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COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES









Hello Coshocton County! Welcome to month of March. It won't be long before spring arrives. It is nice to notice the gradual transformation in our landscapes and to see more daylight at both ends of the day.

I know many of us have been watching world events; especially what is going on in Ukraine. In the short term, there has been a rise in commodity prices which will benefit those will unpriced old crop in the bin. Conversely, I know many who are concerned about the ripple effect on inputs such as fertilizer and fuel. All of these stressors emphasize the need for having a good risk management plan for your farm and to know your cost of production. It appears as the bumpiness of the past 2 years will continue.

I hope to see many of you on Saturday morning at the "Breakfast on the Farm" sponsored by the Coshocton County Farm Bureau at Lapp Farms. There are still a lot of programs being planned for this month---see details in today's newsletter.

I hope each of you have a great and safe week!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator

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Certification Trainings 2022 Central Ohio Agronomy School

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Invasion of Ukraine Will Impact American Agriculture

Source: https://www.morningagclips.com/invasion-of-ukraine-will-impact-american-ag/

The unprecedented actions by Russia on Ukraine could have major implications for Ohio farmers and American agriculture as a whole in a number of different ways. "Russia and Ukraine account for about 29% of global wheat production," said Ian Sheldon, professor and Andersons chair of agricultural marketing, trade and policy at Ohio State's Department of Agricultural, Environmental, and Development Economics. "Beyond agricultural commodities, Russia is a major supplier of natural gas, which is an important input into fertilizer production. That means we could see things happening on the input side of agriculture, as well as the commodity export and international trade side of things."

The input aspect could accentuate an already tight supply and demand picture for fertilizers and other 2022 inputs, but Sheldon said the crisis in Ukraine could act as a double-edged sword for farmers in Ohio, as corn and wheat are major commodities exported by Ukrainian farmers.

"Obviously you don't want to benefit from other people's pain, but if you want to see a good side of this for American exporters, if the world corn price goes up that is potentially beneficial to Ohio corn farmers and the same goes for wheat," Sheldon said. "I think we will see prices firm up and remain firm, especially if the invasion leads to major destruction of farmland and obstacles for farmers to bring their corn to market. A lot also depends on how Russia treats any exports leaving Ukraine and the extent of sanctions against Russia as punishment for their actions."

Without hesitation, as tensions between Russia and Ukraine escalated to a full invasion by Russian forces, world markets reacted sharply. Due to the nature of today's global economy, U.S. agriculture markets quickly followed suit. Shortly after the crisis escalated, prices for corn, soybeans and wheat were trading limit-higher overnight.

"Prior to the conflict escalating, everyone assumed that if an invasion did occur that the market would be bullish, figuring that there would be less supplies available on the world marketplace because of Ukraine's importance in the global corn and wheat trade, specifically," said Bailey Elchinger, risk management consultant and regional director with StoneX. "The speed at which this has happened over the past few days is a little bit shocking to the markets though. When you look back through history, an invasion of this nature is not a common thing."

Just as grain prices quickly climbed, so did other agricultural products. "Global fertilizer prices also reacted strongly," Elchinger said. "Urea was trading \$160 higher per ton on Thursday morning and that was a direct reaction to fears of Ukraine and/or Russia limiting fertilizer or natural gas out of those countries."

Many farmers found it hard to sit on their hands as the markets offered an opportunity to sell old crop corn above \$7 a bushel, while other farmers wondered what the longer term scenarios might entail. Elchinger said there are important things to consider for new crop sales.

"First and foremost, know your cost of production and what price you have your inputs locked in for," she said. "If you know those things, really start to study what your profit margin is today and know the amounts of which you are willing to sell ahead of harvest and probably take some risk off of the table."

Elchinger said a good relationship with your commodity buyer is key and to continue to stay in contact with them when it comes to your marketing plan. They can keep you accountable and will be able to shed some light on what may happen in the days ahead. "It is bound to be volatile," Elchinger said. "You need to be sure that you are not open to too much risk in times like this."

The Ag Law Round-up

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Source: https://farmoffice.osu.edu/blog/fri-02252022-906am/ag-law-roundup

It's time to round up a sampling of legal questions we've received the past month or so. The questions effectively illustrate the breadth of "agricultural law," and we're happy to help Ohioans understand its many parts. Here's a look at what has come our way:

I'm considering a carbon credit agreement. What should I look for? Several types of carbon credit agreements are now available to Ohio farmers, and they differ from one another so it's good to review them closely and with the assistance of an attorney and an agronomist. For starters, take time to understand the terminology, make sure you can meet the initial eligibility criteria, review payment and penalty terms, know what types of practices are acceptable, determine "additionality" requirements for creating completing new carbon reductions, know the required length of participation and how long the carbon reductions must remain in place, understand how carbon reductions will be verified and certified, be aware of data ownership rights, and review legal remedy provisions. That's a lot! Read more about each of these recommendations in our blog post on "Considering Carbon Farming?"

I want to replace an old line fence. Can I remove trees along the fence when I build the new fence? No, unless they are completely on your side of the boundary line. Both you and your neighbor co-own the boundary trees, so you'll need the neighbor's permission to remove them. You could be liable to



the neighbor for the value of the trees if you remove them without the neighbor's approval, and Ohio law allows triple that value if you remove them against the neighbor's wishes or recklessly harm the trees in the process of building the fence. You can, however, trim back the neighbor's tree branches to the property line as long as you don't harm the tree. Also, Ohio's line fence law in ORC 971.08 allows you to access up to 10 feet of the neighbor's property to build the fence, although you can be liable if you damage the property in doing so.

I want to sell grow annuals and sell the cut flowers. Do I need a nursery license? No. Ohio's <u>nursery dealer license</u> requirement applies to those who sell or distribute "nursery stock," which the law defines as any "hardy" tree, shrub, plant, bulb, cutting, graft, or bud, excluding turf grass. A "hardy" plant is one that is capable of surviving winter temperatures. Note that the definition of nursery stock also includes some non-hardy plants sold out of the state. Because annual flowers and cuttings from those flowers don't fall into the definition of "nursery stock," a seller need not obtain the nursery dealer license.

Must I collect sales tax on cut flowers that I sell? Yes. In agriculture, we're accustomed to many items being exempt from Ohio's sales tax. That's not the case when selling flowers and plants directly to customers, which is a retail sale that is subject to the sales tax. The seller must obtain a <u>vendor's license</u> from the Ohio Department of Taxation, then collect and submit the taxes regularly. Read more about vendor's licenses and sales taxes in our law bulletin <u>at this link</u>.

I'm an absentee landowner who rents my farmland to a tenant operator. Should I have liability insurance on the land? Yes. A general liability policy with a farm insurer should be affordable and worth the liability risk reduction. But a few other steps can further minimize risk. Require your tenant operator to have liability insurance that adequately covers the tenant's operations, and include indemnification provisions in your farm lease that shift liability to the tenant during the lease period. Also consider requiring your tenant or hiring someone to do routine property inspections, monitor trespass issues, and ensure that the property is in a safe condition.

