

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCESNovember 11, 2020 Issue

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Happy Veteran's Day Coshocton County! This morning's rain will allow our community to catch its breath from a busy harvest stretch. I am so thankful for the wonderful weather over the past week. It is amazing to see how many acres of soybean and corn fields were able to be harvested. I even saw some late hay being made. The good news is that our weather continues to look favorable for harvest as we move through November.

THANK YOU to all of our Veterans in Coshocton County. Your service to our country is so important and appreciated.

"On this Veterans Day, let us remember the service of our veterans, and let us renew our national promise to fulfill our sacred obligations to our veterans and their families who have sacrificed so much so that we can live free." Dan Lipinski

Have a good and safe week.

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator



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November Brings Better Weather

By: Aaron Wilson

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2020-38/november-brings-better-weather>

Frost/Freeze Summary

The National Weather Service Frost/Freeze program has ended for the season as many areas have experienced 1-2 hard freezes (28°F) over the last three weeks.

Weather Summary

A wet end to October was both a blessing and a curse. October ranks as the 18th wettest October on record (1895-2020) for Ohio, with much of the state picking up 3-8" of liquid-equivalent precipitation. Unfortunately, this slowed harvest with moisture content in corn remaining high. However, we have seen significant improvements in the [U.S. Drought Monitor](#), with only about 7% of Ohio currently experiencing abnormally dry or moderate drought conditions (Fig. 1).

Ohio's weather has been dominated by high pressure this past week, with many locations reporting record highs over the weekend. In fact, Dayton set a monthly record high of 80°F for November. For more information on recent climate conditions and impacts, check out the latest [Hydro-Climate Assessment](#) from the [State Climate Office of Ohio](#).

Forecast

Warm and dry conditions will continue into Tuesday before a cold front moves through the region. Rain showers are likely late Tuesday afternoon through Wednesday morning, with high pressure and dry weather resuming for Wednesday afternoon through Saturday. While the next couple of days will see highs in the 70s, Wednesday's highs are expected in the 60s, with highs in the 50s and overnight lows in the 30s for Thursday through Saturday. Our next opportunity for rainfall will occur on Sunday and Monday. The [Weather Prediction Center](#) is currently forecasting 0.50-3.00" of rain across Ohio with two systems over the next 7 days (Fig. 2).

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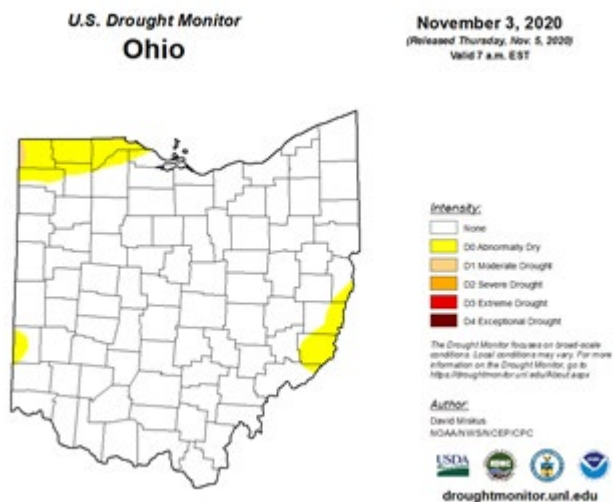
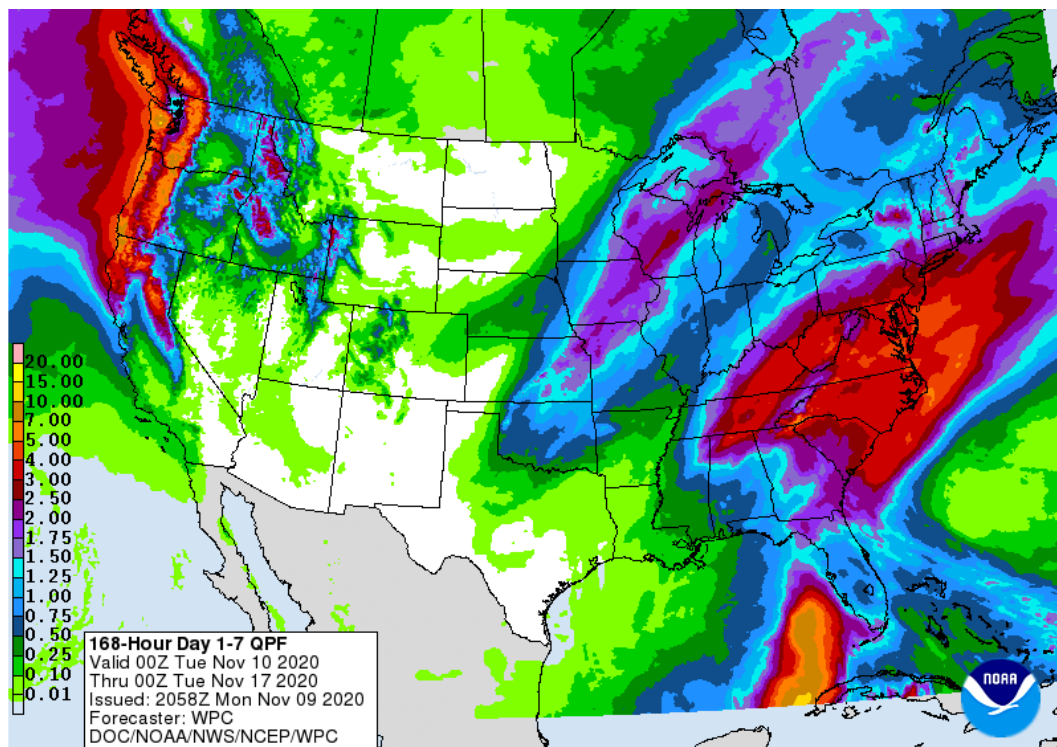


Figure 1: U.S. Drought Monitor for Ohio as reported on Thursday November 3, 2020.

