

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES



Hello Coshocton County! Boy, was it a hot, hot, hot Coshocton County fair! Thanks to everyone who attended to support our great 4-H and FFA youth. Congratulations to everyone for a job well done!

It was great to get some rain this past weekend as we were getting extremely dry. I believe "Weather Extremes" will be a part of our vocabulary going forward. What a crazy summer for farmers across Ohio.

I had the chance at the end of the month to conduct our annual weed survey in soybean fields and it is evident that Marestalk is still king. Make sure to read Mark Loux's article on fall weed control..now is the time to spray for Marestalk.

I am busy planning Extension events and workshops for this winter. Make sure to mark November 12 down for our first Farmers Breakfast of the winter. I also have scheduled a Farm Tax Update for December 2 and a Winter Ag Law Update for December 9. We are also working on a ton of other programs and will be offering our bi-annual Master Gardener training this winter.

Have a great week!

Sincerely,

David Marrison

Coshocton County OSU Extension ANR Educator

October 9, 2019 Issue

Coshocton Cty Soybean Weed Survey
Fall Herbicide Treatments
October 2019 Weather Prediction
How to Fight Foxtail in Forages
Fire Safety During Harvest Season
Is a Late Soybean Harvest in Your Future?
Prospects for Corn Use in Ethanol
What's in your Hay?
Making Behavior Change- Power of 10
Fall Foliage & Farm Tour Slated for October 19-20
2020 Coshocton/Tuscarawas Lamb & Wool Queen Sought
4th Annual "For the Love of Lamb" Dinner Slated for November 2
Considering Being a Master Gardener
November Farmers Breakfast
Farm Tax Update- December 2
Winter Ag Law Update- December 9
Upcoming Programs

Coshocton County Extension
724 South 7th Street, Room 110
Coshocton, Ohio 43812
Phone: 740-622-2265
Fax: 740-622-2197
Email: marrison.2@osu.edu
Web: <http://coshocton.osu.edu>



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information visit: go.osu.edu/cfaesdiversity.

Coshocton County Soybean Weed Survey

By David Marrison

At the close of September, I drove a 100-mile loop around Coshocton County to determine the weeds which are the most prevalent in our local soybean fields. In fact, OSU Extension Educators from most every county in the state are completing this survey for the OSU Agronomic Crops Team to determine which weeds are present in fields prior to harvest (were not adequately controlled during growing season).

As I drove across Coshocton County, I took observations from 109 soybean fields accounting for an estimated 2,500 acres. It is evident that Marestalk continues to lay claim to our number #1 weed control issue in soybeans with 47.7% of the fields surveyed having Marestalk which is up 10% in comparison with last year's survey. The #2 weed observed was Giant Ragweed in 20.2% of the fields up modestly at 2.1%. The #3 weed observed was Volunteer Corn in 11.0% of the fields (up 3%). The following table list the prevalence of weeds found in the fields surveyed.



2019 Coshocton County Soybean Weed Survey	Percentage of Fields Containing this Weed (change from 2018)
Marestalk	47.7% (+10.0%)
Giant Ragweed	20.2% (+2.1%)
Volunteer Corn	11.0% (+3.0%)
Redroot Pigweed	10.1% (+8.7%)
Giant Foxtail & Other Grasses	7.3% (+4.4%)
Velvetleaf	6.4% (-0.1%)
Common Lambsquarter	3.7% (+0.8%)
Common Ragweed	0.9% (-0.5%)
Pokeweed	0.9 % (-3.4%)

So what should farmers be doing now to help themselves next year? It is well worth the time for farmers to jump in their farm truck and do a scouting loop of their fields. Scouts should keep records of their scouting to indicate where exactly a problem was identified, how common the problem was, how damaging the problem was and what, if any, control measures were utilized in 2019. It is important to note the hotspots so you can make sure to address the problem and then re-evaluate the results.

The scouting reports can then be used to design a weed management plan for each field. This plan might mean that a chemical application is needed right after the soybeans are harvested this fall. This is especially crucial with Marestalk as fall applications of weed control are superior to in-season control.

Fall Herbicide Treatments- Even More Important This Year

By Dr. Mark Loux

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-33/fall-herbicide-treatments-%E2%80%93-even-more-important-year>

If you have never applied herbicide in fall to burn down winter annuals, or done it only infrequently, this might be the year to make an investment in fall herbicides. Fall treatments are an integral component of marestalk management programs. They also prevent problems with dense mats of winter annuals in the spring, which can prevent soil from drying out and warming up, interfere with tillage and planting, and harbor insects and soybean cyst nematode. 2019 was a generally tough year for weed control, leading to higher end of season weed populations in some fields. A number of acres were never planted, and growers got to experience the difficulty in obtaining season-long control in the absence of a crop. Reminds us all how important the crop canopy and shading of the soil is during the second half of the season. Bottom line - there was substantial production of weed seed in some fields, and a replenishment of the soil seedbank by both winter annual and summer annual weeds. The seed of winter annuals and marestalk lacks dormancy so above-average weed

seed production can lead to an immediate increase in fall-emerging weeds. Applying herbicides this fall can compensate for increased weed populations and make life easier in the spring.

