

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**February 9 (Edition #133)**

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SWCD 2022 Tree Seedling Sale

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Hello Coshocton County! So far, the groundhog's prediction has been spot on (unfortunately!). Today's warmup will be a nice reprieve and hopefully some of the ice will melt. Let's hope we are turning the corner on our winter weather.

I would encourage you to consider attending the 2022 Agricultural Policy and Outlook meeting next Monday, February 14 in Zanesville. We have a lot of great speakers and topics slated for this meeting. Make sure to get your reservations today by calling the Muskingum County Extension office at 740-454-0144.

Our Ag Day planning committee is excited to announce our National Ag Day Lunch will return in-person this year. We hope to see many of you there. Please make sure to note the location change (we will be at the Lake Park Pavilion). Reservations are due on March 11.

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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THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

National AG Day Lunch Slated for March 22, 2022

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-in-agriculture-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

Regional Ag Outlook Meeting Slated for February 14

Join OSU Extension for the **2022 Regional Agricultural Policy and Outlook Meeting** which will be held on Monday, February 14 from 9:00 a.m. to 12:30 p.m. at the Muskingum County Conference and Welcome Center located at 205 N. 5th Street in Zanesville, Ohio.

This school will focus on topics of farm inputs, rent, real estate, agricultural law, grain marketing, and 2023 Farm Bill. Featured speakers include Barry Ward, Peggy Hall, Matt Roberts, and Carl Zulauf. This program is made possible with support from the Ohio Corn and Wheat Growers Association. Growers and producers from around the region are encouraged to attend.



A pre-registration fee of \$20 per person is required and should be made by Wednesday, February 9, 2022. Online registration is available at go.osu.edu/muskingumoutlook. Contact the Muskingum County Extension office at 740-454-0144 or martin.2422@osu.edu with questions.

Reminder: 2nd Annual Corn College & Soybean School

By: Laura Lindsey

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-03/reminder-join-us-2nd-annual-virtual-corn-college-and-soybean>

Due to popular demand, the AgCrops Team will host the 2nd annual virtual Corn College and Soybean School on February 15, 2022 from 9:00 AM – 4:00 PM featuring your OSU Extension state specialists, including the new corn agronomist, Dr. Osler Orteiz, and new soybean pathologist, Dr. Horacio Lopez-Nicora. CCA CEUs will be available during the live presentations (2.0 CM, 5.0 IPM, and 1.0 NM).

To register, please go to: <http://go.osu.edu/cornsoy> There is a \$10 registration fee for this event, which goes directly to support OSU AgCrops Team activities. Presentations will be recorded and uploaded to the AgCrops Team YouTube channel after the event (<https://www.youtube.com/c/OSUAgonomicCrops>).

MORNING SESSION 9:00-noon

9:00-9:40	Laura Lindsey	Soybean Management for 2022
9:50-10:30	Osler Orteiz	Corn Management for 2022
10:40-11:20	Horacio Lopez-Nicora	Soybean Disease Management
11:20-noon	Pierce Paul	Corn Disease Management

AFTERNOON SESSION 1:00-4:00

1:00-1:40	Kelley Tilmon	Soybean Insect Management
1:50-2:30	Andy Michel	Corn Insect Management
2:40-3:20	Mark Loux	Weed Management for Corn and Soybean
3:20-4:00	Steve Culman	Meeting Nutrient Needs for Corn and Soybean

Winter 2022 Beef Quality Assurance Re-Certification Trainings

The Coshocton County Extension office will be offering two additional **Beef Quality Assurance (BQA)** re-certification 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.bqa.org/beef-quality-assurance-certification/online-certifications>.

Providing Extra Energy in Bad Weather

By: [Dean Kreager](#), Licking County Agriculture and Natural Resources Educator

Source: <https://u.osu.edu/beef/2021/02/10/providing-extra-energy-in-bad-weather/#more-10300>

Note: Reprinted from 2/10/2021 Newsletter

Winter is here! As I write this, we have had some snow and freezing temperatures along with a healthy dose of mud, but the worst is yet to come. Some grazers may still be utilizing stockpiled forages but many of us have transitioned to feeding hay, baleage, or silage. Hopefully, we know the quality of our forage and the needs of the livestock that will be consuming it. Maybe we have even planned for supplemental energy sources when needed. This is all great until mother nature throws a monkey wrench into things. Rain, snow, wind, and mud can destroy our best laid plans.

There are charts that tell us the nutrient requirements of all types of livestock during different stages of their lives. These help us know which forages are best suited to which animals and when a supplement needs to be added to maintain performance and reach genetic potential. What we sometimes forget is these tables do not account for non-typical weather conditions. A sunny day with no wind and temperatures near zero are better tolerated than a muddy 40°F day with blowing rain.

The temperature below which an animal's body begins to lose its normal function is called lower critical temperature (LCT). Below this temperature an animal needs to have additional energy to maintain body heat and normal body functions. For cattle with a dry average winter hair coat, the LCT is 32° F. If the hair coat is wet the LCT increases to 59° F. Goats and horses have values similar to cattle. For sheep with 2.5 inches of wool, their LCT is 28° F. For freshly shorn sheep, the LCT is 50° F. Due to the water shedding properties of wool, sheep are not as severely affected by rain as livestock with wet hair coats.



A rule of thumb for the increase in energy need is, for each 1°F wind chill value below the LCT, the animal will need an additional 1% increase in TDN (Total Digestible Nutrients, i.e. energy). With a wet hair coat this increases to a 2% increase in TDN. For example, a cow with an average winter dry hair coat and 10° F wind chill temperature would require an additional 22% TDN (32° F LCT -10° F wind chill = 22). Now let us look at a wet hair coat with a 35°F windchill. For this, LCT 59°-35°=24. Now we need to multiply this by 2 due to the wet coat. This cow will require an additional 48% TDN. So, even though the wind chill temperature is 25° F warmer than the previous example, this cow will require more than twice the additional energy that needed in the previous example.

Animals can eat more to compensate for increased energy needs. Cattle can increase consumption by near 30%, which would still not be enough for the example above. There are two things to remember. First, we need to supply more feed. If not, they just run out of feed 30% sooner and go hungry waiting for more feed to arrive. Second, poor-quality hay is slower to digest. Ruminants physically cannot eat as much poor-quality hay as good hay. The examples above show how easy it is for an animal's energy needs to increase beyond the point where simply eating more will fix the problem.

Bad things can happen when breeding animals are losing weight. Reduced energy and weight loss during late pregnancy can lead to birthing difficulties, decreased milk production, reduced weaning weights, and an increased length of time to breed back. These issues can have effects on future years performance. The

research evidence of how nutrition can affect future genetic expression of a fetus after it is born keeps building. Poor conditions during pregnancy can lead to multi-generational reductions in performance.