Figure 2: Forecast precipitation for the next 7 days. Valid from 7 pm Monday November 9, 2020 through 7 pm Monday November 16, 2020. Figure from the Weather Prediction Center.



The latest [NOAA/NWS/Climate Prediction Center](#) outlook for the 8-14 day period (November 17 - 23) and the [16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center](#) shows above average temperatures and near to below average precipitation are likely (Fig. 3). Normal highs during the period are in the mid- to upper-50s, lows in the mid- to upper-30s, with about 0.85" of rainfall per week.

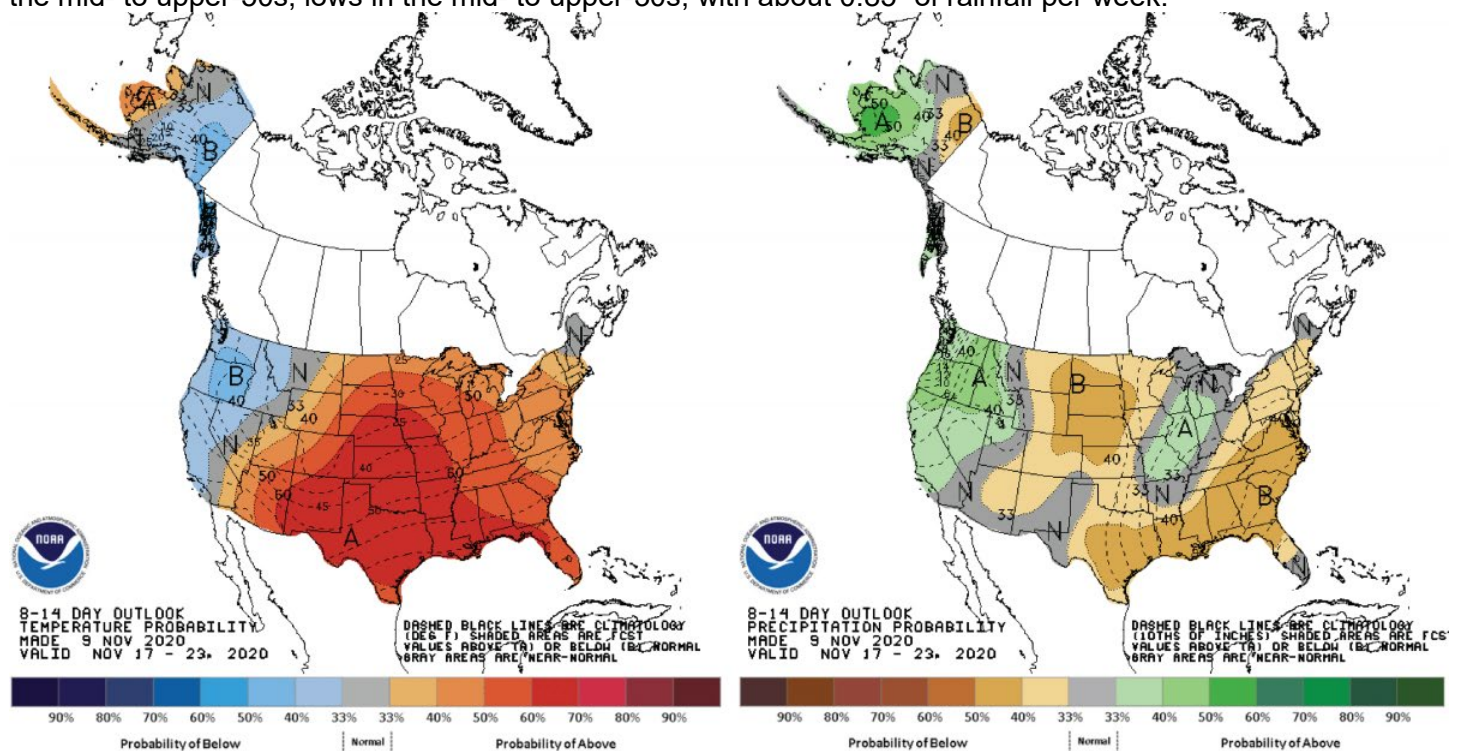


Figure 3: Climate Prediction Center 8-14 Day Outlook valid for November 17 – 23, 2020 for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

Engenia, XtendiMax Labels Reapproved

By: Mark Loux

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2020-38/engenia-xtendimax-labels-reapproved>

The USEPA recently reapproved use of Engenia and XtendiMax on Xtend and XtendiFlex soybeans, with modifications to address concerns about off-target movement. Summary of current situation follows:

- While the previous labels for these products listed all of the typical uses of dicamba that are found on most dicamba labels aside from soybeans, these two products are now approved for use only on dicamba-resistant soybeans – Xtend and XtendiFlex.
- Can be applied preplant, preemergence, or postemergence: XtendiMax - up to R1 stage or no later than June 30, whichever occurs first; Engenia - no later than June 30. Emerged broadleaf weeds should be less than 4 inches in size.
- A maximum of two preplant/preemergence and two postemergence applications is allowed. Maximum XtendiMax use rate for any one application is 22 oz/A. Total XtendiMax allowed per season is 88 oz/A. Maximum Engenia rate for any one application is 12.8 oz/A. Total Engenia allowed per season is 51.2 oz/A.
- Apply in a minimum spray volume of 15 gpa with boom set no higher than 24 inches above target. Do not exceed a ground speed of 15 mph. Do not mix with AMS.
- XtendiMax: all applications must include an approved volatility reducing agent (VRA) such as a VaporGrip

Xtra Agent product. Engenia: all applications must include an approved pH buffering adjuvant. See websites for list of approved products.

