



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

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Cattle Price Expectations in 2017

Trent T. Milacek, Northwest Area Ag Econ Specialist

The live cattle contract has recovered from October lows around \$95/cwt. to over \$120/cwt. on the April contract. This price rally has proved beneficial to producers looking to market cattle over the next month and those who have already sold wheat pasture calves. Should producers remain optimistic about prices or should they take action now to prevent potential losses?

The cattle market has been in a multi-year downtrend since the end of 2014. Brief rallies have met technical resistance and failed to move higher due to a lack of strong fundamental information. Strong fundamentals could include a decrease in supply or an increase in demand or both. Weak fundamentals that will continue to weigh on prices are increases in supply or headwinds to trade deals to boost exports.

June live cattle contracts are trading above \$110/cwt. and August contracts are trading near \$107/cwt. currently. These price levels are below the multi-year downtrend resistance line. A big "push" will be required to move higher. Those who do not believe that will happen will likely be interested in marketing now. This could include cash sales, hedging or put options to lock in current prices.

In a best-case scenario, beef supplies will be lower than expected this summer and prices will shift to a sideways trading pattern. Producers may not see large increases in price but at the same time, prices will not move much lower. What will likely happen and what is somewhat priced into the current market is a larger beef supply. Large feedlot placements over the past few months have positioned the industry to produce a wall of beef this late spring and summer.

Strong support exists near the \$95/cwt. level. The market tested those prices last fall and promptly recovered to current levels over a few months. Unfortunately, this built in support is \$15/cwt. below June contract prices. On the upside, there would be some resistance at the \$140/cwt. level. This is about \$35/cwt. above August contract bids.

While upside exists from a purely technical standpoint, the reality is that markets have a lot of downside sentiment. Support levels are in place, but the prices required to breakeven for most producers lie at higher levels. Price protection and risk management remains a crucial part of a producer's operation. Remaining flexible in marketing and taking advantage of current prices could provide much needed cash flow to producers early in the year.



Spring Cotton Clinic

Wednesday, April 12, 2017

**Oklahoma Panhandle Research and Extension Center
(OPREC), Goodwell, OK**

10:30a-- *Registration, Coffee and Donuts*

11:00a-- **Cotton Marketing**

Jerrell Key, Adobe Walls Gin

11:30a-- **Harvesting Cotton for a Good Grade**

Leighton Stovall, Moore County Gin

12:20p-- **2017 Cotton Production Update**

(Lunch) *Dr. Randy Boman, Cotton Extension Program Leader*

1:20p-- **Early Season Cotton Insects, 2017**

Jerry Goodson, SWREC Extension Assistant

2:20p-- **Keys to Successful Cotton Weed
Management**

*Dr. Todd Baughman, IAB Weed Science Program
Support Leader*



Lunch Sponsors:



CCA credits will be offered

Please RSVP by April 4th to 580-349-5441

Early-Season Management of Sugarcane Aphids in Sorghum

Tracy Beedy, Panhandle Area Agronomy Specialist

Looking for ways to maximize sorghum production and minimize damage from sugarcane aphid? Consider planting a tolerant hybrid. Although tolerant hybrids must be treated at the same treatment thresholds as non-tolerant hybrids, they slow the multiplication of the aphid, and may allow one treatment per season, rather than two. The United Sorghum Checkout Program has added sixteen sorghum varieties to their online list of sugarcane-aphid-tolerant hybrids (see starred entries in the table below). Be aware that this list is national and these hybrids will not be adapted to all locations. The web link to the United Sorghum Checkoff web-page is below the table.

Company	Hybrid	Maturity	Company	Hybrid	Maturity
Alta Seeds	AG1201	Early	*Golden Acres	H-390W	Med-Early
Alta Seeds	AG1203	Med-Early	*Heartland Genetics	HG35W	Med-Early
Alta Seeds	AG1301	Med-Early	*NuTech Seed	GS 636	Med-Early
B-H Genetics	4100	Medium	Pioneer	83P17	Med-Full
*B-H Genetics	3616	Early	Pioneer	83P56	Med-Full
Dekalb	DKS 37-07	Med-Early	*Pioneer	83P73	Med-Full
*Dekalb	DKS 48-07	Medium	*Pioneer	83G19	Med-Full
Dekalb	Pulsar	Med-Early	*Pioneer	86P20	Med-Early
*Dyna-Gro Seed	DG 742c	Med-Early	*Pogue	PA225	Med-Full
*Dyna-Gro Seed	M60GB31	Med-Early	Richardson Seeds	RS260E	Med-Full
*Dyna-Gro Seed	M60GB88	Med-Early	Richardson Seeds	Sprint WFG	Med-Early
*Dyna-Gro Seed	M73GR55	Med-Full	Sorghum Partners	SP 73B12	Med-Full
*Dyna-Gro Seed	M74GB17	Med-Full	Sorghum Partners	SP7715	Med-Full
*Frontier Hybrids	F279	Early	Sorghum Partners	SP 78M30	Med-Full
*Frontier Hybrids	F305	Med-Early	Warner Seeds	W-7051	Med-Full
Golden Acres	3960B	Medium	Warner Seeds	W-844-E	Med-Full

<http://www.sorghumcheckoff.com/newsroom/2016/03/28/sugarcane-aphid/>

In 2016, sugarcane aphid numbers in many parts of Oklahoma did not reach treatment thresholds until August. Planting as early as soil temperatures stabilize above 65F and utilizing tolerant hybrids may avoid some late-season damage, as well as using seed treatments to ensure early vigor and give sorghum a head start in development.

