

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**October 6 Issue (Edition #115)**

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BQA Session on October 11

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Hello Coshocton County! It has been great to see many of you at the Coshocton County fair this week. If you have not made it down to the fair, there is still time to come out and enjoy all it has to offer. I would encourage you to come and to bid at the Junior Fair auction tomorrow evening. It is a great way to support our local youth. Grab some great fair food and then head to the auction which begins at 5:30 p.m.

Good to see some corn and soybeans run last week. Once the weather breaks, it will be full steam ahead. A reminder that we will be having another Beef Quality Assurance Re-certification session next Monday evening and next weekend (October 16-17), the Coshocton County Fall Foliage and Farm Tour will be held.

Enjoy this week and as always, be safe and kind.

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator

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go.osu.edu/cfaesdiversity.



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

Coshocton County Fall Foliage & Farm Tour

OSU Extension, Coshocton Soil & Water Conservation District, and the USDA Farm Service Agency invite you to participate in the **50th Coshocton County Fall Foliage & Farm Tour** scheduled for Saturday, October 16 and Sunday, October 17. This year's drive-it-yourself tour will highlight the southeast townships of Franklin, Linton, and Lafayette. The tour attracts nearly 1,500 people each year and is a great way to enjoy Coshocton's fall foliage and to visit various farms and businesses.

This year's tour will include stops at a beef farm, winery, park, dam, dairy farm, training and competition facility, as well as a popular farm market and pumpkin patch. The stops will be open on Saturday, October 16 from 10:00 a.m. to 5:00 p.m. and on Sunday, October 17 from 12:00 to 5:00 p.m.

Just a reminder the tour map will not be released until the weekend of the tour. The map pick-up location has been changed this year to the Coshocton County fairgrounds located at 707 Kenilworth Avenue in Coshocton. Maps can be picked up from 10:00 a.m. to 3:00 p.m. on Saturday and from 12:00 to 3:00 p.m. on Sunday. More information about the tour can be obtained by calling the Coshocton County Extension office at 740-622-2265. We hope to see many of you on this year's tour!

CFAES OHIO STATE UNIVERSITY EXTENSION

50th Coshocton County Fall Foliage & Farm Tour
Drive-It-Yourself Tour

Details: Tour route maps are released on tour days. Maps are available on Saturday from 10:00 A.M. - 3:00 P.M. Sunday from 12:00 P.M. - 3:00 P.M. The Coshocton County Fairgrounds 707 Kenilworth Ave. Coshocton, Oh 43812

Cost: Free and open to the public. Donations are welcome.

Contact Information:
OSU Extension Coshocton County
724 S. 7th Street, Room 110
Coshocton, Oh 43812
740-622-2265 <http://coshocton.osu.edu>

2021 TOUR STOPS INCLUDE:

- Dairy Farm
- Beef Farm
- Winery
- Wells Creek Dam
- Fall Produce Farm: Mums & Pumpkins
- Coshocton County Master Gardeners
- Lunch Stop- Plainfield UMC
- Plainfield, Ohio
- Hosted by: Plainfield UMC and Aleta UMC
- ...and More!

Saturday, October 16
10:00 A.M. - 5:00 P.M.

Sunday, October 17
12:00 P.M. - 5:00 P.M.

FSA FARM SERVICE AGENCY

Coshocton Soil and Water Conservation District

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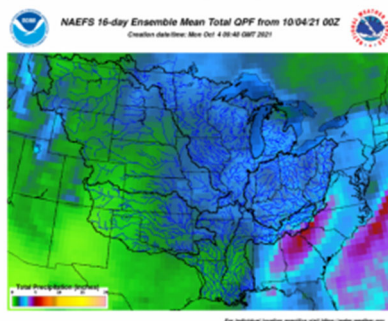
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October Harvest Weather Looks Good

By: Aaron Wilson

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-34/october-harvest-weather-looks-good>



After a brief period of wetness to start October, harvest season looks pretty good. October temperatures will be well above normal. Rainfall will average close to normal after the brief wetter period this week.

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead14/

The result will be that the first freeze date will likely be later than normal from October into early November. As we head into the later part of harvest season beyond October, the warmer than normal weather will likely persist into November and possibly December. Rainfall will average close to normal. Some rainfall enhancement could develop later this fall near Lake

Erie though with the warmer than normal lake waters.

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1

For the winter, we expect a warmer than normal start with a trend toward normal or slightly colder than normal finish. Precipitation is likely to increase to above normal as we go through winter.

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=3

You can stay up-to-date on all the seasonal risks at the OHRFC websites: <https://www.weather.gov/ohrfc/SeasonalBriefing>

Over the next two weeks we expect 0.75 to 1.75 inches of rain across the state with isolated lower and higher totals as seen in the attached image.

Corn Pre-Harvest Check

By: Taylor Dill & Jason Hartschuh

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-34/corn-pre-harvest-check>

Corn harvest started earlier than normal this year across Ohio with many farmers taking advantage of higher grain prices and hauling in high moisture corn. This is causing more producers to switch back and forth between corn and soybean harvest. Considerations for choosing fields to harvest aside from weather are both stalk and ear quality.