My neighbor and I both own up to the shoreline on either side of a small lake—do I have the right to use the whole lake? It depends on where the property lines lay and whether the lake is connected to other waters. If the lake is completely surrounded by private property and not connected to other "navigable" waters, such as a stream that feeds into it, the lake is most likely a private water body. Both of you could limit access to your side of the property line as it runs through the lake. You also have the legal right to make a "reasonable use" of the water in the lake from your land, referred to as "riparian rights." You could withdraw it to water your livestock, for example; but you cannot "unreasonably" interfere with your neighbor's right to reasonably use the water. The law changes if the lake is part of a "navigable" waterway. It is then a "water of the state" that is subject to the public right of navigation. Others could float on and otherwise navigate the water, and you could navigate over to your neighbor's side. Public users would not have the riparian rights that would allow them to withdraw and use the water, however, and would be trespassing if they go onto the private land along the shore.

If I start an agritourism activity on my farm, will I lose my CAUV status? No, not if your activities fit within the legal definition of "agritourism." Ohio law states in ORC 5713.30(A)(5) that "agritourism" activities do not disqualify a parcel from Ohio's Current Agricultural Use Valuation (CAUV) program. "Agritourism," according to the definition in ORC 901.80, is any agriculturally related educational, entertainment, historical, cultural, or recreational activity on a "farm" that allows or invites members of the general public to observe, participate in, or enjoy that activity. The definition of a "farm" is the same as the CAUV eligibility—a parcel devoted to commercial agricultural production that is either 10 acres or more or, if under 10 acres, grosses \$2500 annually from agricultural production. This means that land that is enrolled in the CAUV program qualifies as a "farm" and can add agritourism activities without becoming ineligible for CAUV.

Send your questions to aglaw@osu.edu and we'll do our best to provide an answer. Also be sure to check out our law bulletins and the Ag Law Library on https://farmoffice.osu.edu, which explain many of Ohio's vast assortment of agricultural laws.

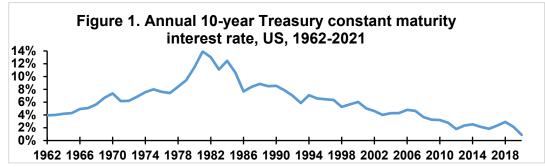
U.S. Interest Rates

Carl Zulauf, Ohio State University, Gary Schnitkey, Krista Swanson, and Nick Paulson, University of Illinois at Urbana – Champaign, December 2021

The *farmdoc daily* article of December 20, 2021 posits that the US Federal debt is not likely to have a major impact on Federal policy and spending unless Federal outlays for interest substantially increase as a share of all Federal outlays. This article therefore examines US nominal and real (inflation-adjusted) interest rates. Americans younger than 40 have little experience with sustained increases in interest rates. Moreover, the current real interest rate is more negative than any time over the observation period that starts in 1962. A third article in this series will examine the US labor market.

Interest Rate: This study uses the 10-year US Treasury bond constant maturity interest rate reported by the

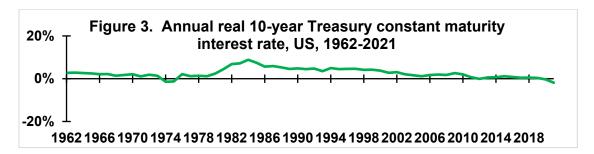
Federal Reserve Bank of St.
Louis. The 10-year Treasury rate is one of the most watched market-determined interest rates. After rising throughout the 1960s and 1970s, it has steadily declined from a peak of 13.9% in 1981, attaining a low of 0.9% in 2020. It has averaged 1.4% so far in 2021, with a recent rate of 1.43% on December 20, 2021.



Inflation: Nominal interest rates do not consider inflation. The Gross Domestic Product (GDP) implicit price deflator index is considered the most complete measure of prices in an economy. As measured by the year-over-year change in this index, US inflation has never reached double digits but did reach at least 9% in 1974, 1975, 1980, and 1981. The initial peak in what was a double peak inflation period was associated with higher oil prices caused in part by an oil export embargo largely led by Middle East countries. Similar to the nominal 10-year Treasury rate, inflation has consistently declined since the early 1980s. Correlation between these two variables is +0.67, indicating a reasonably close relationship in which nominal interest rates are higher when inflation is higher. Using the average GDP price index for the first three quarters of 2021, current inflation is 3.3%, the highest since 3.4% in 1991. The GDP price index is also from the Federal Reserve Bank of St. Louis.



Real Interest Rate: The real interest rate was calculated as the 10-year Treasury constant maturity interest rate for a year minus the percent change in the GDP implicit price deflator index from the previous year. Like the nominal 10-year Treasury rate, the real 10-year Treasury rate has declined consistently since the early 1980s. The peak real rate was 8.8% in 1984. The real 10-year interest rate has been negative in 5 years: 1974, 1975, 2012, 2020, and 2021. The average real rate for 2021 is currently -1.85%, the lowest over the observation period. This situation is unlikely to change after final data becomes available for 2021 since recent monthly inflation numbers have remained high.



Summary Observations:

The real 10-year US Treasury Bond interest rate has been negative for the last two years. The only other two year period of negative real interest rates occurred during the 1970s.

The combination of inflation and negative real interest rates (1) encourages current consumption since goods and services will be more expensive in the future and (2) discourages investment in interest rate instruments such as bank CDs since earned interest will not cover inflation price increases.

A key, emerging question is, "Is the US entering a period of sustained inflation?"

Reinforcing this question's importance is that Americans younger than 40 have little experience with sustained increases in inflation and interest rates. It is not clear how they will react if one or both occur.

History may or may not be a good predictor of the future, but in the US's most recent bout with inflation, inflation trended upward throughout the 1960s and 1970s. It was not until the late 1970s that the US decided to cure its inflation. Thus, even if inflation is emerging as a problem, it may be several, perhaps many, years before the US gets serious about addressing it. Factors likely to influence the timing of a response will be how high is sustained inflation and how rapidly is it increasing.

The approach the US took to curing its inflation in the late 1970s was an extended period of high real interest rates. This approach in turn led to an extended period where Federal outlays for interest on the debt materially constrained Federal policy and spending. It also contributed to real estate investments, such as farmland, and stocks struggling with low returns and declining values.

The next article in this series will examine the US labor market to assess its potential to impact inflation and by extension interest rates.

Data Source:

Federal Reserve Bank of St. Louis. 2021, December. Federal Reserve Economic Data (FRED). https://fred.stlouisfed.org

Zulauf, C., G. Schnitkey, K. Swanson, and N. Paulson. US Federal Debt. *farmdoc daily* (11): 167. Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign. December 20, 2021.

