

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES



December 8 (Edition #124)

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Hello, Coshocton County! December is off and running which means each day's weather will be unpredictable and you will never know what you get until you wake up each morning (just like a good box of chocolates). See Jim Noel's prediction for the upcoming winter and spring outlook in today's issue.

Now is the time of year that we turn to planning for the new year. As we close 2021, I will be sharing some planning articles from many of our OSU Teams in this newsletter. Today, I have included articles on burndown options, soybean performance trials, and winter feed costs & beef markets for beef cattle.

We are also planning some great programs for this winter and look forward to gathering together to learn as an agricultural community.

Have a great week!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator

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THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
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Winter and Spring Weather Outlook

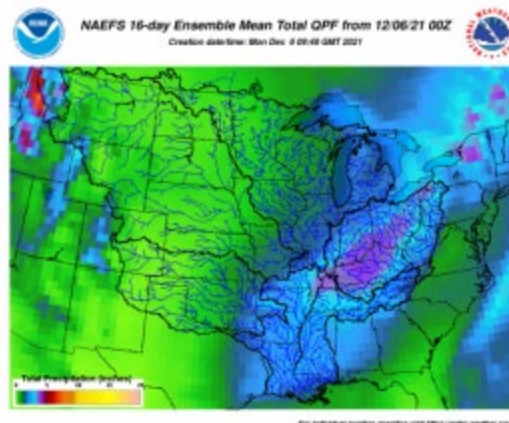
By: Author(s): Jim Noel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-40/winter-and-spring-weather-outlooks>

After a cooler and drier November, our attention turns to the winter and spring outlooks. With a weak La Nina ongoing again this upcoming winter, what will it mean for Ohio? La Nina is only one of many factors that impacts our weather and climate.

The outlook for December is for warmer and wetter conditions across most of the state. This pattern will likely persist into February, though January may become less wet though confidence in that is low. We will likely have some short intense cold snaps mixed in with the warmer than normal conditions. As for snow, with the cold bursts, if timing is right, we should see more snow than last year but there is no indication of anything more than about normal snow at this time.

One note for winter is if we do not have snow on the ground when we get the cold bursts, it will make crops like wheat more vulnerable so this is worth watching. As we go into next planting season, indications are like so many springs for it to start off with normal or even a bit colder than normal temperatures and above normal precipitation. However, by May things should relax toward normal conditions.



You can get the latest information on hydrology, temperature and precipitation outlooks at:
<https://www.weather.gov/ohrfc/SeasonalBriefing>

In the shorter-term, the wetter pattern will result in 1-4 inches of rainfall up to the holidays across Ohio with the least in the northwest part of the state and the most in the south and east.

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

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

By: Mark Loux

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-40/alternative-spring-burndownpostemergence-strategies-when>

Note: This article represents the combined thinking of weed scientists from Indiana, Kentucky, Michigan, Ohio and Pennsylvania

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

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

1. Spring tillage is an option to replace herbicide burndown. Can cause long-term compaction problems if tilled when too wet. Waiting until weeds are large makes tillage less effective. Weeds that survive tillage will be difficult to control with POST herbicides. In other words, till when soil conditions are fit and before weeds are huge.
2. Where it's only possible to use glyphosate once, it may be needed most in the burndown. Saflufenacil can be added for enhanced control of rye and ryegrass, and marehail. ACCase herbicides (e.g. clethodim, quizalifop) can then be used for POST grass control in soybeans. Glufosinate, Enlist Duo, or XtendiMax/Engenia can be used for many broadleaf weeds, especially the glyphosate-resistant ones. Where residual herbicides are omitted, or do not provide enough control, we would expect POST treatments to struggle more in the absence of glyphosate with weeds such as lambsquarters. So use residuals. Glyphosate is still more than just a grass herbicide.
3. If glyphosate is omitted from burndown, grasses become a bigger issue than broadleaf weeds. Options for annual grasses: Gramoxone; rimsulfuron – if small, corn only; ACCase herbicides – clethodim (wait 7 days to plant corn), quizalifop (soybeans only) – need 60 degree days, apply alone if possible, weak on winter annuals under cold conditions. Where trying to reduce glyphosate rates, a rate of 0.38 lb ae/A will control most annual grasses.
4. Burndown programs typically contain two to three “burndown” herbicides in order to ensure control of a diversity of weeds under various environmental conditions. This is why glyphosate is not used alone in burndown programs, but mixed with 2,4-D, dicamba, or Sharpen. We suggest following this same strategy when glyphosate is omitted – try to have at least two herbicides with substantial burndown activity in the mix. Increasing rates of components of the burndown mix should be generally helpful, in accordance with label guidelines for soil type, weed size, time until planting, etc. There are also other herbicides that can improve control in some mixes although we don't consider them “burndown” herbicides on their own – chlorimuron, atrazine, metribuzin.
5. There are generally more options for burndown and POST applications in corn compared with soybeans, so it might make sense to save a limited supply of glyphosate and glufosinate for use in soybeans.
6. Control of little barley and annual (Italian) ryegrass in a burndown requires glyphosate, ACCase herbicides are not effective enough in spring. For annual bluegrass – ACCase can work - 60 degree day, no tank mixes. High rates of metribuzin can provide fair control of bluegrass.
7. For burndown of a legume cover prior to corn, clopyralid and dicamba are the most effective herbicides. For cereal rye, Gramoxone plus atrazine or metribuzin may be best option in the absence of glyphosate.
8. It's possible to chop and bale a cover, then use glyphosate POST to kill regrowth. The addition of an ACCase herbicide may help control regrowth in soybeans. POST corn herbicides will not kill the rye, including nicosulfuron, rimsulfuron, and Group 27 herbicides (Impact, Shieldex, Laudis etc).
9. Mixing ACCase herbicides with dicamba or 2,4-D (no glyphosate) can cause reduction in grass control due to antagonism. Apply separately to avoid this.
10. Increasing the number of applications can help with weed and herbicide management when certain products are short or glyphosate rates need to be reduced. For example, three applications instead of two: 1) Fall or early spring burndown when weeds are small; 2) residuals plus possibly additional low-rate burndown at planting; 3) POST.