Stalk strength and quality is affected by stalk rot, root growth, leaf health, and fertility. Most stalk rots are caused by a fungus in the genus *Fusarium*. Compounding stressors will heighten the severity of the stalk rot if the plant is infected. Stalk rot fungi survive in corn residue and enter the plant by wounds from corn borers, mechanical injury, or hail. Post silking is usually when the fungus will move from the roots to the stalks.



Stalk rot development at the crown

Root growth and leaf health both determine stalk strength by providing key nutrients for grain fill. The roots bring in water and nutrients to sustain the plant and leaf tissue is the source of photosynthetic bodies that create carbohydrates in conjunction with the roots. Cold and waterlogged conditions can restrict root growth, which many producers faced this spring with receiving both snow and pounding rain on early planted corn. This season has also been perfect for Gray Leaf Spot, Northern Corn Leaf Blight, and Tar Spot. These fungi kill photosynthetic material at the end of the season during grain fill, which can cause the plant to “cannibalize” or to take carbohydrates from the stalk to provide energy to finish grain fill. Similar to inhibited root growth and disease pressure at the end of the season, insufficient fertility, usually a nitrogen stress can cause cannibalization of the stalk. We have had many reports of premature plant death this year do to leaf disease mostly tar spot and plants running out of nitrogen.

There is no end of season management to mitigate stalk deterioration, but producers can minimize yield loss from lodging by harvesting fields with stalk quality issues early. One can use the “squeeze test” or “push test” to evaluate lodging potential. Use the thumb and the forefinger to squeeze the internodes and if the node is easily compressed then the stalk integrity has been compromised. For the push test, push the stalk 6 to 8 inches from vertical at the ear and if the stalk breaks between the ear and the lowest node, stalk rot is likely present. Assess approximately 20 plants in various location in each field, if more than 10-15% of stalks are rotted then the field should be considered for early harvest.

Ear quality should be taken into account when deciding which fields to harvest first. To assess ear quality, remove the husks from several ears in multiple areas of the field and observe the ear. If *Giberella* ear rot or *Fusarium* kernel rot is present in a considerable population, then consider harvesting these fields earlier. If ear rots are present, consider possible combine adjustments such as increased fan speed to decrease infected grain in the final grain sample.



Fusarium Kernel Rot



Giberella Ear Rot

The decision to harvest wet grain increase drying cost, but down corn also increases

harvest challenges, ear losses, and decreased grain yield. The average cost to dry corn is 0.02 gallons of propane per point per bushel of corn dried. Drying corn an extra 5% takes an extra 0.1 gallons of propane. The decision to harvest early can maintain bushels in the bin and make for a safer fall harvest.

Are You Seeing Brown Pods and Green Stems?

By: Laura Lindsey, Kelley Tilmon, & Andy Michel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-34/are-you-seeing-brown-pods-and-green-stems>

Green stems on mature soybean plants may be the result of a source/sink problem. If there are a limited number of pods (sink), there are fewer places for the plant's photosynthates (source) to go.



From previously conducted work by Dr. Jim Beuerlein, when soybean pods were removed from a plant node when they first formed and started to expand, the leaf at that node stayed green after the rest of the plant matured. If all the small pods were removed from a branch on a plant, that branch did not mature. Further, if setting of pods were prevented on the main stem of a plant but pods allowed to develop normally on the branches, those branches matured normally while the main stem stayed green and held onto its leaves. Anatomical studies of the flow of carbohydrates within a plant show that each leaf fills the pods at its node only, but if all its carbohydrates are not needed at that node, the extra will move to the next lower node. Therefore, soybean plants digest their

leaves, petioles and stems to complete the pod filling process and add a few more bushels per acre. If the digestion of plant parts is not needed to complete pod fill, then these plant parts remain green.

Another possible cause of stay green syndrome might be stink bug feeding. As the bugs feed, they inject saliva which may impact the plant's physiology to remain green. To check for stink bug feeding, open a few pods and look for shriveled or flat seeds (see figure for stink bug damaged seed) that may indicate stink bug feeding. Stink bug feeding is usually heavier on the edge of the field so green plants may be more common there.



The Beauty of Baleage for Small Ruminants

By: Mike Rankin, Hay and Forage Grower managing editor

(Previously published in [Hay & Forage Grower: September 28, 2021](#))

Source: <https://u.osu.edu/sheep/2021/09/28/the-beauty-of-baleage/>

Baleage. Can it be fed to small ruminants? Yes, yes it can! For those that are curious about how to implement this feeding strategy into your operation, be sure to check out this quick piece from the folks at Hay & Forage Grower as well as joining us at Ohio Sheep Day this Saturday, October 2! Trust me, you won't be disappointed.

Somewhere between the territories of making dry hay and chopping haylage is the land of baleage. Its acreage is expanding at a rate that would gain compliments from the former Macedonian king and conqueror of all things land, Alexander the Great. Of course, Alex is no longer with us to offer such kudos or much of anything else, for that matter.

