

Noble County Oklahoma Cooperative Extension Service
Chad Webb
Extension Educator Ag/4-H/CED
Kylie Sherrill
Extension Educator 4-H Youth Development
Vacant
Extension Educator 4-H/Family & Consumer Sciences
Barbara Ebersole
Extension Administrative Support Specialist

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Agriculture News and Updates: November 2020



NOBLE COUNTY EXTENSION

A Few Tips to Reduce Supplementation

Earl H. Ward, Area Livestock Specialist

The seasons are changing. Summer is coming to an end and of course the next season is feeding season. Most feed contracts go from October through March and allow producers to lock in their feed prices. However, those feed prices are only one part of the equation when calculating your feed costs. Since you cannot control the price of feed there are a few things you can do to lower your feed costs even if the price per ton remains the same.

The typical cattleman has a shotgun approach to supplementation. Meaning that they hit the bullseye but it's not very precise. To be more precise, a producer needs to first evaluate their forage quality and quantity. After forage quality is determined via a forage sample, the producer must evaluate the supplements available and choose the most cost-effective supplement that best fits management style. This means that the producer will evaluate their supplement needs on an annual basis and adjust the feed or the amount of feed to match the current situation.

Most beef producers have a hard-set date of when they begin to supplement with no regard to forage quality, forage quantity, or animal's nutrient requirements. So, when is the right time to start supplementing? Let the cows tell you. Constantly be observing the animal's body condition score (BCS) and when you see the animal is starting to drop condition, then that is when you need to start with supplementation. One great way to reduce feed costs is by separating the animals based off their fleshiness and only feeding those animals that are in a lower BCS. For instance, separating and feeding those cows in a BCS 4 or below will save you money from feeding cows in a BCS 6 that don't need extra supplementation.

A more precise supplementation program might mean separating animal's by age. It is not wise to put a group of weaning calves in the same pen as fat yearlings, so why do producers typically run their young cows with the older cows? Separating cows by age translates to separating them based on their nutrient requirements. A



Chad Webb
Noble Co. OSU Extension
300 Courthouse Dr., #13
Perry, OK 73077
580-336-4621

Chad Webb

2020 NOBLE COUNTY FALL FAIR CHECKS ARE AVAILABLE IN THE NOBLE CO. OSU EXTENSION OFFICE. PLEASE PICK YOURS UP TODAY!

heifer with her first calf is not only trying to produce a healthy calf but is also trying to put weight on herself to reach her mature weight. Many times, separating animals by BCS and age are same thing because typically the younger females are the ones that have a lower BCS.

For the producers who have a rotational grazing system, it is advised to allow the separated animals access to the fresh pasture first for a short time before rotating the fleshier herd into that pasture. For those producers on a continuous grazing system, separation can be achieved by installing a temporary hot wire to separate the herd.

By taking these things into consideration, along with others, a producer can move their supplementation program from a shotgun approach to a fine-tuned sniper shot. It is recommended to work with your OSU Extension Educator to help with evaluating your supplementation program.

Safe Handling of Wildlife Carcasses

Dr. Dwayne Elmore, Professor and Bollenbach Endowed Chair in Wildlife Extension

It is once again hunting season in Oklahoma. As hunters find success in the field and harvest wildlife, it is important to consider how to safely handle the carcasses to stay safe. Wildlife can be infected with various zoonotic diseases that are transmissible to humans. Additionally, wildlife often harbors ticks and fleas which are disease vectors and can transmit diseases. Some of the diseases that may be encountered in Oklahoma and can infect hunters include ehrlichioses, leptospirosis, Lyme disease, tularemia, trichinosis, rabies, Rocky Mountain spotted tick fever, salmonella, and swine brucellosis. Hunters often become wary when they observe odd behavior in wildlife or notice injury or signs of disease on animal carcasses. However, the absence of these obvious signs should not cause complacency in the safe handling of harvested animals. Any animal should be treated as a potential source of infection.

There are several ways to protect yourself when handling wildlife carcasses. First, avoid direct contact with any body fluids such as blood, lymph fluid, urine, feces, and saliva. When handling carcasses, always wear disposable gloves that provide a barrier between you and the animal. Two layers of gloves are a good idea to provide an extra layer of protection in case a tear develops in a glove. Also, wear some type of eye protection to keep body fluids from splashing into your eyes. A face shield will provide better protection by also covering your mouth and nose which could be points of entry. Take your time when cleaning harvested animals and make sure you have adequate lighting which will help prevent cutting yourself with a knife or being injured by broken bones on the carcass. When removing gloves, look for any injury on your hands that might indicate a glove was pierced. If you see any cuts, immediately treat them with antiseptic. Wash your hands, arms, and face immediately after handling the carcass. Also wear gloves and face protection when packaging meat for storage.

