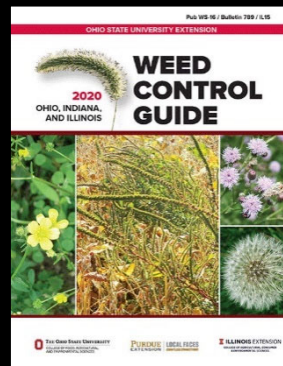


**COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**January 1, 2020 Issue

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Upcoming Programs

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Happy New Year Coshocton County! Another year is in the books and 2019 was a very special one for us as OSU Extension celebrated its 100<sup>th</sup> year of service to Coshocton County. We are so grateful for your support of our Extension Office. We are looking forward to the next 100 years!

Today is the day we traditionally take stock of our lives and make resolutions or set goals for the year. These goals usually revolve around ourselves as persons. Lose weight, exercise more, eat less, read more, spend more time with the family, etc.

I would also encourage you to take time over the next few weeks to set goals for your farm business for 2020. These could include doing an in-depth analysis of your operation (financial, yield, profit per acre or profit per cow). I also hope your goals include attending some of our local Extension events. The tax and legal workshops held in December kicked off our winter programming season. I hope to see many of you at our upcoming programs.

As we begin the new year, I would like to offer the following quote from Edith Lovejoy Pierce who stated, "We will open the book. Its pages are blank. We are going to put words on them ourselves. The book is called Opportunity and its first chapter is New Year's Day." Coshocton County, have a good and safe new year!

Sincerely,

*David Marrison*

Coshocton County OSU Extension ANR  
Educator



**THE OHIO STATE UNIVERSITY**

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AND ENVIRONMENTAL SCIENCES

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## **Weed Control Guides Available**

Coshocton County Extension is pleased to announce that copies of the 2020 Weed Control Guide for Ohio, Indiana and Illinois are now available for purchase for \$15.25. The Weed Control Guide explains the importance of weed control and gives suggestions on herbicide management strategies for corn, soybeans, small grains, and forages. Also included are special sections on marehail, Palmer amaranth, and waterhemp. An index to all tables regarding herbicides is listed on the back cover for easy navigation and quick referencing. Stop in today to purchase your copy today!

## **2019 Ohio Performance Trials**

The Ohio State University has released the 2019 Corn, Soybean & Forage Performance Trials publication. This 40 page supplement to the Ohio Country Journal has the 2019 Ohio Corn Performance Trial results, 2019 Ohio Soybean Performance Trial results as well as the results from the 2019 Ohio Forage Performance Trials. Complimentary copies of this publication can be obtained at the Coshocton County Extension office.

## **2019 Farmer's Tax Guide**

The 2019 version of the Farmer's Tax Guide (Publication 225) has been released by the Internal Revenue Service and can be found at: <https://www.irs.gov/pub/irs-pdf/p225.pdf>. Copies are also available at the Coshocton County Extension office.

## **What's on our Christmas Wish List? More Written Farmland Leases in 2020**

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

Source: <https://farmoffice.osu.edu/blog/wed-12182019-325pm/what's-our-christmas-wish-list-more-written-farmland-leases-2020>

Christmas is a good time to make wishes for the peace and well-being of others. One of our top wishes this year does that: we hope for all Ohio farmers to have written farmland leases. It's an odd wish, we know. But putting leases in writing can help landowners and farm tenants live in peace, and we like that. Farm leases have always been prone to being verbal agreements, sealed with a handshake. Simplicity and trust are two plausible reasons we've done business that way. But a written farm lease can be simple, and using one doesn't have to mean that the parties don't trust each other. Instead, a lease can keep distrust from arising between the parties by anticipating needs and foreclosing uncertainties and disagreements.

One of the strongest disagreements we hear about verbal farm leases is whether one party can terminate the lease without giving the other much notice of that termination. For example, if Riley has rented land from Dale every year for the past ten years, can Dale terminate the lease for the 2020 planting season in February of 2020? What if Riley has already purchased inputs, added nutrients, or planted a cover crop? Or perhaps Dale passes away at the end of the year. Will Riley lose the lease if Dale's children sell the land before planting season begins? These are the uncertainties that can lead to fighting, distrust, and sometimes, costly and difficult litigation.

A written farmland lease can prevent these uncertainties that can arise with verbal leases. A written lease can state how much notice is required in order for one party to terminate the lease. It can address other potentially problematic issues, such as who repairs drainage tiles, fences and access points, how to address new subsurface drainage and soil fertility needs, and whether and how to adjust annual lease rental rates. When an issue or question about the arrangement develops, the written farm lease can provide the already agreed-upon answer or solution.

When it comes to the peace and well-being of farmers, written farmland leases are a good thing to wish for. So let's keep the Grinch of uncertainty from showing up in 2020, and put those farmland leases in writing. For our resources on what to include in a written farm lease, how to create an enforceable lease, and other farm lease needs, please visit: <https://farmoffice.osu.edu/our-library/farm-leasing-law>

## Choosing Varieties & Hybrids for 2020

By Dr. Anne Dorrance & Dr. Pierce Paul

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-41/choosing-varieties-hybrids-2020-check-disease-resistance-ratings>

The seed suppliers want your early orders and the catalogues are all spread out on the tables. Now to begin the process of choosing the best variety or hybrid for your fields that can hold up to all of the challenges facing soybeans and corn in Ohio. Our recommendation is to first focus on the disease and insect scores. Every company uses a different scale based on 1 to 10 – but for some companies 1 is best and for others, 10 best – so first read the fine print. In addition, some companies use a distributive disease rating scale, using words like “excellent disease package,” “good disease package,” or “poor.” While this scale is unclear as to which specific disease the hybrid is most resistant to, it can still be used as a guide for hybrid/variety selection. For instance, a hybrid listed as having an “excellent disease package” should be less susceptible to the primary diseases than one listed as having a “good disease package.” Next step – what key diseases and insect pests do we need to focus on.