As one prominent beef seedstock producer told me a few years back, "Baleage is a game changer for the beef industry." But baleage making is not limited to beef production. Dairy producers and many custom harvesters [including those that feed sheep and goats] are also members of the Baleage Fan Club.

The surge in baleage production throughout the humid regions is relatively easy to explain. Though there are additional expenses involved, they are much less than a traditional chopped haylage system. Those farm units

that are already set up to use large round or square bales can just as easily use baleage. The ability to harvest and preserve high-moisture hay shortens the needed wilting time, a real advantage where rain and humidity characterize the farming landscape.

It's the shortened drying time and reduced harvest losses that result in the most direct economic advantage for baleage; it offers the opportunity for more yield with higher forage quality. On beef farms, baleage often takes the place of supplement feeding.

Perhaps a key advantage of baleage — one that is not initially considered — is less wastage during feedout. After incorporating baleage into a feeding program, this is often one of the first observations made, and the difference in waste can be upward of a 15% advantage for the high-moisture forage.

A few years ago, Iowa State University extension specialists estimated a cost savings of \$0.33 per head per day for a cow-calf winter diet with baleage versus dry hay fed in a ring feeder. The advantage comes from improved forage quality, a lower supplement cost, and reduced wastage. With a higher cost for both hay and supplement this year, the cost savings is likely even greater.

This past spring, I visited with one producer who told me that they didn't start making baleage because of reduced wilting time compared to dry hay; they adopted a baleage system to beat the drought years. Baleage offered them a system to make additional high-quality feed early in the spring from fall-planted winter annuals. If summer pastures shut down, they have prepackaged pasture to fall back on.



Baleage or Failure? When feeding small ruminants, baleage management and quality have to be just right!

One of the precipitates of the baleage revolution has been the wrapping of low-moisture hay. This comes in the form of wrapping hay that is 18% – 35% moisture, or “sweet hay” as it's sometimes called, or wrapping dry hay that is below 18% moisture. In the latter case, the plastic simply takes the place of a hay barn that may not be available on a home or rented farm.

Wrapping hay that is 18% – 35% moisture produces a product that has a “sweet” smell but does not go through a fermentation. The key to being successful with this practice is oxygen exclusion. In other words, don't skimp on plastic. Many producers are using eight to 10 layers.

Avoid failure

With a great deal of producer experience and a strong research effort in recent years, the recipe for making top-notch baleage — as opposed to failure — is no secret. Virtually any hay-type crop can be harvested and wrapped successfully, although some are easier than others, depending on their ability to go through a rapid and complete fermentation.

The accumulated laundry list of practices from producer experience and research that will lead to successful baleage production include:

1. Have the right equipment. Everything, including the baling tractor, the baler, and all bale-moving equipment, must be stouter and more powerful to handle the heavier bales.
2. Don't cut more hay down than you can wrap. Remember, this is a system where one operation will impact the next.
3. Target a baling moisture range of 50% – 60% for optimum fermentation. In some cases, plus or minus 5% out of this range can also result in an acceptable product. Invest in a good moisture meter or use a microwave and scale to verify moisture content. Don't guess. [An air fryer works wonders as well: [Measuring Forage Moisture Content Using an Air Fryer](#)]
4. Make dense bales; they wrap and preserve better. This may require a slower baling ground speed and

a higher PTO speed. Research has shown that dense bales (at least 8 – 10 pounds per cubic foot) have a lower pH and offer an extended bunk life.

5. Wrap bales as soon as possible after baling. Most research shows that a reasonable target is to have everything wrapped within 12 hours of baling, but sooner is always better. If forage is allowed to heat before being wrapped, the buffering capacity of the feed rises, and it becomes more difficult to get a good fermentation.
6. Select a suitable site for storage, ideally on a graded, rock surface. Ensure that bales don't impede natural water flow. Store bales where plastic integrity can be maintained, keeping them away from trees where branches may fall. Control weed growth in the storage area, but don't place bales on freshly mowed areas where coarse stubble can puncture the plastic wrap. Stored bales need to be routinely checked for damage from wildlife and rodent activity. Repair any holes in the plastic immediately.
7. For in-line wrappers, ensure that bales are uniform in size and pushed tight together, which prevents air pockets from forming.
8. Store and inventory baleage based on forage quality. Many producers use spray paint to mark the outside of individual bales or line wraps with field information. Target the highest quality feed to those livestock classes that are growing or lactating.
9. Feed baleage within nine months of harvest because forage quality begins to deteriorate after that point. It is also desirable to let bales ferment at least eight weeks before they are fed. Finally, use a feeding system that won't promote waste.

Electric Fencing for Sheep

By: Gerlad Q. Fitch, Extension Sheep Specialist, Oklahoma State University

(Previously published by [Oklahoma State University Extension: February, 2017](#))

Source: <https://u.osu.edu/sheep/2021/10/05/electric-fencing-for-sheep/>

The use of electric fencing for sheep is relatively new in the United States. Several other countries have used electric fencing with great success for several decades now. Electric fencing is more economical than standard barbed wire or hog wire fencing. Electric fencing also allows for temporary fencing to subdivide pastures, which can increase the stocking rate and forage utilization and decrease parasite problems through rotational grazing.