Plan Now for Improving Winter Damaged Pastures

By: <u>Stan Smith</u>, OSU Extension PA, Fairfield County (originally published in <u>The Ohio Cattleman</u>) Source: https://u.osu.edu/beef/2022/03/02/plan-now-for-improving-winter-damaged-pastures/

Ohio's roads and highways aren't the only things that have suffered from a winter that's alternated between sub-freezing temperatures, and abundant rainfall on top of already saturated surfaces. As spring quickly approaches, pastures and paddocks that served as cattle feeding areas this winter are a sea of pocked up mud. While road crews will be out repairing damaged roads by tamping cold patch into the potholes, it's simply not that easy to repair soils that are expected to support life in the form of growing plants during the coming months.

That said, a key decision many face regards whether or not reseeding these pasture paddocks that suffered from Mother Nature's abuse this winter is the most efficient option to get these areas back into productive forage? Let's look at some options and management strategies that might be considered.

One low-cost option, at least in terms of out-of-pocket expense, is to do nothing. In the absence of competition from existing plants, given enough time nature will re-grow something in paddocks that were trampled while muddy. The cost in this option is time. If you have the land base to set aside those torn up paddocks through the spring and early summer, they will renovate themselves. Dragging these areas with a harrow once they dry a bit will level off the high spots, but beyond that we generally have plenty of seed bank in the soil that will eventually regenerate vegetation. Whether that seed bank contains desirable plants, or what percentage of desirable plants will make-up the re-growth are questions to be considered.

It's likely in those paddocks where the sod base was torn up that summer annual weeds like pigweed, ragweed, barnyard grass and goose grass will show up in heavy numbers in addition to the grasses and clovers that had been present in the sod base. Clipping annual weeds off before they go to seed will allow more light into the grasses and clovers that are coming back. By mid to late summer a light grazing pass could be made on these paddocks. If they are not torn up again next winter, the sod base – especially if it was previously fescue – will continue to thicken and good rotational grazing management can put them back into productive pasture paddocks the following year. The main question that must be answered in this option is; do you have the time and pasture land base to be able to wait for the paddock to heal itself and perhaps lose an entire grazing season of productivity?

The next option to consider is re-seeding. Re-seeding offers the possibility to increase pasture productivity and to bring a new mix of forages into the pasture paddock. When Bob Hendershot, retired NRCS State Grasslands Specialist, spoke to graziers, one of the points he made is related to pasture species genetics. Bob always pointed out that row crop producers use new and improved genetics to increase crop yields and as livestock producers we seek to improve our livestock genetic base, but we don't often give that same attention to pasture genetics. Bob frequently asked, "How old are the genetics in your pasture forages?" There have been advances in forages; grasses and legumes bred to better tolerate grazing, and genetics that allow plants to be more palatable and productive. A sacrifice paddock that has suffered from trampling and reduced stands may be an opportunity to bring some new and improved forage genetics into the pasture mix.

Talk with your seed representative or County Extension Agriculture Educator about a pasture mix of specific species that might work best for your situation. However, as we look at today's cost of applying nitrogen to grass forages, all graziers should aim for 30% stand of evenly distributed legumes throughout a grass stand. At this level, supplemental nitrogen should not be needed in future years. If the area to be planted needs to be covered quickly due to erosion concerns and/or quicker production is needed for grazing, then include some annual ryegrass seed in the seeding mixture. Adding around 4 pounds of annual ryegrass per acre should provide some early cover and an early grazing pass because it is quick to germinate and grow.

If the choice is made to do a new seeding, this is also an ideal time to consider making any necessary adjustments to fertility. This obviously begins with a soil test.

Soil pH should be above 6.0, with a goal of 6.5. Soil phosphorus (P) level should be 30 to 50 ppm when using the Mehlich III soil test extraction. Given an average Ohio cation exchange capacity (C.E.C.) of 10, soil potassium (K) level should be at least 120 ppm. If your soil tests are reported in pounds per acre instead of ppm, then these numbers should be doubled, respectively.

If your soil is not close to these numbers it may be worthwhile to put off a spring seeding, apply the needed lime and fertilizer this spring, spend time controlling the weeds that will emerge and aim for an August seeding. In those paddocks that are severely torn up, it offers the rare opportunity in a pasture situation to spread lime and/or fertilizer and then use tillage to incorporate it into the root zone while smoothing out the soil surface and preparing a new seed bed.

There are options available that allow beaten up pasture paddocks to recover and become productive grazing paddocks again. The specific option chosen depends upon the resource base of the producer, farm forage goals, and timing. Regardless the option used, planning, management and some cooperation from Mother Nature are necessary to achieve success.

When Do I Start Grazing?

By: Victor Shelton, Retired NRCS Agronomist/Grazing Specialist Source: https://u.osu.edu/beef/2022/03/02/when-do-i-start-grazing/

I'm writing this the last full week in February. We are about a month away from spring which officially starts on March 20th because there is a minute more daylight than night than the day before. Probably more importantly, we're at least twice that many days before spring grazing. With that said, a few bulls just threw dirt back with their front hoof, the cows produced a low harmonious bellow in objection, and the old ewes just mournfully bleated in total disgust. That just can't be right!

Now don't get your switch in a knot. There are a few exceptions to my estimated spring grazing timeline. Certainly, if you have any stockpiled forage left from the previous season, that is game. To have decent quality at this time, it had to be good stockpile from last fall with adequate nitrogen present and is likely tall fescue which holds its value better over winter than other grasses.

During this time of year, you absolutely want to make sure that you have enough residual forage present to not only provide fodder for the livestock, but also protect the soil surface. That generally means a minimum of at least 3,000 pounds of dry matter or a good thick ten inches of forage. If you don't have good cover and the soil is thawed and wet, you can quickly do more damage than good. Even if you have good cover, you shouldn't let your livestock stay on any one place too long. They have got to keep moving or they will damage the sod opening it up to pesty weeds, erosion and yield reducing compaction.

Pastures that were grazed to the nubbins last fall are going to require more rest and will be slower to respond in the spring. Fields that are continuously grazed close lack deep roots and structure and are more subject to damage under wet conditions and also slower to respond in the spring.

Pastures that were stockpiled and grazed after going dormant are in a little better shape and, depending on how fast regrowth comes, can usually be grazed sooner than others. Stockpiled pastures that had adequate residue left behind, usually a minimum of 3-4 inches, are really good places to start grazing and are actually better balanced as far as crude protein, nitrogen, carbon and fiber are concerned. These will grow quicker in the spring because of better root reserves and will often have slightly warmer soils beneath them. Perennial plants are alive year around and just appear dormant above the soil surface. Below ground, there is always some biological and microbial activity going on.

So, here is how to answer the real question of the day – "when do I start grazing?" Preferably, you will want to start grazing when the plants are at least 8 to 10 inches tall (tall cool-season forages such as fescues and orchardgrass) and the ground is dry enough to support the weight of the livestock without causing damage to the forage base. That is slightly taller than I used to recommend. Sufficient growth that includes enough fiber, is, or should be, the goal.