There are ways to help prevent these problems. First, we need to test our forage, so we know if and how much supplementation is needed. Knowing what we have helps us feed forages in a way that we are not over feeding or underfeeding according to the needs of the animal and the weather conditions present. Second, provide shelter to reduce wind chill issues. This can be a simple windbreak. While a dry inside location is great, a location that collects moisture and mud is not. Wet building conditions with limited airflow can increase problems. Third, feed late in the day if possible. Maximum production of heat typically occurs 4-6 hours after consumption. Finally, continue to feed energy at a higher level for a few days after the poor weather conditions end. Despite our best efforts the animals likely had to rely on their fat stores during the poor weather and need a little extra time to replace those stores so they will be ready for the next change in weather.

Artificial Insemination with a Small Beef Herd

By: [Dean Kreager](#), OSU Extension Ag and Natural Resources Educator, Licking County

Source: <https://u.osu.edu/beef/2022/02/09/artificial-insemination-with-a-small-beef-herd/>

With only 10% of beef herds in the United States utilizing Artificial Insemination (A.I.), from time to time the discussion arises on whether it is worth doing on small beef farms. In some situations, this is an easy answer while in other situations it is not so clear cut. Some herds are operated with the goal of producing superior offspring. Others are trying to get income from land that is not suitable for other purposes, and they want to do it with minimal labor. Both are worthy goals but the use of A.I. only fits one of the two situations.

Why use A.I.?

There are many possible reasons, but I will just discuss three here.

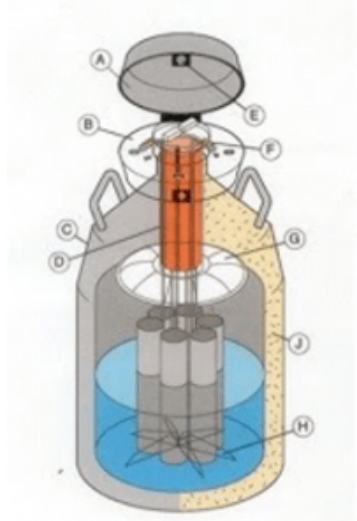
The first is genetic improvement. Whether you are raising purebred cattle and tracking EPD's or raising show cattle and looking at phenotype, A.I. opens the door to using the top genetics in the country. For \$20 to \$50 per straw you can purchase semen on nearly any bull. You also have the option to purchase semen from a variety of sires to improve your genetic diversity. Can you afford more than one bull in a small herd? New sires are released every year and on average each generation is better than the previous generation. How often can you afford to replace your bull with a new model? Finally, you have the option of sexed semen. Improvements continue to be made in sex sorting semen. Current results are typically within 10% of conventional semen pregnancy rates.

The second is biosecurity. A bull brought into your herd has the potential to bring along diseases that your herd may not have been exposed to in the past. A good vaccination program goes a long way in reducing these risks. There still is a concern of sexually transmitted diseases being transferred if the bull services other cattle through lease arrangements or weak fences.

The third can be a big one and that is safety. No matter how calm a bull may seem it is still a bull and should not be trusted. While beef bulls tend to be less dangerous than dairy bulls there are still many people injured or killed by bulls each year.

But First

Before implementing an A.I. breeding program it is crucial that your herd health and nutrition program are being taken care of. If you do not have a vaccination program in place, consult with your veterinarian to develop a program that will work well for your farm. Breeding time is not the time to vaccinate. Vaccinations should be given 5-6 weeks before breeding. Vaccinating too near insemination time can result in reduced pregnancy rates.



Be sure your cows are receiving adequate nutrition. This involves testing the forage and monitoring body condition scores. Very thin cows with body condition scores of 4 or less are likely to have greatly reduced fertility. Remember that the nutrients a cow takes in first go to maintenance and second to growth. Next the nutrients are used for production which in this case is milk. Finally, anything that is left can be used for reproduction. Too often there may not be enough energy or protein left after maintenance, growth and production take their share and reproduction suffers.

Economics

When it comes down to economics there are many things to consider. If you are just looking at dollars spent, it is hard to continue to feed and care for a bull while adding the A.I. costs on top of the bull expenses. Going 100% A.I. is possible but takes dedication to details and a time commitment to heat detection and pregnancy checking. It is challenging to maintain a narrow calving window when a clean-up bull is not used, but it is possible.

A study reported by Les Anderson at the University of Kentucky looked at the dollar cost per pregnancy when using bulls purchased at various prices. A \$3000 bull used for 15 cows resulted in a cost of approximately \$100 per calf, depending on many factors such as pregnancy rate. While this may not be exact today it can provide a ballpark idea.

When it comes to costs for A.I., many beef cattle are bred using an estrus synchronization program. I am including those cost for this discussion. With a cost of about \$20 for synchronization, \$20 -\$40 for semen and around \$20 if you need to hire a technician you are at around \$60-\$80 without adding in labor. With a 60% pregnancy rate you are at around \$115 per pregnancy. There are also other costs to consider such as owning a nitrogen tank and paying to have it filled about every 8 weeks which could amount to \$300-\$500 per year. There is not one way to raise cattle that is right for all situations. If your goal is to maximize genetic improvement in your cattle and you are willing to spend some time and invest in facilities, A.I. is a great place to start. If you do decide to try A.I., remember that impacts may take years to be observed. The generation interval on cattle is long so you won't see results immediately.

Price Risk Management Tools for Cattle Producers

Dr. Kenny Burdine, Extension Professor, Livestock Marketing, University of Kentucky

Source: <https://u.osu.edu/beef/2022/02/09/price-risk-management-tools-for-cattle-producers/>

The last few years are unlikely to be remembered fondly by many cattle producers. Large cattle supplies, a global pandemic, weather challenges, and a sharp increase in feed prices have all impacted feeder cattle values. However, 2022 has brought optimism for a significantly better cattle market. As I write this on January 21, 2022, there is more than a \$15 per cwt increase in CME® feeder cattle futures from the March contract to the August contract. In fact, every contract for August through November is trading north of \$180 per cwt. It has been some time since we have seen those types of price levels, so they have certainly caught my attention over the past few weeks. This article will briefly discuss some tools available to cattle producers should they want to protect themselves from downside price in 2022.

First, producers could consider entering a cash forward contract with a buyer looking to place feeders later in the year. The two parties could agree on a price now for cattle to be delivered at a later date and this expectation of higher prices should be reflected in the contract price. Assuming the contract is binding and enforceable, this strategy eliminates price risk. However, production risk remains a concern if cattle don't perform as expected, fail to reach the agreed upon weight, or if weather conditions necessitate earlier sale of the cattle. While forward contracts are an excellent price risk management tool, they are pretty limited in their use for cattle in Kentucky.