**Soybeans:** the four diseases that impact Ohio farmers the most are: Phytophthora (on poorly drained soils), Frogeye leaf spot (continuous soybean fields from central Ohio-south), Sclerotinia (fields with poor air drainage – Northeast and Eastern regions), and SCN (more than 50% of fields now have detectable populations of SCN – with more than 7% in severely high populations).

**Phytophthora root and stem rot.** This pathogen, *Phytophthora sojae*, can be found in most fields in Ohio but causes disease when those fields are saturated with rains for 24 hours or more. Under these conditions highly susceptible varieties can have 100% yield loss. The heavy clays of Northwest Ohio are particularly prone to this disease. During 2019, we detected *Phytophthora* stem rot over a broader geographic region due to the amount of rain. In the seed catalogues, there are two ratings for resistance, 1) a listing of a Rps gene and 2) a quantitative resistance score on a 1 to 9 scale. The Rps genes were the first line of defense and have been used since the 1960s (Rps1a was the first). Based on recent check-off funded research, we can confirm that most fields in Ohio have populations of *P. sojae*, where these genes are no longer 100% effective. They might work in one spot in the field, but not 2 feet away. The next line of soybean defense is the quantitative resistance, which is many, many genes working together to limit the growth of the pathogen. Much like a teenager that is immune to all of the badgering to do their chores – it isn't bothered at all by the presence of the pathogen. This quantitative resistance has been called many things in the seed catalogues: partial resistance, field resistance, and tolerance. Our best varieties have scores of 3 on a scale of 1 to 10 where 1 is very high resistance (really an effective Rps gene) and 10 is dead. Focus on the best score rating for that seed company.

**Frogeye leaf spot.** This has now become a recurring problem for soybeans in southern up to Central Ohio. High levels of inoculum (lots of leaf spots) in the fall that can overwinter in Ohio, so this is especially important for those fields that are continuous soybean. The first thing is if you had Frogeye at the end of the season in 2019, please do not plant the same variety back in that field. I do that to create the best opportunity for our research plots to develop disease for fungicide studies, and since I have that covered, you don't need to do that. Any frogeye in fields in 2019 (conditions were not as favorable as previous years) means it's time to choose something with better resistance scores. A resistant cultivar will not develop frogeye, so no yield hit and no added input costs for fungicides if conditions are favorable for disease to develop.

**Sclerotinia stem rot.** The infections for this disease occur during flowering under conditions of cool



temperatures (70s F) and high humidity. High plant population and poor air drainage can also favor this disease. Resistance to this pathogen, *Sclerotinia sclerotiorum*, is also quantitative (many genes) and some are associated with limiting pathogen growth but also with longer internodes to help with disease escape. The structure, sclerotia, looks like a mouse or rat dropping, and can survive for long periods of time if they are buried. This is one soybean disease where no-till can favor the degradation of the sclerotia.

**Soybean Cyst Nematode.** This nematode continues to expand in the number of fields it can be detected in (> 50%) in Ohio. More importantly, we are also identifying fields with super high numbers of SCN (7% of those sampled during 2018 & 2019)! It is very important to continue to purchase varieties with SCN resistance. This is a success story. Planting soybean varieties with resistance has kept this nematode at very low levels for over 20 years. Based on earlier reports from the '90s, it had the potential to become a major problem, but then the companies all worked hard to provide new varieties with SCN resistance. Now, as you would expect, similar to *Phytophthora*, where the same resistance has been deployed for 20 years, we do have a number of fields in Ohio where the SCN populations are adapting to PI 88788 or Peking or both sources of resistance. Interestingly, not like the *Rps* genes of *Phytophthora* where they work or they don't, SCN adapts slowly by increasing the number of successful feeding sites on the roots of resistant plants. So early in the process, we don't see the decline in SCN numbers when soil tests are collected and yields begin to drop. Later in the process, increases in SCN occur overall in the field and yield loss is similar to that of a susceptible variety. We are in the midst of wrapping up this statewide survey as part of the SCN coalition ( <https://www.thescncoalition.com/> ) to assess where SCN is in Ohio and if it has adapted. Summary results from this for Ohio will be coming in April.

**Gray leaf spot (GLS) of corn.** This is still the most frequently occurring foliar disease of corn in Ohio and neighboring states, but thanks to genetic resistance, the impact of this disease is low in most years. On rare occasions when susceptible hybrids are planted under warm, humid conditions in river-bottom fields, yield loss can exceed 50%. Resistance in the case of GLS does not mean "no disease," it means less disease or low disease severity. Compared to susceptible hybrids, fewer and smaller lesions develop on resistant hybrids, leading to slower disease spread from the lower to the upper leaves. Some companies rank their hybrids for resistance to GLS on a 1 to 9 scale, with 1 being most resistant and 9 being most susceptible. However, some companies do the opposite, with hybrids with higher scores being more resistant than those with low scores.

**Northern Corn Leaf Blight (NCLB).** Like GLS, this is one of the most common leaf diseases of corn in Ohio, and over the last few years, NCLB has been more severe than GLS. Two types of resistance are available to protect against races of the fungus that cause NCLB: partial resistance (non-race specific), which protects against all known races of the fungus, and race-specific resistant, which is controlled by single *Ht* genes and, as the name suggests, protects against specific races of the pathogen. Partial resistance is expressed as a reduction in the number and size of the lesions, and the amount of spores produced in the lesions, as well as an increase in the length of time it takes for new lesions to develop and a new crop of spores to be produced. Race-specific resistance is controlled by one or more *Ht* genes, such as *Ht1*, *Ht2*, *Ht3*, and *HtN*. Resistance conferred by *Ht1*, *Ht2*, and *Ht3* is expressed as small chlorotic lesions with limited sporulation, whereas resistance conferred by *HtN* results in fewer, smaller lesions, similar to what is observed with partial resistance. For years, races 0 and 1 were the most predominant races of the NCLB fungus in Ohio. If we assume that these races are still the most prevalent, the fact that we continue to see susceptible reactions on multiple hybrids at multiple locations across the state suggests that we are either planting hybrids without *Ht* genes (susceptible to races 0 and 1) or with *Ht1* only (susceptible to race 1). Avoid planting hybrids without *Ht* resistance. Click here for more on NCLB resistance: <https://agcrops.osu.edu/newsletter/corn-newsletter/select-hybrids-resistance-northern-corn-leaf-blight-how-does-it-work>