We have published information on fall herbicides fairly frequently, and our suggestions for fall treatments have not really changed much. There is plenty of information on fall herbicide treatments in the C.O.R.N. newsletter archive and on other university websites. Our philosophy on this has not changed much over the past decade. A few brief reminders follow:

1. When to spray? Anytime between now and Thanksgiving will work, and possibly later. We have applied into late December and still eventually controlled the weeds present at time of application. Once hard freezes start to occur, there is usually a substantial change in the condition of certain weeds, such as dandelion and thistle, that renders them less sensitive to herbicides. We discourage applications during periods of very cold weather which can occur starting about Thanksgiving, and also (obviously) when the ground is snow-covered. The generally dry conditions we are experiencing have limited weed emergence so far this fall. We anticipate that rain occurring now that leads to some sustained soil moisture near the surface will likely result in germination and emergence of the weeds that have been missing until now. Our recommendation is to wait for rain and the additional weed emergence before applying any herbicide this fall. The risk in this is that the weather turns wet, making it difficult to apply herbicide. So it's also possible to apply now and include a residual component to help with later fall emergence (which is the exception to the "no residual" recommendation in #4 below), such as simazine, a low rate of metribuzin or Canopy, or a Sharpen rate higher than 1 oz.



2. What about all of the crop residue on the ground after harvest - won't that cause problems? We have not worried about this, and the herbicides seem to work regardless. Most agronomists I have asked have the same impression. On the other hand, it probably wouldn't hurt to wait a while after harvest to let the residue settle down, and the weeds to poke through. Dense crop residue usually prevents marestail from emerging anyway.

3. Don't make it too complicated or pricey. Keep in mind that the primary goal is control of weeds that have already emerged. This is hard to accomplish with a single herbicide, but there are a number of relatively low-cost two-way mixtures that easily achieve this goal. Our philosophy has generally been to start with 2,4-D, and then add another herbicide that results in more comprehensive control. Herbicides that make the most sense to add to 2,4-D based on our research: glyphosate, dicamba, metribuzin, simazine, Basis (and generic equivalents), Express (and generic equivalents), or Canopy/Cloak DF or EX. These allow either corn or soybeans to be planted the following year with these exceptions: simazine - corn next year; Canopy/Cloak - soybeans next year; Basis - possibly restricted to corn based on rate and geography. We do not see the need for three-way mixtures, although a case can be made to add a low rate of glyphosate to a two-way mix to control grass or improve activity on perennials. A two-way mixture of glyphosate and Sharpen could also be used, but we believe Sharpen has more utility in marestail control programs when used in the spring.

4. Is there an advantage to including residual herbicides? No, because almost all of them dissipate over the winter and fail to provide any control of spring-emerging weeds. The primary exception to this is chlorimuron (Canopy/Cloak), which for whatever reason does persist at high enough concentrations to provide some control in spring. Our research has repeatedly shown that applying other residual herbicides in the fall to get control in spring is a waste of money. The good news here is that any effective fall herbicide treatment with or without residual will result in a weed-free seedbed in spring, usually into April, so that the spring-applied burndown/residual treatment just has to control small weeds that emerge in the few weeks prior to planting. That is the goal.

October 2019 Weather Prediction

By Jim Noel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-33/october-2019-weather-prediction>

Originally Published October 1, 2019.

After another hot week (until late this week), a cool down to normal temperatures is expected starting either Oct. 3 or 4 that will last through Oct. 15. Temperatures are expected to return to above normal (but no where near current levels) from Oct. 15-31.

Rainfall will be above normal in northern Ohio this week. The week of Oct. 7 will be normal or below normal but confidence is next week's rainfall pattern is low to moderate. Above normal rainfall is in the outlook for the second half of October which could slow harvest after Oct. 15.

The hot and drier pattern for a good part of September was caused in part by tropical activity. The remnants of Dorian created a big low pressure system not far from Greenland while a typhoon called Lingling in the western Pacific created a big low pressure near Alaska. This resulted in a hot and dry dome of high pressure over the Southeast U.S. and wet weather in the western corn and soybean belt.

This pattern appears ready to breakdown later this week.

We are moving into frost and freeze season and overall it still looks like a delayed frost and freeze season. Most see their first freeze by Oct. 10-20. Currently, it still looks like a normal to later than normal first freeze.

The November outlook still indicates a warmer than normal month with precipitation not far from normal (but with a lot of uncertainty). We will keep you posted on this.

Finally, the two week rainfall outlook from OHRFC can be found here:

<https://www.weather.gov/images/ohrfc/dynamic/NAEFS16.apcp.mean.total.png> .

It shows the wettest areas being the western two-thirds of the corn and soybean belt. Rainfall for the next two weeks in Ohio will be 1-2+ inches in northern Ohio but generally 0.10-0.50 inches in southern Ohio. Normal is about 1.5 inches for two weeks.

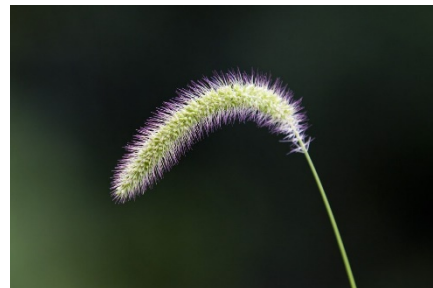
How to Fight Foxtail in Forages

By Clifton Martin, Muskingum County Extension

Source: Farm & Dairy <https://www.farmanddairy.com/columns/how-to-fight-foxtail-in-forages/578142.html>

Cool nights and pleasant warm days leave me thinking I can accomplish just about anything. I may get so overconfident I think I can eliminate foxtail. There are a handful of weeds out there that are regular offenders in hay and pastures and foxtail is one of them. In the world of extension topics, I can count on foxtail questions every fall and through winter into spring as animals begin to reject hay.

Know your enemy - It comes in three forms: giant, green and yellow. Foxtails readily grow and are opportunistic colonizers of bare spaces. They will creep into your pastures, your hayfields, soybean fields, lawns and field edges where there is an opportunity.



They are summer annuals and thrive by the "live fast and die-hard" model which means they produce a lot of seed, spread rapidly, die in the fall and return next year. The foxtails are infamous for seeds that get caught in the gums of livestock which leads to animals rejecting feed and possibly getting infections in the mouth.