Why has electric fencing not caught on in the United States?

The main reason is the past failures producers have experienced due to utilizing poor quality fence chargers and not understanding the basics of electric fencing. The basic principles of fence construction, grounding, and current flow must be understood to ensure correct fence design with minimal maintenance and maximum current flow.

Fence Chargers and Grounding

The major mistake that is made in electric fencing is the use of poor quality, "cheaper" fence chargers and the improper grounding of the fence. The fence charger is the most important purchase in construction of the electric fence. Electric fence chargers have become much more sophisticated than the older type low powered fence energizers. Electric fence for sheep can be maintained even in remote areas with the new solar powered chargers.

Voltage must be maintained at all times if an electric fence is to be effective. The new high voltage energizers produce a very short, 0.003 second, high-energy pulse. The high-energy pulse charges even a long length of heavily weeded fence with a shock that livestock respect. The short pulse limits the overall energy, so posts are not burned and the wires are safe, though painful to touch. The short pulse also removes the chances of fire when grass contacts the wire.

The most important component of electric fence construction is the proper grounding or earthing of the system. With a poor ground, the electric pulse could not complete its circuit, and the fence would be completely ineffective. Improper grounding is the number one reason for electric fence failure and the main reason for producer's in the United States reluctance to use electric fencing. More than 80% of the electric fence systems in the U.S. are inadequately grounded. Three or four ground rods, six feet long, should be used for proper grounding. These rods should be placed in parallel approximately six feet apart. Most fences are constructed with only one ground rod (this is adequate only when the ground is extremely wet) and will not be sufficient to ensure proper current flow.

Permanent Electric Fencing

Permanent electric fencing with five to eight properly spaced strands is excellent for holding sheep. This fencing can be constructed with high-tensile wire and various types of creosote pressure treated posts or fiberglass posts for about one-half of the material and labor cost of an equivalent woven wire fence.

Experience has shown that a seven or eight wire fence that is approximately 48 inches high is ideal for sheep and cattle. This fence will not only keep sheep in, but will also work well for keeping predators out. Spacing will depend on the number of wires used. A good fence design for a seven-wire fence would begin with the bottom wire charged 6 inches above the ground. The next two wires would be spaced at 5 inch intervals and would be a ground wire, followed by a charged wire. The next wire would be a ground wire spaced 6 inches up, followed by a charged wire and a ground wire at 8 inch intervals. The top wire would then be 10 inches up and would be a charged wire. This fence would be 48 inches high and should do a good job of livestock control.

The wires used in these fences should be smooth 12 1/2 gauge or 14 gauge wires. If building a permanent fence, the 12 1/2 gauge would be a much better choice. The 12 1/2 gauge wire is much stronger and will carry the necessary voltage better than the lighter 14 gauge wire. In any case, when this fence is built from smooth wires it is important to put a "wire strainer" on each wire to take up the slack and keep the wires tight. The principal idea of the wire is to give an electrical shock to the livestock, and the actual strength of the wire does not prevent animals from going through. Consequently, all that is needed is to space the wires properly and keep them tight. This makes it possible on level ground to put fence posts 40 to 50 feet apart. By doing this and using high-tensile smooth wire, it is possible to build a fence for much less than the cost of a woven wire fence, and the fence is a much better deterrent to the movement of dogs and coyotes than a woven wire fence.

Temporary Electric Fencing

Recent interest in pasture management involving intensive or controlled grazing systems has created a need for semi—permanent or temporary sub-division fence systems. These allow forage growth, quick grazing, internal parasite reduction, and regrowth of forage for future grazing.

There are many different types of temporary fencing, which includes lightweight, high-tensile smooth wire, polywire, polytape, or flexible netting. The lightweight ,high-tensile wire would be best utilized when the fence is semi-permanent, such as around a wheat field for the winter and spring. This wire is not well utilized when constant moving is necessary. The polywire and polytape is best utilized in a rotational or controlled grazing environment when the fence must be moved more often.

A two or three wire temporary fence around a wheat pasture or for controlled grazing in any kind of pasture will normally be sufficient. Most producers using temporary fencing feel that all wires should be charged and no ground wires are necessary. If a two wire system is used the bottom wire should be 10 to 12 inches above the ground with the second wire 10 to 12 inches above the bottom wire. If a three wire system is used, the three wires spaced at 10 inch intervals works very well.

The new polywire or polytape system has made temporary fencing for controlled and intensive grazing a very feasible alternative. With the use of portable reels and quick setup features, the temporary fences can be moved quickly and are also very efficient in keeping livestock in.

Old fences, which have deteriorated to the extent that they need complete replacement, can be rejuvenated to last for many more years by attaching offset brackets and an electrified wire on one or both sides of the old fence. All single offset wires should be attached at two thirds the height of the animals to be controlled. The old fence can be used as the “ground” wire and will work well to complete the circuit necessary for good sheep control. Charging barbed wire is not a good practice for two reasons: 1) livestock caught in charged barbed wire can literally be shocked to death; 2) barbed wire is not as conductive as the smooth-high-tensile wire and will not carry an adequate current for sheep.

