



# Ag Insights

*From the Desks of Your Northwest Area Ag Specialists*

Oklahoma Cooperative Extension Service - Division of Agricultural Sciences and Natural Resources - Oklahoma State University

**March, 2017**

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## 2017 Grain Sorghum Budget

Trent T. Milacek, NW Area Ag Econ Specialist

Farmers planning to utilize sorghum as a full season summer crop will have many hurdles to conquer in 2017. Lower commodity prices and the sugarcane aphid make close management and large yields crucial to success.

Local grain sorghum bids are determined using the corn futures contract. The basis determines the cash price and in recent months, the basis has been wide. Current new crop basis bids for sorghum range from  $-\$0.91$  to  $-\$0.65$  per bushel. Considering a December corn futures contract is trading around  $\$4.00$  per bushel, producers can forward contract sorghum from  $\$3.09$ - $\$3.35$  per bushel.

Ways to help minimize the effect of the sugarcane aphid on sorghum yield are important to producers. Over the past few years, some farmers have found success with early planting in April and proactive pesticide application. Careful scouting and early planting dates may allow a producer to spray only once, which will help maintain profitability.

A 70-bushel grain sorghum yield sold at  $\$3.20$  gives a farmer  $\$224$  per acre in revenue. Accounting for operating costs like seed, fertilizer, harvesting, herbicides, rent, and machinery costs, a producer could expect to spend  $\$220$  per acre. This results in  $\$4$  per acre in profits.

The budget above includes one application of pesticide to control sugarcane aphid. There have been reports that producers have to spray for sugarcane aphids two and even three times. If two "extra" applications are required, then it will take an 85-bushel yield for the budget to break even.

Careful attention to variety selection can provide some relief. The Oklahoma Cooperative Extension Service and local seed dealers have access to literature that defines the level of sugarcane aphid tolerance in varieties currently available to producers. While no sorghum plant is immune to infestation, the goal of many producers is to reduce the cost of controlling this pest to one application of pesticide.

If selecting a tolerant variety will cause a significant reduction in yield potential, producers should think critically about the decision. A 10-bushel reduction in yield will cost a producer more than another application of pesticide. Variety selection should include options that do well in a producer's region and for selection of sugarcane aphid tolerance.

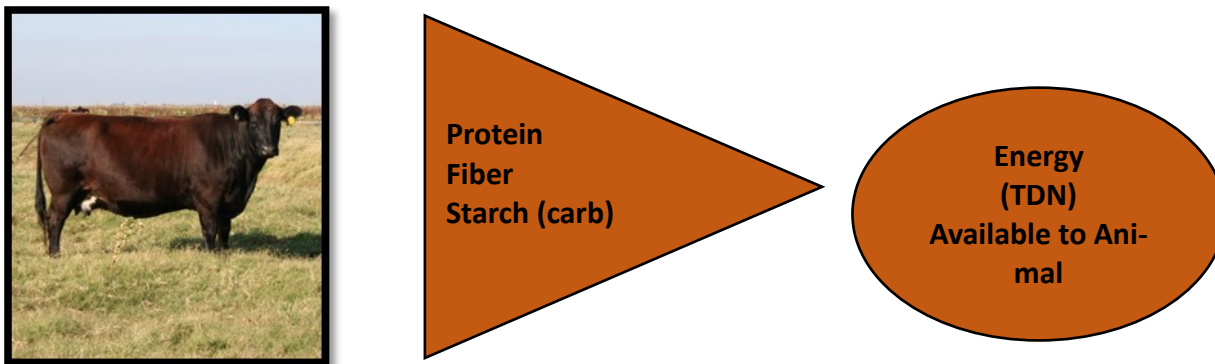
The Oklahoma Cooperative Extension Service has developed an app to help producers manage the economics of sugarcane aphid treatments. Search the App Store on your iPhone or Google Play on your Android device for "SCA Decision Aid" to download the app. An excel version of the tool is also available. Contact your local county extension office for more information.

