### **OHIO STATE UNIVERSITY EXTENSION**



Dear Friends,

What a year this has been. Harvest is well underway and for some almost finished. Yields have been better than for many in other areas of the state. The biggest challenge for livestock producers this winter will be providing quality forages that meet the animal's requirements. I have included a couple of articles that highlight this issue.

Steve Boyles Ohio State University Beef Extension Specialist will be at Sheridan High School to discuss feeding options on November 18<sup>th</sup> at 6:00 pm. The meeting will be in the Ag room.

We will continue to conduct Beef Quality Certification this year for anyone who may still need it. Please feel free to call the office if you need certification and we can set up additional programs.

The OSU Extension Farm Office (<u>https://farmoffice.osu.edu</u>), is an umbrella website containing information for agricultural producers and landowners on, agricultural law, taxation, production economics and farm management. You'll find resources and tools to help you make informative business decisions and simplify your farm office operations.

Additional agriculture and natural resource informational can be found at Ohio State University Extension website: <u>https://agnr.osu.edu/resources</u>. There are several free blogs and newsletters available.

Pesticide and Fertilizer Recertification dates are being finalized and will be sent out in Decembers Newsletter.

Ted Wiseman Extension Educator

Just

cc. Pam Montgomery

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**OHIO STATE UNIVERSITY EXTENSION** 

### UPCOMING PROGRAMS 2019

#### November

18 6:00 p.m. Beef Nutrition Program Sheridan High School AG room

#### December

14 Steer Weigh In Perry County Fairgrounds

#### JULY 2020

20-25th Perry County Fair

Contact the Perry County Extension Offices for detailed information (Registration Deadlines and Fees, etc.)

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

**Ohio CAUV Values Projected to Decline Through 2020 Source**: <u>https://u.osu.edu/ohioagmanager/</u> The Current Agricultural Use Valuation (CAUV) program allows farmland devoted exclusively to commercial agriculture to be taxed based on their value in agriculture, rather than the full market value, resulting in a substantially lower tax bill for the farmer.

The formula for CAUV values incorporates agricultural factors (soil types, yields, prices, and non-land costs for corn, soybeans, and wheat) to calculate the capitalized net returns to farming land based on the previous 5 to 10 years. CAUV underwent large-scale changes to its calculation in 2017 that was targeted to reduce the property tax burden of farmland.

A new report, Ohio CAUV Values Projected to Decline Through 2020, shows the projection of CAUV values though 2020. According to the study authors, OSU agricultural economists Robert Dinterman and Ani Katchova forecast a decrease in the assessed value of agricultural land to an average CAUV value of approximately \$600 in 2020. Access this report at:

https://aede.osu.edu/sites/aede/files/publication\_files/CAUVProjectionsFall2019.pdf

# Ohio's Proposed Hemp Rules Are Set By Peggy Kirk Hall and Ellen Essman- OSU Agricultural & Resource Law Program Source: <u>https://farmoffice.osu.edu/blog/mon-10142019-1020am/ohio-ag-law-blog-ohio's-proposed-hemp-rulesare-out</u>

Ohio's newly created hemp program is one step further toward getting off the ground. On October 9, the Ohio Department of Agriculture (ODA) released its anxiously awaited proposal of the rules that will regulate hemp production in Ohio. ODA seeks public comments on the proposed regulations until October 30, 2019. There are two parts to the rules package: one rule for hemp cultivation and another for hemp processing. The deadline will have past by the time you read this newsletter. Will can wait and see what the final ruling and other licensing requirements will be put in place. To me the big question is where in the state are the processing plants going to located to make this a viable crop for our area. Oddly enough those locations that have hemp growing this year had problems with corn ear worm and other insect issues. More information will be coming soon.

### OHIO STATE UNIVERSITY EXTENSION



## 2019 Buckeye Shepherd's Symposium

### December 13-14, 2019

OARDC Shisler Conference Center 1680 Madison Avenue | Wooster, Ohio 44691

#### Friday, December 13, 2-5 p.m.

#### Speakers:

Sandi Brock - Commercial sheep producer and face of "Sheepishly Me - Adventures in Sheep Farming" on social media and YouTube, of Shepherd Creek Farms in Ontario, Canada.