For diseases like ear rots for which there is very little information in seed catalogs on disease resistance, use your own experience as a guide for making hybrid selection. For instance, if the hybrid you planted this or last season (or five seasons ago) ended up with high levels of *Gibberella* ear rot and vomitoxin, it means that the hybrid is susceptible. Avoid planting it in that same field next year. Also, since resistance may change over time, your experience with a hybrid may be just as good as or even better than the information in some seed catalogs when it comes to disease susceptibility.

## **Winter Application of Manure – Remember Setbacks**

By: Glen Arnold

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-41/winter-application-manure-remember-setbacks>

Some Ohio livestock producers will be looking to apply manure to farm fields frozen enough to support application equipment. Permitted farms are not allowed to apply manure in the winter unless it is an extreme emergency, and then movement to other suitable storage is usually the selected alternative. Thus, this article is for non-permitted livestock operations.

In the Grand Lake St Marys watershed, the winter manure application ban from December 15th to March 1st is still in effect. Thus, no manure application would normally be allowed from now until March 1st.

In the Western Lake Erie Basin (WLEB) watershed, the surface application of manure to frozen and snow-covered soils require there to be a growing crop in the field. This could be a pasture, alfalfa, clover, ryegrass or a rape crop. There must be enough vegetation visible to provide a 90% cover of residue and growing vegetation. Radishes and oats would not qualify as a growing crop as both are typically winter killed. Manure can be applied to fields without growing crops if the manure is incorporated at the time of application or incorporated within 24 hours of application.



The rainfall rule for surface manure application in the WLEB is a weather forecast saying “not greater than a 50% chance of a half inch or more of rain in the next 24 hours.” It is advisable to print out the weather forecast when you start applying manure so you have the needed proof if an unexpected storm drenches the area. Weather.gov is the most commonly accepted website for this forecast. On this web page, you can type in the zip code for a seven-day forecast. On the lower right-hand side of the seven-day forecast page, is an hourly weather forecast that will provide a 48-hour weather forecast graph.

Winter manure application rates should follow the NRCS 590 standards, which limit solid manure application amounts to five tons per acre and liquid manure application amounts to 5,000 gallons per acre. These have 200 foot setback distances from ditches, streams and creeks and must be on slopes of less than 6% and less than 20 acre areas in size without additional buffers. These setbacks exist because as snow melts, it can carry manure to streams and ditches. These 200 foot setback distances apply to both liquid and solid manure application. In recent years there have been several fines levied against livestock producers applying manure too close to ditches and streams.

For liquid manure applicators, examine fields for tile blowouts, monitor tile outlets before, during, and after manure application and any other situations that might allow manure to reach surface waters.

## Reducing Hay Storage & Feeding Losses

By: Jessica A. Williamson, Ph.D., Extension Forage Specialist, Penn State

Source: <https://u.osu.edu/beef/2019/12/18/reducing-hay-storage-and-feeding-losses/#more-7990>

On most livestock operations, the greatest operational cost is stored and harvested feed, so it only makes sense that striving to reduce storage and feeding losses of harvested feeds as much as possible can help improve forage quality, quantity, and overall profitability of an operation. Reducing waste, even by a few percent, can have a direct reflection on farm financial status almost immediately. Dry hay has the potential to meet most ruminant livestock nutrient requirements if harvested correctly and at the optimal stage of maturity to meet the class of livestock's nutrient requirements, and if quality is maintained throughout the storage period. However, supplemental nutrition is often a necessity as a result of hay quality and quantity losses through storage and feeding.



Storage losses of uncovered hay can be upwards of 30%, including weather and respiration, resulting in one of the largest outlets for lost dollars on a livestock operation. Some factors affecting the amount of forage loss due to weather include bale density, weather and climate conditions throughout the duration of storage, and species of hay. Uncovered hay loses quality as rain washes through the bale and removes the desirable water-soluble carbohydrates of the plant cells through leaching, causing a reduction in total digestible nutrients (TDN).

Storage losses of uncovered hay can be upwards of 30%

Dry matter loss after harvest occurs as a result of plant respiration, even in hay with less than 20% dry matter. When harvest moisture levels are greater than 20%, the incidence of mold is much more likely, causing an even greater dry matter loss as a result of microbial activity.

The best option for reducing storage losses is to store hay under cover. A hay barn is always the best choice for reducing storage losses, but other options such as plastic tarps or net wrap can also help improve storage. If no cover option is available, it would be beneficial to keep bales off the ground, either by placing them on pallets or on a gravel lot. This will help bales from sitting in water after high precipitation. A study by the University of Tennessee shows a 5% loss in round bales under a hay barn, stacked or tarped hay on pallets had a 14% loss, while round bales that were net wrapped had a 23% loss. Even with those losses, uncovered hay had an astounding 30% loss.

There are several different methods for feeding hay, all of which have their benefits and disadvantages. Hay refusal is the biggest factor in feeding losses, which is directly related to quality. Other losses during feeding include trampling, leaf shatter, and fecal contamination, all of which are related to how the hay is fed. Feeding hay on pasture ground can have benefits and downfalls. Spreading the hay out and moving the location of where it is fed can provide benefits to the soil health and reseeding of forages within that pasture. This practice is best if the hay that is being fed is very clean and weed-free. If feeding hay in a pasture, it is recommended that only a single day's worth of feed is offered. If animals are fed mass quantities of hay that is intended to last them several days or even weeks, a large amount of waste is often the result of sorting, trampling, bedding, and fecal contamination.