# What Does Cow Manure Tell You About Nutrition?

Dana Zook, NW Area Livestock Extension Specialist

Spring is right around the corner but winter still haunts us with the occasional freezing event. This time of year can be tough for cows grazing on winter pastures. Most of the nutrient value in standing forage has been stripped from weathering these past few months and palatability is low. How can you tell if your cows are truly getting the correct ratio of protein and energy to meet their needs? It may sound silly, but put your eyes on the ground and take a look at those piles of fertilizer we call manure. I learned about manure scoring early in my career as a feedlot intern but it can easily be applied to the cow herd.

In such a crucial time in the cow/calf production cycle, it is imperative that your cows are getting the correct ratio of protein and energy. When looking at supplement needs for our cows, we as producers have been trained to only consider protein. In fact, most supplement tags fail to list a feed's energy content. So to start, let's have a quick nutrition lesson: protein, fiber, carbohydrates, and fat all combine to provide energy to the cow. When one of these four components is lacking, the whole energy system will be inefficient. This could be manifested in the cow by loss of body condition, weak calves, poor milking ability and a variety of other factors that decrease performance.



Early on in the fall, protein may be the only nutrient that our cows are lacking. Come late winter and early spring, before new forage growth emerges, the quality of both protein and fiber will be lacking. Current standing forages or late cut summer hay are feeds that are low in quality and less digestible which leave a deficit in the energy equation.

A good way to determine if your cows lack a piece of the energy puzzle is to take a walk through the pasture to look at....you guessed it, manure! Manure scoring is a method that shows a snapshot of the cow's nutritional quality during the last three to four days. For nutritionists, it is a quick way to determine nutritional quality rather than waiting for nutrition to be shown through body condition. Manure can also show signs of illness such as scours, coccidiosis, and acidosis. Manure pats are scored on a scale from 1 to 5; see pictures and descriptions below. This time of year, it is common to see manure pats that are stacked 4-5 inches high with clearly visual fiber components. Cows producing stools of this type should be provided a good protein source as well as a high quality hay source. One mistake that can occur this time of year is providing an expensive protein source without bothering to consider the hay/forage source. Often, a good quality hay with a small amount of protein can bring nutrition to the appropriate level.

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Manure Score 5	Manure Score 3	Manure Score 1
Stacked Visual folds Fiber visible	Short smooth stack No visual folds	Runny, splattered, misty
Additional high quality protein or energy should be supplied	Healthy	Not necessarily un-healthy. Typical in cattle on high quality immature forages. At times, this consistency of manure may be associated with illness: coccidiosis, acidosis, and scours.
Photos #2 and#3 by Marci Whitehurst, Progressive Cattlemen		

## Backyard Poultry Fact Sheets of Interest

**Dana Zook, NW Area Livestock Specialist**

Spring is in the air and that means many farm stores will be advertising chicks for sale. Raising chickens appeals to many people as a good project for kids and family in addition to providing a good source of protein from the eggs and/or meat. During this time, county extension offices may be receiving calls regarding chick care, poultry nutrition, and egg production. Feel free to contact me at any time with your questions, however the factsheets below are good starting points for most of the calls that may come your way.

**Small Flock Biosecurity for Prevention of Avian Influenza ANSI-8301**

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-9990/ANSI-8301web.pdf>

**Backyard Flock Production ANSI-8202**

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-10303/ANSI-8202web2016.pdf>

**A Guide to Marketing Locally Produced Eggs in Oklahoma FAPC-187**

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-9521/FAPC-187web.pdf>

**Broiler Production: Considerations for Potential Growers AGEC-201**

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-3099/AGEC-202web2017.pdf>



# New Crop Traits and Herbicide Technologies

## Josh Bushong, NW Area Agronomy Specialist

Do you have trouble managing weeds in your summer crops? There are new options worth mentioning that might provide some much-needed solutions. Seed and chemical companies have developed new crop traits that can tolerate different herbicides that can assist in controlling resistant or difficult-to-control broadleaf weed species. Some of these traits include Xtend and Enlist.