- Apply between one hour after sunrise and two hours before sunset when wind speed at boom height is between 3 and 10 mph. Do not apply during temperature inversion.
- Always maintain a 240-foot buffer between last treated row and downwind field edge. Roads, mowed grass and tolerant crops (e.g. corn, Xtend soybean, etc.) can be included in the buffer. Do not apply product if sensitive crops or certain plants are in an adjacent downwind field.
- Do not apply under conditions that favor runoff. Do not apply if soil is saturated with water or when rainfall that may cause runoff is forecast to occur within 48 hours.
- Users should be familiar with stewardship information on the product label and associated materials prior to use. Dicamba-specific training and proof of training is required prior to use of these products. The following websites, which contain information on approved nozzles and tank-mix partners, should be consulted prior to application: Engeniatankmix.com; xtendimaxapplicationrequirements.com. Do not mix any other product of any type with any dicamba product unless it is approved and listed on the website.
- FeXapan has not been reapproved at this time, but should be at some point in the future according to our sources. Tavium maintains its approval, with many of the same modifications in use outlined above. Tavium can be applied up to the V4 stage or June 30, whichever occurs first. Precautions and guidelines, and need for training, are similar to the dicamba products listed above. See label and the Tavium website for specific information on stewardship, mixtures, etc - TaviumTankMix.com

Reducing Winter Feed Costs

By: [Clif Little](#), OSU Extension Agriculture Natural Resources, Guernsey County (this article was originally appeared in [Farm and Dairy](#))

Source: <https://u.osu.edu/beef/2020/11/11/reducing-winter-feed-costs/>

Winter feed represents one of the largest components of annual cow cost. Approximately seventy five percent of the annual feed cost for cattle is winter feed. One way to increase the profit potential in the cow herd is to reduce this cost by extending the grazing season.

For example, a 1500-pound mature cow will consume approximately 38 pounds of hay per day. If that hay sells for \$50 per ton, then her feed cost is (\$50 divided by 2000 pounds) times 38 pounds per day = \$.95 cents per day.

In a three-year study conducted by OSU researchers Dr. Steven Loerch and Dr. Dave Barker they looked at the cost of extending the grazing season, feeding hay and limit-feeding concentrates. Their results indicated that the average winter feed cost per cow per day over the 112 day feeding period for stockpiled pasture system was \$.63 cents per day per head, \$1.31 per head per day for corn limit-fed cattle, and \$1.61 per head per day for cattle wintered on hay. Prices used for the calculations were at \$3.80/bu corn, \$80/ton hay, and \$150/ton supplement. Furthermore, results did not indicate significant differences in cow performance between the three systems.



Stockpiled fescue with small round bales can be utilized for winter strip grazing. Photo by Clif Little

These results equate to a savings of approximately \$1.00 per head/day when comparing the stockpiled pasture system to the hay feeding system. On average for the three-year project, that was a savings of \$112 per cow per year for the stockpiled forage. Planning the winter grazing and supplementation program has tremendous impact on farm profitability.

Extending the grazing season, maximizing forage utilization, reducing feed waste, understanding stored forage nutritional composition, and creating a winter feed area all influence profitability. The key to implementing these systems is to look at examples on other farms. Formulate a vision for the winter-feeding system, then seek other resources input for the plan. The local OSU Extension office, Soil and Water Conservation and the Natural Resource Conservation Service have employees knowledgeable on grazing systems and they can be helpful in providing input. Finally, consider planning the entire system and sign-up for the USDA/NRCS, EQIP grazing program. The last part of the winter grazing plan is implementing the plan. By planning first, one may avoid some unnecessary, and potentially costly adjustments later. A well-managed winter-feeding system will greatly reduce the cost of production and is environmentally friendly.

Making a Plan to Control Dogbane in 2021

Clifton Martin, OSU Extension Muskingum County
Farm and Dairy All About Grazing, Oct 29, 2020

And there we have it: we are in the sunset of 2020. And we all know it has been a year full of topics and challenges we did not expect. But, the wheel keeps turning and the plants still grow, testing our management skills and keeping us sharp. Back in my early days of soybean research management, two weeds became problems in some test plots that I will never forget: hemp dogbane and deadly nightshade. I was worried about hemp dogbane just because of the concern I had for the success of the test plots, but the farmer who hosted the plots took care of it. The deadly nightshade, on the other hand, required hand pulling and a lot of sweat across multiple acres in the middle of August, and now I descend into obsessive weeding whenever I see it in the garden because I have no desire to deal with that again.

But, as many can attest, those become the experiences that serve us later when other problems arise and help us make sense of the tools in our toolbox. Hemp dogbane just happens to be a plant I have been questioned on multiple times this fall, primarily about weed control in pastures. Dogbane (*Apocynum cannabinum*) and common milkweed (*Asclepias syriaca*) are often discussed together because they are look-a-likes and may occur together or nearby in similar conditions. Dogbane will have a milky sap (latex) when the stem is broken, exhibits red coloration in the stems, and branches out in the upper canopy. Milkweed is much the same, though usually single-stemmed without branching. Their success as weeds is partly due to underground rhizomes from which new plants can grow. If there is an infestation, it is usually because of regrowth from established roots below the soil line. As well as weed-like characteristics, it is well documented that both dogbane and milkweed can be toxic to grazing animals in both wet and dry forms. Fortunately, grazing animals are adept at avoiding the plants if other choices are available, but often management is warranted to proactively prevent problems at a later time.

