Hello Northeast Ohio Counties!

Harvest is still in full swing here in NE Ohio with many taking advantage of the current dry period. Whether you are in your car or in your combine, be cautious and share the roadways so we all can get where we’re going safely.

So far this November we have seen record setting high temperatures and dry weather. To see the forecast for the rest of the month, check out today’s first article. Check out the last article to sign up for a presentation on climate change and the effect it could have on agriculture and Ohio.

Have a great week!

Lee Beers
Trumbull County Extension Educator

Andrew Holden
Ashtabula County Extension Educator

Angie Arnold
Portage County Extension Educator

Our Extension family just got a little bit bigger! Trumbull County 4-H Educator Ashlee Meardith and her husband Aaron welcomed Avery Grace into the world over the weekend. Mom and baby are doing well.
November Brings Better Weather
By: Aaron Wilson
Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/2020-38/november-brings-better-weather](https://agcrops.osu.edu/newsletter/corn-newsletter/2020-38/november-brings-better-weather)

Frost/Freeze Summary
The National Weather Service Frost/Freeze program has ended for the season as many areas have experienced 1-2 hard freezes (28°F) over the last three weeks.

Weather Summary

A wet end to October was both a blessing and a curse. October ranks as the 18th wettest October on record (1895-2020) for Ohio, with much of the state picking up 3-8” of liquid-equivalent precipitation. Unfortunately, this slowed harvest with moisture content in corn remaining high. However, we have seen significant improvements in the [U.S. Drought Monitor](https://droughtmonitor.unl.edu), with only about 7% of Ohio currently experiencing abnormally dry or moderate drought conditions (Fig. 1).

Ohio’s weather has been dominated by high pressure this past week, with many locations reporting record highs over the weekend. In fact, Dayton set a monthly record high of 80°F for November. For more information on recent climate conditions and impacts, check out the latest [Hydro-Climate Assessment](https://agcrops.osu.edu/hydro-climate) from the [State Climate Office of Ohio](https://agcrops.osu.edu/stateclimateofficenohio).

Forecast

Warm and dry conditions will continue into Tuesday before a cold front moves through the region. Rain showers are likely late Tuesday afternoon through Wednesday morning, with high pressure and dry weather resuming for Wednesday afternoon through Saturday. While the next couple of days will see highs in the 70s, Wednesday’s highs are expected in the 60s, with highs in the 50s and overnight lows in the 30s for Thursday through Saturday. Our next opportunity for rainfall will occur on Sunday and Monday. The [Weather Prediction Center](https://weather.gov) is currently forecasting 0.50-3.00” of rain across Ohio with two systems over the next 7 days (Fig. 2).
Figure 2: Forecast precipitation for the next 7 days. Valid from 7 pm Monday November 9, 2020 through 7 pm Monday November 16, 2020. Figure from the Weather Prediction Center.

The latest NOAA/NWS/Climate Prediction Center outlook for the 8-14 day period (November 17 - 23) and the 16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center shows above average temperatures and near to below average precipitation are likely (Fig. 3). Normal highs during the period are in the mid- to upper-50s, lows in the mid- to upper-30s, with about 0.85” of rainfall per week.
Figure 3: Climate Prediction Center 8-14 Day Outlook valid for November 17 – 23, 2020 for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

**USDA Releases Farm Production Expense Forecast for 2020**

By: Chris Zoller  
Source: [https://u.osu.edu/ohioagmanager/2020/11/05/usda-releases-farm-production-expense-forecast-for-2020/](https://u.osu.edu/ohioagmanager/2020/11/05/usda-releases-farm-production-expense-forecast-for-2020/)

The United States Department of Agriculture Economic Research Service (USDA-ERS) has announced their prediction for farm production expenses for 2020. Production expenses (see Figure 1) are projected to be reduced by 1.3 percent to $344.2 billion in nominal (non-inflation-adjusted) dollars. These expenses represent the costs of all inputs used to produce farm commodities and affect farm profitability. While overall production expenses are forecast to decrease, specific expenses vary.

Figure 1. Nominal & Inflation-Adjusted Farm Production Expenses, 1970-2020
USDA-ERS estimates expenses to increase in 2020 account for 69 percent of total expenses. The two largest expense categories, feed and labor, are expected to increase 1.4% and 3.1%, respectively. Expenses expected to decrease in 2020 account for 31 percent of all production expenses. Specific examples of expense items expected to decrease include interest expenses (27.1%), fuel and oil (13.9%), livestock and poultry purchases (7.5%), and pesticides (2.1%).

Inflation-adjusted total production expenses in 2020 are expected to be 19 percent below the record high of $427.1 billion in 2014. This will mark the sixth year of declining expenses.