The Roundup Ready® Xtend Cropping system is available in both cotton and soybeans. This technology allows the producer to apply specific dicamba formulations post-emergence. These dicamba formulations include Xtendimax (Monsanto), FeXapan (DuPont), and Engenia (BASF). These dicamba formulations are less volatile than other formulations of dicamba. The glyphosate and dicamba tolerance are stacked traits available in soybeans. In cotton, a three-way stacked trait is available to provide glyphosate, glufosinate, and dicamba tolerance.

The Enlist Weed Control System is available in cotton, soybeans, and corn. This technology allows the producer to apply specific 2,4-D formulations post-emergence. Enlist Duo (Dow Agrosciences) is the name of the herbicide product. It contains both 2,4-D choline and glyphosate. The 2,4-D choline is a new formulation that is less volatile than previous 2,4-D formulations and is the only labeled product to apply to these crops that have the tolerance trait. Cotton and soybeans with this trait are tolerant to glyphosate, glufosinate, and 2,4-D choline. Corn hybrids with this trait can tolerate glyphosate and 2,4-D choline.

Dicamba and 2,4-D herbicides are both from the same herbicide group, Group 4 Synthetic Auxins, and certain herbicide stewardship practices are needed for this particular herbicide group. There are three ways for these herbicides to move off-target, and that is either by spray drift, volatilization, and sprayer contamination. While all herbicides can cause damage if the actual spray drifts during application, these herbicides can also volatilize over several hours after application and drift in the wind for miles. Volatilization occurs when there is a temperature inversion, which can allow the herbicide to raise into the air and move off target with the wind. Even though these new herbicides will have less volatility, there are still risks. Cotton and soybean crops without these new herbicide tolerance traits are very sensitive to these herbicides. Proper sprayer cleanout is necessary to prevent contamination issues.

To prevent unlawful applications always refer to the product label for specific details. Some of these details include minimum and maximum wind speeds, specific nozzle types and sizes, approved tank mixes and adjuvants, and minimum buffer distances. Pesticide labels inform applicators how to safely and lawfully apply pesticides. It would be breaking federal law if pesticides are not applied in accordance with the label. The federally approved labels meet all of Oklahoma's requirements for these products. As of right now, there are no additional regulations or certifications needed by the Oklahoma Department of Agriculture, Food, and Forestry.

While these new traits are a great addition to the "toolbox", great care will be needed to retain their effectiveness for years to come. Overuse and abuse of any trait is not a sound agronomic system. It will be up to the pesticide applicators to follow good stewardship practices to get the most out of these products. Herbicide applications before the weeds reach four inches in height will be needed to achieve satisfactory control. In all summer cropping systems, utilizing a pre-emergence or early post-emergence herbicide with some residual activity is still the best management practice to manage weeds.

Producers and custom pesticide applicators can contact their local extension office to find out more about summer crops and these new trait technologies.

# Records Needed to Document Losses Due to Wildfires and Other Disasters

**JC Hobbs, Extension Tax Specialist**

Documenting your losses due to the recent wildfires will be necessary to prove losses for income tax purposes, obtaining federal assistance, and/or file insurance claims. The following information is designed to help you document losses of both personal-use and business property.

The most important thing to do is to take pictures as quickly as possible to document the casualty and to establish the extent of the damage to property. Also create a written list of items damaged and destroyed as soon as possible to ensure that nothing is missed.

A separate inventory list should be created for personal-use property and for business property. The income tax treatment for these two categories is significantly different. If the item is insured, be sure to keep track of the amount of the reimbursement. This information will be needed when it comes to preparing the income tax return.

In addition to the inventory list, it is important to keep records for the cost of cleaning up as well as making repairs to damaged property. These expenses are not a part of the casualty loss but can be used to measure the loss in the fair market value of the property.

Next month's article will discuss the process of determining losses from various types of assets and also determine the amount of deductible losses as well as the potential of casualty gains for income tax filing purposes. For additional information as well as example inventory worksheets, obtain a copy of IRS Publication 2194: Disaster Resource Guide for Individuals and Businesses.



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