Wildlife often have ticks and fleas. These potential disease vectors will seek a new host as the wildlife carcass cools. Spraying yourself with insect repellent prior to handling the wildlife will help keep them off you, but be sure to examine your entire body immediately after handling the carcass and remove any ticks or fleas found. When cooking wildlife, use a meat thermometer to ensure you are heating the meat to USDA recommended safe temperatures. Note that the safe temperature for wildlife may differ from recommendations for domestic animals. For example, while trichinosis has largely been eliminated from domestic pork, it may be present in feral hogs and bear. Therefore, cook the meat to 160°F to kill this disease.

Finally, if you develop symptoms that may indicate a zoonotic disease, be sure to tell your doctor that you have recently handled wildlife. Many diseases have similar symptoms such as fever, body aches, diarrhea, and nausea. Doctors may attribute your symptoms to a more common illness such as influenza since many zoonotic diseases are rarely encountered by the general public. It is critical to communicate with your healthcare provider to get proper care.



Feral hogs provide quality meat, but they also carry multiple diseases that can infect humans. Notice this hunter is wearing disposable gloves to hold the animal.

Don't Discount Alfalfa as a Winter Supplement

Dana Zook, Extension Area Livestock Specialist

I grew up on a farm where alfalfa was always part of the crop rotation. Much of the alfalfa went to local dairies and but even inferior alfalfa found a home at a local feedyard. Just like the corn and beans harvested each fall, alfalfa was marketed accordingly and maintained an important part of the farm's financial equation.

When I was growing up, I didn't realize the value of alfalfa as a supplement for beef cows. A great deal of research has proven alfalfa to work for cattle producers who are willing to think about supplementation a different way. Some might be thinking, "That's ridiculous, I can't weigh alfalfa like a bucket of cubes....and what about the waste?". These are valid concerns but also prove you are on the right track! Feeding accuracy is key when using alfalfa as a supplement. Unlike conventional protein supplements, alfalfa must be fed daily or too much will be wasted. Daily fed alfalfa will result in 10-15% loss which is like cubed or textured feed supplements.

Alfalfa stands out as a high-quality source of protein, but other benefits can be overlooked. As a legume, it is also high in energy but harvest and baling can impact quality. The premium nutritional value of alfalfa is in leaves making it imperative to bale at the correct moisture.

One overlooked fact of newly harvested alfalfa is its rich Vitamin A content. Some producers may recall the elevation of vitamin A prices in the last couple years. Feeding new-crop leafy alfalfa can put a dent in the amount of Vitamin A necessary for the cow herd. Keep in mind, vitamin A will degrade over time so new-crop alfalfa should be used first if this is a goal. Alfalfa is also rich in other vitamins and minerals but producers should get a forage analysis to confirm these levels.

Research out of Kansas State University demonstrates the effectiveness of alfalfa as a supplement to cows on native range. In one study, cows were supplemented with 19.4% protein alfalfa at three inclusion levels

according to a percentage of bodyweight; 0.48%, 0.72%, and 0.96%. Researchers found that conception rate was unaffected by level of supplementation, but body condition did increase linearly with increased level of supplement. Supplemental alfalfa also reduced calving interval proving the strong correlation of cow body condition and reproduction. Furthermore, weaning weights were greatest in calves whose dams received the highest level of alfalfa. Overall, researchers suggested that the supplemental level of 0.72% of bodyweight would be adequate for cows in good condition. Nevertheless, cows needing to recover body condition would benefit from the highest level of supplemental alfalfa in this study (0.96%).

One fact that should not be lost on producers is the effect of rumen fill when alfalfa is supplemented. K-State researchers discovered decreased grazing by cows in middle to late stages of gestation. It was documented that as the calf fetus grows throughout gestation, there is less room in the rumen, making bulky supplements (i.e. alfalfa) less desirable in situations where grazing is the goal. Furthermore, substitution could occur as cows select alfalfa rather than grazing lower quality forages. For this reason, producers may consider alfalfa as a supplement for cows in early stages of gestation and save the conventional supplements closer to calving.

For more information about using alfalfa in your beef operation, contact your local county OSU Extension office.