It is necessary that sheep become adjusted to and learn to respect electric fences. All animals need time and space to quietly discover that electrified fences are “hot.” If they can be first exposed shortly after they are shorn, they will have less wool for insulation.

Ohio Crop Enterprise Budgets

Source: <https://farmoffice.osu.edu/news/ohio-crop-enterprise-budgets-%E2%80%93-projected-returns-2022>

Production costs for Ohio field crops are forecast to be higher compared to last year with higher fertilizer, seed, chemical, fuel, machinery and repair costs leading the way.

If the current grain prices and costs endure through next year, profit margins will likely be positive although higher costs may create losses for some producers. Grain prices currently used as assumptions in the 2022 crop enterprise budgets are \$4.80/bushel for corn, \$12.20/bushel for soybeans and \$6.90/bushel for wheat. Projected returns above variable costs (contribution margin) range from \$226 to \$472 per acre for corn and \$288 to \$529 per acre for soybeans. Projected returns above variable costs for wheat range from \$191 to \$344 per acre.

Return to Land is a measure calculated to assist in land rental and purchase decision making. The measure is calculated by starting with total receipts or revenue from the crop and subtracting all expenses except the land expense. Returns to Land for Ohio corn (Total receipts minus total costs except land cost) are projected to range from \$54 to \$283 per acre in 2022 depending on land production capabilities. Returns to land for Ohio

soybeans are expected to range from \$166 to \$393 per acre depending on land production capabilities. Returns to land for wheat (not including straw or double-crop returns) are projected to range from \$99 per acre to \$242 per acre.

Total costs projected for trend line corn production in Ohio are estimated to be \$919 per acre. This includes all variable costs as well as fixed costs (or overhead if you prefer) including machinery, labor, management and land costs. Fixed machinery costs of \$78 per acre include depreciation and other overhead. A land charge of \$207 per acre is based on data from the Western Ohio Cropland Values and Cash Rents Survey Summary. Labor and management costs combined are calculated at \$82 per acre. Details of budget assumptions and numbers can be found in footnotes included in each budget.

Total costs projected for trend line soybean production in Ohio are estimated to be \$619 per acre. (Fixed machinery costs: \$62 per acre, land charge: \$207 per acre, labor and management costs combined: \$53 per acre.)

Total costs projected for trend line wheat production in Ohio are estimated to be \$541 per acre. (Fixed machinery costs: \$36 per acre, land charge: \$207 per acre, labor and management costs combined: \$48 per acre.)

Current budget analyses indicates favorable returns for soybeans compared to corn or wheat but crop price change, harvest yields and other factors through fall and into summer of next year may change this outcome. These projections are based on OSU Extension Ohio Crop Enterprise Budgets. Newly updated Enterprise Budgets for 2022 have been completed and posted to the Farm Office website: <https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets>

In addition to projected row crop budgets for 2022, there are newly updated forage budgets posted to our Farm Office site. These include Alfalfa Hay, Alfalfa Haylage and Corn Silage. Also recently updated are two Market Beef Budgets which include Market Beef Budget (Self-Fed) and Market Beef Budget (Bunk-Fed).

New Bulletin Explains Ohio's Sales Tax Exemptions for Agriculture

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Tuesday, October 05th, 2021

Source: <https://farmoffice.osu.edu/blog/tue-10052021-218pm/new-bulletin-explains-ohios-sales-tax-exemptions-agriculture>

If you've ever claimed a sales tax exemption on a purchase of farm goods, you may have experienced some confusion over whether you or the good is eligible for the exemption. That's because Ohio's sales tax law is a bit tedious and complicated. The law has several agricultural exemptions, but it can be challenging to understand who can claim them and what types of goods and services are exempt. Those are the reasons for our newest law bulletin, [Ohio's Agricultural Sales Tax Exemption Laws](#). We walk through the different sales tax exemptions that apply to agriculture, offer examples of goods that do and do not qualify for the exemptions, explain who can claim an exemption and how to claim it, and explain what happens when sales taxes are overpaid or not correctly paid. We also offer steps a farmer can take to obtain the full benefits of Ohio's agricultural sales tax exemptions. The bulletin is available in our law library and [through this link](#): https://farmoffice.osu.edu/sites/aglaw/files/site-library/LawBulletins/Ag_Sales_Tax_Bulletin_Oct2021.pdf

The image shows a form titled "Ohio Department of Taxation Sales and Use Tax Blanket Exemption Certificate". The form includes a header with the Ohio Department of Taxation logo and a "Sales and Use Tax" label. Below the header, there is a section for the purchaser to state a valid reason for claiming a receipt or exemption. The form also includes a section for the purchaser's name, address, and signature, and a section for the vendor's name, address, and signature. The form is designed to be filled out by the purchaser and the vendor to claim a sales tax exemption.