Sorghum producers must balance the yield potential of a hybrid with expected maturity dates and sugarcane aphid tolerance to maximize yield. Sugarcane aphid infestations have been spotted throughout sorghum-planting areas, with some fields infested and neighboring fields not infested. Some high-yielding varieties may justify the cost of budgeting for an insecticide treatment, knowing that it will not always be needed.

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For more detail, consult the seven videos posted on YouTube by United Sorghum Checkoff on managing sugarcane aphids:

<https://www.youtube.com/watch?v=Z55tG8EFCC0>



Save the Date!

Northwest Oklahoma Beef Conference

~Improving Efficiency for a Progressive Future~

Thursday August 31st, 2017

Featuring Burke Teichert, former Vice President and General Manager with AgReserves, Inc.

Currently, Burke is a ranch consultant and speaker and his column on strategic ranch planning appears monthly in Beef Magazine.

~

Other Fantastic Speakers on the Schedule:

Gant Mourer, OSU Beef Value Enhancement Specialist

Dr. Richard Prather, Ellis County Veterinarian

Dr. JaymeLynn Farney, KSU Extension Beef Systems Specialist

Advertising materials and a full schedule will be coming your way soon.

This is a program you won't want to miss!

Have You Evaluated Your Mineral Program?

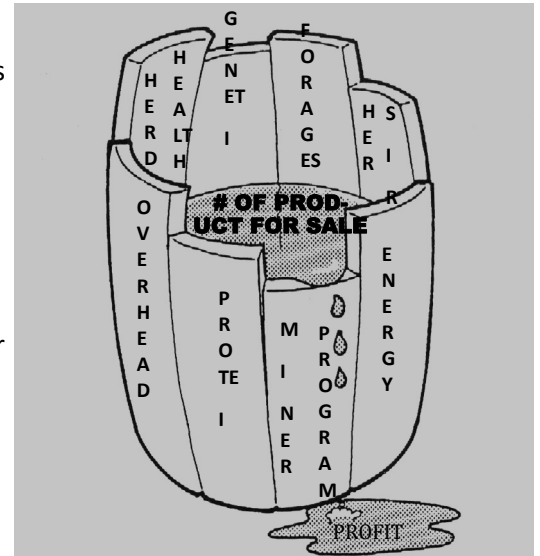
Britt Hicks, Ph.D., Area Extension Livestock Specialist

The proper balance of protein, energy, vitamins and all nutritionally important minerals is needed to make a successful nutrition program. Nutrient balance is the key to any effective nutrition program. As the spring calving season finishes up and the breeding season is approaching, evaluating your mineral program would be wise to be sure that it is optimal for the situation. As our knowledge of minerals grows, we are finding out that minerals may limit production in better-managed herds to a much greater extent than generally recognized. **The most limiting factor in an operation dictates productivity.** This concept is illustrated in the figure below. In this example, water is lost from the lowest slat in the barrel (mineral program) and the effect of other limiting factors (protein, energy, herd health, forage, genetics, etc.) would not be realized until the proper mineral program is provided. **In many operations, the mineral program is the most limiting factor.** In many grass pastures, phosphorus is frequently the most limiting nutrient. Whereas, in small grain pastures such as wheat or oats, calcium and/or magnesium are frequently more limiting.

Forage surveys have suggested that the trace minerals, copper and zinc, may be limiting nutrients in many situations. In national and Oklahoma forage surveys (~6,300 samples), the average copper and zinc levels were 6.2 and 23.4 ppm, respectively, as compared to suggested requirements of 10 and 30 ppm. In forage samples (1,113 samples) that I have collected over the last several years in Oklahoma and Texas, only 14.6% provided adequate zinc and 39.4% were adequate in copper. Cattle cannot perform to their genetic potential even if you meet over 100% of their protein and energy needs but fail to meet their mineral needs.

These surveys suggest that nearly all forages are deficient in one or more minerals and that there is a widespread occurrence of deficient levels of copper and zinc for beef cattle grazing forages. This is further complicated by the fact that the availability of minerals may be affected by the distribution and form of mineral in the feedstuff, as well as interactions with other minerals or dietary components that inhibit absorption or utilization of a given mineral. Research has shown that mineral deficiencies in ruminants fed forages often result from low availability rather than low concentration of a given mineral. Just because minerals can be found in plants does not mean they are available to the animal. Soil mineral level, soil pH, climatic and seasonal conditions, plant species and stage of plant maturity all factor into mineral content and bioavailability in forages. For these reasons, it is important that cattle be on a good, balanced mineral program to optimize performance.