CFAP-2 Program Offers Assistance to Farmers

Trent Milacek, Area Ag Economics Specialist

The USDA has announced another round of Coronavirus Food Assistance Program payments through CFAP-2. This round of payments will assist farmers with losses to 2020 commodities to include row crops, wool, livestock, specialty livestock, dairy, specialty crops, floriculture and nursery crops, aquaculture, broilers and eggs and tobacco.

Sign up started on September 21, 2020 and will continue until December 11, 2020. Interested producers should contact your county FSA office to determine their preference for sign-up. For more details on the program, producers are encouraged to visit farmers.gov/cfap to get further details. If you would like to call with questions, there is a call center that can be reached at 877-508-8364.

This is a separate program from the initial CFAP program so producers will have to fill out a separate application. Details are still emerging, but for now CFAP-2 will pay on 2020 crop year acres and livestock. This will include fall crops planted in 2019 and harvested in 2020 like wheat and spring planted crops harvested in the fall of 2020 like corn, milo and soybeans. Livestock are also included in the new round of payments. The highest inventory of non-breeding cattle, sheep and swine owned between April 16, 2020 and August 31, 2020 are eligible. This means any animal that has not had offspring or is not a breeding bull is eligible.

Payment rates are fairly straightforward for livestock but are more complex for crops. Crops are broken down into price trigger commodities and flat-rate crops. Price trigger commodities suffered a five-percent or greater national price decline. Flat-rate crops either did not experience that large of a decline or data was not available to calculate the decline. The price trigger row crop payment will be the greater of eligible acres multiplied by the payment rate of \$15/acre, or eligible acres of the crop multiplied by a nationwide crop marketing percentage, multiplied by a crop-specific payment rate, and then by the producer's weighted 2020 Actual Production History (APH) approved yield.

In other words, producers will receive at least \$15/acre on eligible crop acres. Flat-rate crops will be paid a \$15/acre flat rate.

Livestock payments will be made at \$55/head for cattle, \$27/head for sheep and \$23/head for swine. Remember that this payment is based on the highest inventory of non-breeding livestock between April 16, 2020 and August 31, 2020.

For more information on application or other crops please contact your local FSA office, visit farmers.gov/cfap or call the CFAP 2 call center at 877-508-8364.

Coronavirus Food Assistance Program 2

<https://www.farmers.gov/cfap>

Extension Experience – Insights into Oklahoma Agriculture

The Northwest Area Extension Staff would like to announce the creation of our new podcast *Extension Experience*. The *Extension Experience* podcast is brought to you by Josh Bushong, Trent Milacek, and Dana Zook. Each week they provide perspective on Agriculture topics and offer insight from our experience working with Extension Educators and Producers across Oklahoma.

The *Extension Experience* podcast is available on Spotify, Google Podcasts, and Apple Podcast platforms. You can also access the episodes on spotlight, <http://spotlight.okstate.edu/experience/>.

We hope you consider listening to Extension Experience.

Estimating hay needs for the upcoming winter

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Each fall, cow/calf producers have that question lurking in the back of their mind: “Do we have enough hay stored to get through the winter?” Winter hay needs will vary dramatically from place to place. Drought areas will provide much less standing forage in pastures than those parts of Oklahoma that have had adequate moisture this fall. Hay feeding will start earlier and occur over more days where drought or snow-cover prevent cows from grazing standing forage.

Estimating forage usage by cows is an important part of the task of calculating winter feed needs. Hay or standing forage intake must be estimated in order to make the calculations. Forage quality will be a determining factor in the amount of forage consumed. Higher quality forages contain larger concentrations of important nutrients so animals consuming these forages should be more likely to meet their nutrient needs from the forages. Also cows can consume a larger quantity of higher quality forages.

Higher quality forages are fermented more rapidly in the rumen leaving a void that the animal can re-fill with additional forage. Consequently, forage intake increases. For example, low quality forages (below about 6% crude protein) will be consumed at about 1.5% of body weight (on a dry matter basis) per day. Higher quality

grass hays (above 8% crude protein) may be consumed at about 2.0% of body weight. Excellent forages, such as good alfalfa, silages, or green pasture may be consumed at the rate of 2.5% dry matter of body weight per day. The combination of increased nutrient content AND increased forage intake makes high quality forage very valuable to the animal and the producer. With these intake estimates, now producers can calculate the estimated amounts of hay that need to be available.