Do's and Don'ts of Local Beef

By: [Garth Ruff](#), Beef Cattle Field Specialist, OSU Extension

Source: <https://u.osu.edu/beef/2021/09/29/dos-and-donts-of-local-beef/>

If you just glanced at the title of this column, you maybe surprised as to how the next few paragraphs unfold, however there are a couple of points that I want to make, and feel are warranted after seeing some misleading/untruthful advertisements for local/freezer beef here recently.

First off, I am a big supporter of local food production and direct marketing. When done properly in some production systems there are opportunities to capitalize on demand for locally produced food, serve as a direct link for consumer education, enhance economic sustainability of the farm enterprise, among other benefits.

I have taught dozens of programs on local foods and direct marketing in the last five or so years. In each of those programs I remind participants of these two things with regards to labeling and direct marketing;

1. Do not misrepresent your product and
2. Do not misrepresent or make false statements about the product of other producers.

Recently several friends of mine have shared with me several instances of both of the above scenarios. In one such instance a freezer beef producer's (who shall not be named) attack on beef produced by other producers and the beef industry was egregious enough to get me wound up; and I try not to get too wound up about things seen on social media. Spreading falsehoods about the wholesomeness of beef is something as an industry we should not tolerate, and I hope that you as producers feel the same.



To hopefully prevent another rant on this very topic let's review some examples of what not to do when putting together a direct marketing plan. Do not misrepresent your product. This is the less aggravating of the two offenses but is an offense that can be misleading to consumers. In most cases the misrepresenting one's own product, standard, commonly used terminology is being used to describe quality are being used without verification.

In simpler terms, one cannot market beef as Choice, Prime, or Certified Angus Beef® if that beef carcass has not been graded by an USDA grader. Grading is optional, and the service comes with an associated cost. Per the Ohio Department of Agriculture web page: Companies can choose to have the meat and poultry that they sell graded by USDA; it is not mandatory. This is the only mark of identity you have for knowing the quality of the product. If a meat or poultry product is graded by USDA, there must be a USDA grade shield or mark on the carcass, package or product label. Only the official USDA grade can be used as a guide to the quality of the meat. If the company claims it is selling Choice beef, for example, it must be proclaimed on the package or product label within the USDA shield or another approved marking.

I truly believe that these fouls are often unintentional, due to a lack of awareness of the rules. It is the second type of foul where producers misrepresent or make false statements about the product of other producers that are intentional and gets me fired up. While these comments are fewer in number, they are more damaging to the industry, often pitting direct marketed product against producers of commodity beef. Keep in mind with regards quality, that most commodity beef has been graded by USDA can the above-mentioned quality based claims can be made.

Keep in mind that there are several reasons to why one would want to distinguish locally produced, direct to the consumer, beef in the marketplace. However, falsehoods about the wholesomeness, safety, and quality of commodity beef should not be made unless there is scientific data to back it up.

In the beef industry there are multiple lanes for producers and consumers to drive in. Not every lane fits every producer or consumer, which makes for the opportunity to make decisions both in production and purchasing of beef. That opportunity to choose, is one of many reasons that make the beef industry unique. Lastly, regardless of which lane we are in as producers, we should all continue to drive towards a common goal of producing a high demand product with a positive consumer eating experience.

Heifer Development Beginning at Weaning

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

Source: <https://u.osu.edu/beef/2021/09/29/heifer-development/>

HEIFER SELECTION: Heifers can be sold at weaning or anytime thereafter. Select at least 20% excess and continue growing the heifers until breeding. A second selection at yearling age is helpful. Let the bull or artificial insemination program select the heifers you keep by maintaining a relatively short breeding season (45 days). Pregnancy diagnosis after the breeding season provides another opportunity for culling. A final selection can be made after heifers wean their first calf. Weaning weight of the first calf is a fairly good, though not foolproof, indicator of future production.

EARLY GROWTH (weaning and yearling weight) AND FRAME: The traditional method for choosing replacements is pick the big ones at weaning. Traditional selection is simple and is not necessarily all bad. If growth is needed, selection on size will provide it. The bigger heifers are generally older, and thus selection is from the earlier calving cows. It also may (or may not) select heifers of heavier milking cows. Heavier and older heifers are more likely to cycle and breed early and be well on their way to having acceptable lifetime performance.

However, there are problems with the traditional method of selection. Some of the heaviest heifers at weaning may be fat and offer the potential of poor lifetime milk production due to fat deposits in the udder. Some big heifers are fast growing due to an endocrine imbalance and are subfertile at breeding.

The biggest problems traditional heifer selection is “frame creep”. This is the gradual increase in mature cow size over time resulting from the use of larger frame bulls and retention of their daughters. The larger, higher maintenance dams may be too big for the feed resources. If nutrition does not change, these cows may suffer reproductively.

Selecting heifers for larger actual weight will generally result in a more uniform group capable of reaching pubertal weight at about the same time. So long as their sires and grandsires are not too big, there is little danger that selecting the larger heifers will cause significant “frame creep”. Be careful not to mistake frame for weight. Framey heifers with below average body condition may be “hard keepers” later in life.