Dogbane is a warm season perennial and a review across pasture management guides for Ohio and Pennsylvania shows agreement on several concepts. Management strategies target the plant when it is mature. Essentially, targeting tall plants before they have the chance to produce seed is ideal for both mowing and herbicides. If attempting a combination, plants should be allowed to regrow to full height after mowing before using an herbicide. This means dogbane and milkweed control is a late summer and fall activity and ensures plenty of leaf surface for the herbicide to do its work. Mowing will likely suppress plant vigor but the underground spreading root structures will persist.

In general, between sixty to eighty percent control is to be expected by herbicide applications. That makes control of dogbane a multi-year effort that requires chasing escapees the following year, and likely after that as well. Extension resources are readily available to help in decision making regarding these weeds. It is likely you may want to fold dogbane control into a plan to manage other perennial and biennial weeds as well.

The herbicide weed control window has come to a close for 2020, and at this point the discussion is about how to work a plan into 2021. It has been said, "Give me six hours to chop down a tree and I will spend the first four sharpening the axe." And, "If you don't know where you are going, you'll end up someplace else." Hemp Dogbane just happens to be the example to come across my desk this fall, but with all weeds and pasture management we like to stress taking the time to evaluate and plan for the future. In the absence of planning, nature bats last.

USDA Releases Farm Production Expense Forecast for 2020

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

Source: <https://u.osu.edu/ohioagmanager/2020/11/05/usda-releases-farm-production-expense-forecast-for-2020/>

The United States Department of Agriculture Economic Research Service (USDA-ERS) has announced their prediction for farm production expenses for 2020. Production expenses (see Figure 1) are projected to be reduced by 1.3 percent to \$344.2 billion in nominal (non-inflation-adjusted) dollars. These expenses represent the costs of all inputs used to produce farm commodities and affect farm profitability. While overall production expenses are forecast to decrease, specific expenses vary.

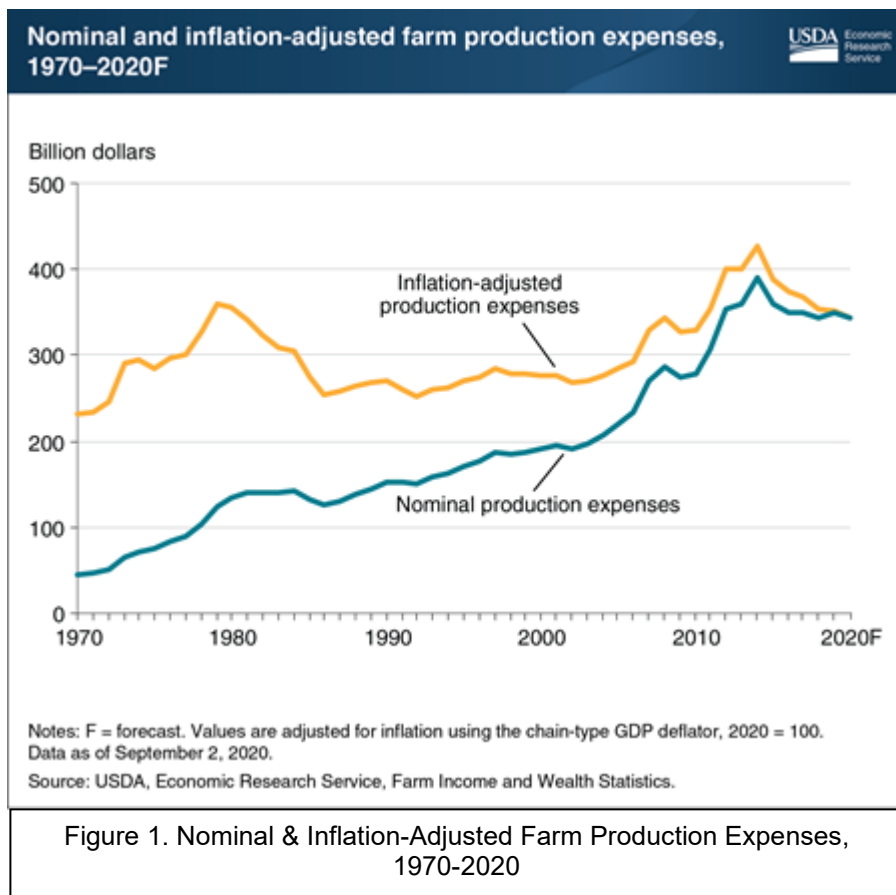
USDA-ERS estimates expenses to increase in 2020 account for 69 percent of total expenses. The two largest expense categories, feed and labor, are expected to increase 1.4% and 3.1%, respectively. Expenses expected to decrease in 2020 account for 31 percent of all production expenses. Specific examples of expense items expected to decrease include interest expenses (27.1%), fuel and oil (13.9%), livestock and poultry purchases (7.5%), and pesticides (2.1%).

Inflation-adjusted total production expenses in 2020 are expected to be 19 percent below the record high of \$427.1 billion in 2014. This will mark the sixth year of declining expenses.

Looking to 2021

While some expense items are forecast to be reduced in 2020, it is important to ask questions as you plan.

Will government payments continue? I don't suggest relying on these payments. What is the outlook for the commodities you produce? What tools are available to help you minimize risk?



As you plan for 2021, I encourage you to talk to your accountant, lender, and other advisors. Refer to the OSU Extension 2021 Budgets (<https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets#2021>). The Ohio State University Extension Farm Business Analysis and Benchmarking Program (<https://farmprofitability.osu.edu/>) can also provide assistance with planning, evaluation, and decision making.