Feeding out of rings can provide a barrier between the hay and animal, reducing waste from trampling or fecal contamination. This practice could lead to loss of pasture if being fed on sod as a result of compaction and trampling, so it is recommended to feed hay out of rings in a livestock concentration area, on concrete, or on gravel. No matter the method of feeding, a well-drained site is always recommended. Reducing even a small portion of loss when storing or feeding hay will have direct and immediate impacts economically on a livestock operation, so plan carefully for methods on improved storage and feeding.

## ***Farm Succession & Red Angus: An Eye to the Future?***

By: [Clifton Martin](#), OSU Extension Educator, Muskingum County (originally published in the [Ohio Farmer](#))

Source: <https://u.osu.edu/beef/2019/12/18/farm-succession-and-red-angus-are-they-in-your-future/#more-7834>

This was a game-changer. When I departed a farm tour this fall I was struck by a deep sense of the importance of what I had just witnessed. The layers were peeled back to provide a brief glimpse into the life of one particular farm family, their farming operation and their triumphs and struggles. In an effort to improve what they do and out of a commitment to their continued success, they allowed our tour group into the potentially vulnerable space that is their lives, finances, and future of their farm. When I stepped foot on the farm I felt I had entered a fairly average farm, though as many are it was a place of beauty and pride. A long farm lane took a sharp left and ended in the drive of a small older home. Behind the home off the right corner were a few grain bins one hundred yards out. Down the slope to the right was the main farm lot with two smaller-sized farm buildings: one for equipment and the other for handling livestock. The buildings were older, painted white, unheated, showing a few signs of age. Pastures, corn, and soybeans surrounded the farm lot across rolling hills. It was a cloudy day in October, 42 degrees, with a slight wind. After two hours outside I would soon agree that it was cold.



We met the farm family as soon as we arrived which consisted of two generations farming side-by-side. There were shared enterprises and independently managed enterprises, but I would really call this a classic father-son operation, who were 2nd and 3rd generation. They benefit from the success of the first generation, but are finding their own way today. The main enterprises that sustained the farm were grain crops and beef livestock. We went off over a hill and were greeted on the other side by a herd of Red Angus, grazing in a fresh paddock to create that hillside view packed with animals that shows up in magazines. The idea was we would enjoy the view and have our question and answer session right there with the farm managers. But, as soon as the animals heard the farmer's voice, mooing and bellowing commenced. It was something to set in that hollow and be surrounded by all these bawling animals.

Hopefully you recognize this farm as positive as I saw it. But ultimately, some lessons really stand out in my mind about this farm. It was in a good place: most of the assets were paid for, income was higher than expenses, they had a reputable brand, there were strong channels of communication, and they had access to multiple markets, among many other positive things, I am sure. So, what were the challenges? We learned that father had no living will and we learned that the farm was in an LLC structure, but it was questionable if it was done correctly for the farm. They shared that financial records existed but without a regular recordkeeping system and we learned that there were off-farm non-farming siblings with an inheritance interest. I could see the ambition of youth meeting the tempered view of experience, the son was living in the home as an "in kind" benefit but did not own the home, and the son was growing in confidence and vision with dreams for the farm that was still owned by, and driving income for, the parent. This was a true farm business succession case study.

There are probably several ways to describe the risks, but I have settled on a lack of future planning as the main risk that stands out to me. Fortunately, they were making great strides to close this gap. They face the reality that the farm is in a great place today, but will it be in three years? Or in 10 years? Will it weather a storm? There was a real gift here: two generations working side-by-side, with a new generation ready to go and keep the farm business running. Ultimately, should tragedy or misfortune strike that farm today, it was questionable if enough pieces would be left for the farm to survive in three years. Legal risks threatened the ability of the next generation to own and manage the business which highlighted that question: What does it take for a farm business to change hands from one generation to the next? It was remarkable to see all those



Red Angus in one place, and to discuss this with the family.

One concept we ag practitioners promote is the concept of an advisory team to support the farm business. Who can you rely on outside of yourself to give you sound advice to run a successful business and ensure it can weather a storm? At this farm, that was the next step. Sometimes that is tough to do because you may find yourself operating out of a position of the strength and provision where you have been able to make sound decisions for a number of years. You just paid off the whole farm with the nothing but your own sweat and time. But I continue to see that successful farm businesses always have a team of trusted advisors that is relied upon for sound guidance. These may be attorneys, tax preparers, accountants, marketers, or other industry consultants. And yes, sometimes you may have to pay for some services.

Some of us have ten animals on a few acres and some more spread across hundreds of acres. At the end of the day, are you thinking about the future of these assets? And are you ready for the day when you need to relinquish control? How will you do that? Who will ensure that you are on a path that the legal framework of our society will accept, and can you navigate that? We all agree that farms are important and we need them in our communities. Your beef operation matters, but can you ensure that you can leave it a good state for your successor?

These were the lessons and questions that I saw that day, when we stood in the field with the cows. Farm succession is forever. Or to put it in more common terms, change is inevitable. Managing risks requires relying on others and in my short Extension career I have learned that we all need to build community and work with people we can trust to navigate issues we struggle to understand. You have a good thing going. Enjoy the reward, but, have an eye on the future.

## ***A Year in Review***

By: David L. Harrison, Originally Published The Beacon, December 25, 2019

Merry Christmas Coshocton County! I hope you are having a wonderful Christmas season. As we bring 2019 to a close, I would like to pause and reflect on the major news stories of 2019. Here is hoping that 2020 brings us many blessings!

For the past two years I have mentioned that nothing could top the political upheaval and divisiveness from the year prior. Well, true to form 2019 was no less dramatic than 2017 or 2018. We started 2019 with the longest shutdown of the federal government in our country's history. And then the year continued to give us plenty to debate, hate, tweet, and argue about. Immigration reform, foreign relations with China, and the recent impeachment hearings all continue to divide our country. Let's hope the New Year brings more peace and harmony!