11. Best opportunity to omit glyphosate or reduce the rate will be: 1) in fields treated the previous fall, or those with a low population of small weeds; and 2) where the POST program is comprehensive enough to control weeds that escape the burndown – Enlist, XtendiFlex, LL GT27 (their effectiveness also depends upon whether glyphosate is being used POST).

12. Take all necessary steps to maximize herbicide activity - optimize adjuvants and sprayer parameters (nozzles, volume, pressure, speed) per label guidelines.

13. Check on availability of premix herbicides that may contain glyphosate or another herbicide that is unavailable as a single ingredient product. Examples that contain glyphosate – Sequence, Halex GT, Acuron GT, Extreme, Flexstar GT.

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

Can be used in corn and soybeans

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Corn only

Acuron/Lexar/generic equivalents/Resicore + atrazine

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

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

Soybeans only

2,4-D + metribuzin + clethodim

Strengths: some grass suppression including cereal rye and ryegrass;

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

Metribuzin + 2,4-D + chlorimuron product

Comments: good fit in fields that were treated prior fall; Some chlorimuron products contain metribuzin – suggest supplementing with additional metribuzin so total is the equivalent of 6 to 12 oz of 75DF. Does not control grasses. Canopy/Cloak Ex contains tribenuron, which improves control of chickweed.

Click [here](#) to print a pdf of this article

[“Weed Control Guide for Ohio, Indiana, and Illinois”](#)

[“Mid-Atlantic Weed Control Guide”](#)

[“MSU Weed Control Guide for Field Crops”](#)

[“2022 Weed Control Recommendations for Kentucky Field Crops”](#)

Lime Considerations

By: [Ed Lentz, CCA](#), [Steve Culman](#), [Greg LaBarge, CPAg/CCA](#)

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-40/lime-considerations>

Many individuals have already applied lime this fall; however, lime can still be applied before planting next spring. It is important to test soil pH and determine whether any lime needs to be applied for future crops. Proper soil pH is important for nutrient availability, herbicide activity, and crop development. For most soils, additional lime is not needed every year. Consider these points before liming your fields:

- **Do I need lime?** Each year we hear stories of people adding lime to their fields without a soil test. The grower has a source of free waste-product lime that they pick up and apply to their fields. In many cases their soil pH was fine, but they did not want to pass up a "good deal". Without knowing the soil pH, a grower may inadvertently raise their soil pH to the high 7's. At this elevated pH, certain nutrients may become limited, and the productivity of their crop may be reduced and require special management practices. Western Ohio has the greatest risk of elevating soil pH from careless applications of lime. A soil analysis is the best step to determine if a field needs lime.
- **What is the pH of my subsoil?** Generally, a laboratory recommends lime when the soil pH drops two to three units below the desired value. The desired value depends upon the crop and the pH of the subsoil. In parts of Ohio where the subsoil pH is less than 6.0 for mineral soils (eastern Ohio), additional lime is recommended after the soil pH drops to 6.2 for corn and soybean, and 6.5 for alfalfa. In other parts of the state (generally western Ohio), the subsoil pH for mineral soils is greater than 6.0 and lime is not needed until the soil pH drops below 6.0 for corn and soybeans, and 6.2 for alfalfa. Private laboratories may not take in account the subsoil pH and use recommendations based on a subsoil pH less than 6.0 for all parts of the state, possibly recommending lime applications several years earlier than needed for some areas.
- **What is the Effective Neutralizing Power of my lime source?** An important item from a lime analysis report is the Effective Neutralizing Power (ENP) value, which is required for material sold as lime for agricultural purposes in Ohio. This value allows a producer to compare the quality among lime sources because ENP considers the purity, neutralizing power (including fineness) and moisture content. In other words, the ENP tells you how much of that ton of lime neutralizes soil acidity. The unit for ENP is pounds/ton (be careful not to use %ENP, which may also be on a lime analysis report). The ENP allows a producer to compare different lime sources because they can now determine price per pound or ton of actual neutralizing material.
- **Should I use “hi cal” or dolomitic lime?** In most situations it does not matter, so a producer can select the least expensive of the two lime sources. Transportation is often the largest cost of a lime material, so generally the closest lime source (quarry) is often the most economical.

