animals, this article will share some basic information that we could all use to ensure our fences are hot. And if your fence is already hot, you best give it a cool drink (I'm sorry I couldn't resist).

The Electric Fence System

An electric fence is used to keep animals in (or out of) a specific location. In the simplest form, an electric fence consists of 3 parts: the energizer (or fence charger), a ground, and wire fencing in a closed circuit.

Energizers

When considering an energizer, there are three main options to choose from: plug-in chargers, solar chargers, or battery chargers. Of these options the plug-in is still likely the best bet, as they are usually cheaper to purchase per amp output. Solar and battery-powered chargers are helpful in remote locations away from power sources. The technology has gotten much better over time and will continue to improve while costing less and less.

Most chargers sold will advertise the joules they provide and the 'miles' the charger would cover. When comparing two chargers and when designing grounding rods, use joules not miles, as this will give you a fairer comparison.

Old chargers used to be high impedance. These are easy to short by the fence contacting vegetation. Some had longer pulse rates, which led to accidental fires. New chargers on the market are low impedance and provide millisecond fast pulses that are less prone to short outs and safer for fires and animals that are in contact for a long period of time.

Grounding

Not properly grounding your fencing system could lead to poor results. Two main factors to consider when grounding your fence are the output capacity (joules) of the charger, and the conductivity of the soil. The greater the charger's output (more joules), the more grounding rod is needed. A minimum of three feet of grounding rod per joule is recommended. Grounding rods should be installed at least ten feet apart. Wetter ground is better than dry and sandy soil. In dry, sandy, or rocky areas you may need more rod installed. It is recommended to use galvanized steel or copper, and not aluminum for your ground. Use the same wire connected to the energizer as the grounding rod itself to minimize corrosion.

Fencing

When building a proper electric fence, you are effectively building a closed circuit. The fence completes the circuit when it is connected to the positive terminal of the charger, and the ground rod in the ground. When an animal contacts the fence it effectively closes the circuit by letting the energy pass through to the ground. This is why birds can sit on the fence without being shocked.

There are many options for fencing these days: single wire, multi-wire, high tensile, woven wire, polywire/polytape, or electric netting. The fence you use should be based on the animals you are looking to fence in/out. Whichever type you choose, you then

must calculate how many miles of fence you have. For a single wire, you simply measure the perimeter of the fence, for multiple wires, multiply the perimeter by the number of wires used. Netting or other options will likely have the number of joules required to properly power them.

Please note that barb wire should never be electrified. You could be considered liable for any animal or person if they were caught in the fence.

Checking your fence

Regularly checking your fence is important for maintaining its effectiveness. If animals are not being deterred each time they contact the fence, they may start to damage and/or escape it. You can monitor voltage levels periodically using a fence tester and using a voltmeter or a fault finder in multiple locations to ensure the fence is operating correctly. Inspection of your fence, especially in the spring, to clear any fallen branches, or other issues, can help avoid escapes. Finally, regular maintenance, mowing perimeters, spraying herbicide, and replacing worn out or damaged equipment will help ensure your fence will continue to do its job.

Summary

In order to create the proper fence for your goals, take your time when designing it. By planning ahead, you can purchase exactly what you need for the fence and build an asset for your operation that could last 30+ years. If you already have an operating fence, make sure to provide needed maintenance and upgrades to ensure it remains effective. Regular testing and inspection are crucial in keeping your fence operating. If you have questions about fencing or building a new system, call your local county extension office.

CLOVERBUD ADVENTURE DAY

JULY 19, 2023

8:00 A.M. - 2:00 P.M.

Open to all youth ages 5 – 8 as of 1/1/23.

At the Ashtabula County Fairgrounds

Check-In begins at 7:45 a.m.

Pick-Up is promptly at 2:00 p.m. at the Expo Building

Cost: \$25.00

Adventures in Nature & Science, Crafts and Animal Encounter, and more!

The number of participants is limited to 40 so sign up now! Pre-registration is necessary to insure adequate supplies and supervision for your children. Participants are asked to bring their own lunch and water bottle. Refrigeration available. Snack will be provided. [Register by clicking here.](#) Registrations and payment by cash, check or credit card is due by July 1. [Click here for the health form.](#)



Women in Agriculture

Ashtabula County Farm Tours

Beef, a Backyard Garden, & Berries

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

Mardy Townsend
Marshy Meadows

Alexa Sandella
Backyard Garden

Lois Wright Morton
Outwash Terrace

Save the date! Rain or shine!

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

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

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

Pierpont, OH
Sunday, August 27th
from 2-4 p.m.

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



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