As we stroll through the memory bank of 2019, it will be remembered for more than politics. Some of the top stories included Hurricane Dorian and more wildfires and earthquakes in California. Violence continued around the globe highlighted by the serial bombing in Sri Lanka and the tragic mass shooting at a Walmart in El Paso, Texas. Some of those we lost include: Eddie Money, Luke Perry, Tim Conway, Cokie Roberts, Gloria Vanderbilt, I.M. Pie and even the internet famous feline - Grumpy Cat.

Agriculturally in Coshocton County, we have a lot to be proud of and our local farmers are a tough bunch that is able to react to any condition thrown their way. I feel very blessed to be working with all those who make agriculture great here in Coshocton County. So, as we close the year, I would like to share some of my top local stories:

**Weather-** It appears weather volatility will be our new normal going forward. We struggled again with too much rain during spring planting and then had stretches of wet weather during harvest. In between, we had some extremely dry and hot stretches. I know many will remember how hot the Coshocton County Fair was this year. Even with all the ups and downs in the weather, our corn and soybean yields were really good. In fact, many are calling our region the garden spot of Ohio this year. For many farmers in Ohio, 2019 was a



disaster. In fact, nearly 1.5 million acres of crops were not planted in Ohio due to the excessive rain in the spring. So, our farmers are truly grateful for how 2019 turned out.

**Coshocton County Extension Turns 100-** 2019 was a historic year for OSU Extension as we celebrated our 100<sup>th</sup> year anniversary of service to Coshocton County. Locally, Extension established its roots on February 1, 1919 when our first “County Agent” Grover C. Musgrove was hired to provide education to farmers in Coshocton County. Since that time our OSU Extension has grown and continues to provide programming for farms, families, and youth. And OSU Extension received the best birthday present in November when voters passed our renewal levy. We are humbled and grateful for your continued support of our Extension programming here in beautiful Coshocton County. We will continue to work to make the best better here in Coshocton County. Thank you!

**Coshocton County Master Gardeners Receive State Recognition-** We were excited that the Coshocton County OSU Extension Master Gardener Volunteers received three state awards in November. Gail Piper of Warsaw was recognized as one of five “Outstanding Master Gardener Volunteer of the Year” for the State of Ohio. Gail has been a Master Gardener since 2006 and has volunteered over 2,100 hours of service to Coshocton County. The Master Gardeners also won the 2019 OSU Extension Outstanding Master Gardener Volunteer Project for the Year for small groups (1 to 25 members). They received this award for the Horticulture Information Station which was installed at the Lake Park Complex near the Master Gardener’s Phenology Garden. And finally, the group was also recognized as a Platinum Standards of Excellence Award Winner. The Platinum Standard Award is the highest recognition a County Master Gardener Program can receive from the State Master Gardener Program. This award is based on criteria for volunteerism, continuing education, and program management. Congratulations to our wonderful Master Gardener Volunteers.

**A New Year is Coming-** As we close the year of 2019, I would like to offer the following quote from Edith Lovejoy Pierce who stated, “We will open the book. Its pages are blank. We are going to put words on them ourselves. The book is called Opportunity and its first chapter is New Year’s Day.” Coshocton County, have a good and safe new year!

### ***OSU Extension to Host Two Winter Beef Programs***

Mark your calendars now for the Ohio Beef Cattle Nutrition and Management School, targeted for anyone raising, feeding, or marketing any class of beef cattle. Session 1 (6-9:00 p.m. January 29<sup>th</sup> at Luckey Farmers Inc. main office in Sandusky County, and January 30<sup>th</sup> at the OSU Newark Campus in Licking County) will feature former OSU research nutritionist and current University of Georgia Department of Animal Sciences Chair, Dr. Francis Fluharty discussing the use of small grains, by-product feeds, and cover crop forages in both feedlot and beef cow diets. Session 2 (February 12<sup>th</sup> in Sandusky County, and February 13<sup>th</sup> in Licking County, both 6-9:00 p.m.) will feature talks by OSU Extension Educators on marketing strategies, feeding and managing for carcass quality, forage testing, and managing annual forages for grazing and hay.

The Ohio State University Extension Beef Team also plans to hold a hands-on, Ohio Beef Cow/Calf workshop at the Claylick Run Farm Sale Facility outside of Newark, in Licking County. This workshop will be held from 10 a.m – 2:00 p.m., including lunch, with 2 different sessions, January 30<sup>th</sup>, and February 13<sup>th</sup>. Session 1 will focus on alternative feeds and forages, and managing beef brood cow nutrition, with discussion led by Dr. Francis Fluharty. Session 2 will focus on herd health and reproduction with Dr. Les Anderson from the University of Kentucky and Dr. Foster Anderson with Bailey Veterinary Clinic, and will include live demonstrations from OSU Extension Beef Team members on body condition scoring, bull breeding soundness evaluation, and semen handling.

For more details and information, or to register, contact Allen Gahler in Sandusky County at 419-334-6340 or [gahler.2@osu.edu](mailto:gahler.2@osu.edu), or Dean Kreager in Licking County at 740-670-5315, or [Kreager.5@osu.edu](mailto:Kreager.5@osu.edu).

## **Precision University: Combating Compaction**

The fall of 2018 and spring of 2019 created some less than ideal conditions for field work leaving many farmers concerned with field compaction. This concern is justified as compaction can significantly reduce yields. Compaction has been a concern for many years as equipment size grows, increasing axle weight.

Researchers have been conducting on-farm trials comparing farming practices to uncover ways farmers can reduce compaction. Comparisons include tires and tracks, equipment size and tillage practices. At the 2020 Precision University, OSU Extension has invited in some of the leading experts from across North America on compaction research and management.