FRAME SIZE: Matching the development program with genotype: We know that most components of fertility that influence first calving and subsequent reproductive performance are not highly heritable. This suggests that management practices are most likely to influence the majority of factors related to reproductive performance. How we manage replacement heifer calves from the time they are weaned from their dams to the beginning of the first breeding period is extremely critical for their subsequent performance.

Studies indicate that puberty can be expected to occur at a genetically predetermined size among individual animals, and only when heifers reach target weights can high pregnancy rates be obtained. In other words, heifers with the genetic potential to reach a heavier mature weight must attain a heavier prebreeding weight before their first breeding season. Using the standard set by the Beef Improvement Federation for nine frame-size classifications for U.S. breeding cattle (Table 5), producers can estimate body composition and energy requirements per pound of gain at various weights during the feeding period.

Table 5. Relationship of Frame Score and Hip Height to Estimated Mature Cow Weights

Frame Score	Hip Height (inches)			Cow Weight (estimated, lbs)
	7 Months	12 Months	Maturity	
1	35	39	44	880
2	37	41	46	955
3	39	43	48	1030
4	41	45	50	1100
5	43	47	52	1175
6	45	49	54	1250
7	47	51	56	1320
8	49	53	58	1395
9	51	55	60	1470

Hip

height (in.) based on Beef Improvement Federation standards. Weights (lb) are expected averages for flesh condition (body condition score 5). Source: Fox, D. G., C. J. Sniffen, and J. D. O'Connor. 1988. Adjusting nutrient requirements of beef cattle for animal and environmental variations. Journal of Animal Science 66:1475.

Weaning weight and yearling weight are moderately to highly heritable traits (.25-.50). As a rough guide, heifers that have within-herd weaning weight ratios below 90 (herd average 100) should be culled in a commercial herd. One caution to keep in mind is watch for calves that have high adjusted weaning weights and low actual weaning weights. These calves may come from heavy milking cows that are late calvers in the herd. In a purebred herd, the heifer's EPDs for weaning and yearling weight should be used when making selection decisions on growth. If seedstock producers are having trouble keeping their heaviest milking cows (high milk EPDs) in the early part of the calving season, they need to be aware of the impact that the some of these cows could have for their commercial bull buyers.

Yearling weights are a more accurate predictor of growth potential than weaning weights. Yearling hip heights are more accurate for predicting mature size than weaning hip height. Heifers with the heaviest yearling weights tend to be the largest framed. Maximum acceptable frame scores may need to be established to match cow size with feed resources. To remove your personal biases, it is suggested an unbiased 3rd party measure your heifers and categorize them to frame and estimated mature size.

Growth is an important trait in heifer selection but there are other important traits. What are those traits?

MATERNAL/PRODUCTION TRAITS: The traits that are important in replacement heifers are the maternal traits: early puberty, fertility, calving ease, milk, soundness (longevity), temperament and efficiency. Early puberty is highly heritable ($H^2 = 50\%$) and related to early first pregnancy. Calving ease is important because it affects the time required for rebreeding. Soundness traits (feet, legs, udders, eye, etc.) are highly heritable and are related to longevity and productivity. Genes for mastitis resistance have been identified; selection for bloat resistance have been accomplished; evidence has been developed indicating genetic differences in the incidence of fescue toxicity.

HEIFER SELECTION WITH CROSSBREEDING SYSTEMS: Hybrid vigor is important but is not everything. Producers should not overlook good replacement prospects just to gain a little more hybrid vigor. Keeping heifers of terminal sires may cause "frame creep".

TIME WHEN BORN: Adjusted 205-day weights and ratios provide a better estimate of the true genetic differences in preweaning growth of the calves and milking ability of the cow than do actual weaning weights. Late-born calves with light, actual weaning weights can still have excellent adjusted 205-day weights and ratios.

MILK PRODUCTION: Caution, some heavy milking cows may not meet nutritional requirements through the available forage. The calving intervals for these cows will generally exceed 370 days. Selecting replacement

heifers out of these cows could eventually cause an increase in open cows. Heifers with the heavier actual weaning weights are more likely to cycle early and calve early as 2-year-olds. Therefore, actual weaning weights may do a better job of identifying the heifers and cows that will be the most productive. Seldom should heifers be selected as replacements that have low actual weaning weights, but high adjusted weights and ratios.

Seedstock producers are selling the “genetics” for growth and milk. The adjusted weights and other genetic indicators such as pedigree EPDs become more important. However, seedstock operators should not produce cattle that are not adaptable to their customer’s resources. If seedstock producers are having trouble keeping their heaviest milking cows in the early part of the calving season, they need to be aware of the impact that the some of these cows could have for their commercial bull buyers.

DISPOSITION: Research has found differences in chute scores between heifer and steers. It has been found that steers have a lower (more desirable) average temperament rating than heifers. Cattle that are calmer have higher average daily gains than do cattle with excitable temperaments.