As a grass, it is easily overlooked before it enters the reproductive phase and sets a seed head. The vegetation itself is fine, but it is the seed head that causes all the trouble. In the case of giant foxtail, I learned to easily recognize it as the plant I could walk out into a field and shake hands with. That sets it apart from most other grasses in shape and form. The seed head is large, soft and droops over in greeting. The green and yellow foxtail take a few more minutes to distinguish from each other, but usually, stand out from other grasses when they produce their seed head with a bottlebrush-like form.

Know your options - If foxtail is truly a problem in your pasture, you have essentially two choices: renovation or complete burn-down. I find many cases where the land manager is reluctant to make changes to what they are currently doing, but in the case of foxtail, change is required or you will continue on the exact same path you find yourself in.

Renovation might involve soil testing and fertility adjustments, adjusting mowing timing and go as far as plowing sections under. Regular mowing will not eliminate foxtail and there may be considerable seed bank in the soil. However, if you can time mowing so to hit giant foxtail between boot stage (seeds start developing in the sheath) and seed set you can suppress the spread of most seed.

Even if you spray with an herbicide in a complete burndown, you still should expect that considerable seed bank may be in the soil and adjust management to suppress foxtail for a few years. A good stand establishment will go a long way in out-competing new foxtail seedlings. With green and yellow foxtail, in particular, I've noticed that seeds heads can still appear under very low mowing heights and continue to be a problem. So it is a good strategy to try to allow the grasses to grow tall before cutting to make management by mowing more successful.

Know your fields- Managing foxtail is really part of a broader strategy of managing a pasture or hayfield. It's important to take stock of the plant species in your fields and make adjustments accordingly. Foxtail is probably a game-changer for most managers if it gets established because it will be hard to sell and use your hay.

This year, during Farm Science Review in London, Ohio, we had grazing demo plots at the Gwynne Conservation Area. As with many parts of Ohio, planting was delayed by persistent heavy rain and in this location, the day the plots were planted in June was the day the rain completely stopped and planting suffered. The result in most of the demo plots is mostly foxtail. In September, I walked out into the plots and the drill furrows from planting were large cracks I could still stick my fingers into. There were a few things to discuss with passersby and a lovely stand of foxtail with which to figure out how to have a useful discussion about forages.

Fire Safety During Harvest Season

By Dee Jepsen

<https://agcrops.osu.edu/newsletter/corn-newsletter/2019-33/fire-safety-during-harvest-season>

Meteorologists would likely correct us if we referred to this year's summer climate as bipolar. However, the early fall rain patterns seem to be completely different depending on where one stands in the state. It is either rain, and lots of it – or dry, on the verge of drought. So when readers see an article about fire safety for harvest season, it is intended for those encountering dry and windy conditions, whenever these conditions appear.

October and November are two months where fire is a particular concern. In agricultural areas, fires can break out during unseasonably warm temperatures. Fire risks are particularly a concern around fields with dry crop residues, near woodland areas, or within equipment with heated bearings, belts, and chains. There are several aspects to consider for fire prevention and fire protection during harvest season.

Preventing Combine Fires

Combines are at high risk of fire. Work crews should take extra precautions to prevent fires from starting.

- Park a hot combine away from out-buildings. Keeping a combine out of barns, shed, and away from other flammables is a common prevention strategy in case a hot spot ignites. Insurance claims can double when equipment fires are responsible for loss of farm structures.
- Regular maintenance is priority. Check the machine daily for any overheated bearings or damage in the exhaust system. Keep the fittings greased. Maintain proper coolant and oil levels. Repair fuel or oil hoses, including fittings and metal lines, if they appear to leak.
- Keep dried plant material from accumulating on the equipment. Frequently blow dry chaff, leaves and other crop materials that have accumulated on the equipment with a portable leaf blower or air compressor. Be sure to inspect the engine compartment and other areas where chaff accumulates around bearings, belts and other moving parts.
- Maintain the electrical system. Pay attention to machine components that draw a heavy electrical load, such as starter motors and heating/cooling systems. Monitor circuits for any overloading, especially if fuses blow regularly. Keep wiring in good condition and replace frayed wiring or worn out connectors.
- Refuel a cool engine whenever possible. Never refuel a combine with the engine running. It is recommended to turn off the engine and wait 15 minutes; this helps to reduce the risk of a spill volatilizing and igniting.
- Prevent static electricity while operating in a dry field. Use a ground chain attached to the combine frame to prevent static charges from igniting dry chaff and harvest residue, letting the chain drag on the ground while in the field.
- Have 2 fully charged fire extinguishers on the combine. ABC fire extinguishers are recommended on farm machinery. In a combine, keep a 10-pound unit in the cab and a 20-pound unit mounted at ground level.
- Have 1 fully charged fire extinguisher in the tractor, grain cart, and pickup truck. ABC fire extinguishers are recommended on farm machinery. These extinguishers are good for fires at incipient phases – meaning at the first sign of smoke or a small flame.
- When a fire appears, it is important to put worker protection before saving equipment.
- Have an emergency plan in place and be sure all employees know the plan. Combine fires happen fast – be sure all employees know what to do if smoke or fire appears.
- Turn off the engine. If in the combine cab, turn off the engine and exit the machine.
- Call 911 before using the fire extinguishers. If the fire is in the cab, only use the 10-pound fire extinguisher from the outside of the cab – on the exterior platform. If the fire is on the ground, use caution when opening the engine compartment or other hatches as small fires can flare with extra air. Stay a safe distance away from the fire.
- Use a shovel on small field debris fires. Throwing dirt over burning field residue can stop a fire from spreading. However, stay back if the fire takes off.