Hedging, through the sale of deferred futures contracts, is another way to capitalize on a strong futures market. As an example, a producer who plans to sell cattle in August, may choose to sell an August CME® Feeder Cattle futures contract now in order to have downside price protection until they sell the cattle. If feeder cattle markets decline between now and August, the producer will gain on their short futures position, which will

offset some of the loss in value of the cattle they will sell. Producers who choose to implement this strategy need to be certain they have access to considerable capital for margin calls. If futures prices continue to increase, producers can lose a lot of money on short futures positions before they are able to sell their cattle on the stronger market. For this reason, it is crucial that lenders be fully aware of the plans if this strategy is used. Producers must also consider basis as the value of the cattle they sell will not perfectly match futures prices.

Options on futures contracts provide an opportunity to have some downside protection, but also keep the ability to capitalize on rising prices. For example, if the August CME® feeder cattle futures contract were trading at \$180 per cwt, the producer might buy a put option with a strike price of \$174. The put option gives the producer the right to sell August futures at \$174, which means their option will increase in value as the market falls. They will pay a premium for this right, which becomes an additional cost. They must also self-insure the first \$6 per cwt drop in the market (the difference between the futures price and the strike price on the put). If feeder cattle prices continue to rise, the producer can benefit by selling their cattle on the stronger market and the only expense is what was paid in premium. Much like hedging through the sale of a futures contract, basis must also be considered with an option strategy as the strike price is based on the futures market.

An additional limitation of both futures based strategies (sale of futures and purchasing of options) is the 50,000 lb CME® Feeder Cattle contract size. The vast majority of Kentucky cattle producers are not large enough to utilize futures and options. Fortunately, Livestock Risk Protection (LRP) insurance provides an opportunity to purchase an insurance product very much like a put option, but that can be scaled for smaller operations. Additionally, the subsidy on LRP has been increased substantially over the last couple of years, which makes it much more attractive from a premium perspective.

LRP is an insurance product that pays an indemnity if the CME® Feeder Cattle Index is below a selected coverage level on the ending date of the insurance policy. The CME® Feeder Cattle Index is used to cash settle open CME® Feeder Cattle contracts at expiration, so this insurance product is very similar to a put option. Consider the option example from before for a producer that planned to sell 800 lb feeder steers in August. Rather than purchasing an August put, that producer could instead purchase LRP insurance with a coverage level of \$174 per cwt and an ending date sometime during the month of August. If the CME® Feeder Cattle Index was below \$174 on the ending date of the policy, they would be indemnified for the difference on every lb they covered. They must still self-insure the decrease until the index reaches \$174 and they must also understand basis – the policy is indemnified based on the CME® Feeder Cattle Index, rather than what they sell their cattle for.

The table below provides a quick comparison of some of the key features of the strategies discussed. Forward contracts are the only strategy described that do not involve basis risk, as an actual price for the cattle can be agreed upon. Potential margin calls are an important consideration for producers that choose to use short futures positions. Put options and LRP insurance both have the advantage of leaving potential for upside price gains, although the downside protection is not as solid as with forward contracts or short futures. Finally, LRP insurance offers the best opportunity to scale price protection to smaller quantities. While forward contracts could be written in any size, they tend to be more available for larger volumes.

Risk management strategies are very much dependent on the risk preferences and financial situation of the individual. The purpose of this article was largely to point out what is being offered by the market and review some price risk management strategies that are available. While these markets certainly have the potential to go higher, it is very likely that attractive pricing opportunities will be available for producers looking to establish some downside price risk protection this year. Price risk management is not about trying to cherry-pick market highs as it is sometimes presented. It is about strategically managing downside price risk and should be part of every producer's marketing plan.

Farm Profits in 2022 Projected to Remain Above Average

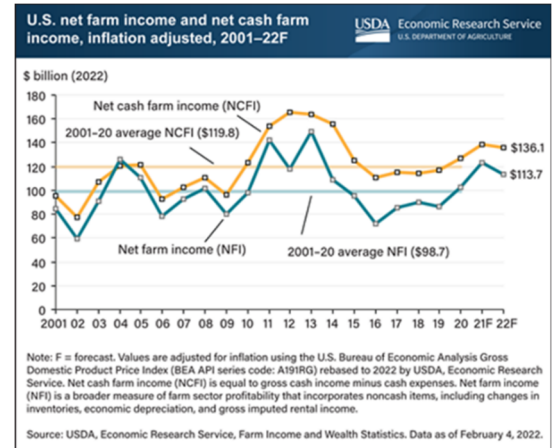
By: Chris Zoller, Extension Educator, ANR, Tuscarawas County

Source: <https://u.osu.edu/ohioagmanager/2022/02/05/farm-profits-in-2022-projected-to-remain-above-2001-2020-average/>

The United States Department of Agriculture Economic Research Service (USD ERS) uses two measures, Net Cash Farm Income (NCFI) and Net Farm Income (NFI), to gauge the financial performance of the U.S. agriculture sector. This article summarizes a recent USDA Charts of Note publication. The complete report is available here: <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=103192>.

U.S. Farm Income Projections - 2022

Net cash farm income is calculated by subtracting expenses from gross cash income. USDA ERS estimates this measure will decline 2.1 percent in 2022, compared to 2021. Net farm income is a broader measure of farm sector profitability that incorporates noncash items, including changes in inventories, economic depreciation, and gross imputed rental income. U.S. net farm income in 2022 is projected to be 7.9 percent lower than 2021. Should these forecasts be realized in 2022, both measures would still be above their respective 2001 – 2020 averages.



U.S. Farm Expense Projections - 2022

USDA ERS expects farm production costs to rise 1.5 percent in 2022, offsetting potential income gains. Farmers should not count on Government payments in the amounts distributed through previous COVID-19 pandemic assistance programs. Government payments are expected to fall by 58.5 percent from the amount received in 2021.