A related Heifer Development video can be accessed at: <https://youtu.be/A53ZTkpb7m4>

SWCD Annual Meeting & Banquet - October 21

The Coshocton Soil & Water Conservation District invites you to their **79th Annual Meeting and Banquet** on Thursday, October 21, at the Lake Park Pavilion. The doors will open at 6:00 p.m. for Supervisor election voting and dinner will begin at 7:00 p.m. Theo’s Restaurant from Cambridge will serve a delicious buffet dinner featuring 5 Cheese & Bacon stuffed chicken breast, mashed potatoes, green beans, coleslaw, and assorted homemade pie. Tickets are \$12 per person; children 10 and under are \$6.

The Coshocton SWCD will present a short program with awards for the Outstanding Conservation Farmer, Big Tree Contest, and the Hay Show. Additionally, Ken Smailes will be the banquet’s featured speaker highlighting the history of agriculture in Coshocton County. Tickets can be obtained by stopping in to the SWCD office, Monday through Friday, from 8:00 a.m. to 4:30 p.m. **Reservation deadline for tickets is TODAY October 6.** More information can be obtained by calling 740-622-8087 ext 4.



Earn \$ While Helping Tick & Tick Borne Disease Research

By: Dr. Risa Pesapane

Ticks and tick-borne diseases are a growing problem for both humans and animals in Ohio. The Ohio State University is interested in learning about your knowledge and experience related to ticks through completion of a survey. Only livestock producers or veterinary professionals that reside in Ohio and are over the age of 18 are eligible to participate. Your responses to the survey are confidential. Results of this survey will be used to develop customized training and educational materials about ticks for the livestock production community.

If you complete the survey, you will be eligible for a monetary compensation of \$5.00 in the form of a gift card to the business of your choosing. Choose the one survey category that best describes your profession. To take the survey, please click or copy-paste the following link into your browser:

Livestock producer survey is available here: https://osu.az1.qualtrics.com/jfe/form/SV_9KXdJTr05f5BrBs

Veterinary professional survey is available here: https://osu.az1.qualtrics.com/jfe/form/SV_cOR5PdPM51Fi7s2

If you have questions about this survey, please contact the primary investigator, Dr. Risa Pesapane, by email

at ticks@osu.edu.

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Office of Responsible Research Practices at 1-800-678-6251 or hsconcerns@osu.edu.

BQA Re-certification Sessions Planned

The Coshocton County Extension office will be offering a series of **Beef Quality Assurance (BQA)** re-certification meetings to help producers renew their BQA certification. These sessions will be held in Room 145 at the Coshocton County Services Building located at 724 South 7th Street in Coshocton County. Producers can choose the session which best fits their schedule. Sessions will be held on: October 11, November 3, December 1 & 14. Each will be held from 7:00 to 8:30 p.m. 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.

Online certification and recertification is also available and can be completed anytime at <https://www.bqa.org/beef-quality-assurance-certification/online-certifications>.



50th Coshocton County Fall Foliage & Farm Tour Drive-It-Yourself Tour

Details: Tour route maps are released on tour days. Maps are available on Saturday from 10:00 A.M. - 3:00 P.M. Sunday from 12:00 P.M. - 3:00 P.M. The Coshocton County Fairgrounds
707 Kenilworth Ave.
Coshocton, Oh 43812

Cost: Free and open to the public.
Donations are welcome.

Contact Information:

OSU Extension Coshocton County
724 S. 7th Street, Room 110
Coshocton, Oh 43812
740-622-2265 <http://coshocton.osu.edu>

**Saturday, October 16
10:00 A.M.-5:00 P.M.**

**Sunday, October 17
12:00 P.M.-5:00 P.M.**

2021 TOUR STOPS INCLUDE:

- ◆ Dairy Farm
- ◆ Beef Farm
- ◆ Winery
- ◆ Wills Creek Dam
- ◆ Fall Produce Farm: Mums & Pumpkins
- ◆ Coshocton County Master Gardeners
- ◆ Lunch Stop: Plainfield UMC
Plainfield, Ohio
Hosted by: Plainfield UMC and
Isleta UMC

...and More!





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. Pre-registration is required for each session as space is limited.

Sessions Will Be Held:

July 12, August 9, September 13, October 11, November 3, December 1 & 14
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

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.



THE OHIO STATE UNIVERSITY

PAID SURVEY FOR LIVESTOCK PRODUCERS

Why take the survey?

Ticks and tick-borne diseases are a growing problem for both humans and animals in Ohio. The Ohio State University is interested in learning about your knowledge and experience related to ticks as a livestock producer through completion of a survey. Results of this survey will be used to develop customized training and educational materials about ticks for the livestock production community. Those who complete the survey will be eligible for a monetary compensation of \$5.00 in the form of a gift card to the business of your choosing.

Who can take the survey?

Only livestock producers that reside in Ohio and are over the age of 18 are eligible to participate.

How do I take the survey?

Scan the QR code with a smartphone device to take you to the survey link.

What if I have questions?

If you have questions about this survey, please contact the primary investigator, Dr. Risa Pesapane, by email at ticks@osu.edu. For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Office of Responsible Research Practices at 1-800-678-6251 or hsconcerns@osu.edu.



SCAN ME