Several parts of the state are historically low in soil magnesium (eastern and southern Ohio). Adequate soil magnesium is important to reduce the risk of such problems as grass tetany for grazing animals. Soil test magnesium levels need to be greater than 50 ppm (100 lb) for optimal corn, soybean, wheat, and alfalfa production on fine to medium textured soils and greater than 35 ppm on coarse textured soils. Often areas low in magnesium also need lime, which has made the application of dolomitic lime an economic solution for both concerns.

The ratio between calcium and magnesium is important. Soils should contain more calcium than magnesium. Extensive research has shown that crops yield the same over a wide range of calcium to magnesium ratios and will not affect crop production if the calcium to magnesium ratio is larger than 1. High calcium lime should be used in situations where the soil test calcium to magnesium ratio is less than 1, or in other words, the soil magnesium levels are greater than the soil calcium levels. I have not observed any Ohio soil tests where the magnesium levels are above the calcium levels. Also keep in mind that almost all dolomitic lime sources will contain more calcium than magnesium. Unfortunately, some producers have been led to believe that magnesium levels in dolomitic lime may be undesirable. The level of magnesium is unimportant if the calcium level is above magnesium. The focus should be selecting lime on its Effective Neutralizing Power (ENP) rather than its calcium level.

- How about gypsum as a lime source? Gypsum is not a lime source. It does not have the right chemical composition to neutralize soil acidity, such as carbonate (gypsum is calcium sulfate). Gypsum is used as an amendment for soil physical properties and/or as a fertilizer providing calcium and sulfur.

In summary, make sure you take a soil test to determine if lime is needed, determine if magnesium is needed, know the historic pH of your subsoil, and then use the ENP to select the most cost-effective lime material. A soil test every three to four years will determine the lime requirements for your fields. Additional information on ENP and lime sources and liming rates may be found at the following location: <https://agcrops.osu.edu/FertilityResources> scroll down to the 'pH and Liming' section.

2021 Ohio Soybean Performance Trial Final Report

By: Laura Lindsey and Allen Geyer

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-40/2021-ohio-soybean-performance-trial-final-report-now-available>

The purpose of the Ohio Soybean Performance Trials is to evaluate soybean varieties for yield and other agronomic characteristics. This evaluation gives soybean producers comparative information for selecting the best varieties for their unique production systems. A pdf copy of the trial can be downloaded here: https://stepupsoy.osu.edu/sites/hcs-soy/files/2021_OSPT_final.pdf The data will also be available soon for download on the Ohio Crop Performance Trials website- <https://u.osu.edu/perf/>

The 2021 trial included 19 brands of soybean tested in six Ohio counties (Henry, Sandusky, Mercer, Union, Preble, and Clinton). Entries included non-GMO (conventional), Xtend, Enlist, XtendFlex, sulfonylurea-tolerant, and Liberty Link/glyphosate tolerant (LLGT27). Soybean yield varied across the state. In Henry County, soybean yielded ranged from 26.0 to 52.0 bu/acre due to wet weather in the spring and fall; while in Clinton County, soybean yield ranged from 63.7 to 88.2 bu/acre with good growing conditions.

Winter Feed Costs

By: James Mitchell, Livestock Marketing Specialist, University of Arkansas

Source: <https://u.osu.edu/beef/2021/12/08/winter-feed-costs/>

Feed costs are higher this year, and we expect them to remain high through the winter. As an example, I have included a table below that summarizes prices for various livestock feeds. This year, prices range from 16% higher for whole cottonseed to 57% higher for grain sorghum. Hay prices are also higher this year, averaging \$144/ton or 9% higher year-over-year. Alfalfa hay is averaging \$194/ton or 12% higher year-over-year. The point is that prices are noticeably higher for all feedstuffs.