Reference

USDA-ERS, Farm production expenses forecast to decrease in 2020, the sixth year in a row. Available at: <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=99736>

USDA Releases Projections of Farm Prices to 2030

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

Source: <https://u.osu.edu/ohioagmanager/2020/11/11/usda-releases-projections-of-farm-prices-to-2030/>

The United States Department of Agriculture Economic Research Service (USDA-ERS) released their 10 year projection for farm commodity prices. The projections offer a mixed outlook based on expected increases in demand, exports, and market conditions this year. See Figure 1 for the USDA-ERS price projections for several U.S. farm commodities. These projections are not inflation adjusted.

The projections are based on an assumed long-term global outlook that includes a recovery in income growth—beginning in 2021—from the declines that have occurred in most economies during 2020. The outlook for the U.S. economy, and for many important U.S. agricultural markets and competitors, however, remains uncertain.

Crops

Wheat and cotton are projected by USDA-ERS to show the strongest gains. Wheat prices are projected to rise as domestic and export demand begins to outpace domestic production. In addition to the potential to capitalize on projected price gains, you may want to consider incorporating wheat into your rotation for soil health, disease management, and other reasons. Modest changes in prices for U.S. corn and soybeans from current levels reflect the relatively steady demand for these products during 2020, together with the moderating influences of productivity gains and continued export competition. If the corn and soybean price projections are true, should you continue to grow these crops?

Livestock

Farm prices of hogs, broilers, and eggs are projected higher by 2030, as economic recovery restores growth in domestic and export demand. U.S. beef cattle prices are expected to rise during the early years of the 10-year projection period, before declining somewhat as the multi-year cattle cycle and a longer-term trend of sluggish demand growth turn prices downward. For those in the beef business, the overall projected negative price change should be of concern. What can you do now to plan for a downward price trend?

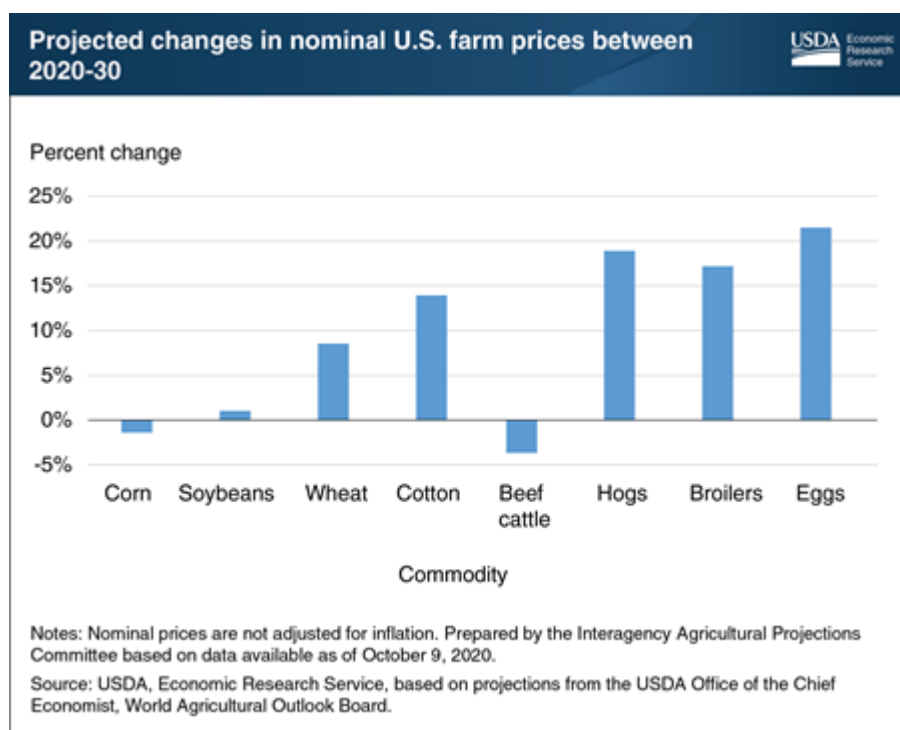


Figure 1. Projected changes in U.S. farm commodities, 2020-2030

Planning

This USDA-ERS release is a prediction of future prices based on two things: (1) information known today and (2) anticipated changes over time. What will you do with this information? How will this and other information impact how you chart the course of your business? The weather is a topic all farmers want to discuss but cannot control. Planning, however, is something all farmers can control. Use the available information to help make educated decisions about the future of your farm. Read and review information, meet with your lender, accountant, and Extension Educator.

Ohio State University Extension crop budgets are developed annually and are available at <https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets>. These Excel-based budgets include a column for users to input their own information to evaluate scenarios.

The FINPACK computerized program is used by Ohio State University Extension to help farmers evaluate business changes. Depending upon the commodities you produce, now may be the time to re-evaluate your business model. If this is you, the FINPACK program can be of great benefit. Additional information is available here: <https://farmprofitability.osu.edu/>.

Source

United States Department of Agriculture Economic Research Service, Economic recovery, competition shape projections of U.S. farm prices to 2030. November 6, 2020. Available at: <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=99758>

A Hunting We Will Go: Laws Landowners Need to Know

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

Originally Published on December 02, 2019

Source: <https://farmoffice.osu.edu/blog/mon-12022019-1222pm/hunting-we-will-go-laws-landowners-need-know>

With archery season in full swing and deer gun season approaching, hunters will be out in full force across Ohio. That means it's also high season for questions about hunting laws, trespassers, property harm, and landowner liability. Below, we provide answers to the top ten frequently asked questions we receive on these topics.