**Cameron Lauwers** - First generation sheep producer and fourth generation farmer from Capac, Michigan who runs 600 ewes in a mostly housed accelerated lambing system.

**Dr. Luciana da Costa, DVM -** Assistant Professor and Extension Veterinarian of the OSU Department of Veterinary Preventive Medicines. She will be sharing her expertise on mammary health and mastitis.



#### Young Shepherd's Assembly

Friday December 13 - A unique program for shepherds under age 40 to network and learn from one another at Jakes' Steakhouse. This year, the young shepherds will join the past OSIA presidents for dinner and discussion about the public's perception and influence on agriculture then and now. The cost for dinner and the program is minimal courtesy of a grant from the Ohio Sheep and Wool Program.





Saturday, December14, 8 a.m.-4 p.m.

#### Speakers:

Sandi Brock - Shepherd Creek Farms Cameron Lauwers - Lauwers Lamb Dr. John Foltz - OSU Animal Science Department Chair Lee Fitzsimmons - Wayne Savings Community Bank



#### Topics of Discussion:

- Progressive accelerated housed management
- Getting started in a housed system
- Using social media in agriculture
- Overview of OSU sheep research
- Nutrient and manure management
- Working with your ag lender...And more!

#### Youth Program

A free and fun program designed especially for youth ages 6-18. Plan to bring your youngest shepherds for this multi-faceted youth program, while you take in the symposium topics.

#### Registration

To register online or print a registration form, visit ohiosheep.org or the events page at sheep.osu.edu.

THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, ASRIGULTURAL, AND ENVIRONMENTAL SCIENCES Please join us for the 70th Ohio Sheep Improvement Association Anniversary!

### How good or bad is your hay?

From Ted Wiseman and Dean Kreager Extension Educators in Perry and Licking County

You may be thinking enough already with the hay quality talk. Many articles have been sent out on this topic starting before some people even baled their first cutting. Last year a lot of the hay was very poor quality and many animals lost significant weight through the winter. Some animals even died with hay in front of them because the hay did not have enough nutritional value. Hay quality affects all types of livestock but I will concentrate on beef cows since they are less likely to receive supplemental feed than most other animals.

Thin cows are more likely to produce calves that are less healthy and will not grow as well. Those cows often take longer to breed back which will carry into the next year with later born calves. Below is a summary of 45 forage samples from hay made this year. This data represents 2 important test numbers. These 2 items do not tell the whole story when it comes to hay quality, but they give us a good start.



Percent TDN (total digestible nutrients) is a measure of the amount of energy in the feed. Basically, this equates to the amount of calories.

Percent protein is a measure of the protein that is available to the animal for maintaining muscle and body systems. It is also very important for development of the calf she is carrying.

#### October 2019

The vertical blue bars represent 1st cutting hay samples while the vertical orange bars represent 2nd cutting. There are 4 silage samples included.

When looking at TDN on the graph, the grey bar at 60% represents the needs of a beef cow at the peak of lactation (such as fall calvers). This bar could be lowered to 54% for last trimester spring calvers. At 54% it would appear that some of the first cutting would be adequate; however, when we factor in the moisture content and the limitation on the total pounds a cow can possibly consume none of these first cutting samples completely met the energy needs of the cattle. If you add in the increased energy needs from rain, mud, cold, and snow, the animals will be loosing body condition through the winter if they are not receiving an energy supplement.

Protein content is represented by the yellow bar on the graph. Typically, you will want at least an 8%-9% protein level to meet the needs of a cow in its 3rd trimester. You can see that some of the first cutting samples are closer to 5%. The protein needs are met by more samples than the energy needs but still may require some protein supplementation.