For feedlots, higher feed costs will impact feedlot cost of gain (COG). The first graph below is from K-State's Focus on Feedlots monthly report. The data are COG estimates for steers in Kansas feedlots. The COG averaged \$110/cwt in October, a 45% increase year-over-year. Feedlot COG has trended higher each month this year and is counter to typical seasonal patterns. The regular seasonal pattern is for feedlot cost of gain to peak in the winter before declining through the summer and fall. A higher COG means that feedlots will want to place heavier feeder cattle, which translates to a decline in the feeder cattle price-weight slide. This also creates opportunities for stocker and backgrounding operations to add those pounds outside of feedlots this winter.

USDA-AMS Nation Feedstuffs Report, (\$/ton)			
	2020	2021	% Chg. YOY
Corn	\$137.77	\$212.56	54.3%
Corn Gluten Feed	\$144.64	\$194.30	34.3%
Cottonseed	\$326.09	\$376.50	15.5%
DDGs	\$171.12	\$227.30	32.8%
Grain sorghum	\$136.80	\$214.40	56.7%
Soybean hulls	\$134.92	\$166.46	23.4%
Soybean meal	\$315.88	\$384.42	21.7%
Wheat middlings	\$105.58	\$158.21	49.8%

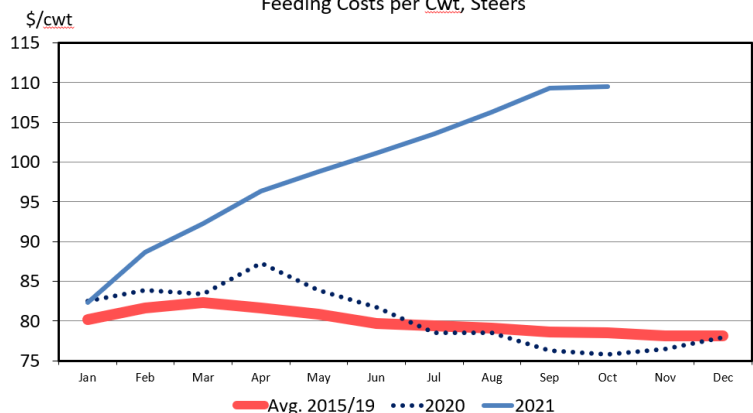
For cow-calf operations, higher feed costs will increase cow costs. The second graph (below) shows what it costs to run a cow each year. The data are LMIC estimates for cow cash costs which do not include things like depreciation on buildings and equipment. Importantly, costs estimates are for the average operation. Average cow-calf costs in 2021 are \$853/cow. LMIC estimates a 6% increase in average cow-calf costs in 2022, totaling \$902/cow.

Higher cow costs mean we have a higher breakeven price. Assuming no non-cash costs and cull cow revenue, this year's projected breakeven price for a 600-pound steer is \$142/cwt (\$853/6). Under the same assumptions, the breakeven price for a 600-pound steer in 2022 is \$150/cwt (\$902/6). Assuming \$300/cow for non-cash costs and 20% cull cow revenue, the projected breakeven price for a 600-pound steer in 2021 increases to \$154/cwt. Under the same assumptions, the projected breakeven price for a 600-pound steer in 2022 increases to \$160/cwt. We could go through other scenarios to see how breakeven prices change with costs. One of the biggest factors impacting costs will be feed.

Feed costs will be higher this winter, and we need to plan accordingly. These higher prices provide the proper incentives to refine our winter supplemental feeding programs. Submitting hay samples for testing would be a good start to help us determine where we are deficient. This winter, we will need to be more precise with what and how we feed.

KANSAS FEEDLOT CLOSEOUTS

Feeding Costs per Cwt, Steers

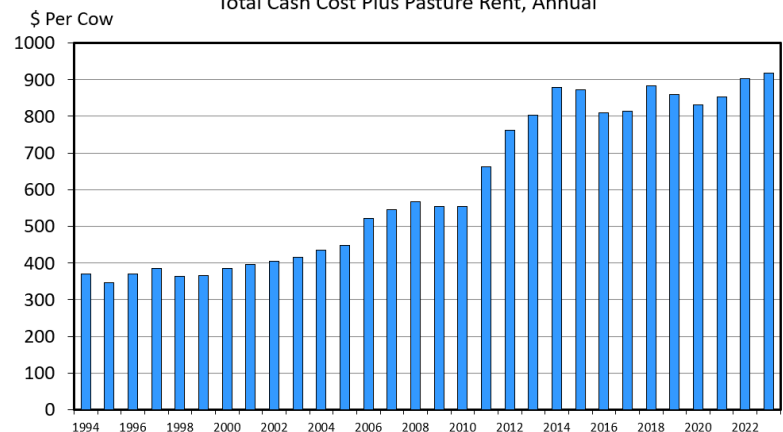


Data Source: KSU Focus on Feedlots, Compiled by LMIC
Livestock Marketing Information Center