Is a Late Soybean Harvest in Your Future?

By: [James Morris](#), [Will Hamman](#), [Jason Hartschuh, CCA](#), [Elizabeth Hawkins](#)

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-34/late-soybean-harvest-your-future>

The variability of the 2019 cropping year is continuing into harvest. With a broad range of planting dates this spring, many soybean producers will be faced with variable harvest conditions. Additionally, the hot and dry conditions this late summer into early fall has sped up the senescence and dry down of many soybean fields. While seed quality is currently very good, a few weeks of wet weather can degrade quality quickly. Be sure you are ready when the soybeans are.

When harvesting soybeans, harvest loss can be a real concern. The ideal time to harvest soybeans is when

the soybean seed reaches 12-15% moisture. This will allow for optimal threshing and reduced harvest loss. Harvest loss can be very simply calculated by getting out of the combine and counting the soybean seeds on the ground. By randomly selecting a 1-foot by 1-foot area in a harvested part of the field, a producer can estimate harvest loss. Counting 4 soybean seeds per square foot is equal to 1 bushel/acre of loss. Due to the mechanical nature of a combine it is nearly impossible to gather every soybean seed in the field. An acceptable level of loss is 3% of yield or less, which is equivalent to 1-2 bushels/acre. If harvest conditions and combine adjustments are not optimal, harvest loss can reach 10% of yield and that can become very costly to the producer.

It is important for the combine operator to be checking harvest loss as well as the quality of the grain in the combine grain tank. Harvest loss can occur in three areas: 1) pre-harvest, 2) header and 3) combine. One should check these three areas within different locations in a field. Checking behind the combine represents total harvest loss, but one must check pre-harvest loss before combining an area, as well as just behind the header after harvested (header loss). Combine loss equals the total harvest loss minus the pre-harvest loss and header loss. Checking all three areas determines if and what combine settings must be adjusted, especially header loss.

It is recommended to review the owner's manual and/or consult your local combine dealer for help on proper combine settings specific to the crop and harvest conditions. Fine tuning adjustments from these settings will help optimize the effectiveness of the combine. Adjustments should be based on harvest conditions and grain samples from the tank, looking for cracked or damaged soybeans seeds as well as the amount of pod material or unthreshed pods in the sample, see Table 1 below for acceptable levels.

80% of harvest loss occurs at contact with the header.

The following are a few tips to help reduce or minimize harvest loss:

- A floating, flexible cutterbar and automatic header height control can improve the ability to maintain the header low and level to the ground during harvest.
- Keep the cutter bar as low as possible for short soybeans and those that are dry. This point is important in areas with low plant populations and where more pods are on the lower portion of the plant, nearest the ground.
- Take time and slow the combine down. Slowing up 0.5 to 1.0 mph in areas where harvest loss might be risky.
- Shorter soybeans require smaller clearances between the reel, cutter bar, auger and the feed conveyor chain, to ensure stems are feeding through the platform and into the feeder house.
- Check knives, guards, ledger plates and wear plates, and keep spares handy.
- Ensure the sickle is sharp. Dull sickles tend to push stems over rather than cut them cleanly.
- Make sure to properly adjust guards and header to proper engagement angle as outlined in the operator's manual.
- Check that stems are being cleanly cut across the header. If not, check for dull blades, improperly set header angle, other incorrect header settings, or reduce your ground speed.
- Keep an eye on reel speed and adjust to match soybean conditions and ground speed within the field. The rule of thumb is to keep reel speed ~25% faster than ground speed.
- Make sure the feeder house relative to the header is at the proper adjustment to keep material feeding as efficient as possible.
- Importantly, make sure chains and bearings are properly lubricated and serviced on their stated time intervals. Belts should be tight and checked routinely.

Another risk of harvest this fall is harvesting soybeans that were killed by a frost before reaching full maturity or natural senescence. If this occurs, producers can expect a higher than normal moisture at harvest. This may require combine settings to be adjusted to minimize harvest losses. Reducing the concave clearance as well as increasing rotor or cylinder speed for more aggressive threshing may be needed for wet, tough soybeans.

Soybeans are recommended to be harvested between 12-15% moisture for optimum weight and minimal field loss. When soybeans are at 18% moisture or above, they can easily be crushed, so it's important to handle

them with care to avoid any further losses. Soybeans that have not reached complete physiological maturity can cause issues as increased amounts of pods can enter the dryer. If beans are not properly cleaned before entering the bin, the excess pods and weed seed can result in decreased air flow and circulation and lead to increased insect population and mold growth. This can also increase the risk of a fire and the high oil content of soybeans makes a fire of this type tough to extinguish. Clean out the dryer frequently and keep a close watch when you suspect debris is entering the dryer. In cases like last year, if soybeans are severely damaged while still in the field, it is best to market them as soon as possible.

We may find ourselves having to dry some of our later planted stands. Due to the late harvest last year, this was a struggle for us and many others. Regardless of how much fuel was burned, we couldn't get the moisture to drop. Ken Hellevang, an Agricultural Engineer for North Dakota State University Extension states that this happens due to "the moisture holding capacity of air being reduced at lower air temperatures. As average air temperatures approach 35°F, natural air drying becomes inefficient and not economical. Adding heat would cause the beans on the bottom of the bin to be dried to a lower moisture content and it would increase drying speed only slightly. Cool the soybeans to between 20°F and 30°F for winter storage and complete drying in the spring. Hellevang recommends starting drying in the spring when outdoor temperatures are averaging about 40°F."