Planning for 2022

Continued supply chain issues, higher fertilizer and chemical prices, and other uncertainties make budgeting in 2022 even more critical. OSU Extension has several resources that can help you make informed decisions. Consider the following:

- Contact your OSU Extension Agriculture and Natural Resources Educator
- OSU Extension Enterprise Budgets for corn, soybeans, wheat, alfalfa, and corn silage: <https://farmoffice.osu.edu/farm-management/enterprise-budgets>
- Ohio Farm Business Analysis & Benchmarking Program, including crop and dairy enterprise summaries: <https://farmprofitability.osu.edu/>
- OSU Extension Farm Bill Decision Tool: <https://farmoffice.osu.edu/farm-management-tools/decision-aids>
- OSU Extension Custom Rates: <https://farmoffice.osu.edu/farm-mgt-tools/custom-rates-and-machinery-costs>
- OSU Extension eFields On-Farm Research Studies can provide information about reducing costs with reduced seeding rates: <https://digitalag.osu.edu/efields>
- OSU Extension Tri-State Fertilizer Recommendations for Corn, Soybean, Wheat, and Alfalfa: https://agcrops.osu.edu/FertilityResources/tri-state_info
- Considerations for Managing P & K: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-03/considerations-managing-p-k-2022>
- Fertility Calculator for Ohio Recommendations: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-02/fertility-calculator-ohio-recommendation>

The Ag Law Harvest

By: Jeffrey K. Lewis, Attorney and Research Specialist, Agricultural & Resource Law

Source: <https://farmoffice.osu.edu/blog/fri-02042022-1222pm/ag-law-harvest>

Did you know that ants are the only creatures besides humans that will farm other creatures? It's true. Just like we raise cows, sheep, pigs, and chickens in order to obtain a food source, ants will do the same with other insects. This is particularly true with aphids. Ants will protect aphids from natural predators and shelter them during heavy rain showers in order to gain a constant supply of honeydew.

Like an ant, we have done some heavy lifting to bring you the latest agricultural and resource law updates. We start with some federal cases that deal with the definition of navigable waters under the Clean Water Act, mislabeling honey products, and indigenous hunting rights. We then finish with some state law developments from across the country that include Georgia's right to farm law and California's Proposition 12.



Supreme Court to review navigable waters definition under the Clean Water Act. The Supreme Court announced that it would hear the case of an Idaho couple who have been battling the federal government over plans to build their home. Chantell and Mike Sackett ("Plaintiffs") began construction on their new home near Priest Lake, Idaho but were halted by the Environmental Protection Agency ("EPA"). The EPA issued an administrative compliance order alleging that Plaintiffs' construction violates the Clean Water Act. The EPA claims that the lot, on which the Plaintiffs are constructing their new home, contains wetlands that qualify as federally regulated "navigable waters." Plaintiffs are [asking the Court to revisit](#) its 2006 opinion in [Rapanos v. United States](#) and help clarify how to determine when a wetland should be classified as "navigable waters." In Rapanos, the Court found that the Clean Water Act regulates only certain wetlands, those that are determined to be "navigable waters." However, two different tests were laid out in the Court's opinions. The Court issued a plurality opinion which stated that the government can only regulate wetlands that have a continuous surface water connection to other regulated waters. A concurring opinion, authored by Justice Kennedy, put forth a more relaxed test that allows for regulation of wetlands that bear a "significant nexus" with traditional navigable waters. Justice Kennedy's test did not take into consideration whether there was any surface water connection between the wetland and the traditional navigable waters. In the lower appellate court, [the Ninth Circuit Court of Appeals used Justice Kennedy's "significant nexus" test to uphold the EPA's authority to halt Plaintiffs' construction](#). Now, [Plaintiffs hope](#) the Supreme Court will adopt a clear rule that brings "fairness, consistency, and a respect for private property rights to the Clean Water Act's administration."

SueBee sued for "bee"ing deceptive. Sioux Honey Association Cooperative ("Defendant") finds itself in a sticky situation after Jason Scholder ("Plaintiff") brought a class action lawsuit against the honey maker for violating New York's consumer protection laws by misrepresenting the company's honey products marketed under the SueBee brand. Plaintiff claims that the words "Pure" or "100% Pure" on the Defendant's honey products are misleading and deceptive because the honey contains glyphosate. Defendant filed a motion to dismiss the class action lawsuit and a federal district court in New York [granted Defendant's motion in part and denied it in part](#). Defendant asked the court to find that its labels could not be misleading as a matter of law because any trace amounts of glyphosate in the honey is a result of the natural behavior of bees interacting with agriculture and not a result of Defendant's production process. However, the court declined to dismiss Plaintiff's mislabeling claims. The court concluded that a reasonable consumer might not actually understand that the terms "Pure" or "100% Pure" means that trace amounts of glyphosate could end up in honey from the bees' foraging process. The court also declined the Defendant's request to dismiss Plaintiff's unjust enrichment claim because of the alleged misrepresentations of the honey. However, the court did dismiss Plaintiff's breach of express warranty claim and request for injunctive relief. The court dismissed Plaintiff's breach of express warranty claim because Plaintiff failed to notify Defendant of its alleged breach of warranty, as required by New York law. Plaintiff's request for injunctive relief was also dismissed because the court could not find any imminent threat of continued injury to Plaintiff since he has now learned that the honey

contains trace amounts of glyphosate. The court ordered the parties to proceed with discovery on Plaintiff's remaining claims, keeping the case abuzz.

Indigenous Hunting Rights. Recently, two members of the Northwestern Band of the Shoshone Nation ("Northwestern Band") were cited for hunting on Idaho lands without tags issued by the state. The Northwestern Band filed suit against the state of Idaho declaring that its members possessed hunting rights pursuant to the Fort Bridger Treaty of 1868 (the "1868 Treaty"). The 1868 Treaty provided that the Shoshone Nation agreed to permanently settle on either Fort Hall Reservation, [located](#) in Southeastern Idaho, or Wind River Reservation, [located](#) in Western Wyoming. By agreeing to settle on one of the two reservations, the Shoshone Nation was granted hunting rights on unoccupied lands of the United States. However, the Northwestern Band ended up settling in Northern Utah and not on one of the two named reservations. After considering the 1868 Treaty, the [Federal District Court of Idaho dismissed Northwestern Band's lawsuit](#). The court held that the hunting rights contained in the 1868 Treaty were tied to the promise to live on one of the reservations, and that a tribe cannot receive those hunting rights without living on one of the appropriate reservations. Thus, the court found that because the Northwestern Band settled in Northern Utah and not on one of the reservations, the hunting rights of the 1868 Treaty did not extend to the Northwestern Band of the Shoshone Nation.

Tensions rise over Georgia's Freedom to Farm Act. A few days ago, Georgia lawmakers introduced legislation that seeks to further protect Georgia farmers from nuisance lawsuits. [House Bill 1150](#) ("HB 1150") proposes to change current Georgia law to protect farmers and other agricultural operations from being sued for emitting smells, noises, and other activities that may be found offensive by neighboring landowners. [Georgia's current law](#), which became effective in 1980, does provide some protection for Georgia farmers, but only from neighboring landowners that have moved near the farm or agricultural operation after the current law went into effect. All neighboring landowners that lived near the farming operation prior to the current law going into effect have retained their right to sue. HB 1150, on the other hand, will prevent these nuisance lawsuits by all neighboring landowners, as long as the farm or agricultural operation have been operating for a year or more. Passing a right to farm law has proven to be difficult in Georgia. In 2020, House Bill 545, also known as the "Right to Farm bill" failed to pass before the final day of the 2019-2020 legislative session. Private landowners, farmers, and their supporters, are divided on the issue and seek to protect their respective property rights. It doesn't look like HB 1150 will have the easiest of times in the Georgia legislature.