**Looking to 2021**

While some expense items are forecast to be reduced in 2020, it is important to ask questions as you plan. Will government payments continue? I don’t suggest relying on these payments. What is the outlook for the commodities you produce? What tools are available to help you minimize risk?

As you plan for 2021, I encourage you to talk to your accountant, lender, and other advisors. Refer to the OSU Extension 2021 Budgets (https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets#2021). The Ohio State University Extension Farm Business
Analysis and Benchmarking Program (https://farmprofitability.osu.edu/) can also provide assistance with planning, evaluation, and decision making.

Reference
USDA-ERS, Farm production expenses forecast to decrease in 2020, the sixth year in a row. Available at: https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=99736

Winter is around the corner; are you ready?
By: Victor Shelton, NRCS State Agronomist/Grazing Specialist
Source: https://u.osu.edu/beef/2020/11/04/winter-is-around-the-corner-are-you-ready/#more-9776

The rains are finally replenishing reserves in most areas. Though a bit late for some things, it is still a boost for forages that have been stockpiled and they have leaped in compensatory growth! Ideally, this stockpile is best used after it goes dormant in order to not slow next spring’s growth. Dormancy often requires several nights in a row at 25 degrees or lower. That type of weather isn’t far away. Once dormant, the forage can be grazed with less harm to the plant’s energy reserves. When it is grazed, it can be taken down a bit closer than normal but leaving good residual. That good stop grazing height will slow runoff over winter, reduce any erosion and help springboard growth next season. If you open up the sod too much in early winter, you also possibly open the site up for more weeds too.

It is always a good idea to evaluate and balance grazing livestock with available feed. It is better to know now than later. First, take different grazing animal classes (cows, heifers, stockers, ewes, etc.) and figure an average weight per class and then multiply that number times the number in each class. Now you have a total live weight. Multiply the live weight by .03 to get an average daily intake. For example, 20 cows averaging a weight of 1,100 pounds is 22,000 pounds live weight. Multiply that by .03 (three percent dry matter intake) and it equals 660 pounds of dry matter needed per day. Now what are you going to feed those animals? It could be hay, stockpiled forage, crop residue, supplements or most likely a combination of these. Stockpiled forage is usually

Winter is around the corner; are you ready? Photo by Chris Hollen
going to be tall fescue with some other grasses and legumes mixed in. You can lay a clipboard on top of the standing sward and measure the height of the compressed forages to estimate it. If the stand is dense, there is usually about 300 pounds per acre inch of dry matter. So, if you happen to have 10 inches, that is 3,000 pounds of dry matter per acre. You do not want to remove it all, so let’s say you remove six inches. That is 1,800 pounds available for grazing times the number of acres of this stockpiled forage. Fields do vary. Adjust as needed. The efficiency of grazing will depend on how you allocate it out. If you let stock have the whole field, then expect 60-75% utilization. At best you’ll have 1,800 pounds available. If you allocate it out like you are feeding hay with temporary fence providing one- or two-days’ worth at a time, you’ll find the efficiency to be up near 90%. In areas with plenty of moisture, the stockpiled fescue is good quality and quantity and will provide a lot of good grazing. There is always some waste, it just can’t be avoided. That waste will help feed the next year’s growth.

Inventory any hay you have on hand. You should have an idea on how much bales weigh and how many you have of each. For example, if you have fifty 1,500-pound bales (about 1,300 pounds dry matter) on hand, you essentially have 65,000 pounds available. The efficiency of this hay is also dependent on how you feed it, in addition to how it is stored. The worst-case scenario is feeding hay free-choice without any feeder structure and storing hay outside on the ground, which sadly wastes about 45% of the offered hay. Feeding enough hay for only 2-3 days at a time creates some competition between cows. In ring or cone type feeders and storing bales inside is efficient with an average of about 15% waste assuming that the hay is good quality. Small bales are probably the most efficient, but are certainly a little more labor intensive and not used as often as in the past. If you have silage or balage on hand to feed, figure it into the plan and generally expect 90% efficiency adjusted to dry weight.

The nutritional value of corn stalks can certainly vary from year to year. Stalks will start out in the 8% crude protein range with approximately 70% total digestible nutrients (TDN) and over a period of about 60 days drop to 5% crude protein and 40% TDN. Spring calving cows will meet most of their energy needs during mid gestation. Growing animals such as calves and fall calving lactating cows may be lacking in energy and protein and most likely will need to be supplemented if run on stalks.