1. I gave them permission to hunt on my land, but do I have to sign something? Yes. Permission to hunt should be in writing. Ohio law requires a person to obtain written permission from a landowner or the landowner's agent before hunting on private lands or waters and to carry the written permission while hunting. A hunter who doesn't obtain written permission can be subject to criminal misdemeanor charges. ORC 1533.17. The ODNR provides a permission form at http://wildlife.ohiodnr.gov/Portals/wildlife/pdfs/publications/hunting/Pub8924_PermissiontoHunt.pdf. If a hunter uses another form, read it carefully before signing and ensure that it only addresses hunting and doesn't grant other rights that you don't want to allow on the land.
2. Do family members need a license to hunt on my land? Some of them will, depending on their relationship to you. Resident landowners, their children of any age and their grandchildren under the age of 18 are exempt from the hunting license requirement when hunting on the landowners' private lands and waters. The same rule applies if a limited liability company (LLC), limited liability partnership (LLP) or a trust holds the land and the LLC, LLP or trust has three or fewer members, partners, trustees and beneficiaries, as long as the LLC member, LLP partner or trustee is a resident of Ohio. When the landowner is not a resident, only the landowner, spouse and children of any age may hunt without a license, and only if the landowner's state of residency grants the same rights to Ohioans who own land in that state. ORC 1533.10. Family members who don't fall under the license exemption must obtain a hunting license and follow the written permission requirement.

3. Does a hunter need my permission to retrieve an animal injured on another property? Yes. The written permission requirement applies to all of these activities: shooting, shooting at, catching, killing, injuring, or pursuing a wild bird, wild waterfowl or wild animal. ORC 1533.17.
4. Will I be liable if a hunter is injured on my land? Probably not. Two laws apply to this situation, depending upon whether you gave the hunter permission. A landowner is not liable for injuries to or harm caused by a hunter who does not have written permission to be on the land. ORC 1533.17. Ohio's Recreational User Statute applies when a hunter does have permission to be on the land; it states that a landowner has no legal duty to keep the premises safe for a hunter and assumes no responsibility for or incurs liability for any injury to person or property caused by any act of a hunter. ORC 1533.181. Note that this immunity doesn't apply if the landowner charges a fee for hunting, unless the fee is a payment made under a hunting lease with a hunter or hunting group. ORC 1533.18. Read more about the law in our law bulletin, [here](#). These laws provide significant protection from liability for hunter injuries, but won't protect a landowner who willfully or recklessly causes harm to hunters. One situation that might rise to the level of willful or reckless conduct by a landowner is granting permission to too many hunters and failing to inform or manage the hunters, explained below.
5. What if several people want to hunt on my land—how many should I allow? Ohio law does not state how many hunters can have permission to hunt on a parcel, but be careful about setting up a dangerous situation by allowing multiple hunters on the land at once. If you do give permission to several hunters, let them know that others could also be hunting on the land and designate a particular parking area so that they know when other hunters are present. You could even consider scheduling hunters on certain days. If the hunters are part of a hunting club, consider leasing your land to the hunting club and letting the club decide how to manage multiple hunters (see our Hunting Lease checklist, [here](#)). Taking such steps to manage multiple hunters will ensure that you aren't behaving recklessly and have immunity from liability under the Recreational User Statute.
6. Should I allow a hunter to bring along someone who's not hunting? In regards to liability for that person, the Recreational User Statute described above applies to any person engaging in any kind of recreational activity, in addition to hunting. Hiking or walking on the land is a recreational activity covered under the law. As long as you give permission and don't charge the recreational user a fee, the law provides immunity from liability for their injuries.
7. What if a hunter leaves a tree stand or a blind on my land—can I get rid of it? It depends. It's okay to carefully remove a stand or blind from the area, but be careful about damaging or getting rid of it too soon if it's the property of a hunter who had permission to be on the land. According to Ohio common law, you might be liable for the property under a claim of "conversion" if the property is not "abandoned" or "lost." Abandoned property is that to which the owner has relinquished all rights with the intention of not reclaiming it, while lost property is that which the owner has involuntarily parted with through neglect, carelessness, or inadvertence. A finder who possesses abandoned property takes absolute title to the property, while a finder of lost property takes title against everyone except the owner. In either case, destroying or disposing of property that is not abandoned or lost could lead to a claim of conversion, and you could be liable for the damages.
8. What if a hunter who had my permission to hunt ends up harming my property? There are two ways with deal with property harm from hunters. First, the hunting laws prohibit a hunter from acting in a negligent, careless or reckless manner so as to injure persons or property. Violating this law can lead to first degree misdemeanor charges and compensation to the landowner, as well as revocation of the hunting licenses and permits. ORC 1533.171 and 1533.99. Second, Ohio law allows a landowner to seek compensation for the "reckless" destruction of vegetation, trees and crops under ORC 901.51. Reckless means acting intentionally and without regard for consequences. If successful, a landowner can receive triple the amount of the harm caused to the property.

9. What can I do to a trespasser who's hunting on my land? Dealing with trespassers is tricky. First, don't willfully harm the trespasser, as you could be liable for causing intentional harm. Second, call your local ODNR wildlife officer or the Turn in a Poacher program, below, to report the incident. Third, read our law bulletin on "Do's and Don'ts of Dealing with Trespassers on the Farm," available on farmoffice.osu.edu, [here](#).
10. What if I see someone violating hunting laws? ODNR's "Turn in a Poacher" program encourages the public to report wildlife violations such as hunting out of season or without a license or permission. The program provides several ways to report: complete an online form available at <http://wildlife.ohiodnr.gov/stay-informed/turn-in-a-poacher-tip> and submit it through the internet or via mail, call the TIP hotline at 1-800-POACHER, or use the same number to text photos of suspects, vehicles or signs of violations. All reports are confidential.