Confining California's Proposition 12. Meat processors and businesses that sell whole pork meat in California (collectively the "Petitioners") have delayed the enforcement of [California's Proposition 12](#) ("Prop 12"), for now. Prop 12 is California's animal confinement law that has sent shockwaves across the nation as it pertains to raising and selling pork, eggs, and veal. Last week, the [Superior Court for Sacramento County granted Petitioners' writ of mandate](#) to delay the enforcement of Prop 12 on sales of whole pork meat. Petitioners argue that Prop 12 cannot be enforced until California has implemented its final regulations on Prop 12. To date, California has yet to implement those final regulations. California, on the other hand, suggests that final regulations are not a precondition to enforcement of Prop 12 and the civil and criminal penalties that can be brought against any farmer or business that violates Prop 12. The court disagreed. The court found that the language of Prop 12, as voted on by California residents, explicitly states that California voters wanted regulations in place before the square-footage requirements of Prop 12 took effect. Therefore, the court granted Petitioners' writ of mandate to prevent the enforcement of Prop 12 until final regulations have been implemented. The court's writ will remain in effect until 180 days after final regulations go into effect. This will allow producers and businesses to prepare themselves to comply with the final regulations. Opponents of Prop 12 believe this is another reason why the Supreme Court of the United States should review California's Proposition 12 for its constitutionality.

Posted In: [Animals](#), [Business and Financial](#), [Conservation Programs](#), [Environ](#)

Antibiotic Stewardship in Calves- Part 3

By: [Haley Zynda](#), Extension Educator, Agriculture and Natural Resources, Wayne County, Ohio State University Extension

Source: <https://dairy.osu.edu/newsletter/buckeye-dairy-news/volume-24-issue-1/antibiotic-stewardship-calves-%E2%80%93-part-3>

We're back with the final installment of the Antibiotic Stewardship in Calves program from Veal Quality Assurance. The final module is treatment protocols, a natural wrap-up to the program after learning about both the role of antibiotics and clinical evaluations. The goal of Part 3 is to improve treatment accuracy according to veterinarian protocols, and by the end of it, we should be able to select strategies for individual calves (a one-size-fits-all approach is too broad when it comes to veterinary medicine).

So why are veterinary protocols important? Well, given the title of the course, one of the reasons is to reduce unnecessary antibiotic use. Additionally, avoiding illegal use of medicine, improving treatment success, improving animal welfare (a biggie in today's consumer perspectives), and to decrease the risk of meat residues. Each protocol your vet gives you will have a set list of components: disease signs, medication and dosing, route of administration, use and frequency of treatment, length of treatment, meat withdrawal (if applicable), and follow-up. We'll walk through each of these components with an example. With the temperature fluctuation of late, pneumonia is likely a "popular" illness right now, so we'll use a respiratory disease example.

Think back to the clinical evaluation section and respiratory disease. Healthy calves should not have eye or nasal discharge, droopy ears, a cough, or abnormal breathing, scoring a 0 on all accounts. If a calf presents with any severity of the former list, they automatically receive a score of at least 2 for each sign. This is where decisions come into play; if the scores add to 2, don't treat quite yet, just check on them the next day. If the scores add up to 4, take the calf's temperature. A normal temperature indicates monitoring the calf further, but a temperature above 102.5°F calls for treatment. Scores adding to 5 or more require immediate treatment, no temperature necessary. Decision trees can help guide when a certain type of treatment is necessary, but always consult with your veterinarian on specific antibiotic use!

Speaking of medications, there are several names that will appear on labels, depending on the brand you purchase. For example, Polyflex® is a brand name drug, but the generic name is ampicillin. Likewise, for Liquamycin® LA-200 (oxytetracycline) or Baytril® 100 (enrofloxacin). Dosing will also be listed on the bottle (1 cc = 1 mL), as will the route of administration. Adhering to the proper route of administration is extremely important, just look up the results when Banamine® is administered intramuscularly in horses. Medications can be given orally (per os), intravenously, subcutaneously (sub-q), or intramuscularly (IM); the neck is a popular spot for sub-q or IM injections because there are fewer economic losses down the line from site reactions in the muscle.

Frequency and length of treatment go hand-in-hand; frequency being how often you can administer medication, with length being the number of days the medication is given. Some drugs may have single-dose, single-day treatment options or multiple-day treatment options listed on the bottle, but check with your vet to ensure the correct one is given. Ensuring the correct drug is used for the disease at hand is also an essential part of the puzzle; using antibiotics for off-label use can ONLY be recommended by your veterinarian. So let's put it all together.

We have a 100 lb calf with respiratory signs. Her eyes aren't crusty, but she has labored breathing and some nasal discharge. These signs add up to a 6, so according to our decision tree, we can treat without taking her temperature (but can always do so for more information). After talking with our vet, it sounds like it may be pneumonia and is listed as a use for Polyflex® (ampicillin). This drug is given at a rate of 1 mL per 50 lb of body weight either IM or sub-q. We can treat the calf with 2 mL of ampicillin once per day for 3 to 7 days. Our little heifer calf will stay on the farm to become a replacement, so no withdrawal time is expected. However, on a veal operation, we would need to wait 8 days before sending the animal to slaughter.

The last part of the equation is recordkeeping. Creating and maintaining thorough records allows producers to monitor progress, or lack thereof, of individual animals and reduce the risk of drug residues in meat. Records are the only way to prove a treatment occurred.

In summary of the three-part series, antibiotics are a necessary drug to treat bacterial infections but can lead to negative human and animal health impacts if not used judiciously. Recognizing the clinical signs of disease and having a good working relationship with your herd vet allows for accurate and consistent use of antibiotic treatments. Many thanks to Drs. Pempek and Habing from Ohio State University for putting together this comprehensive and essential training.