About one acre of typical corn residue will be needed per animal unit per grazing month. Weekly allocations seem to work very well so you need to figure how many acres of stalks will be needed for one week of grazing for your herd. Higher yielding corn certainly produces more residue and more potential grazing. You can usually bank on about 12-15 pounds of desired residue to graze per bushel of corn. Stalk grazing should be avoided under wet conditions.
Compare the amount of dry matter you will need for the livestock with how much you have. Now you know about how much dry matter you are going to need to get them through the winter and an idea of how much you have available to feed them. If you are a little short on forages, you can add some supplements such as corn gluten, soybean hulls, etc. into your feeding plan. In fact, you may want to anyway if hay quality is lacking, or if more energy is needed. We used 3% for the intake estimate which is actually a little high, but if we have a wet, cold winter, energy needed to keep warm will increase and any growing animals will also have higher needs. It’s better to overestimate than to be short. Cold, wet and especially muddy conditions will increase energy requirements. If you are still short on feed, then you may want to purchase some hay or consider reducing numbers.

Summer annual warm-season grasses — such as sudangrass or sorghum-sudangrass hybrids and johnsongrass produce a cyanide compound when frosted and quickly start shutting down, causing the production of the prussic acid. To be safe, livestock should be removed from these forages for at least two weeks to allow for the forages to “dry down” and the prussic acid to dissipate before grazing again. These forages can be harvested for balage right after being frosted and later fed as long as they are allowed their normal fermentation process time period of three or four weeks. Dry hay containing these is generally fine. Johnsongrass tends to be a bit more toxic than sorghums. Frosted areas could be only “pockets” in a field to start with. Any regrowth from the base of the plant after a frost can also be very high in prussic acid. If in doubt, wait.

Lastly today, if you haven’t checked your winter-feeding pads, it would be better to do that now and add more lime topping or aggregate as needed. Also, it’s not a bad idea to take the time to double check winter watering tanks while the weather is still good. I like the fall weather, but it never seems to last long enough.

Remember, it’s not about maximizing a grazing event, but maximizing a grazing season! Keep on grazing!

**Engenia, XtendiMax Labels Reapproved**

By: Mark Loux
Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/2020-38/engenia-xtendimax-labels-reapproved](https://agcrops.osu.edu/newsletter/corn-newsletter/2020-38/engenia-xtendimax-labels-reapproved)

The USEPA recently reapproved use of Engenia and XtendiMax on Xtend and XtendiFlex soybeans, with modifications to address concerns about off-target movement. Summary of current situation follows:
- While the previous labels for these products listed all of the typical uses of dicamba that are found on most dicamba labels aside from soybeans, these two products are now approved for use only on dicamba-resistant soybeans – Xtend and XtendiFlex.

- Can be applied preplant, preemergence, or postemergence: XtendiMax - up to R1 stage or no later than June 30, whichever occurs first; Engenia - no later than June 30. Emerged broadleaf weeds should be less than 4 inches in size.

- A maximum of two preplant/preemergence and two postemergence applications is allowed. Maximum XtendiMax use rate for any one application is 22 oz/A. Total XtendiMax allowed per season is 88 oz/A. Maximum Engenia rate for any one application is 12.8 oz/A. Total Engenia allowed per season is 51.2 oz/A.

- Apply in a minimum spray volume of 15 gpa with boom set no higher than 24 inches above target. Do not exceed a ground speed of 15 mph. Do not mix with AMS.

- XtendiMax: all applications must include an approved volatility reducing agent (VRA) such as a VaporGrip Xtra Agent product. Engenia: all applications must include an approved pH buffering adjuvant. See websites for list of approved products.

- Apply between one hour after sunrise and two hours before sunset when wind speed at boom height is between 3 and 10 mph. Do not apply during temperature inversion.

- Always maintain a 240-foot buffer between last treated row and downwind field edge. Roads, mowed grass and tolerant crops (e.g. corn, Xtend soybean, etc.) can be included in the buffer. Do not apply product if sensitive crops or certain plants are in an adjacent downwind field.

- Do not apply under conditions that favor runoff. Do not apply if soil is saturated with water or when rainfall that may cause runoff is forecast to occur within 48 hours.

- Users should be familiar with stewardship information on the product label and associated materials prior to use. Dicamba-specific training and proof of training is required prior to use of these products. The following websites, which contain information on approved nozzles and tank-mix partners, should be consulted prior to application: Engeniatankmix.com; xtendimaxapplicationrequirements.com. Do not mix any other product of any type with any dicamba product unless it is approved and listed on the website.