Immature forage is very high in crude protein (nitrogen) and low in fiber. All ruminant livestock need to balance the carbon nitrogen ratio in their rumen to maintain that mat. If they don't then they will not perform the way we want them to, i.e., less gain, less milk production. It goes through them faster than they can effectively utilize it. Immature forage that lacks sufficient fiber can also lower the rumen pH. Rumen pH drops as feed is digested rapidly and rises when the rate of digestion slows. Acidosis occurs when acid is produced faster than it can be used. Those pastures with no residual left from the previous season and are extremely lush new growth are the greatest risk. It's all about the fiber!

Now, this can be avoided by a smooth transition from fed forages to pasture by making sure the forages have enough growth prior to grazing or the addition/supplementation of some hay with the lush pasture. That will help to advocate for the ruminant livestock, but it will still have a negative impact on the total production of the field for the year. Just like a grazing event during the growing season, the forage plant needs to be able to fully express itself and that takes patience with both us and the livestock. The forage plant early in the spring is pulling reserves from the roots and starting photosynthesis. Being consumed at this time slows the process and reduces resilience and long-term growth potential for the season.

A crop field with leftover corn residue and a winter annual planted in it can help provide some early grazing without concern of damaging pastures but are best grazed while frozen or dry to help deter compaction. Fall-planted spring oats may look a bit anemic in the early spring if there are any left but mixed with new growth from something like cereal rye, the combination makes pretty good grazing. Immature annuals without enough fiber present can have similar issues as short lush early pasture.

I was recently told about a conversation between a guy and his wife as they traveled down a highway. She noticed cows grazing on a hilltop and said, "That is so pretty." The husband agreed, but also noted that there really wasn't much left to graze. The producer probably thinks he is saving some hay, but it comes at a cost of grass this coming summer. Time to shut the gates and wait until the grass is really ready to graze!

Enough of that topic for now. It is not too late to do some frost-seeding or overseeding of clover. The successfulness now is the seeds' ability to reach the soil and start growing before it gets too much competition

from existing perennial plants. Fertilizer is high and seed is also no bargain. Clover seed is higher than normal and probably won't get any better until new supplies from this year are bagged. That said, even with higher price tags, the addition of more clover this year could be a game changer. Adding clover to pastures and hayfields where it is lacking can increase forage production and improve forage quality because of high digestibility and protein and help boost the grass component of the stand.

Legumes can utilize atmospheric nitrogen. Biological nitrogen fixation occurs on legume root nodules due to a special symbiotic relationship the plant has with bacteria. That is why it's important to inoculate the seed. Most legumes have a very specific rhizobium needed to fix nitrogen so to get the biggest bang for your buck, make sure it's present.

Clover can produce an incredible amount of nitrogen for the sward if the correct rhizobium is present. Nitrogen this year is about one dollar per pound. If the clover can provide even 100 pounds of nitrogen to the stand, then that clover is worth at least \$100 per acre for the nitrogen. Clover can sometimes provide a lot more than just 100 pounds. I usually recommend that the legume be 30-40 percent of the stand by dry weight. Bloat causing legumes, which do include red and white clovers, should never be over 50 percent of the stand. I've said this before, but I'll say it again, shop and choose a high-quality seed, named varieties and from reputable companies. Do the math and seed at pure live seed (PLS) rates. Take the amount of seed needed (4 lbs. per Acre PLS) and divide it by (percent purity x percent germination). Four pounds divided by (.95 x .80) = 5.26 pounds of seed needed per acre. You can do the same calculation and compare prices by dividing the price of the seed per pound by the PLS percent and see what the true cost is of the seed. Three dollars and twenty cents per pound seed at the previous PLS rate is actually about \$4.21 per pound (\$3.20/(.95 x .80)) due to the lower germination. Compare that price of the "bargain" seed, always checking the seed tag and testing date. A bargain is not always a bargain.

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

Weaning Management for Goat Kids

By: Ontario Goat (Previously published online with <u>Ontario Goat: 2020</u>) Source: <u>https://u.osu.edu/sheep/2022/03/01/weaning-management-for-goat-kids/</u>

Weaning, or transitioning from a milk-based to solid diet, is one of the most stressful events in a kid's life. It is not uncommon for kids to grow more slowly, stop growing, or even lose weight at weaning. This is referred to as "weaning shock". Strategies should be implemented to reduce any negative effects that may arise as a result of weaning to protect health and welfare while maintaining growth. In meat goats, weaning may occur at the same time the kid is separated from the doe, causing additional stress. In dairy goats, maternal separation and weaning are usually separate events. This article covers strategies for weaning kids from milk who are already separated from their dam.

There is some evidence that dairy kids grow very well if provided with milk until 84-112 days (12-16 weeks) of age. The increase in growth at a younger age may allow replacement doelings to reach breeding weight at a younger age, reducing the cost of raising them. Producers must decide if the potential increase in growth and future milk production outweighs the cost of additional milk or milk replacer.



Preparing for weaning

Preparing kids for weaning should start early. Kids must be exposed to hay and concentrates early in life to promote proper rumen development. At a young age, kids will not absorb many nutrients from solid feeds, but consuming small amounts of these feeds will help stimulate rumen development. A developed rumen is essential to digesting nutrients from solid feed later in life. Sudden removal of milk without rumen adaption to

solid feeds and adequate solid feed intake can lead to a slump in growth as well as a variety of serious health complications.

Allow kids to have free choice access to solid feed soon after birth, at about 7-14 days of age. They will likely not eat very much, but it is important to continue to offer them fresh solid feed. Put a small amount out for them daily and remove any leftover feed before offering fresh feed. Offering kids free access to fresh, clean water from birth will also encourage them to consume more solid feed.

The right time to wean

Since kids cannot switch from milk to solid feed suddenly, it is best to wean kids based on their weight and amount of concentrate they are eating, not their age. Kids should be about two and a half to three times their birth weight before they are weaned. For a Saanen born weighing approximately 7 lbs., weaning can start when they reach 20 lbs.

Weaning kids based on the amount of solid feed they consume ensures that individual differences in development are considered and kids are able to absorb nutrients from solid feed before milk is taken away. This helps prevent weaning shock. Kids should be eating about 1% of their body weight in solid feed before weaning. For a 33 lb. kid, this is about 0.33 lbs. of feed per day. However, it can be a challenge to determine if all kids in a pen are eating enough solid feed.

An average kid will be eating 1% of their body weight in solid feed and weigh two and a half to three times their birth weight at around 60 days of age (8.5 weeks). Despite this, if economically feasible, weaning one month later than this may reduce stress, improve growth, breeding success, and production in the first lactation.