The nursery rhyme "A Hunting We Will Go" paints a happy-go-lucky picture of hunting. But hunting raises many questions and concerns for agricultural landowners. Ohio law offers rules and remedies that can ease those concerns. Landowners who know and use the laws just might be able to hum along with the nursery rhyme through hunting season.

Sheep & Goat Vaccine & Health Management Schedule

By: Marcy Ward, Extension Livestock Specialist, New Mexico State University

Shad Cox, Superintendent – Corona Range and Livestock Research Center, New Mexico State University

John Wenzel, Extension Veterinarian, New Mexico State University

Source: <https://u.osu.edu/sheep/2020/11/03/sheep-and-goat-vaccine-and-health-management-schedule/>

Most livestock vaccine and health management protocols revolve around the animal's stage of production. For sheep and goats, it is recommended to vaccinate prior to lambing, weaning, and breeding. The purpose of this publication is to offer a guide in establishing a health management schedule. Every operation is unique, and it is therefore imperative that producers consult with their veterinarian before establishing a specific vaccination and health protocol.

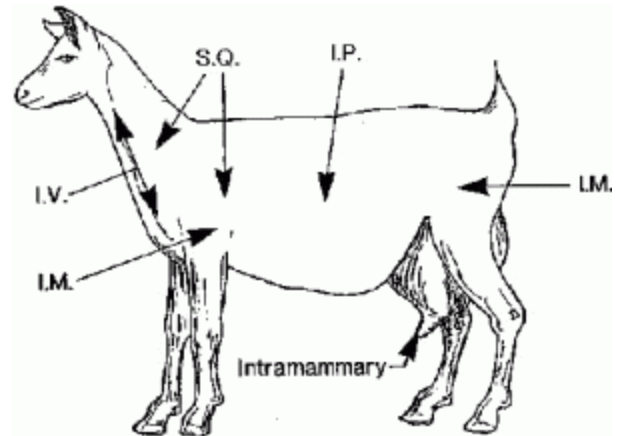


Table 1. Recommended Vaccine and Health Management Schedule for Sheep and Goats

Stage of Production	Timing	Recommended Vaccines/Herd Management	Diseases Covered	Optional Vaccines*
Pregnant sheep and goats		<i>Clostridium perfringens</i> types C and D and tetanus. Will need to use cattle vaccines labeled safe for sheep and goats. Topical external parasite control (permethrin)	<i>Clostridium perfringens</i> types C and D and tetanus Keds and lice in sheep	
Kid Goats	At lambing or kidding	Topical and drench wormers to dams	Prevents internal parasite infestation	SE/vitamin E can help prevent white muscle disease

New Lambs	Lambs 2 weeks of age	Dock tails and castrate		300 I.U. tetanus antitoxin, if dam was not vaccinated during gestation
	30 days after lambing or kidding. Booster at 45 days (2 weeks later)	Clostridium perfringens types C and D antitoxin	Enterotoxemia	Ovine ecthyma for soremouth
Ewes & Does	60–30 days pre-breeding	<i>Campylobacter fetus-jejuni</i> bacterin <i>Chlamydia psittaci</i> ewe vaccine Clostridial 8-way (once) Caseous lymphadenitis (CL)	Vibriosis (late-term abortions) Chlamydia (late-term abortions; vaccine can be used in both sheep and goats) Eight clostridial strain bacterial diseases CL, a contagious bacterial disease that causes skin lesions and abscesses	
Bucks & Rams	30–60 days pre-breeding	Clostridial 8-way <ul style="list-style-type: none"> Anthelmintic (de-wormer) 	Eight clostridial strain bacterial diseases Prevents parasite infestation	

Things to Consider

- Read all labels carefully before administering vaccines or other treatments.
- For optimal parasite control, a fecal egg count should be done to assess level of infestation, and may determine potential anthelmintic resistance. Your veterinarian can assist you with this process.
- When treating for parasites, it is now recommended that you remain consistent with your de-worming protocol. The key is to get the appropriate dose per animal. Animals that are under-dosed have an increased risk of becoming anthelmintic-resistant.
- For external parasites like keds and ticks, topical permethrin-based products work well.
- Caution: Avoid applying to dairy goats. Zeta-cypermethrin products can be used as an alternative.
- Depending on weather and level of infestation, a second dose may be needed two weeks later to sufficiently treat the animals.
- Ewe lambs and doelings will require an additional dose (total of three) of both *Campylobacter* and *Chlamydia* vaccines to ensure full protection prior to their first breeding season.
- Older sheep and goats who have been properly vaccinated as young animals should only require annual vaccines covering the clostridial (i.e., 8-way) and anti-abortive vaccines (i.e., *Vibrio*).

- Clostridial vaccines can be highly reactive at the vaccination site. To reduce blemishes, use clean, high-gauge needles (18 g) and subcutaneous administration techniques.

To learn more about external parasite management, refer to NMSU Extension Guide [B-112, Guide for Control of External Parasites of Sheep and Goats](#).