- FeXapan has not been reapproved at this time, but should be at some point in the future according to our sources. Tavium maintains its approval, with many of the same modifications in use outlined above. Tavium can be applied up to the V4 stage or June 30, whichever occurs first. Precautions and guidelines, and need for training, are
similar to the dicamba products listed above. See label and the Tavium website for specific information on stewardship, mixtures, etc - TaviumTankMix.com

31st Annual Ashtabula County Beef Banquet Held Last Saturday
By Andrew Holden

The 31st Annual Ashtabula County Cattlemen’s Association Banquet was held on Saturday, November 7th, 2020 at the Williamsfield Community Center. Due to the Covid-19 pandemic the Ashtabula County Cattlemen offered the option to take the great prime rib dinner to go or have it in-person. Around 120 people took advantage of the carry out option and around 50 people ate the meal in person. Those who attended the banquet in person were asked to socially distance and wear a mask when away from their table. The night was a success with a total of 175 meals served for carry out and in-person. While this year’s banquet required a different approach from previous years, many came to support the Cattlemen’s and enjoyed a great meal. The wonderful prime rib dinner was again prepared by Cherry Valley Processing owned by Joe and Laurie Mezinger.

In addition to the meal, a recap of the Cattlemen’s activities from the past year was provided. These activities included: Winter Calving Workshop, ACCA Beef Scholarship Program, Jr. Fair Beef Awards (Best of Show Steer, Best of Show Carcass, Best Rate of Gain), and 31st Annual Beef Banquet. The directors also presented the winners of the ticket raffle and 50/50 raffle. The Ashtabula County Cattlemen’s Association is very appreciative of the local businesses who donated special gifts to the banquet. A special thank you is extended to Abbey and Kate Cole for their assistance in this year’s banquet. Thank you to all of the sponsors of the banquet and raffle prizes: Ashtabula County Cattlemen’s Association, Centerra Co-op, Cherry Valley Processing, Charlies Auto Parts, Dr. Bryan & Jamie Elliott, Erie Bank, Kanicki Cattle Company, Mike’s Bikes, Pyma Love Farm, South County Cattle, Stackhouse Farms, Ashtabula County Farm Bureau

Ashtabula County Extension Hosting Dr. Thomas W. Blaine Speaking on Climate Change via Zoom

Global warming is a subject that causes people to ask a lot of questions. When scientists inform the public that humans are causing global temperatures to rise, one of the first set of questions is: Hasn’t global temperature always fluctuated? After all, the
glacial grooves at Kelley’s Island prove that Ohio was once covered with ice. Something caused that global cooling, and when the ice age ended, something caused massive global warming – and none of it was humans. So why the concern about global warming now? Isn’t it likely that the warming is natural and not caused by humans at all?

“These are all great questions, and the public deserves answers to them,” said Thomas W. Blaine, Associate Extension Professor with Ohio State, who will be speaking virtually via Zoom in a program hosted by Ashtabula County Extension on November 19th at 7 p.m. “The way that I structure my presentation brings a lot of satisfaction to audience members who do not believe these kinds of questions have been adequately answered or explained by the scientific community. I present a history of earth’s climate, explaining why temperatures have fluctuated so much in the past. We go over the era of the dinosaurs, the ice ages, you name it, we cover it. It turns out that audiences just love learning about Earth’s natural history – it’s a lot of fun.”

Another set of questions goes like this, “Hasn’t Earth been much warmer than it is now for most of its history? If that is true (and it is), then why worry about a few degrees warming in the next 50-100 years?”

Blaine explains, “Again, the fact that Earth is currently in an ice-house as opposed to its normal condition of a hot-house, is something that I carefully explain in my presentation. How these changes came and went is something on which I focus as well. It answers a lot of questions people have. This is important, not only because it clears up a lot of the confusion about what is at stake now, but it also gets people interested in science. How many potential budding young scientists do we have in Ashtabula County? You just never know what kind of experience is going to direct someone to go to Ohio State or another university and come out with a PhD in Physics, Chemistry, Biology, or another great field. Basically, I think that any program that increases scientific literacy among the public is a good thing. That’s why I went into Extension.”

Hosting the presentation on behalf of Ashtabula County Extension are Julie Wayman and Andrew Holden. Julie Wayman, Local Food Coordinator shared, “We are very honored to have Dr. Blaine speaking in Ashtabula County albeit virtually. The program should hold great interest to people across the county including farmers, gardeners, beekeepers, boaters, students, and anyone who has an interest in our climate and our climate future.”

“We look forward to this evening of education,” agreed Ohio State Extension Ag and Natural Resource Educator, Andrew Holden. “Climate change comes up often in discussion of the weather and agricultural concerns. It will be great to hear from a scientist regarding the current data and research.”
The public is invited to attend this lecture via Zoom. To register and receive your digital invitation to this free event, please visit go.osu.edu/ashtabulaclimate2020 For questions or to register via phone, call the Extension during normal business hours at 440-576-9008.