Weaning method

Gradual weaning has been found to be the least stressful weaning method for kids. In a gradual weaning program, milk allowance is slowly reduced over a period of several days. A review in 1988 by Lu and Potchoiba found that gradual weaning is especially important if weaning kids earlier than 70 days (10 weeks) of age. Kids weaned before 70 days of age are much more likely to experience weaning shock (reduced growth) than those weaned after.

Stress at weaning

Stress can lead to reduced feed conversion, greater production of manure, decreased immunity, increased excretion of pathogenic bacteria in manure, and poor meat quality. As such, stress decreases productivity, health, and welfare. Being free from fear and distress is an important aspect of good animal welfare. Avoid "stacking stressors" for kids. Do not perform other stressful procedures such as disbudding, routine health care, mixing of groups, transporting, or changing housing at the same time as weaning. Spread these stressful experiences out by a week or two, allowing kids time to adjust to each change.

Additionally, avoid weaning kids who are sick. Sick or compromised kids may experience greater weaning shock, further reducing their growth and setting back their recovery. Kids that were sick between birth and weaning may appear healthy now, but need a few more days on milk before they are ready to be weaned, due to the lost growth and development while they were ill.

Throughout the entire weaning period, continue to closely monitor kids for signs of stress or symptoms of disease. Early intervention can help you identify and treat weaning shock before it becomes a serious problem. If many of your kids are experiencing weaning shock, reduced growth, stress, or illness at weaning, you may need to tweak your weaning protocol. Working with your herd veterinarian and nutritionist can help you identify problems and take steps to avoid them in the future.

Summary

Weaning is a significant event in the life of your kids. By monitoring growth, body weight and feed consumption, and using this information to make weaning decisions as well as reducing stressful experiences

close to weaning and gradually reducing the amount of milk offered, producers can ensure that kids continue to grow and thrive throughout the weaning process. With some careful consideration and preparation, you can help kids avoid weaning shock and transition to a new diet smoothly. This will safeguard the welfare and profitability of your kids.

Alternative Spring Burndown/Postemergence Strategies When Herbicides are in Short Supply

By: Mark Loux

Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-05/alternative-spring-

burndownpostemergence-strategies-when

Note: This is a repeat (mostly) of an article that ran in C.O.R.N. last November. It represents the combined thinking of weed scientists from Indiana, Kentucky, Michigan, Ohio and Pennsylvania

There is a lot of speculation about herbicide shortages for the 2022 growing season, and some products are apparently getting more expensive and/or scarce now. This will affect herbicide buying and weed management decisions for the 2022 season. The two main active ingredients that we're hearing about right now are glyphosate (Roundup, others) and glufosinate (Liberty, others), for which prices have increased substantially. There will likely be limited supplies of other pesticide active ingredients as well, but in the short term, a shortage of these two active ingredients poses some major challenges for corn and soybean production. The purpose of this article is to discuss ways to minimize the impact of herbicide shortages, primarily glyphosate, on corn and soybean production. As you search for alternatives to these two herbicides and others, the weed control guides and technical guides produced by University Extension and industry are an important tool for planning weed management programs and herbicide purchases. Links to the university publications are at the end of this article. Feel free to contact us also when trying to sort through options (loux.1@osu.edu).

Some guiding principles based on our experience that may help with decisions, especially where glyphosate will not be in all applications:

- Spring tillage is an option to replace herbicide burndown. Can cause long-term compaction problems if tilled when too wet. Waiting until weeds are large makes tillage less effective. Weeds that survive tillage will be difficult to control with POST herbicides. In other words, till when soil conditions are fit and before weeds are huge.
- 2. Where it's only possible to use glyphosate once, it may be needed most in the burndown. Saflufenacil can be added for enhanced control of rye and ryegrass, and marestail. ACCase herbicides (e.g. clethodim, quizalifop) can then be used for POST grass control in soybeans. Glufosinate, Enlist Duo, or XtendiMax/Engenia can be used for many broadleaf weeds, especially the glyphosate-resistant ones. Where residual herbicides are omitted, or do not provide enough control, we would expect POST treatments to struggle more in the absence of glyphosate with weeds such as lambsquarters. So use residuals. Glyphosate is still more than just a grass herbicide.
- 3. If glyphosate is omitted from burndown, grasses become a bigger issue than broadleaf weeds. Options for annual grasses: Gramoxone; rimsulfuron if small, corn only; ACCase herbicides clethodim (wait 7 days to plant corn), quizalifop (soybeans only) need 60 degree days, apply alone if possible, weak on winter annuals under cold conditions. Where trying to reduce glyphosate rates, a rate of 0.38 lb ae/A will control most annual grasses.
- 4. Burndown programs typically contain two to three "burndown" herbicides in order to ensure control of a diversity of weeds under various environmental conditions. This is why glyphosate is not used alone in burndown programs, but mixed with 2,4-D, dicamba, or Sharpen. We suggest following this same strategy when glyphosate is omitted try to have at least two herbicides with substantial burndown activity in the mix. Increasing rates of components of the burndown mix should be generally helpful, in

- accordance with label guidelines for soil type, weed size, time until planting, etc. There are also other herbicides that can improve control in some mixes although we don't consider them "burndown" herbicides on their own chlorimuron, atrazine, metribuzin.
- 5. There are generally more options for burndown and POST applications in corn compared with soybeans, so it might make sense to save a limited supply of glyphosate and glufosinate for use in soybeans.
- 6. Control of little barley and annual (Italian) ryegrass in a burndown requires glyphosate, ACCase herbicides are not effective enough in spring. For annual bluegrass ACCase can work 60 degree day, no tank mixes. High rates of metribuzin can provide fair control of bluegrass.
- 7. For burndown of a legume cover prior to corn in the absence of glyphosate, clopyralid and dicamba are the most effective herbicides. For cereal rye burndown in corn, best option is Gramoxone plus atrazine applied with surfactant or crop oil and at least 10 gallons of 28%.
- 8. Best non-glyphosate option for control of rye in soybeans is a high rate of clethodim (10 to 14 oz of 2L/12 to 16 of Select Max) or Assure II (10 to 12 oz) applied before the boot stage. Apply with crop oil concentrate and AMS (17#/100 gallons). For Select Max, can use crop oil or nonionic surfactant. Apply when nighttime temperatures are no lower than 50 degrees. Mixing with most other herbicides can reduce effectiveness. We expect these herbicides to be variable in their control of rye.
- 9. It's possible to chop and bale a cover, then use glyphosate POST to kill regrowth. The addition of an ACCase herbicide may help control regrowth in soybeans. POST corn herbicides will not kill the rye, including nicosulfuron, rimsulfuron, and Group 27 herbicides (Impact, Shieldex, Laudis etc).
- 10. Mixing ACCase herbicides with dicamba or 2,4-D (no glyphosate) can cause reduction in grass control due to antagonism. Apply separately to avoid this.
- 11. Increasing the number of applications can help with weed and herbicide management when certain products are short or glyphosate rates need to be reduced. For example, three applications instead of two: 1) Fall or early spring burndown when weeds are small; 2) residuals plus possibly additional low-rate burndown at planting; 3) POST.
- 12. Best opportunity to omit glyphosate or reduce the rate will be: 1) in fields treated the previous fall, or those with a low population of small weeds; and 2) where the POST program is comprehensive enough to control weeds that escape the burndown Enlist, XtendiFlex, LL GT27 (their effectiveness also depends upon whether glyphosate is being used POST).
- 13. Take all necessary steps to maximize herbicide activity optimize adjuvants and sprayer parameters (nozzles, volume, pressure, speed) per label guidelines.
- 14. Check on availability of premix herbicides that may contain glyphosate or another herbicide that is unavailable as a single ingredient product. Examples that contain glyphosate Sequence, Halex GT, Acuron GT, Extreme, Flexstar GT.