It is also important to ensure good ventilation when drying during cold temperatures. Check vents and exhausts for ice or frost to avoid damage to the roof. Leave the access door open to relieve pressure when operating the fan at temperatures near or below freezing. Over drying can also be an issue. It's important to not heat beans over 120 degrees Fahrenheit as high temperatures can cause damage to seed coats and lead to increased risk of the soybeans splitting. Hellevang also mentions that one study found temperatures of 130 degrees Fahrenheit caused 50-90% of seed coats to be cracked, increasing the amount of split beans to 20-70%. Table 1. outlines the grades and requirements for soybeans. If soybeans beans are already molded or discolored, over heating would only add more problems to the situation. As Table 1 shows, the limit of split beans is 10% for US No. 1 soybeans and 20% for US No.2 soybeans. Most molds and discolorations will grade as total damage and as shown below, only 2% is tolerated for US No. 1 soybeans and 3% for US No. 2 soybeans.

TABLE NO. 1 - GRADES AND GRADE REQUIREMENTS - SOYBEANS

Grade	Maximum Limits of -				
	Damaged Kernels		Foreign Material (percent)	Splits (percent)	Soybeans of other colors ¹ (percent)
	Bleed (part of total) (percent)	Total (percent)			
U.S. No. 1	0.2	2.0	1.0	10.0	1.0
U.S. No. 2	0.5	3.0	2.0	20.0	2.0
U.S. No. 3	1.0	5.0	3.0	30.0	5.0
U.S. No. 4	3.0	8.0	5.0	40.0	10.0

U.S. Sample Grade:
 U.S. Sample Grade is soybeans that:
 (a) Do not meet the requirements for grades U.S. No. 1, 2, 3, or 4; or
 (b) Contains 4 or more stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of glass, 3 or more cotilaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth in 1,000 grams of soybeans, or
 (c) Contains 11 or more animal filth, castor beans, cotilaria seeds, glass, stones, or unknown foreign substance(s) in any combination, or
 (d) Have a musty, sour, or commercially objectionable foreign odor (except garlic odor); or
 (e) Are heating or otherwise of distinctly low quality.

¹ Disregard for Mixed Soybeans

Harvested has already started for many producers across the state but it seems that several of us still have a few fields that were planted later than normal. As we begin to lose time for in-field drying, bin drying may be our next option. Bin drying is possible but must be done with care for our own safety and for grain quality. For storage, a normal soybean crop should be dried to 13% for a 6-month storage period, and 12% for 12 months of storage. For lower quality soybeans, experts suggest drying grain 1 or 2 points below that required for a normal crop. More information can be found at the following links.

Sources:

<https://cropwatch.unl.edu/2018/ndsu-offers-soybean-drying-advice>

<https://crops.extension.iastate.edu/cropnews/2018/10/managing-wet-soybeans-late-harvest>

<https://agcrops.osu.edu/newsletter/corn-newsletter/2015-29/combine-adjus...>

Prospects for Corn Use in Ethanol

By: [Todd Hubbs](#), Department of Agricultural and Consumer Economics, University of Illinois

September 30, 2019

Source: <https://farmdocdaily.illinois.edu/2019/09/prospects-for-corn-use-in-ethanol.html>

Poor ethanol plant margins, plants idling production, and continued haggling over small refinery exemptions provide the background for ethanol production moving into the 2019-20 marketing year. Corn use for ethanol production during the 2019-20 marketing looks set to recover slightly from the weak levels seen during the 2018-19 marketing year.

Based on ethanol production estimates provided by the U.S. Energy Information Administration, U.S. fuel ethanol production during the 2018-19 corn marketing year totaled 15.572 billion gallons. At around 500 million gallons below the previous marketing year, ethanol production came in down 3.1 percent. Exports sit on pace to total lower than last year's 1.636 billion gallons. Ethanol stocks over the marketing year increased by 332 million gallons despite lower production. The final *Grain Crushings and Co-Products Production* report for the marketing year comes out on September 1. Ethanol production and recent conversion ratios indicate that corn used for fuel ethanol production totaled approximately 5.366 billion bushels, down 4.3 percent from use during the previous year. Reported use of sorghum for fuel ethanol production during the 2018-19 corn marketing year totaled near 100 million bushels, compared to 60 million bushels during the previous year. Combined corn and sorghum use during the past year were 3.5 percent lower than reported use during the last year.

Ethanol production thus far in the 2018-19 marketing year sits 4.4 percent lower than last year over the same period. USDA's current projection totals 5.45 billion bushels for the marketing year. Numerous factors look to influence corn use for ethanol production during the current marketing year. Domestic gasoline consumption, the rate of consumption of higher ethanol blends, and the extent of fuel ethanol exports remain vital components. Domestic gasoline consumption depends on the price of crude oil and gasoline prices. EIA's recent short-term energy outlook projects gasoline consumption over the next marketing year up slightly with national average gas prices up to \$2.76 per gallon in 2020, up from the \$2.65 per gallon seen in 2019. If those price forecasts turn out to be correct, gasoline consumption would be expected to remain relatively flat over the next marketing year.

EIA's projection for ethanol production in 2019-20 sits at 15.961 billion gallons with considerable strength in the second half of the marketing year. Approval of E-15 blending year around may provide the support for this projection. A slight increase in the consumption of higher blends may occur if prices stay competitive. Higher blend consumption will not likely add substantially to total domestic ethanol consumption this year. Sorghum use for ethanol production appears set to remain unchanged due to trade issues with China despite a slightly smaller crop projection for 2019. An increase in ethanol production efficiency would undercut any increase in feedstock consumption this year. If recent conversion ratios stay in place, corn use for ethanol under EIA ethanol production forecasts comes in near the 5.45 billion bushels projected by the USDA.