First cutting forages provides the largest amount of your supply compared to second, third or fourth. Taking inventory of what you have now for each cutting will give you time to plan your winter-feeding program. Most importantly if you haven't tested your forages before, this would be the year to do so. The cost of a forage sample is minimal compared the costs associated with lower body condition scores, low birth weights and poor milk production. I am glad to help with sampling and interpretation. We can have your hay tested for \$25 including shipping for most standard testing.

Once you know what quality of forages you have, work with a nutritionist to help decide what other feed stuffs you can use to develop a proper beef ration. Just getting the numbers on a spreadsheet or computer program is only the starting point. Understanding the complexities of the ruminant digestive system and knowing what the limitations of certain feeds is critical. The Ohio State Beef Team website has some great resources addressing feed and feed shortage issues <u>https://u.osu.edu/beefteam/</u>.



### What's in your hay? Ted Wiseman, OSU Extension, Perry County

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, at calving and at peak milk production, respectively.

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Forage Analysis		Amount Fed on an As-Is basis (lb/day)					
				Soybean Meal			
TDN	CP	Hay	Corn	(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			

Table 1. Nutrient Requirement of Total Digestible Nutrient (TDN) 49, and Crude Protein (CP) 7.

Table 2. Nutrient Requirement of Total Digestible Nutrient (TDN) 54, and Crude Protein (CP) 9.

Forage Analysis		Amount Fed on an As-Is basis (lb/day)			
TDN	СР	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	СР	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

Table 3. Nutrient Requirement of Total Digestible Nutrient (TDN) 60, and Crude Protein (CP) 11.

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.

We have a hay probe at the Perry County Extension Office for you to use. Please call the office prior to coming in for it to ensure it is not being used. 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.

### OHIO STATE UNIVERSITY EXTENSION

#### **Open Burn Laws for Ohio**

Dee Jepsen – State Agricultural Safety & Health Leader

October and November are two months in the fall where open burning is a fire concern for Ohio residents. It's a good idea to know the type of fire permitted for your area.

The Ohio EPA determines the types of fires that are restricted inside and outside of a village or city. For the most part, open burning of residential and land-clearing wastes are not permitted within city limits. Restrictions do not apply to barbeques, campfires, cookouts, and bonfires (with wood stacks no larger than 2ft. high X 3ft. wide) – these types of fires are permitted.



Agricultural products, such as wastes and plant matter from tree trimmings, stumps, brush, weeds, leaves, grass, shrubbery and materials from crop or livestock production, are permitted to be burned with restrictions. Likewise burning of fence posts and scrap lumber (but not from buildings or land clearing waste) are also permitted. All open fires must be more than 1,000 feet from a neighbor's home or inhabited building.

Wastes that are never permitted to be burned include: garbage, dead animals, and products containing rubber, grease and asphalt. Fires cannot be near, or block vision of, roadways, railroads or airfields.

The months of October and November carry open burn restrictions. According to the Ohio Department of Natural Resources, fires can become out of control due to windy and dry conditions. Because of these conditions, open burning is not permitted in rural areas from 6 a.m. to 6 p.m. During the ban, fires must be in a plowed field with a 200 feet distance of woodlands or brush.

With any fire, small particulates are suspended in the smoke that could lead to health disorders. Open fire burning has been linked to asthma and respiratory illnesses. Household wastes contain various chemicals and these toxins can emit high levels of sulfur dioxide, lead and mercury. Airborne pollutants can lead to more severe health conditions such as nervous system damage, kidney and liver damage, and reproductive disorders.

For additional questions about Ohio's open burning regulations, contact the Ohio EPA Division of Air Pollution Control at (614) 644-2270. Local EPA districts are also available to answer questions. Their website contains a complete list of agencies available in the

state, <u>http://epa.ohio.gov/dapc/general/openburning</u>. The Ohio Department of Natural Resources website is <u>http://forestry.ohiodnr.gov/burninglaws</u>.

For more information about other Ag Safety topics visit <u>https://agsafety.osu.edu</u> or contact Dee Jepsen at jepsen.4@osu.edu or 614-292-6008.