12/06/21

ESTIMATED AVERAGE COW CALF COSTS

Total Cash Cost Plus Pasture Rent, Annual



Data Source: USDA & LMIC, Compiled by LMIC
Livestock Marketing Information Center

Markets Continue to Show Strength

By: Stephen R. Koontz, Department of Agricultural and Resource Economics, Colorado State University
Source: <https://u.osu.edu/beef/2021/12/08/markets-continue-to-show-strength/>

Cattle markets continue to show gradual strength and price improvements. After the price break in late-August and early-September, all live cattle futures contract prices have returned to and pushed into life-of-contract highs. Feeder cattle contracts have not pushed into new highs, and likely won't, given the feed costs situation but all contracts show very strong prices. Underlying cash cattle and calf markets have followed suit. The 5-Market weighted average has pushed into the \$130s, the first time since 2017 (and without mandatory cash trade I might add), and while feeder cattle and calves have shown little of the typical seasonal weakness. Small calf prices have pushed into levels similar to what was seen this spring.

The Markets

What does the technical picture say? This week should be interesting. Most contracts have broken resistance while having pushed into new highs. This is what the market has to do to move higher and is thus a buy signal. However, the move was weak and with softening momentum. Further, as market closing is here this Monday the number of hook reversals are plentiful and there are even key reversals in some more distant contracts. These are, albeit often short-term, sell signals. The technicals reveal that persistent pattern of gradual moves higher followed by periodic hard adjustments lower. There is optimism and aggressive risk reduction. More of the same technically.

The underlying fundamentals continue to paint a strong picture. Boxed beef cutout valuations continue to drift lower following summer seasonal highs. But packer margins remain incredibly strong by historical standards. FI steer and heifer slaughter remain at elevated levels and repeatedly press on what I perceive as industry capacity of 525 thousand head per week. Saturday slaughter also is at elevated levels. Cattle on feed over 120 days and over 150 days continue the seasonal decline but remain above last year. The leverage remains with the packer in this situation, but the packer has a strong incentive to run as many hours as possible. Beef cow slaughter also remains strong. The beef herd liquidation, at least partially, continues and will impact next year's supply.

And there is no bearish news on the demand side. All indicators of domestic demand are excellent. Beef supplies are up, cold storage is down, and beef cut prices are high – not as high as during the seasonal peaks but very strong given beef supplies. Exports to China have been much talked about and are growing leaps and bounds. But I would encourage the reader to compare increases in beef exports to China to the decline in beef exports to Hong Kong. International demand appears to remain strong but all else is not constant.

There are solid underlying supply and demand fundamentals, and it is clear that the bottleneck in the packing sector remains. It is reasonable to have long-term optimism but at the same time be willing to periodically and aggressively reduce risk.

Winter Management Tips for Sheep and Goats

By: Michael Metzger, Michigan State University Extension Educator
(Previously published on [MSU Extension, Sheep & Goat: December 14, 2018](#) and [December 19, 2018](#))
Source: <https://u.osu.edu/sheep/2021/12/07/winter-management-tips-for-sheep-and-goats/>

As cold weather approaches, it is important to consider the comfort of the sheep and goats we care for. Winter can be a stressful time for livestock. As owners, we need to help to reduce that stress by providing proper care, feeding, and management practices. Adjusting management practices will help to ensure that sheep under your care will thrive through the cold winter months.

Sheep

Sheep should be given some kind of shelter even if it is just a tree line or wind block. Shelters can include barns or three sided shed. Shelters should have adequate ventilation so that moisture does not build up and cause respiratory problems for the sheep. Hair sheep and wool breeds that have been recently shorn require more shelter than animals with longer wool. Ewes that are lambing during the cold winter months should be housed in a barn and check regularly. Newborns must be dried quickly after birth as hypothermia can set in quickly. Avoid damp, dark, or drafty barns, and wet muddy areas in or around buildings. Young lambs are able to withstand cold temperatures quite well, but drafts and dampness can lead to losses from baby lamb pneumonia. Heat lamps can be used to help keep lambs warm, although care must be taken to prevent electrocutions and/or barn fires.