Ethanol exports for the 2018-19 marketing year show no growth over the last marketing year. Ethanol export numbers are available from U.S. Census trade data for 2019 through July. For the 2018-19 marketing year, U.S. exports of ethanol are at 1.437 billion gallons, down 4.9 percent from the similar period over the 2017-18 marketing year. The reduction is due to lower export levels to Brazil and China. Chinese imports of U.S. ethanol are minimal thus far in the marketing year. A continuation of the current trade war mitigates any chances of expanded exports to China over the next year.

Brazilian ethanol imports from the U.S. are down 17 percent from last year through July. During the 2017-18 marketing year, U.S. ethanol exports totaled 1.636 billion gallons, with exports to Brazil comprising 28.4 percent of the total. Increased ethanol production from sugar, the continuation of the 20 percent tariff rate quota on Brazilian ethanol imports, and a burgeoning corn ethanol industry in Brazil may see this trend continue over the next marketing year. Recent adjustments to the tariff in Brazil maintained the 20 percent tariff level but increased the quota to export levels greater than 198.1 million gallons per year, up from

approximately 160 million gallons. U.S. ethanol exports will require continued expansion in other markets to meet or exceed the export levels attained during the 2018-19 marketing year.

While negotiations on small refinery exemption continue to play out, the prospect of substantial growth in corn use for ethanol this marketing year seems limited. Barring a significant change in policy surrounding the RFS, a trade deal, or an unexpected jump in gasoline consumption, the prospects for corn use in ethanol appear set to match current USDA projections of 5.45 billion bushels at best.

What's In Your Hay?

By [Ted Wiseman](#), OSU Extension, Perry County (originally published in [The Ohio Cattleman](#))

Source: <http://u.osu.edu/beef/2019/10/02/whats-in-your-hay/#more-7563>

I don't think that anyone would be surprised if I stated that getting hay made this spring was a real struggle. Spring arrived with beef cows in some of the poorest body conditions that we have seen in years. It is possible for an animal to starve to death with hay in front of them every day all winter.

My intent in this article is to simply illustrate the importance of getting your hay tested this year and to work with a nutritionist to establish a feeding program. Forages analyzed from this year indicate that quality is going to be an issue again. Many of the first cutting samples from this year have protein levels in the single digits and total digestible nutrient (TDN) levels, in the 30s and 40s. To put this into perspective straw has a crude protein level around 4 percent and TDN levels between 25-55. To make matters worse we have an extremely low supply of forages and straw this year.

The following three tables focus mainly on the energy levels in forages and at three different stages of beef cow production. In this scenario we have a 1200-pound cow and keeping dry matter intake (DMI) constant at 2 percent. At each TDN level for forages analyzed it shows how much hay, corn and soybean meal it would take to meet these requirements. These tables equate to requirements of a beef cow at 9 months gestation (Table 1), at calving (Table 2) and at peak milk production (Table 3) respectively.

Forage Analysis		Amount Fed on an As-Is basis (lb/day)		
TDN	CP	Hay	Corn	Soybean Meal (49.9 % CP)
0.35	6.0	20.1	6.7	0.3
0.40	6.0	22.6	4.7	0.4
0.45	7.0	24.2	2.3	0.1
0.5	8.0	25.4	0.6	0
0.55	9.0	26.7	0	0
0.60	10.0	26.7	0	0

Forage Analysis		Amount Fed on an As-Is basis (lb/day)		
TDN	CP	Hay	Corn	Soybean Meal (49.9 % CP)
0.35	6.0	16.5	8.7	1.4
0.40	6.0	18.1	7.0	1.5
0.45	7.0	20.4	5.1	1.1
0.5	8.0	23.4	2.6	0.6
0.55	9.0	25.9	0.7	0
0.60	10.0	26.7	0	0

Forage Analysis		Amount Fed on an As-Is basis (lb/day)		
TDN	CP	Hay	Corn	Soybean Meal (49.9 % CP)
0.35	6.0	13.8	11.5	1.3
0.40	6.0	15.2	10.1	1.4
0.45	7.0	17.1	8.5	1.1
0.5	8.0	19.5	6.5	0.6
0.55	9.0	22.8	3.8	0.1
0.60	10.0	26.7	0	0

I cannot stress enough how important it is for you to have forages analyzed this year. Just because we can balance a ration on an excel spreadsheet doesn't mean that it will work. The ruminant digestive system is far more complex. With TDN levels as low as what we have this year, some lower than straw, it is extremely important to work with a nutritionist now.

With tight supplies across the state you will want to determine your inventory and quality early as possible. This will give you time now to purchase additional forages or supplements instead of scrambling to find them this winter. If you do need to purchase additional hay, hopefully it has an analysis on it, unfortunately many times they do not. Visual estimation of the nutritive value of hay is nearly impossible. Visually you can estimate maturity, condition, purity, color and smell. Nutrient levels will also vary depending upon level of legumes compared to grasses in the bale. If purchased hay has not been tested, it should be sampled and analyzed so you can plan your feeding program.

Many of the county extension offices or local feed dealers have a hay probe that you can use to collect samples. It is extremely important to follow the correct sampling procedures for accurate results. Forage tests are relatively inexpensive compared to the value of knowing what you are feeding and when it is needed.

Making Behavior Change with the Power of Ten

By: Emily Marrison

Originally Published in Coshocton Tribune on October 6

A few months ago, I stumbled upon a tremendous resource from Rutgers University and the New Jersey Agricultural Experiment Station Cooperative Extension. The program "Small Steps to Health and Wealth" is made up of 25 behavior change strategies that relate to physical and financial health and wellness. There is certainly interconnectedness between our finances and our health.