Burndown programs that deemphasize use of glyphosate – pros and cons.

Can be used in corn and soybeans

Gramoxone + 2,4-D + metribuzin/atrazine (atrazine – corn only)

Strengths: best non-glyphosate option for rye burndown; adequate for general spring weeds including marestail <6" tall; can be applied before either corn or soybeans (depending on rate); has activity on grasses

Weakness: perennial weeds; large marestail; annual ryegrass; special training required to apply

Comments: Metribuzin rate for corn varies by soil type and is limited to a maximum of 5.33 oz of 75DF.

Sharpen + glyphosate (low rate 0.38 - 0.56 lb ae/A) + 2,4-D

Strengths: adequate cereal rye and other cover crop burndown; marestail control; can be applied before either corn or soybeans (depending on rate)

Weakness: large weeds; overall weed control is fair due to low glyphosate rate

Comment: Rates higher than 1 oz require wait of 15 to 30 days to plant soybeans. Must wait 2 weeks to plant soybeans if 1 oz is mixed with flumioxazin or sulfentrazone product.

<u>Sharpen + 2,4-D + metribuzin/atrazine (atrazine – corn only)</u>

Strengths: good foliar and residual marestail control; good initial Palmer/waterhemp control; burndown and residual in one pass

Weakness: does not control grasses (atrazine control grass up to an inch when applied with oil); must wait 2 weeks to plant soybeans if mixed with flumioxazin or sulfentrazone product. Metribuzin rate for corn varies by soil type and is limited to a maximum of 5.33 oz of 75DF.

Basis Blend/other rimsulfuron products + 2,4-D + metribuzin/atrazine

Comments: some grass control; limited burndown activity on several key species; better used in corn due to long wait to plant soybeans (15 to 60 days)

<u>Harmony Extra/similar products + 2,4-D + metribuzin</u>

Comments: average (70-80%) control on many key broadleaves; no grass control; additional residuals and POST products necessary for in crop weed control; can be used in corn or soybean

Corn only

Acuron/Lexar/generic equivalents/Resicore + atrazine

Strengths: winter and summer annuals; burndown and residual in one-pass; can add more atrazine or 2,4-D

Weakness: poor control of cereal rye and ryegrass; corn only

Soybeans only

2,4-D + metribuzin + clethodim

Strengths: some grass suppression including cereal rye and ryegrass;

Weakness: 2,4-D antagonizes clethodim activity; cool weather limits clethodim activity; use rate of clethodim is not high enough if used before corn planting

Metribuzin + 2,4-D + chlorimuron product

Comments: good fit in fields that were treated prior fall; Some chlorimuron products contain metribuzin – suggest supplementing with additional metribuzin so total is the equivalent of 6 to 12 oz of 75DF. Does not

control grasses. Canopy/Cloak Ex contains tribenuron, which improves control of chickweed.

Click here to print a pdf of this article

"Weed Control Guide for Ohio, Indiana, and Illinois"

"Mid-Atlantic Weed Control Guide"

"MSU Weed Control Guide for Field Crops"

"2022 Weed Control Recommendations for Kentucky Field Crops"

Take Action fact sheet on cover crop termination

Using the Corn Nitrogen Rate Calculator

By Eric Richer, Extension Educator in Fulton County

Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-05/using-corn-nitrogen-rate-calculator

Throughout this winter meeting season, fertilizer has been a hot topic. Generally, the discussion has been

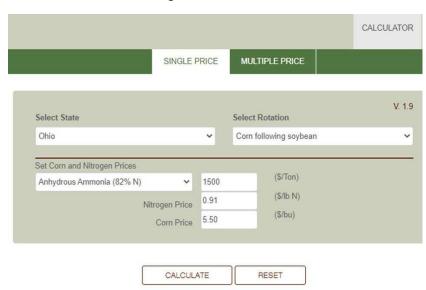
around nitrogen price and availability. Most of us have little to no influence on price or availability, but as a farmer, you decide your corn (and wheat) nitrogen rates, assuming you can get the nitrogen product you want. Your corn nitrogen rate could likely cost \$100 per acre more in 2022 as compared to the year prior and nitrogen will probably surpass seed as the most expensive variable cost per acre this year. As such, it is important to note that the most recent revision (2020) of the Tri-State Fertilizer Recommendations for Corn, Soybean, Wheat and Alfalfa moved from nitrogen rate recommendations based on yield--from the original 'Tri-States'--to a nitrogen rate based on maximum profitability or a maximum return to nitrogen (MRTN) rate. Sometimes



the maximum return to nitrogen rate is referred to as the Economic Optimum Nitrogen Rate (EONR).

In the Corn Belt, the corn nitrogen rate calculator has been developed to generate these economic optimum rates. The purpose of this article is to help you understand what the corn nitrogen rate calculator is and how to use it. You can find the calculator at http://cnrc.agron.iastate.edu/. The calculator utilizes yield and rate data from on-farm and small plot research trials in Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio and Wisconsin. The Ohio recommendations are based on nearly 300 corn nitrogen rate trials in the state. After selecting your state, you will need to select the crop rotation. See Figure 1. The third input is the source of nitrogen you will use and the price per ton you expect to pay. The final input is the price per bushel of corn at which you expect to sell your corn. Watch this short video to see how to use the Corn Nitrogen Rate Calculator.

Once you click calculate, a return to nitrogen graph is presented with three different lines plotted: Gross Return to N, Net Return to N, and Fertilizer N Cost. The Net Return to N line is arguably the most important. It identifies the N rate where the last unit of added nitrogen has an economic return (EONR) or in other words, it identifies the last unit of N that creates profit for your farm, given the N price and corn price inputs. Additionally, the output page identifies a profitable N rate range that suggests a little bit of 'wiggle room' for your total N rate, often times 10-20 lbs of N above and below the EONR (aka MRTN).