Sheep require more energy in the winter to help them maintain body temperature. The highest quality hay should not be fed during gestation. Utilize average to good-quality hay during the early gestation period, when ewe nutrient requirements are low compared to late gestation and lactation. If high-quality hay, such as alfalfa, are fed during gestation it is important to limit intakes as overfeeding is costly. Ewes up through 15 weeks of gestation should receive 4 lbs. of a good quality grass/legume hay daily. In the last 4 weeks of gestation they should receive 4 lbs. of a good quality grass/legume hay plus 1 lb. of corn [or concentrate] daily. To prevent wool picking and other problems, ewes should receive a minimum of 1.5 lbs. of hay per day and one lb. of corn can be substituted for 2 lbs. of hay. Once ewes lamb and begin to lactate, they should receive 5 lbs. of good quality hay and 2 lbs. of 15% crude protein grain mix a day. Hay should be fed in feeders to help minimize waste and help prevent the spread of disease. Sheep should have access to fresh water at all times. This may require changing water a couple of times a day to remove the ice or some other type of heated waterer. [Michigan State University](#) reminds producers to use caution with any type of electrical device with sheep and lambs may chew the cord. Salt and minerals formulated for sheep should also be available at all times.

Goats

Goats do not require elaborate housing during the winter months. The most important issues regarding housing is to block the harsh, cold north wind and to keep the animals dry. Goats that are properly cared for will have a thick coat of hair helping them to survive the winter with minimal housing. A three sided structure with the opening facing the south provides protection from the cold wind and yet allow plenty of ventilation to keep moisture down in the barn or shed. Make sure there is plenty of clean, dry bedding available. Goats kidding in the cold weather will require more shelter because young kids will not be able to maintain their body temperature outside. A heat lamp may be required in these situations but should only be used with extreme caution because of the risk of barn fires or animals chewing electric cords.

Feeding and watering goats in the winter requires a little more planning than during the warmer summer months. Goats should have access to fresh water at all times. This may require changing water a couple of times a day to remove the ice or some other type of heated waterer. Use caution with any type of electrical device with goats as they may chew the cord. During the winter, goats need more energy to help maintain body temperature. They will also need roughage which can be supplied in grass, alfalfa, or mixed hay. Alfalfa hay can be a great source of both energy and protein, although care should be taken when feeding bucks and wethers because of urinary calculi. Salt and minerals should also be available.

Lice are more prevalent on goats during the winter months. They can be irritating to the goat and in some cases, heavy infestations can cause anemia, poor coat and/or skin quality. [Michigan State University Extension](#) recommends working with your veterinarian to develop a treatment plan for you goat herd to control lice and other parasites. Keeping a herd of goats, or even a couple of animals as companions, can be a rewarding experience. With a little preplanning we can help our animals not only survive, but thrive the cold winter months.

New Year Means New Minimum Wage

By: Jeffrey K. Lewis, Attorney and Research Specialist, Agricultural & Resource Law Friday, December 03rd, 2021

As 2021 winds down, it is always good to plan for the new year. Part of that planning includes making sure, as an employer, you are compliant with any updates to current law as we turn the calendars to 2022. One law that is changing next year, is Ohio's minimum wage law. Beginning January 1, 2022, the Ohio minimum wage will rise to \$9.30, up from the current \$8.80, for non-tipped employees. However, as an agricultural employer, the law provides some exemptions to paying federal or state minimum wage. In this post, we review minimum wage requirements, agricultural exemptions to minimum wage, and who qualifies for the agricultural exemptions.



Ohio versus federal minimum wage. As discussed above, Ohio's minimum wage will rise to \$9.30 for non-tipped employees but federal minimum wage will remain at \$7.25. An agricultural employer is required to follow both state and federal laws, but when the two sets of laws differ, there may be some confusion about which one applies. Normally, federal law reigns supreme and usually preempts, or overrides, state law. But in this case, the federal law sets the floor for minimum wage. This means that employers across the country that are subject to the Fair Labor Standards Act ("FLSA") cannot pay less than \$7.25 per hour to their employees. However, if a state law requires that employers pay their employees more than the federal minimum wage, then the employer must meet the state's minimum wage standard. Thus, Ohio employers must pay the Ohio minimum wage, unless an exemption applies.

Ohio's "small employer" exemption. Starting in 2022, Ohio employers that grossed less than \$342,000 in 2021 are not required to pay Ohio's \$9.30 minimum wage. Instead, those employers are required to pay the \$7.25 federal minimum wage to their employees, unless another exemption applies.

Ohio and federal agricultural exemptions. Under both Ohio and federal law, agricultural employers are exempt from paying the federal or Ohio minimum wage to their employees if any of following apply: The employer did not use more than 500 man-days of agricultural labor during any calendar quarter during the preceding year.

1. The employee is the parent, spouse, child, or other member of the employer's immediate family.
2. The employee:
 - a. is employed as a hand-harvest laborer;
 - b. is paid on a piece-rate basis;
 - c. commutes daily from their permanent residence to the farm; and
 - d. was employed in agriculture for less than 13 weeks during the previous calendar year.
3. The employee is:
 - a. 16 years of age or younger;
 - b. employed as a hand-harvest laborer;
 - c. paid on a piece-rate basis;
 - d. employed on the same farm as their parent or legal guardian; and
 - e. paid the same piece-rate wage as employees over the age of 16.
4. The employee is engaged in range production of livestock.