One of the strategies is called the "Power of 10." I like it because it is simple, and it makes sense. According to author and Financial Resource Management Extension Specialist Barbara O'Neal, "The number '10' is powerful and fits a 'small-steps approach' to behavior change. It is easy to multiply, divide, and remember; small enough not to discourage people from taking action; and large enough to make an impact over time. '10' also shows up repeatedly in expert recommendations to improve health and increase wealth."

Here are some examples of how this "Power of Ten" can work:

Shed 10 pounds

Did you know you can lose 10 pounds in a year by eating 100 fewer calories per day? And likewise, you can lose 10 pounds in a year by burning off an additional 100 calories per day. It's amazing how easy it is to eat 100 calories. That's the same as 1 tablespoon of mayonnaise or a handful of potato chips or an 8 oz. soda pop or beer. Just substituting water for one soft drink a day can really make a difference.

Also, a 150-pound person who walks 4 mph for 30 minutes will burn about 200 calories. If you are pressed for time, then exercise in 10-minute increments three times during the day. If you are a visual person, it might be helpful to imagine what 10 pounds of fat looks like. Imagine ten 1-pound cans of Crisco or 40 sticks of butter.

Save 10% of gross income

A great rule of thumb is to pay yourself first by saving at least 10% of your gross income each week. The math is easy. If you earn \$40,000 a year, then you should be saving at least \$75 every week. The best way to do this is through payroll deduction if that is an option for you. If you start saving \$100 weekly in your 20s, with an 8% return, you'll have over \$1.5 million in 40 years to provide financial security later in life.

Lose 10% of body weight

A nutrition company I used to work for had a big marketing campaign years ago to encourage people to lose 10% of their body weight. This is because research shows that people don't need to lose a large amount of weight to see improvements in their health. For many people a 10% decrease is enough to move their body mass index (BMI) back into a normal range. And this helps with a host of health issues including high blood pressure.

Save \$1 a day, plus pocket change in a can or jar

By reducing your spending just \$1 per day, you should be able to save about \$50 a month or \$600 a year. If you increase that to \$2 a day, plus your loose change, then you will have over \$1,000 in savings.

Today I'll leave you with this quote from Marian Wright Edelman, "We must not, in trying to think about how we can make a big difference, ignore the small daily differences we can make which, over time, add up to big differences that we often cannot foresee."

Fall Foliage & Farm Tour Slated for October 19-20

OSU Extension, Coshocton Soil & Water Conservation District, and USDA Farm Service Agency will once again sponsor the drive-it-yourself **Fall Foliage & Farm Tour** on October 19-20, 2019. This year's tour will highlight the eastern section of Coshocton County. It will continue to focus on the history of the area as well as provide the opportunity for participants to have a variety of up close experiences at agricultural enterprises along the tour route.

Map pick up will be held once again at The Animal Boutique & Villas located at 23905 Airport Road, across from Walmart. Maps must be picked up 2 hours prior to the end of the tour. Maps are not available until Saturday morning. We ask that you stop to pick up your brochure and map so we can tally the number of tour participants. The tour is free, but donations are appreciated. Stops are open on Saturday, October 19, 10:00 a.m. to 5:00 p.m. and on Sunday, October 20, 12:00 to 5:00 p.m.



2020 Coshocton/Tuscarawas Lamb & Wool Queen Sought

The Coshocton and Tuscarawas Lamb and Fleece Improvement Committee is now accepting applications for the 2020 Coshocton/Tuscarawas Lamb and Wool Queen. The duties of the queen are to promote the lamb and wool industries at fairs and festivals and special events.

The application is available online at coshocton.osu.edu or tuscarawas.osu.edu. Applications are also available at both Extension offices. They are due October 18 and interviews will take place October 22 at the Coshocton Extension Office. Applications can be found on-line at Coshocton.osu.edu or Tuscarawas.osu.edu. For more information contact David Marrison at 740-622-2265 or marrison.2@osu.edu

4th Annual “For the Love of Lamb” Dinner Slated for November 2

The Coshocton and Tuscarawas Lamb and Fleece Improvement Committee is hosting the 4th Annual “**For the Love of Lamb Dinner**” on Saturday, November 2 at 6:00 pm. The Chef Prepared Local Farm to Plate Dinner will be held at the Heritage Vineyard Winery near Warsaw. Tickets are \$25.

The meal will be prepared by Chef Mike Cichon and will highlight the versatility of delicious lamb. Chef Cichon will share his inspiration for the meal as well as tips for cooking with lamb. Wine tastings will be available and Heritage Vineyard wine can be purchased separately for dinner.



Raffle tickets for baskets filled with lamb and wool items are also available. Cost is \$1 per ticket or 6 for \$5. Raffle tickets may be purchased prior to the event, even if you do not attend the meal. Tickets may also be purchased at the dinner.

Meal tickets and raffle tickets may be purchased from the following committee members through October 25: Elaine Ashcraft at 740-622-1573, Nancy Wells at 740-754-1247, David & Emily Marrison at 740-622-1179 or at the Town & Country Vet Clinic in New Philadelphia, Ohio at 330-339-2363

Consider Becoming a Coshocton County Master Gardener Volunteer

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

The Master Gardener Volunteer Program trains volunteers for Ohio State University Extension in Coshocton County to help further the mission of engagement and outreach. Volunteers are trained in consumer horticulture including: annuals, perennials, fruits, vegetables, soil, botany, turf, insects, diseases and more! After receiving over 50 hours of education, each intern must complete 50 hours of service to OSU to become fully certified Ohio State Master Gardener Volunteers. The next training classes in Coshocton County will be held on Monday evenings from February 10 through June 8, 2020 from 6:00 to 9:00 p.m.