Featured Speakers include:

Dr. Scott Shearer -The Ohio State University

Dr. Ian McDonald -Ontario Ministry of Agriculture

Dr. Mark Hanna -Iowa State University

Dr. Jason Warren -Oklahoma State University



We have also moved the event to the Champion Center at the Clark County Fairgrounds outside Springfield. This facility allows us to feature equipment demonstrations in a heated environment and enables exhibitors to display the latest in technology from their companies. We're excited to get our hands dirty with some compaction demonstrations involving different types of equipment!

Details including online registration and hotel information can be found at [go.osu.edu/precisionu](http://go.osu.edu/precisionu). The Precision University will be held January 8 from 8:00 am - 3:30 pm. The registration deadline is January 3 and the cost to attend is \$50. This includes breakfast, lunch and giveaways. Sponsors and exhibitors include Camso, Soucy, Green Field Ag, Capstan Ag, Apple Farm Service, Precision Ag Reviews, Ag Info Tech, Mosaic, and Agro Chem.

## **2020 Agronomy School Slated for January 28**

The OSU Extension offices in Coshocton & Muskingum Counties are pleased to be offering the “**2020 Agronomy School**” on Tuesday, January 28, 2020 from 9:00 a.m. until 3:00 p.m. This school will be held at the Dresden United Methodist Church located at 1014 Main Street in Dresden.

This school will focus on topics to increase corn profitability, improve grain crop nutrient management, and understand new trends in Ohio weather. Participants will also learn more about the farm bill, commodity prices, and trade issues.

The featured speakers for this event include: Aaron Wilson, Atmospheric Scientist, Byrd Polar and Climate Research Center; Ben Brown, Program Manager for Farm Management; Glen Arnold, Field Specialist, Manure Management; and Harold Watters, Field Specialist, Agronomic Systems; Clifton Martin, OSU Extension Educator and David Marrison, OSU Extension Educator. This event is being co-sponsored by the Ohio Soybean Council.



## **2020 AGRONOMY SCHOOL**

Pre-registration for this school is required and the fee is \$30 per person. Make checks payable to Ohio State University Muskingum County. Mail to 225 Underwood Street, Zanesville, OH 43701. The registration deadline is Wednesday, January 22, 2020. This fee includes refreshments, lunch, handouts, and a copy of Bulletin #969 – A Field Guide to Identifying Critical Resource Concerns and Best Management Practices. Pesticide and

Certified Crop Advisor (CCA) credits have been applied for. More information can be found at [muskingum.osu.edu/agronomyschool](http://muskingum.osu.edu/agronomyschool). More information can be obtained by contacting the Muskingum County Extension office at 740-454-0144.

### ***2020 Ag Outlook Meeting***

Wayne County Extension will be hosting a regional **2020 Ag Outlook Meeting** on Friday, January 24 at the Kidron Park Community Building at 4434 Kidron Rd, Kidron OH. The program begins at 9:00 am and concludes by 3:15 pm. Thanks to our sponsors, Farm Credit Mid-America, Farmers National Bank, Wayne Savings Community Bank and Farmers State Bank, many of the costs associated with facility rental, presenter mileage fees and handout materials are covered, and the registration cost is only \$12/person. Pre-registration is required to the Wayne County Extension office by January 17 to enable us to get an accurate meal count and provide handout materials for all participants. Pre-register by calling the Wayne County Extension office at 330-264-8722 or by sending an email message to [lewandowski.11@osu.edu](mailto:lewandowski.11@osu.edu). More information including a flyer with presenters and topics available at <https://wayne.osu.edu/program-areas/agriculture-and-natural-resources/2020-ag-outlook-meeting>

### ***Beef 509 Program to be held in February***

Beef 509 is the result of a partnership with the Ohio Beef Council, Ohio Cattlemen's Foundation, The Ohio State University Extension and The Ohio State University Department of Animal Sciences. The Ohio Beef Council (OBC) will hold its Beef 509 educational event at The Ohio State University. The Beef 509 program is held to raise the awareness level about the beef that is produced and what goes into producing a high-quality and consistent product.

The 2020 program will take place on two consecutive Saturdays, February 22 and 29, 2020. The part of the program held on February 22 will include a live animal evaluation session, harvest demonstration, rumen function and nutrition discussion, an animal disposition and carcass value presentation, a grid pricing discussion, a quality assurance overview and a review of current issues. Attendees will also have the opportunity to use what they have learned to evaluate cattle and then purchase them in an auction simulation at a level that will net a profit when value is determined at the packing and market retail sectors.

In the second session on February 29, attendees will participate in a demonstration on carcass grading as well as fabrication. There will also be a discussion on manufactured meat, and an update on the Ohio Cattlemen's Association and the Ohio Beef Council. The program will conclude with a review of the results from the combined sessions. It is critical to attend both sessions as participants are assigned to teams that work together throughout the program.

The Beef 509 program is the result of a partnership with the Ohio Beef Council, the Ohio Cattlemen's Foundation, The Ohio State University Extension and The Ohio State University Department of Animal Sciences.

For more information or to register, visit [ohiocattle.org](http://ohiocattle.org), call the OCA office at 614-873-6736 or contact Kagney Collins at the Ohio Beef Council at [kcollins@ohiobeef.org](mailto:kcollins@ohiobeef.org).

### ***Consider Becoming a Coshocton County Master Gardener Volunteer***

Do you enjoy gardening? Are you looking for a way to give back to your community? Then becoming a Master Gardener Volunteer may be just the thing for you.

The Master Gardener Volunteer Program trains volunteers for Ohio State University Extension in Coshocton County to help further the mission of engagement and outreach. Volunteers are trained in consumer horticulture including: annuals, perennials, fruits, vegetables, soil, botany, turf, insects, diseases and more! After receiving over 50 hours of education, each intern must complete 50 hours of service to OSU to become fully certified Ohio State Master Gardener Volunteers.