500 man-days exemption. The "man-days" exemption was intended to exempt small and family-sized farms. A "man-day" is any day during which an employee performs at least one hour of agricultural labor. To calculate a "man-day", an agricultural employer needs to keep track of the number of people who worked each day and for how long. 500 "man-days" is roughly equal to having seven employees working for at least one hour each, five days a week during a calendar quarter. It is also not just full-time employees that are counted towards the 500 "man-day" exemption, temporary and seasonal workers also count towards the "man-day" exemption.

Family member exemption. An agricultural employer is not required to pay family members the minimum wage. This family member exemption applies to employees engaged in agriculture and are either the parent, spouse, child or other member of the employer's immediate family. However, not every blood relative is considered "other immediate family." According to the U.S. Department of Labor, the following will be considered as part of the employer's "other immediate family": stepchildren, foster children, stepparents, and foster parents. Other family members, including siblings, cousins, nieces, nephews, uncles, and aunts do not count as immediate family members.

Employed in agriculture. Ohio law closely resembles, if not mirrors, FLSA requirements when it comes to agricultural exemptions to minimum wage and overtime requirements. But, to qualify for the agricultural exemptions discussed above, an employer must have employees that are employed in "agriculture." Under the FLSA, "agriculture" has two distinct branches, primary agriculture and secondary agriculture. Employees engaged in primary agriculture are considered to be employed in agriculture for that workweek. Employees engaged in secondary agriculture are only considered to be employed in agriculture if the activities are performed by a farmer or on a farm in connection with the farming operations.

What is considered primary agriculture? Primary agriculture "includes farming in all its branches" and are those activities traditionally viewed as agricultural, including:

- Cultivating and tilling the soil;
- Dairying;
- Producing, cultivating, growing, and harvesting agricultural or horticultural commodities; and
- Raising livestock, bees, fur-bearing animals, or poultry.

Activities that qualify as primary agriculture do not necessarily have to take place on a farm. For example, someone employed in a hatchery that is located in an industrial complex is engaged in a primary agriculture activity (raising poultry) and is considered to be employed in agriculture. On the other hand, even though an activity takes place on a farm, it does not necessarily mean it is considered to be a primary agriculture activity. For example, courts have determined that employees of Dairy Farm A are not engaged in a primary agriculture activity when they process milk produced by Dairy Farm B.

What is secondary agriculture? Secondary agriculture includes all activities, including forestry or lumbering operations, that may not themselves be considered agricultural practices but are necessary to agriculture. For an activity to be considered secondary agriculture it must meet two requirements:

- (1) the activity must either be performed by a farmer or on a farm; and
- (2) the activity must be incidental to or in conjunction with such farming operations.

Secondary agriculture includes preparing an agricultural product for market, delivering agricultural products to storage, to market, or to carriers for transportation to market.

Any activity that is performed by a farmer's employees, is also considered to be "performed by a farmer." Moreover, an activity is considered "incidental to or in conjunction with" farming activities if the work being performed is:

- (1) An established part of agriculture;
- (2) subordinate to the farming operations of the farm; and
- (3) not an independent business.

Mixing it up. After understanding what work is considered agricultural, it is important to understand the impact of an employee performing both exempt and non-exempt work. If an employee does both exempt and non-exempt work in the same week, then the employee loses their exemption status and must be paid according to federal/Ohio minimum wage and overtime requirements. However, if an employer can separate the employee's exempt and non-exempt work into separate weeks, then the employer would only have to pay the employee federal/Ohio minimum wage and overtime for those weeks that the employee performed non-exempt work.

This is especially important to agricultural employers that also engage in agritourism activities. Having a farm employee perform work related to an agritourism activity does not qualify for the agricultural exemptions under federal/Ohio law. Agricultural employers should be careful when assigning their employees tasks. Assigning tasks outside the realm of agriculture will subject the employer to the provisions of federal and state minimum wage and overtime laws.

Overtime. Agricultural employers are exempt from paying their agricultural employees an overtime wage rate. This exemption applies to all agricultural employees, not just small farm employees or immediate family members.

Conclusion. Determining whether your employees qualify for an agricultural exemption can be a complex issue, with multiple layers of analysis. It is always best to ask an attorney to help clarify whether your employees are considered to be “employed in agriculture” and thus qualify for the agricultural exemptions to minimum wage and overtime laws. Further, it is always a good idea to seek a lawyer’s counsel every so often to help make sure your operation is continuing to be compliant with labor and employment laws.

References and Resources.