Two informational meetings will be held to answer questions about the 2020 Training program. These meetings will be held on **Monday, November 4** from 6:00 to 7:00 p.m. and **Wednesday, November 20** from 6:00 to 7:00 p.m. at the Coshocton County Extension office located at 724 South 7th Street in Coshocton, Ohio.

Attend one of these meetings to learn more about the Master Gardener training program and about the educational outreach the Master Gardeners conduct. Attendance at one of these meetings is not necessary to apply to become a Master Gardener but it is highly recommended so applicants can get their questions answered. More details can also be received by contacting David Marrison at 740-622-2265 or marrison.2@osu.edu An application packet can be found on-line at coshocton.osu.edu.

November Farmers Breakfast Right Around the Corner

OSU Extension, Coshocton Soil & Water Conservation District, and the Farm Service Agency are pleased to be offering the **Farmers Breakfast** series once again this winter. These breakfasts will be held on the 2nd Tuesday of the month (November through March) beginning at 7:30 a.m. **NEW** this year is the location as the breakfasts will be held at the Coshocton Inn & Suites located at 115 N Water Street in Coshocton, Ohio (next to McDonald's). The breakfast buffet will be \$9.00 and no reservations are needed. Rob McMasters from the Coshocton County EMA will be the featured speaker for the November 12 breakfast. For more information about the breakfasts, please contact the Coshocton SWCD at 740-622-8087, extension 4



Farm Tax Update to Be Held on December 2 in Coshocton

OSU Extension in Coshocton County is pleased to be offering a **Farm Tax Update** on Monday, December 2 2019 from 7:00 to 8:37 p.m. at the Coshocton County Services Building - Room 145 located at 724 South 7th Street in Coshocton, Ohio.

OSU Extension Educator David Marrison will provide a Farm Tax Update. We will examine year farm tax strategies and learn more about the new Section 199A deduction for Qualified Business Income. It is not business as usual in the world of farm taxes. Wrap up the year learning how to better manage your farm taxes.

This program is free & open to the public! However, courtesy reservations are requested so program materials can be prepared. Call 740-622-2265 to RSVP or for more information.

Winter Ag Law Update

Join OSU Extension on Monday evening, December 9, 2019 as we host Peggy Hall (OSU Agricultural & Resource Law Director) for a **“Winter Ag Law Update.”** Attend and learn more about the legal issues impacting farmers. This meeting will be held from 6:30 to 8:30 p.m. at the Frontier Power Community Room located at 770 South 2nd Street in Coshocton, Ohio.

Some of the legal topics which will be addressed include: farm leases, grain contracts, line fence law, noxious weeds, Nuisance complaints, surface drainage rights, leasing land for hunting, and the legal aspects of growing hemp. Bring your Ag Legal questions for Peggy to answer! Don't miss this chance to learn more about the legal issues which are impacting agriculture and our local farms/families.



There is no charge for this program but reservations are being requested so that adequate program materials can be printed. Call 740-622-2265 or email marrison.2@osu.edu to reserve your spot.

Upcoming Program Dates

- Fall Foliage & Farm Tour- October 19-20
- Love of Lamb Dinner- November 2
- Farmers Breakfast- November 12
- Farm Tax Update- December 2
- Ag Legal Workshop- December 9
- Farmers Breakfast- December 10
- Winter Agronomy School- January 28
- Farm Financial Management Series- February 4, 11, & 18
- Mortality Composting Workshop- March 18

Check out upcoming programs at: go.osu.edu/coshoctonevents

Winter AG LAW UPDATE

“Legal Issues Impacting Farmers”

**Monday, December 9, 2019
6:30 to 8:30 p.m.**

**Frontier Power Community Room
770 South 2nd Street
Coshocton, Ohio 43812**



Join OSU Extension as we host Peggy Hall (OSU Agricultural & Resource Law Director) for a **“Winter Ag Law Update.”** Don’t miss this chance to learn more about the legal issues which are impacting agriculture and our local farms/families.

Some of the legal topics which will be addressed include: farm leases, grain contracts, line fence law, noxious weeds, Nuisance complaints, surface drainage rights, leasing land for hunting, and the legal aspects of growing hemp. Bring your Ag Legal questions for Peggy to answer!



PRE-REGISTRATION IS REQUESTED. There is no charge for this program but reservations are being requested so that adequate program materials can be printed. Call 740-622-2265 or email marrison.2@osu.edu to reserve your spot.



FARM TAX UPDATE

Monday, December 2, 2019

7:00 to 8:37 P.M.

Location:

Coshocton County Services Building
Room 145
724 South 7th Street
Coshocton, Ohio 43812

Details:

This program is free & open to the public! Courtesy reservations are requested so program materials can be prepared. Call 740-622-2265 to RSVP.

OSU Extension Educator David Marrison will provide a Farm Tax Update. We will examine year farm tax strategies and learn more about the new Section 199A deduction for Qualified Business Income. It is not business as usual in the world of farm taxes. Wrap up the year learning how to better manage your farm taxes.



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu.

Coshocton County

Fall Foliage & Farm Tour

49th Annual 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. or Sunday from 12:00 P.M. - 3:00 P.M. at The Animal Boutique and Villas (across from Walmart) 23905 Airport Road 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 19
10:00 A.M.-5:00 P.M.

Sunday, October 20
12:00 P.M.-5:00 P.M.

2019 TOUR STOPS INCLUDE:

- ♦ *RC Flying Club*
 - ♦ *Dairy Farm*
 - ♦ *Fertilizer Facility*
 - ♦ *Pumpkin Farm*
 - ♦ *Two Wineries*
 - ♦ *Lunch Stop: First Baptist Church W. Lafayette, Ohio*
- ...and more!*