At a very basic, but helpful level, the output page calculates your nitrogen price per pound based on the

product price per ton input. Is nitrogen cost per pound \$.90 or \$.30 this year? Another basic calculation that the output page provides is the nitrogen-to-corn price ratio. In the 2021 growing season, many farmers had a nitrogen-to-corn price ratio below one tenth (.1). What is your price ratio this year? See Figure 2 for the outputs when \$1,500/ton anhydrous is used in Ohio, corn after soybean rotation, and with an expected corn price of \$5.50/bushel.

The corn nitrogen rate calculator identifies an economic optimum rate based on corn and nitrogen prices, all other things constant. As farmers, you know that growing conditions aren't always constant. On your own farm, I encourage you to use local weather, soil type, pre-sidedress N tests, manure history, and previous performance to



refine your nitrogen rate in-season or with adaptive nitrogen management approaches.

National AG Day Lunch Slated for March 22

We are pleased the Coshocton County Ag Day Luncheon will make its return on Tuesday, March 22, 2022. This event was cancelled in 2020 and held as a drive through event last year due to the coronavirus pandemic. Please join us in-person this year as we recognize the contributions of today's farmers and show our appreciation for the men and women of agriculture.

This year's theme is "Growing a Climate for Tomorrow" and is sponsored by Farm Credit Mid-America, the Coshocton Soil & Water Conservation District, and Ohio State University Extension. The Celebration will be

held at the Lake Park Pavilion located at 23253 State Route 83 in Coshocton, Ohio. The doors will open at 11:30 a.m. with lunch at 11:45 a.m. followed by a short program that will adjourn at 1:00 p.m. The meal is being catered by Shumaker Farms and the cost is \$8 per person. Reservations are required by March 15 and can be made by calling 740- 622-8087, ext. 4 or via email at samanthapriest@coshoctoncounty.net.



We hope you join us to celebrate Coshocton County Agriculture.

ODA Testing Date in Coshocton County Slated for March 17

The Ohio Department of Agriculture (ODA) will be administering Private and Commercial Pesticide license examinations on March 17, 2022 at the Coshocton County Services Building (Room 145) located at 724 South 7th Street in Coshocton, Ohio. The testing will begin at 10:00 a.m. Pre-registrations are required and can be made on-line at the ODA website at:

https://agri.ohio.gov/wps/portal/gov/oda/divisions/plant-health/pesticides/exam-registration Producers can also call the ODA at 614-728-6987. Study materials can be obtained at: https://pested.osu.edu/

OSU Extension to Host 2022 East Ohio Women in Agriculture Conference

Source: https://u.osu.edu/ohioagmanager/2022/02/05/osu-extension-to-host-2022-east-ohio-women-inagriculture-conference/

Ohio State University (OSU) Extension will host the 7th Annual East Ohio Women in Agriculture Conference. The conference is planned for Friday, March 25 from 9:00 a.m. – 3:30 p.m. at Ohio FFA Camp Muskingum, 3266 Dyewood Road SW, Carrollton, OH 44615. All women and young women (high school age) who are interested, involved in, or want to become involved with food, agricultural, or natural resources production or small business are encouraged to attend.

The conference program features a networking fair and sixteen breakout sessions presented by OSU Extension educators, producers, and partner agencies. See the Sessions this year are focused around four themes: Natural Resources, Plants & Animals, Home & Family, and Special Interest (includes break-out with Ohio FFA State Officers). The conference keynote will be led by Bridget Britton, OSU Extension Behavioral Health Field Specialist. She and her team will lead participants through "Stoic or Stressed? Talking through difficult topics in a safe space."

Registered participants, community organizations, or businesses interested in sponsorship can contact 740-461-6136. Interested individuals can register for the conference online at go.osu.edu/eowia2022. Cost of the conference is \$55 for adult participants and \$30 for students. Conference fee includes conference participation, breakfast, lunch, and conference handouts. Deadline for registration is Friday, March 11. For additional information, please contact Emily Marrison, OSU Extension Coshocton County at 740-622-2265. Stay connected with the Ohio Women in Agriculture Learning Network on Facebook @OHwomeninag or subscribe to the Ohio Women in Agriculture blogsite at u.osu.edu/ohwomeninag

Winter 2022 Beef Quality Assurance Re-Certification Trainings

The Coshocton County Extension office will be offering two additional Beef Quality Assurance (BQA) recertification meetings during the winter of 2022 to help producers renew their BQA certification. These sessions will be held on March 9 and April 13 from 7:00 to 8:30 p.m. in Room 145 at the Coshocton County Services Building located at 724 South 7th Street in Coshocton County. Pre-registration is required for each session as space is limited. There is no fee to attend. Call 740-622-2265 to pre-register. These sessions also qualify for anyone who is seeking a first time certification.



If you cannot attend one of our local sessions, Tuscarawas County will also be holding Beef Quality Assurance classes on February 28 (7 p.m.) and March 30 (7:00 p.m.) at the Sugarcreek Stockyards. Call 330-339-2337 to pre-register. Online certification and recertification is also available and can be completed anytime at https://www.bga.org/beef-quality-assurance-certification/online-certifications.

2022 Central Ohio Agronomy School

By: John Barker

Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-04/2022-central-ohio-agronomy-school-nutsbolts-about-corn-soybean

The 2022 Central Ohio Agronomy School will be held on Monday evenings, beginning on Monday, March 7 through Monday March 28, from 6:30 –9:00 p.m. at the Ramser 4-H Activity Center 700 Perimeter Dr. Mount Vernon, Ohio 43050 (on the fairgrounds). This four-week program will provide the attendees with the most comprehensive, up-to-date crop production and agricultural technology information available today. This school is designed with everyone in mind; part-time or full-time producer, beginner or CCA agronomist. Within each subject area we will teach the basic concepts and progress to the most advanced agronomic principles.

Topics include:

- March 7 Weed ID With Live Plants Key Identifying Characteristics
 John Barker, Ag Educator, Knox County
 I Have It ... Now How Do I Get Rid of It? Developing Multi-Year Herbicide Programs
 Dr. Mark Loux, OSU Weed Science
- March 14 Local, State and National Issues Facing American Farmers
 John Linder, Chairman National Corn Growers Association
 Are Retirement Plans in Your Future What Do I Need To Consider?
 David Marrison, OSU Extension Coshocton County
- March 21 Corn Disease Update Tar Spot, Vomitoxin and Much More Dr. Pierce Paul, OSU Plant Pathology
 Carbon Credits Is There Really A Market In Ohio?
 Mike Estadt, OSU Extension Pickaway County

March 28 – Solar Leasing Considerations For Ohio Farmers?