Small Ruminant Management: Abortion Causing Diseases

By: [Dr. Brady Campbell](#), Assistant Professor, State Small Ruminant Extension Specialist

Source: <https://u.osu.edu/sheep/2022/02/01/small-ruminant-disease-management-abortions/>

For those raising sheep and goats in the Midwest, lambing and kidding season is in full swing. As we enjoy the victories and contemplate the challenges our management systems threw at us this year, it is important to note and document everything that happened so we can evaluate our outcomes at the end of the season. An important statistic to keep in any livestock operation is death loss. This number is valuable to quantify the efficiency of your operation, but without recording a reason for a loss or death in your operation, this statistic ends here. I know that it can be stressful and deflating when we encounter a loss, but understanding why it occurred and the reason behind it will pay dividends as you move forward. Although this discussion is a bit gloomy to talk about, it's an important one none the less. Below, I have outlined some of the common diseases in sheep and goats that are associated with pregnancy loss, abortions, stillbirths, and birth deformities. Be sure to read each of these and compare them to your operation. Even if you don't have issues today, these diseases can rear their ugly head at any given time. Keeping this information tucked away in your farming tool box will be well worth the read.

Campylobacter (Vibrio)

Campylobacter, or more commonly referred to as Vibrio, is caused by a bacterial infection with campylobacter jejuni or fetus. Ewes and does that contract this bacterial infection tend to abort during late pregnancy. For those that do not abort, lambs and kids may be carried full term and can be either born dead (stillbirth) or live. Those that are born live will be small and weak, thus needing further attention. Unfortunately, this disease is rarely detected and is not known until abortions occur. For those experiencing issues with this disease, there are a couple of options to prevent and control future losses. During an abortion storm, tetracycline antibiotics may be used to control current issues. Due note that a valid VCPR will be required to purchase over the counter antibiotics in 2023. For future concerns, commercially produced vaccines are available. Be sure to read vaccine use prior to purchase as initial treatment may consist of a booster. Once a vaccine as such is used with your flock, it must be repeated on an annual basis. Therefore, it is critical to have dead lambs and kids tested at your state diagnostic center to ensure that you are treating for the appropriate disease the reduce your chances of introducing a disease that is not already present.

Chlamydia

Chlamydia is also a bacterial infection caused by chlamydia psittaci. Ewe and does infected with this disease will also abort during the last ~50 days of pregnancy. For those that do not abort, live offspring will be weak and will require special attention to ensure survivability. Just as noted above, antibiotics and vaccines can be used to control and prevent future outbreaks and issues. Some unique characteristics of Chlamydial infections is that it is easily spread from contaminated bedding that was previously exposed to infected placenta and birthing fluids. Therefore, it is critical to remove infected ewes from the flock and clean the area. Placenta and discharge from infected ewes is said to have a pungent and fowl smell. When purchasing ewes, be sure to acquire from clean flocks. Additionally, it is thought that mature ewe are immune to this disease if previously exposed.

Toxoplasmosis

Toxoplasmosis is an infection caused by the protozoa *Toxoplasma gondii*. These protozoal oocyst survive and remain active in the soil for several years and is therefore difficult to completely manage. Ewes and does that contract this disease during early pregnancy may abort or reabsorb the fetus. During late pregnancy, fetuses may be stillborn or live. Those that are live can either be weak or born normally. The vector that catches most grief due to association with Toxoplasmosis is the domestic cat. If you choose to keep cats in your barns for vermin control, keep only those that are spayed or neutered and those that are older as they tend to be less of an issue. Furthermore, storing feeds appropriately also ensures that vermin such as raccoons and opossum steer clear as they too are known to be carriers of the disease.

Cache Valley Virus (CVV)

Cache Valley has become a sour name over the past few years in the sheep industry. As the name states, this disease is caused by a virus and therefore is challenging to control. Animals contract CVV in the fall during or after the breeding season. Cache Valley is spread via mosquitos and biting midges. Ewes and does that are infected during early pregnancy may either reabsorb or abort their fetuses. Those that carry to full term usually result in stillbirth that have severe deformities. Unfortunately, at this time there is no vaccine available for this virus. It is however thought that animals that were previously infected will develop innate immunity to the disease. The best recommendation available at this point is to avoid wet, marsh like areas during and after the breeding season. Animals housed indoors should have access to proper ventilation to discourage insect accumulation.

Listeriosis

Although not a disease that we commonly associate with abortions and one that is typically human induced, Listeriosis is a bacterial infection caused by *Listeria monocytogenes*. This issue is most common in systems that feed fermented feeds (i.e., silage, baleage, haylage) or feed hay that is stored and/or fed out doors. If the infection is severe enough, ewes and does will abort. Other indicators that an animal is facing challenges with Listeriosis is neurological symptoms that are associated with this infection. Infected animals may circle, press their heads against a wall as they attempt to relieve swelling of their brain, drooling, and incoordination. To avoid these issues, be sure to monitor feed spoilage by limiting the amount of time a fermented feed is offered before replacing with fresh feed. Additionally, fermented feeds should have a low ash content, a pH that is <4.5, and stored in an anaerobic (oxygen deprived) environment. Animals demonstrating signs of Listeriosis can be treated if detected early. Consult with your local veterinarian for the most appropriate treatment protocols.

Noninfectious agents (toxic plants, genetic, nutrition)

Last, but certainly not least, producers may face noninfectious agents that result in abortions in their flocks and herds. Plants, both natural and cultivated, can have unique livestock challenges through out the year. Does anyone remember the herd of goats this past year that all perished because someone thought that feeding yard and Christmas waste that contained yew was appropriate? This seemingly kind gesture turned into a devastating loss for the producer. Poisons and toxins in plants can create serious issues that may result in abortions if the dose is low enough that does not cause death. To minimize your chances of facing these issues, scout your pastures regularly for downed trees after extreme weather events or toxic plants growing or thrown across the fence line.

It is my hope that you won't experience a loss in your flock or herd this year, but in the case that you do, please take a few minutes to truly investigate the cause of death. If you aren't able to do so or don't feel comfortable, find a mentor, neighbor, or fellow producer in the area that can assist. Determining the reason upon why a loss occurred is extremely important not only for your bottom line, but to also protect your animals and yourself from future challenges that could be more severe in the future. So the next time you have to dig a hole or turn the compost bin, make certain that you understand what happened to the animal that you lost and formulate a plan upon how you and your operation will overcome the challenge. Happy Shepherding!

SWCD 2022 Tree Seedling Sale

It's time for the Coshocton Soil & Water Conservation District's Annual Tree Seedling Sale! Tree varieties are available in packs of 5, 25, or 100 seedlings, and this year the Elderberry, Persimmon, Redbud, and Silky Dogwood are also available as single 3 to 4 foot saplings. Other items that are available this year include wildflower seed packets, Plantskydd wildlife repellent, tree tubes, and marking flags. Our supplier has decided to offer fewer varieties than in the past to simplify the sale during this unpredictable time.

As in past sales, seedlings can be ordered with a mail-in form (see attached). The District also partners with the Licking SWCD to provide an online ordering option. A link is available on the tree sale page of our website, www.coshoctonswcd.org.