- 29 U.S. Code Chapter 8 – Fair Labor Standards, <https://www.law.cornell.edu/uscode/text/29/chapter-8>
- 29 U.S. Code § 206 - Minimum wage, <https://www.law.cornell.edu/uscode/text/29/206>
- 29 CFR Chapter 5 – Wage and Hour Division, Department of Labor, <https://www.ecfr.gov/cgi-bin/text-idx?SID=9215c26baf64464cdfbd4073e46247d3&mc=true&tpl=/ecfrbrowse/Title29/29chapterV.tpl>
- 29 C.F.R. §§ 780 et seq. – Exemptions Applicable to Agriculture, https://www.ecfr.gov/cgi-bin/text-idx?SID=09461535e9555139c7d6471d1b26598d&mc=true&node=pt29.3.780&rgn=div5#se29.3.780_1103
- Ohio Constitution, Article II, Section 34 – Minimum Wage, <https://codes.ohio.gov/ohio-constitution/section-2.34a>
- Ohio Department of Commerce, 2022 Minimum Wage Poster, https://www.com.ohio.gov/documents/dico_2022MinimumWageposter.pdf
- Ohio Revised Code Chapter 4111 – Minimum Fair Wage Standards, <https://codes.ohio.gov/ohio-revised-code/chapter-4111>
- U.S. Department of Labor Wage and Hour Division, Field Operations Handbook Chapter 20 – Agriculture: Related and Seasonal Exemptions, https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/FOH_Ch20.pdf
- U.S. Department of Labor Wage and Hour Division, Fact Sheet #12: Agricultural Employers Under the Fair Labor Standards Act (FLSA), <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/whdfs12.pdf>

Farmland and Farmland Owner Tax Webinar

Source: <https://farmoffice.osu.edu/tax/farmer-and-farmland-owner-income-tax-webinar>

Are you a farmer or farmland owner wanting to learn more about the recent income tax law changes and proposals? If so, join us for this webinar. If so, please plan to attend the Farmer and Farmland Owner Tax Webinar on Thursday, December 9, 2021 from 6:30 - 8:30 p.m.

This webinar will focus on issues related to farmer and farmland owner tax returns, COVID-19-related legislation introduced in 2020 and 2021 and federal legislative proposals and possible tax changes that may impact the farm sector. This two-hour program will be presented in a live webinar format via Zoom by OSU Extension Educators Barry Ward and David Marrison along with Purdue faculty member Dr. Michael Langemeier. Individuals who operate farms, own property, or are involved with renting farmland should participate.

Topics to be discussed during the webinar include (subject to change based on tax law change):

- Tax Planning for Higher Income Years
- Sale of Farm Assets
- Tax Issues related to COVID-related legislation
- Federal Legislative Proposals and Possible Tax Impacts
- Like Kind Exchanges (farm machinery and equipment no longer are eligible for this provision) how this change may affect state income tax, Social Security credits and eventual payments
- New 1099-Misc and 1099-NEC

The registration fee is \$35 per person. Additional details can be found at:
<https://farmoffice.osu.edu/tax/income-tax-schools> For more information, contact Julie Strawser
at strawser.35@osu.edu or call the OSU Extension Farm Office at 614-292-2433.

One More BQA Re-certification Session Planned

The Coshocton County Extension office will be offering one final **Beef Quality Assurance (BQA)** re-certification meeting this month to help producers renew their BQA certification. This session will be held December 14 from 7:00 to 8:30 p.m. in Room 145 at the Coshocton County Services Building located at 724 South 7th Street in Coshocton County. Pre-registration is required as space is limited. There is no fee to attend. Call 740-622-2265 to pre-register. This session also qualifies for anyone who is seeking a first time certification.

If you cannot attend this session, our friends down in Tuscarawas County will be holding a Beef Quality Assurance class on December 9 beginning at 7:00 p.m. at the Sugarcreek Stockyards. Call 330-339-2337 to pre-register. Online certification and recertification is also available and can be completed anytime at <https://www.bqa.org/beef-quality-assurance-certification/online-certifications>.

Upcoming Programs

2021 Beef Quality Assurance Re-certifications- Coshocton County
December 1 & 14, 2021 (7:00 to 8:30 p.m.)

2022 Private Pesticide & Fertilizer Re-Certification

January 12 from 8:30 a.m. to 12:30 p.m. at Locke Landing in Roscoe Village

January 20 from 9:00 to 10:00 a.m. in Room 145, Coshocton County Services Building (Fert Only)

February 10 from 5:30 p.m. to 9:30 p.m. in Room 145, Coshocton County Services Building

2022 Agronomic Weeds School

February 2 from 9:00 a.m. to 4:00 p.m. in Room 145, Coshocton County Services Building

Ag Outlook Meeting

February 14 from 9:30 to 12:30 p.m. in Zanesville, OH