The next training classes in Coshocton County will be held on Monday evenings from 6:00 to 9:00 p.m. at the



Coshocton County Extension office (724 South 7<sup>th</sup> Street in Coshocton, Ohio) from 6:00 to 9:00 p.m. The training dates are February 10, 17, & 24; March 2, 9, 16, 23, & 30; April 6, 20, & 27; May 4, 11, & 18 and June 1 & 8.

The cost for this training program is \$135 course fee and applications are due January 8. More details can also be received by contacting the Coshocton County Extension office at 740-622-2265 or [marrison.2@osu.edu](mailto:marrison.2@osu.edu) An application packet can be found on-line at [coshocton.osu.edu](http://coshocton.osu.edu).

### ***Upcoming Program Dates***

- Winter Agronomy School- January 28
- Farm Bill Training in Clark- January 30
- Farm Succession Workshop- February 12 & 19
- Farm Financial Management Series- February 4, 11, & 18
- Mortality Composting Workshop- March 18

**Check out upcoming  
programs at:**  
[go.osu.edu/coshoctonevents](http://go.osu.edu/coshoctonevents)



# 2020 AGRONOMY SCHOOL

TUESDAY, JANUARY 28, 2020 9:00 AM TO 3:00 PM

Join OSU Extension in Muskingum & Coshocton Counties for the 2020 Agronomy School. This school will focus on topics to increase corn profitability, improve grain crop nutrient management, and understand new trends in Ohio weather. Also learn more about the farm bill, commodity prices, and trade issues. Thank you to the Ohio Soybean Council for co-sponsoring this event.

**Location:**

Dresden United Methodist Church  
1014 Main Street  
Dresden, Ohio 43821

**Cost:**

\$30 per person- RSVP by Jan 22

**Registration information:**

See back side of flyer

**Featured Speakers:**

Aaron Wilson, Atmospheric Scientist, Byrd Polar and Climate Research Center

Ben Brown, Program Manager for Farm Management

Glen Arnold, Field Specialist, Manure Management

Harold Watters, Field Specialist, Agronomic Systems

[muskingum.osu.edu](http://muskingum.osu.edu)

[coshocton.osu.edu](http://coshocton.osu.edu)



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# 2020 Agronomy School

## Registration Details:

PRE-Registration is required, and the fee is \$30 per person. The registration deadline is Wednesday, January 22, 2020. This fee includes refreshments, hot lunch, handouts, and a copy of Bulletin #969 – A Field Guide to Identifying Critical Resource Concerns and Best Management Practices. Fertilizer Certification and Certified Crop Advisor (CCA) credits have been applied for.

Make checks payable to Ohio State University Muskingum County. Mail to 225 Underwood Street, Zanesville, OH 43701. Please return this form with payment. Thank you!

Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

Amount Enclosed: \_\_\_\_\_

## More Information:

Muskingum County

Clifton Martin

740-454-0144

[martin.2422@osu.edu](mailto:martin.2422@osu.edu)

Coshocton County

David Marrison

740-622-2265

[marrison.2@osu.edu](mailto:marrison.2@osu.edu)

[muskingum.osu.edu](http://muskingum.osu.edu)

[coshocton.osu.edu](http://coshocton.osu.edu)



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For an accessible format of this publication, visit [cfaes.osu.edu/accessibility](http://cfaes.osu.edu/accessibility).



# Agriculture Outlook and Policy Meeting

What's ahead for farmers and Ag businesses in 2020? Come to the January 24 Ag Outlook and Policy meeting and hear what the experts are saying.

**Friday, January 24, 2020**

9:00 am to 3:15 pm

Kidron Park Community Building  
4434 Kidron Rd, Kidron

Cost : \$12/person.

Pre-register by January 17, call the Wayne County Extension office at 330-264-8722, or RSVP by email to: [lewandowski.11@osu.edu](mailto:lewandowski.11@osu.edu)

More information at  
[go.osu.edu/agwayne](http://go.osu.edu/agwayne)

## FEATURING:

David Marrison: ANR Educator, Coshocton County  
**Transitioning Your Farm Before the Hearse Arrives**

Barry Ward: Extension Production Business Management, Director OSU Income Tax Schools

**Examining the Ohio Farm Economy: Crop Margins, Land Economics, Tax Issues**

Dianne Shoemaker: Extension Field Specialist, Dairy Production Economics

**Precision Tools for Dairy Profitability: 15 Measures of Competitiveness/Farm Analysis**

Ben Brown: Agricultural Risk Management, Department of Agricultural, Environmental and Development Economics

**Commodity Outlook and Risk Management in 2020**

Aaron Wilson: Specialist and Research Scientist, Byrd Polar & Climate Center

**Farming in the Face of Weather Extremes**

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## Ag Outlook and Policy Meeting 2019

**PRE-REGISTRATION IS REQUIRED.** The cost is \$12 per person. **Registration deadline is January 17<sup>th</sup>.** Make checks payable to OSU Extension. Please send checks and registration to: OSU Extension- Wayne County, 428 W. Liberty Street - Suite 12, Wooster, Ohio 44691. Please detach and return this form with your payment. Thank you.

Name(s): \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Number attending/amount enclosed: \_\_\_\_\_

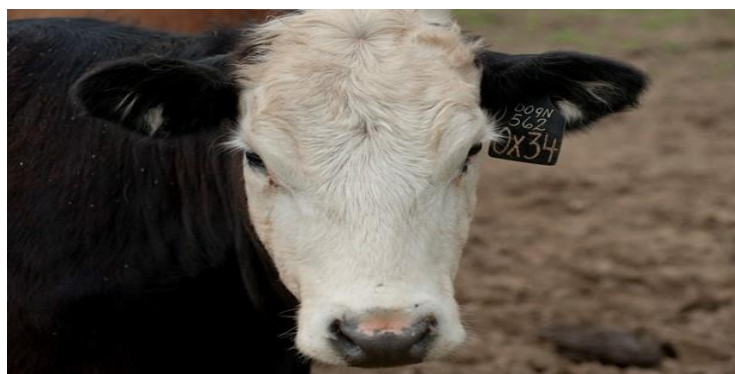


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**[wayne.osu.edu](http://wayne.osu.edu)**

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# OHIO BEEF CATTLE NUTRITION AND MANAGEMENT SCHOOL



## SESSION 1

Session 1 will focus on utilizing small grains in the diets of all ages and production groups of beef cattle, utilizing alternative forages, and managing your herd or feedlot with lower quality feedstuffs. This discussion will be led by former OSU research nutritionist and current University of Georgia Department of Animal Sciences Chair, Dr. Francis Fluharty.