Order early as there are a set number of seedlings available for the sale. All orders are filled on a first-come, first-served basis. The deadline for turning in paper order forms is **Friday, March 4**. Online orders can be submitted through **Monday, March 21**, but the available varieties will be quite limited by that time. The pick-up day for all orders will be **Friday, April 22** at the Coshocton SWCD Office. More information about the sale is available on our website, and if you have questions, please call 740-622-8087, ext. 4 or email samanthadaugherty@coshoctoncounty.net.



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 <i>Learn about safe operation, sharpening, and maintenance of chainsaws. Stay safe with personal protective equipment. Get cutting!</i>	1-B Forages for Horses: The Crash Course – Haley Zynda, OSU Extension <i>Managing horses also means managing grass or hay. From equine nutrition to forage species selection, the course has it all.</i>	1-C He Said, She Said – Emily Marrison, OSU Extension <i>Explore what research reveals about male and female communication. Learn ways to achieve more productive work settings and peaceful home environments.</i>	1-D Being the Boss: 2022 Ag Labor Update – Dr. Margaret Jodlowski, Ohio State University <i>A look at up-to-date data on agricultural labor availability and wages, and research on labor management specifically for female operators!</i>
Session 2	2-A Preparing to Hunt – Janessa Hill, OSU Extension <i>Are you interested in hunting for recreation or food? Learn about resources, equipment, and more to be successful in the field!</i>	2-B Raising Livestock on 5 Acres or Less – Sandy Smith, OSU Extension <i>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.</i>	2-C Charcuti...what? Everything old is new again! – Kate Shumaker, OSU Extension <i>No matter how you say it, charcuterie has been around for centuries. Learn history, shortcuts, money savers, tips and more!</i>	2-D Real Women, Real lives: Making Professionalism Purposeful. – Cassie Mavis, Morgan Anderson & Mackenzie Ott, State FFA Officers <i>Identify, observe, and implement female leadership principles. We will dive into the driving forces in strengthening a women's professional presence.</i>
Session 3	3-A Get Out: How Nature Improves Our Health – Laura Stanton and Shari Gallup, OSU Extension <i>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.)</i>	3-B A complete approach to raised bed gardening – Jim Jasinski, OSU Extension <i>Are raised beds right you? Learn about construction, soil mixes, plant selection, and ways to minimize weeds, diseases, and insects!</i>	3-C Canning & Freezing Venison – Melinda Hill, OSU Extension <i>A successful hunt includes safely storing the harvested meat. Learn how to properly pressure can venison, review freezing tips, and more.</i>	3-D Real Women, Real lives: Making Professionalism Purposeful. – Cassie Mavis, Morgan Anderson & Mackenzie Ott, State FFA Officers <i>Identify, observe, and implement female leadership principles. We will dive into the driving forces in strengthening a women's professional presence.</i>
Session 4	4-A Mushroom Mania – Erika Lyon, OSU Extension <i>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.)</i>	4-B Humane Euthanasia in Livestock – Dr. Sarah Finney, Tri-County Animal Clinic <i>How to recognize when it's time to euthanize and approved methods of euthanasia in livestock animals.</i>	4-C Basic Clothing Repair – <i>Learn basic sewing repair and what to look for when purchasing clothing that's long-lasting to help prevent wear and tear.</i>	4-D Cut Flowers for Income – <i>Learn how to grow, harvest, arrange and market cut flowers.</i>

Registration Form

Name _____

Address _____

Phone _____ Email _____

Breakout Sessions: 1 _____ 2 _____ 3 _____ 4 _____

Payment Enclosed: \$ _____ for _____ Adult(s) and/or _____ Student(s)

Please register on-line at go.osu.edu/eowia2022 or mail registration and payment to:
OSU Extension Harrison County, ATTN: Women in Ag, 538 North Main St., Ste H, Cadiz, OH 43907

2022 Tree Sale Order Form

Name: _____

Address: _____

Phone: _____

Email: _____

How would you like to receive the pick-up reminder?

Postcard or E-mail

Would you like to receive our quarterly newsletter?

Yes - No - Already Receive

Mail order form with
payment to:

Coshocton SWCD
724 S. Seventh Street, Rm 120
Coshocton, OH 43812

**Paper Order Forms must be
received by Friday, March
4th** and are subject to

availability. Online ordering
may continue as tree supplies
last. Projected pick up date is

Friday, April 22nd at the

Coshocton SWCD Office. If

you have any questions,

please call (740) 622-8087,

ext. 4. More information

about the tree sale and online

ordering information is

available on our website at

www.coshoctonswcd.org

Important Information

There is no limit on the
number of packets that can
be ordered, but **all orders are
subject to availability. We
suggest ordering as soon as
possible, since there are a set
number of seedlings
available.** Orders are filled on
a first-come, first-served
basis. Anyone can order trees
regardless of county
residence, but trees *will not
be delivered or mailed.*
**Payment must be included
with your order.**

<u>Please Indicate Quantity of Packs for Each Variety</u>				
Native Small Trees & Shrubs	Sapling <small>One 3'- 4' sapling</small>	Pack of 5 <small>12"-18" seedlings</small>	Pack of 25 <small>6"-12" seedlings</small>	Number of packets x price
	\$12.00	\$14.00	\$40.00	
Arrowwood Viburnum	N/A			
Eastern Red Cedar	N/A			
Elderberry				
Persimmon				
Redbud				
Silky Dogwood				
Native Large Trees	Pack of 5 <small>12"-18" seedlings</small>	Pack of 25 <small>6"-12" seedlings</small>	Pack of 100 <small>6"-12" seedlings</small>	Number of packets x price
	\$14.00	\$34.00	\$110.00	
Bur Oak				
Kentucky Coffeetree				
Northern Pecan				
Shagbark Hickory				
Sugar Maple				
White Oak				
Native Conifer	Pack of 5 <small>9"-18" seedlings</small>	Pack of 25 <small>6"-9" seedlings</small>	Pack of 100 <small>6"-9" seedlings</small>	Number of packets x price
	\$12.00	\$25.00	\$70.00	
Eastern White Pine				
Additional Items		Cost	Qty.	Qty. x price
Wildflower Seed Packet		\$5.00		
Plantskydd Repellent - Powder Concentrate		\$18.56		
Plantskydd Repellent - Pre-mixed Spray		\$18.56		
Tree Tube and Wood Stake		\$6.00		
Marking Flags Circle White or Pink	25	\$5.57		
	50	\$6.50		
	100	\$7.42		
Sub-total:				
Sales Tax 7.25%:				
Grand Total Enclosed:				
Starting in 2022 the State Auditor requires Soil & Water to collect tax. Non-profits and farms must provide tax exempt form with order.				