Using an example of 1200 pound pregnant spring-calving cows, let's assume that the grass hay quality is good and tested 8% crude protein. Cows will voluntarily consume 2.0% of body weight or 24 pounds per day. The 24 pounds is based on 100% dry matter. Grass hays will often be 7 to 10% moisture. If we assume that the hay is 92% dry matter or 8% moisture, then the cows will consume about 26 pounds per day on an "as-fed basis". Unfortunately we also have to consider hay wastage when feeding big round bales. Hay wastage is difficult to estimate, but generally has been found to be from 6% to 20% (or more). For this example, let's assume 15% hay wastage. This means that approximately 30 pounds of grass hay must be hauled to the pasture for each pregnant cow each day that hay is expected to be the primary ingredient in the diet.

After calving and during early lactation, the cow may weigh 100 pounds less, but will be able to consume about 2.6% of her body weight (100% dry matter) in hay. This would translate into 36 pounds of "as-fed" hay per cow per day necessary to be hauled to the pasture. This again assumes 15% hay wastage. Accurate knowledge of average cow size in your herd as well as the average weight of your big round bales becomes necessary to predict hay needs and hay feeding strategies. Unless cool season grasses are available in March and April, lactating cows may need to be fed hay for 60 days or more to maintain body condition while waiting for Bermudagrass or native grasses to grow enough for grazing.

Big round hay bales will vary in weight. Diameter and length of the bale, density of the bale, type of hay, and moisture content all will greatly influence weight of the bale. Weighing a pickup or trailer with and without a bale may be the best method to estimate bale weights.

Find Farm Management Resources on your Smartphone

Producers have access to farm financial management, production, marketing, and risk management topics online through the e-Farm Management website. This site serves as a resource library of videos, decision tools, and publications for farmers and ranchers to strengthen their farm management skills.

In the Explaining the 2018 Farm Bill video, viewers learn about commodity programs in the current farm bill. The video explains the different programs that are available and how they differ. Finally, viewers learn about other programs such as crop insurance and conservation options.

To view this video and find additional information on commodity farm programs, visit:

<http://agecon.okstate.edu/efarmmanagement/farm.asp>.

More information on this and additional farm management topics may be found: 1) by contacting your nearest Extension Educator (<https://extension.okstate.edu/county/index.html>) 2) on the e-farm management website (<http://agecon.okstate.edu/efarmmanagement/index.asp>)

or 3) on the OSU Agricultural Economics YouTube Channel (<https://www.youtube.com/user/OkStateAgEcon>).

Grazing Small Grains

Small grains forage is a valuable source of high-quality forage that is generally available in late fall, winter, and early spring. The crude protein of wheat pasture forage can range from 20-30 percent which makes it an excellent forage when other sources may become low in quality and quantity. Grazing should not be initiated until wheat has developed a coronal root system (frequently called secondary root system). The coronal root system anchors the wheat plant, making it difficult for cattle to pull up. Furthermore, leaf removal at this growth stage is not as critical to future growth. The coronal roots are those which originate at the crown in contrast to primary roots which originate at the seed.



This picture illustrates a five-week old wheat seedling. The seed was attached near where zero is on the ruler and the primary roots developed from this point. About 1.5 inches above the seed, the crown formed in this plant. In this figure one coronal root grew, but three additional coronal roots started but never grew out. Coronal roots begin to emerge at the same time as tillers emerge. If the soil is dry where the coronal roots are forming, they will stop growth until the soil is moistened. Therefore, if no rain has fallen from planting until coronal roots begin to develop, they probably will not penetrate the soil until a rain occurs. Cattle should not be pastured until coronal roots have grown out. Grazing before the wheat plant has several tillers is detrimental, because wheat growth is a relatively slow process from germination until tillering occurs. Removal of the early leaves will slow the growth rate, resulting in less dry matter production by December 1. Wheat growth and accumulation in September through November is needed if dependable grazing is to be available for the December through February time period when the wheat is growing slowly. Once daytime temperatures fall below 60° F or nighttime temperatures below freezing, wheat growth is very slow. Rapid growth resumes in late January or February as temperatures warm again.

Dry matter accumulation in wheat pasture can be estimated visually. Wheat forage about six inches high contains between 500 and 750 pounds of dry matter per acre. The lower white marking on the board is six inches, and 750 pounds of dry matter were harvested from this plot. Row width and the growth habit of the variety will influence these estimates. Even though these are only estimates, they should help you to determine the stocking rate (acres per animal) and to estimate how long the forage supply might last.