## SESSION 2

Session 2 will feature talks by several OSU Extension Educators on marketing strategies, commodity market outlook, feeding for the grids/carcass quality, forage testing, and managing annual forages for grazing and hay.

The sessions will be offered twice in two different locations – Licking County and Sandusky County.

### SANDUSKY COUNTY

Session 1: January 29, 2020 | 6:00 – 9:00 pm

Session 2: February 12, 2020 | 6:00 – 9:00 pm

#### Luckey Farmers Inc.

Main Office  
1200 W. Main Street  
Woodville, OH 43469

### LICKING COUNTY

Session 1: January 30, 2020 | 6:00 – 9:00 pm

Session 2: February 13, 2020 | 6:00 – 9:00 pm

#### Ohio State University Newark and COTC Campus

Warner Center, Room 126  
1179 University Drive  
Newark, OH 43055

**PRICE: \$40.00** (Price includes Session 1 & 2)

**CONTACT:** For questions, contact Allen Gahler in Sandusky County at 419-334-6340 or [gahler.2@osu.edu](mailto:gahler.2@osu.edu), or Dean Kreager in Licking County at 740-670-5315, or [kreager.5@osu.edu](mailto:kreager.5@osu.edu).

## REGISTRATION | OHIO BEEF CATTLE NUTRITION AND MANAGEMENT SCHOOL

*(Registration should be sent to the attending County.)*

Name: \_\_\_\_\_

Additional Attendees: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

# of Attendees \_\_\_\_\_ x \$40 Total Amount Enclosed: \_\_\_\_\_ **(Make checks payable to OSU Extension.)**

Send completed forms to: **Sandusky County Sessions**  
Ohio State University Extension  
Sandusky County  
2000 Countryside Drive #4  
Fremont, OH 43420

**-or-** **Licking County Sessions**  
Ohio State University Extension  
Licking County  
771 East Main Street, Suite 103  
Newark, OH 43055



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# Ohio Beef Cow/Calf Workshop

Are you looking at all your options to make your cow/calf operation profitable? OSU Extension is bringing in experts from Ohio and surrounding states to discuss and demonstrate the practices that you might apply on your farm to improve your operation. By attending the sessions below, you will receive the needed interaction with speakers and participants to address any questions, as well as the opportunity to connect with fellow cattle producers.

## SESSION 1

Session 1 will focus on alternative feeds and forages, and managing brood cow nutrition with discussion led by Dr. Francis Fluharty.

## SESSION 2

Session 2 will focus on herd health and reproduction with Dr. Les Anderson from the University of Kentucky and Dr. Foster Anderson, a highly respected local cattle veterinarian. We will include live demonstrations on topics such as body condition scoring, breeding soundness exams, and semen handling.

**January 30, 2020 | 10:00 am – 2:00 pm**

**-and-**

**February 13, 2020 | 10:00 am – 2:00 pm**

**LOCATION:** Claylick Run Farm Sale Facility (Heated Facility)  
11970 Cross Rd., Newark, OH 43055

**PRICE: \$40.00** (Price includes Session 1 & 2 and Lunch)

**CONTACT:** For questions, contact Allen Gahler in Sandusky County at 419-334-6340 or [gahler.2@osu.edu](mailto:gahler.2@osu.edu), or Dean Kreager in Licking County at 740-670-5315, or [kreager.5@osu.edu](mailto:kreager.5@osu.edu).



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## REGISTRATION | OHIO BEEF COW/CALF WORKSHOP

Name: \_\_\_\_\_ Additional Attendees: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
Dietary Needs: \_\_\_\_\_

# of Attendees \_\_\_\_\_ x \$40 Total Amount Enclosed: \_\_\_\_\_ (Make checks payable to OSU Extension.)

Send completed forms to OSU Extension Licking County, 771 E. Main Street, Suite 103, Newark, OH 43055.



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# Livestock Mortality Composting Certification

**Wednesday, March 18, 2020  
6:30 to 8:30 p.m.**

**Coshocton County Services  
Bldg - Room 145  
720 South 7<sup>th</sup> Street  
Coshocton, Ohio 43812**



As rendering and burial options for livestock mortality become more limiting or restrictive, composting livestock mortality is a good and environmentally friendly alternative. To legally compost livestock mortality in Ohio, producers are required to attend a certification training. OSU Extension invites livestock producers to earn their **Mortality Composting Certification** on March 18, 2020 from 6:30 to 8:30 p.m. at the Coshocton County Extension office. Rory Lewandowski, Wayne County Extension will be the featured speaker for this program. Upon completion of the program, all participants will be certified in livestock mortality composting. The fee for this certification is \$10 per person (but waived for Coshocton County residents).

**PRE-REGISTRATION IS REQUESTED.** There is no registration fee for Coshocton County residents and \$10 for out-of-county attendees. Room space is limited so register today! Call 740-622-2265 or email [marrison.2@osu.edu](mailto:marrison.2@osu.edu) for more information or to reserve your spot.

Name \_\_\_\_\_ County \_\_\_\_\_

Address \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ \$0 for Coshocton County Residents

\_\_\_\_\_ \$10 for Out-of-County

Make checks payable to **OSU Extension** and return to:  
OSU Extension, 720 South 7<sup>th</sup> Street, Room 110, Coshocton, Ohio 43812