Seedling sizes are 6 to 18 inches depending on variety; sapling varieties are approximately 3 to 4 feet tall. All trees are state/federally inspected and **are bare root seedlings**. Due to the number of variables involved, we do not guarantee the success of the seedlings once they are in your possession. Reasonable substitutions may be made based on availability.

Marking Flags: Available in pink or white; each flag is 4" x 5" on a 30" wire.

Tree Tube and Wood Stake: A 4' tube with wood stake that can improve seedling survival and reduce wildlife damage.

Plantskydd Repellent: Contains 1 lb of powder concentrate that will treat over 200 plants or 1 qt of pre-mixed spray that will treat around 100 plants. Plantskydd can help prevent damage to seedlings from browsing deer, rabbits, and opossum.

Wildflower Seeds: 1 ounce of seeds per packet that plants 100 to 200 square feet. Mix includes a variety of perennials, grasses, and showy annuals.

Seedling Varieties in alphabetical order	Mature Height	Mature Width	Growth Rate	Sun Light	Mois-ture	Soil PH
Arrowwood Viburnum - Ornamental, white flowers, blue-black berries, attracts birds butterflies and moths	6'-15'	6'-15'	M	S,P,SH	D, M,W	A,N,B
Bur Oak - Wildlife, large tree at maturity and long-lived and offers deep shade	70'-80'	70'-80'	S	S	D,M,W	A,N,B
Eastern Red Cedar - Ornamental, windbreaks, wildlife, timber (do not plant near apple trees due to cedar apple rust)	40'-50'	8'-20'	M	S	D, M	A,N,B
Eastern White Pine - Timber, windbreaks and wildlife	60'-80'	20'-40'	F	S	M	A, N
Elderberry - Dark edible berries, showy white flowers, wildlife and attracts birds	5'-12'	5'-12'	F	S,P	M,W	A,N
Kentucky Coffeetree - Reputation as tough species, ornamental or street tree, toxic to livestock & pets if ingested	60'-95'	40'-50'	F-M	S	M	N,B
Northern Pecan - Edible fruit, wildlife and timber	70'-100'	40'-80'	M	F	D,M	N
Persimmon - Edible fruit, fragrant white flowers, wildlife and attracts pollinators	35'-60'	20'-35'	S	S,P	D,M	A
Redbud - Adaptable with edible pink-magenta flowers	25' - 30'	26' - 33'	M	S, P	M, W	B
Shagbark Hickory - Wildlife habitat (bat roosting in flaking bark), wildlife and timber	60'-80'	30'-50'	S	S,P	D,M	B,N
Silky Dogwood - White flowers, reddish stems and burgundy fall color	5'-8'	6'-10'	M	S,P,SH	D,M,W	N,B
Sugar Maple - Syrup, timber, wildlife and pollinators	60'-75'	40'-50'	M	S,P,SH	D,M	N,B
White Oak - Timber, wildlife, long-lived and ornamental	50' - 70'	50' - 70'	M-S	S, P	D, M, W	N

Growth Rate: F = fast 12"+/year, M = medium 6"-12"/year, S = slow 2"-6"/year

Light Required: S = sun, P = part sun/part shade, SH = shade **Soil Moisture:** D = dry, M = medium, W = wet

Soil pH: A = acidic (6.5 or less), N = normal pH range (6.5 - 7.5), B = basic/alkaline (7.5 or higher)

Links to more information about the tree varieties are available on our website www.coshoctonswcd.org.

Ohio

FARMLAND LEASING UPDATE

<https://farmoffice.osu.edu/events/ohio-farmland-leasing-update>

FEBRUARY 9, 2022

7:00—9:00 pm

Via Zoom Webinar

Presented by OSU's Farm Office Team:

Barry Ward

Leader, Production Business Management

Peggy Kirk Hall and Robert Moore

Attorneys, OSU Agricultural & Resource Law Program

Learn the latest information on:

- Current economic outlook for Ohio row crops
- Research on cash rent markets for the Eastern Corn Belt
- Rental market outlook – fundamentals
- Ohio's statutory termination legislation
- Addressing soil quality and conservation practices in leases
- Using long term leases in farm succession planning
- Farmland leasing resources

Register for this free webinar at:

<https://go.osu.edu/farmlandleasingupdate>



**THE OHIO STATE
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OSU FARM OFFICE

farmoffice.osu.edu

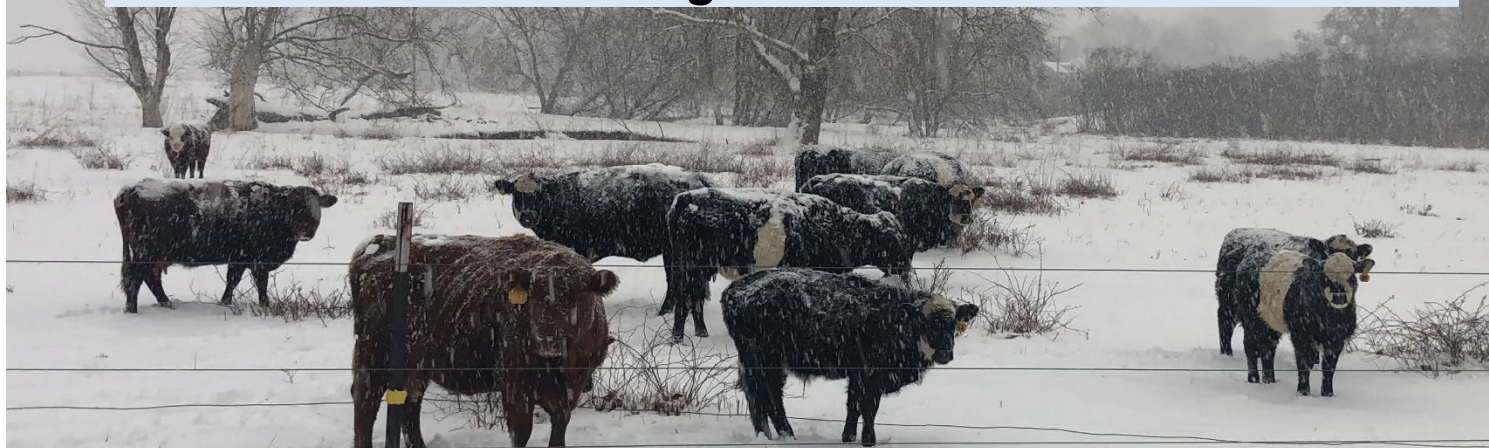
CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.

CFAES

OHIO STATE UNIVERSITY EXTENSION

BEEF 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. Pre-registration 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.



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

COSHOCTON COUNTY EXTENSION

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