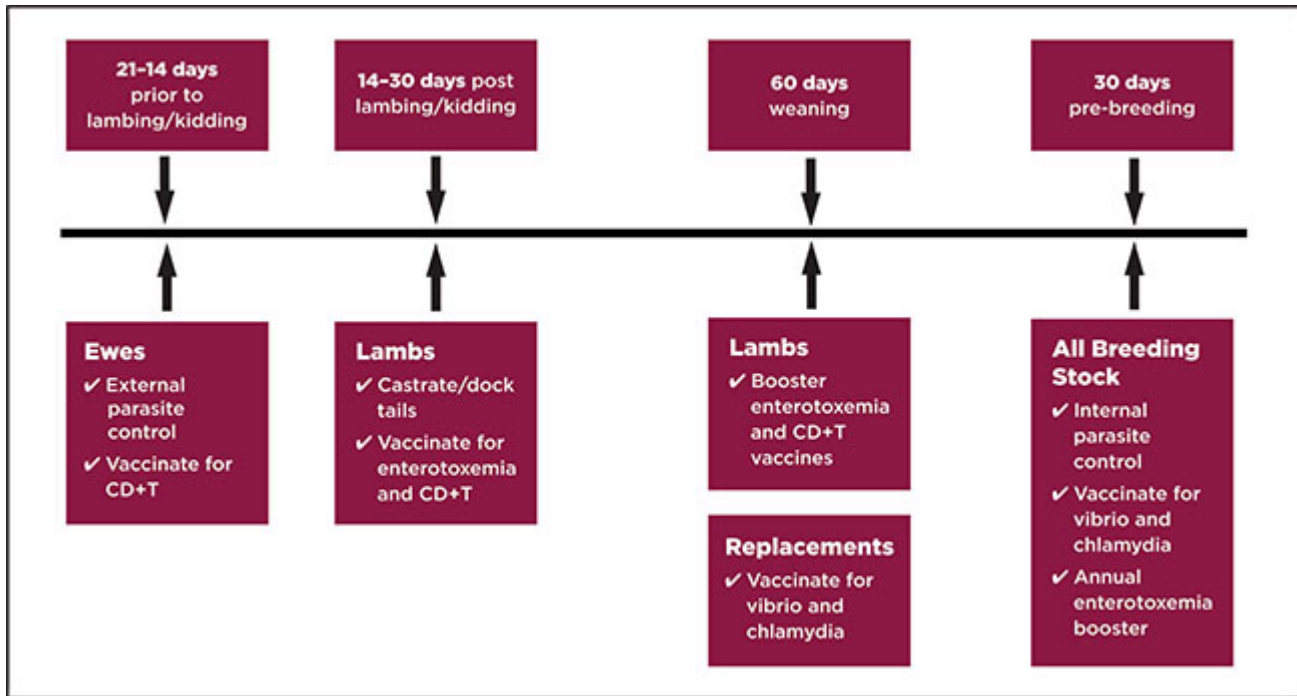


Figure 1. An example animal health protocol with corresponding schedule in a farm flock situation.

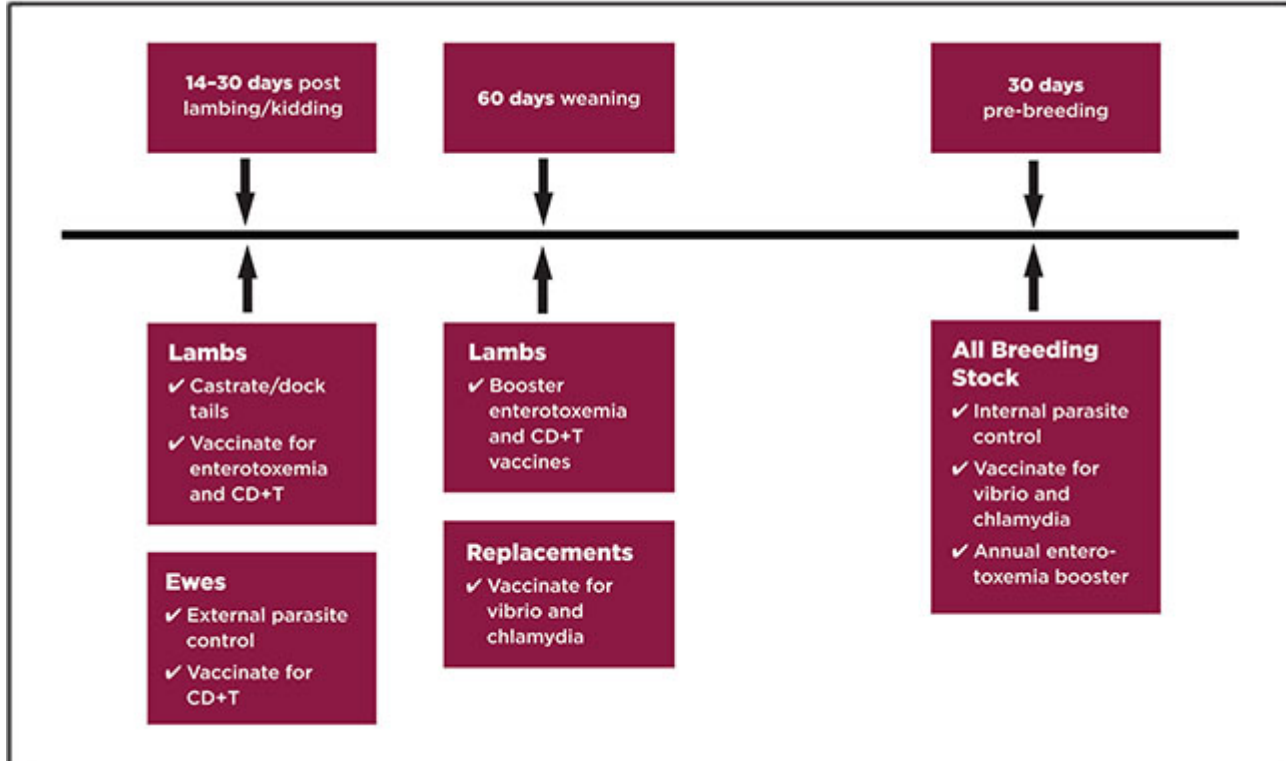


Figure 2. An example animal health protocol with corresponding schedule for sheep and goats on range.