Eric Romich, Field Specialist Energy Education Ohio State University Extension

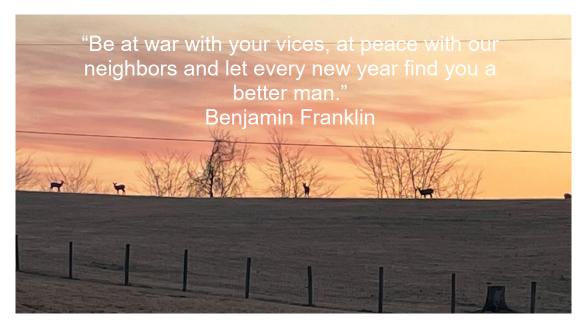
Ag Outlook - Farming In A World Facing Supply Chain & COVID Issues

Ben Brown, Sr. Research Associate Univ. of Missouri Extension

This school will provide:

- 11.5 continuing education credits (CEU's) for Certified Crop Advisors,
 - C.M. 2, I.P.M. 5.5, N.M 1, P.D. 3.
- 8.5 hours of Commercial Pesticide & Fertilizer Credits
 - Core, 2A, 2C, 2D, 9, and 15 (fertilizer).
- 8.5 hours of Private Pesticide & Fertilizer Credits
 - o Core, Cat 1, Cat 2, Cat 6, and Cat 15 (fertilizer).

Registration costs vary due to CCA credits and pesticide applicator credits. This program is sponsored by Advantage Ag & Equipment, B&B Farm Service, Central Ohio Farmers CO-OP, Clark Seeds, Cubbage Electric, Farmcredit, Seed Consultants, and The Ohio State University Extension. For more information contact the OSU Extension Office in Knox County (740-397-0401). The following link will provide more information for this program. https://u.osu.edu/knoxcountyag/2022/01/28/2022-central-ohio-agronomy-school/



East Ohio Women in Agriculture Conference



Who should attend:

Women and Young Women (high school age) who are interested, involved, or want to become involved in food, agriculture, natural resources, or small business.

This one-day conference is a great place to learn, share and network. Be surrounded by other women who are facing the same day-to-day ups, downs, adventures and dilemmas as you.

AGENDA

- 9:00 Registration, Network Fair & Breakfast
- 9:30 Welcome
- 10:00 Breakout 1
- 11:00 Breakout 2
- 12:00 Buffet Lunch
- 12:45 Keynote

Stoic or Stressed? Talking through difficult topics in a safe space

Bridget Britton

Behavioral Health Field Specialist

- 1:45 Breakout 3
- 2:45 Breakout 4
- 3:30 Closing and Door Prizes

THE OHIO STATE UNIVERSITY EXTENSION

Friday March 25, 2022 9 A.M. – 3:30 P.M.

Ohio FFA Camp Muskingum 3266 Dyewood Rd SW Carrollton, OH 44615 https://ffacamp.com/

\$55 Adults/\$30 Students

Registration Deadline: March 11

For more information call 330-264-8722

Register online at go.osu.edu/eowia2022

or complete & send this registration form.

Cancellation Policy: In the event of an unforeseen emergency, the conference will be cancelled by 11:59 PM, March 24, 2022. Attendees will be notified by email. The event will not be rescheduled. No registration fees will be refunded.

Break Out Tracks & Sessions										
	Natural Resources	Plants & Animals	Home & Family	Special Interest						
Session 1	1-A Sharpen your Skills: Chainsaw Maintenance and Safety – Lee Beers, OSU Extension Learn about safe operation, sharpening, and maintenance of chainsaws. Stay safe with personal protective equipment. Get cutting!	managing grass or hay. From	Explore what research reveals about male and female communication. Learn ways to achieve more productive work settings and	1-D Being the Boss: 2022 Ag Labor Update — Dr. Margaret Jodlowski, Ohio State University A look at up-to-date data on agricultural labor availability and wages, and research on labor management specifically for female operators!						
Session 2	2-A Preparing to Hunt – Janessa Hill, OSU Extension Are you interested in hunting for recreation or food? Learn about resources, equipment, and more to be successful in the field!	2-B Raising Livestock on 5 Acres or Less – Sandy Smith, OSU Extension So, you have some land, and you want some extra income or a supply of food for your family. This session will investigate all your options and possibilities.	2-C Charcutiwhat? Everything old is new again! – Kate Shumaker, OSU Extension No matter how you say it, charcuterie has been around for centuries. Learn history, shortcuts, money savers, tips and more!	2-D Real Women, Real lives: Making Professionalism Purposeful. – Cassie Mavis, Morgan Anderson & Mackenzie Ott, State FFA Officers Identify, observe, and implement female leadership principles. We will dive into the driving forces in strengthening a women's professional presence.						
Session 3	3-A Get Out: How Nature Improves Our Health — Laura Stanton and Shari Gallup, OSU Extension Did you know that nature is beneficial to every aspect of wellbeing? We'll explore all the reasons to get out! (May be outdoors weather permitting.)	3-B A complete approach to raised bed gardening – Jim Jasinski, OSU Extension Are raised beds right you? Learn about construction, soil mixes, plant selection, and ways to minimize weeds, diseases, and insects!	3-C Canning & Freezing Venison – Melinda Hill, OSU Extension A successful hunt includes safely storing the harvested meat. Learn how to properly pressure can venison, review freezing tips, and more.	3-D Real Women, Real lives: Making Professionalism Purposeful. – Cassie Mavis, Morgan Anderson & Mackenzie Ott, State FFA Officers Identify, observe, and implement female leadership principles. We will dive into the driving forces in strengthening a women's professional presence.						
Session 4	4-A Mushroom Mania – Erika Lyon, OSU Extension Learn the basics of the biology, ecology and identification of some common spring mushrooms while venturing on this outdoor fungal foray. (In the event of bad weather, this session will be moved indoors.)	4-B Humane Euthanasia in Livestock – Dr. Sarah Finney, Tri-County Animal Clinic How to recognize when it's time to euthanize and approved methods of euthanasia in livestock animals.	4-C Basic Clothing Repair – Learn basic sewing repair and what to look for when purchasing clothing that's long-lasting to help prevent wear and tear.	4-D Cut Flowers for Income –						

Registration Form										
Name										
Address										
Phone			Email							
Breakout Sessions:	1	2		3	4					
Payment Enclosed:	\$	for	Adult(s) ar	nd/or	Student(s)					

CFAES

OHIO STATE UNIVERSITY EXTENSION

BEF QUALITY ASSURANCE

Re-certification Trainings for Livestock Producers



Coshocton County will be hosting a series of Beef Quality Assurance re-certification programs to allow beef and dairy producers to re-certify their beef quality assurance during the winter of 2022. Preregistration is required for each session as space is limited.

Sessions Will Be Held:

Tuesday, February 1, 2022

Wednesday, March 9, 2022

Wednesday, April 13, 2022

7:00 to 8:30 p.m.

Coshocton County Services Building
724 South 7th Street - Room 145, Coshocton, OH 43812
Seating is limited, so please RSVP
Register by calling: 740-622-2265

Other Sessions are being offered in neighboring counties or can be completed on-line anytime at bqa.org.



COSHOCTON COUNTY EXTENSION