Adequate minerals should always be available in any operation. Recognize the role minerals play in good health as well as fertility and growth. Frequently, the first thing a producer cuts from his program during tight times is the mineral program. Cutting the mineral program is never recommended since minerals are important in maintaining reproduction and performance. Cutting minerals out of a feeding program may reduce cost in the short term but will reduce returns and effectively increase cost over the long term. Based on my personal research and field experience with minerals over the last 30 years, I am convinced that marginal deficiencies in minerals probably are more costly to producers than are the added profits from feed additives such as ionophores.



Can Heifers be Successfully Bred on Small Grains Pasture?

Dana Zook, NW Area Livestock Specialist

It's that time of year again. Many people have made breeding decisions regarding their replacement heifers and are in the process of a synchronization protocol or natural mating protocol. With a large amount of wheat acres being grazed, producers are utilizing wheat or other small grains pasture to develop replacement heifers. Although wheat pasture is a highly nutritious and often readily available forage source, it is important to consider the possible implications of grazing heifers on these pastures during breeding as it may affect fertility.

In the past, producers who have utilized small grains pasture as a grazing resource for heifers during breeding have reported sub-par breeding performance. Why would this be? During the winter and early spring, small grains pasture provides a complete package of protein and energy, allowing heifers to achieve body weight targets by the appropriate time. However, in the digestive system of a bovine animal, excessive protein is converted to soluble nitrogen in the rumen and urea nitrogen in the blood. You may be thinking, more protein equates to better nutrition, right? Well, in most cases, yes, but in this specific instance, high amounts of blood urea nitrogen decreases uterine pH during the luteal phase which can reduce fertility. In layman's terms, a decreased pH in the uterus makes a poor environment for viable embryos and sperm, both of which are pretty crucial for successful conception.

Over the years, a number of Universities have tested this scenario but have discovered conflicting results. A Cornell University study found that Holstein heifers fed excessive dietary protein in a total mixed ration had reduced uterine pH which caused a reduction in fertility. Another trial conducted in Arkansas found similar results of lower conception, reduced pregnancy rate and increased blood urea nitrogen in heifers grazing small grains pastures.

At OSU, Dr. Selk and colleagues looked at this topic in a study published in 2011. Two trials each used 40 heifers developed on wheat pasture and were divided into treatment groups in mid-March. The first group remained on wheat pasture, and the other group was placed in the dry lot where they had access to free choice hay and a corn-based growing ration. Both groups remained in their respective treatments through estrus synchronization and fixed-time AI. Results of this trial were as follows: 1.) the percentage of heifers cycling before timed-AI was greater for wheat pasture (75%) compared to those in the dry lot (55%), 2.) dry lot heifers were heavier than their wheat pasture counterparts (897 lbs. vs. 866 lbs.), and 3.) conception rates were similar for wheat pasture (53%) and dry lot heifers (43%).

As you see, the results of these studies don't get producers any closer to a conclusion regarding management of breeding heifers on small grains pasture. However, recommendations from reproductive physiologists at OSU would be to take heifers off small grains pasture about a week prior to breeding and keep them off for about a month post-breeding. This is thought to help decrease the excessive protein in their system and neutralize the uterine environment for more improved fertility. Take time to consider alternative nutritional options for heifers during this year's breeding season. For more information about anything in the article, synchronization protocols or replacement heifers, contact your local OSU county extension educator.

Wheat Disease Management

Josh Bushong, NW Area Agronomy Specialist

Wheat in the area has been given a fighting chance with recent rainfall. Fields determined worthy of being taken to harvest now need to be managed properly to protect grain yield and quality. Pest management needs to be acknowledged as a means of protecting a profitable yield. Hopefully weeds have been controlled to this point in the season as many wheat fields have surpassed labeled application timings for many herbicides. Scouting fields for diseases and insect infestations is still a must.

Foliar applications of fungicides in recent years has gained popularity. Even with tight profit margins, OSU data suggests that if a fungicide is warranted then the application is often economical. While there are several diseases that can adversely impact wheat, leaf rust this time of year is typically of major concern. Maintaining a healthy flag leaf provides the most protection from yield loss. Leaf rust can cause as much as a 50% yield reduction. Yield losses of 10 to 35% is expected if leaf rust on the flag leaves is severe at the flowering stage and a 1 to 20% yield loss is expected at the milk stage.

There are many fungicides labeled in wheat. As with all pesticides, there are some recommended practices for disease management. First and foremost, try to plant a variety that has good disease tolerance. To delay potential fungicide resistance, it is best to utilize more than one mode of action especially if more than one application is made per year. Many fungicide products contain more than one mode of action, which can reduce the chance for fungicide resistance. The Fungicide Resistance Action Committee (FRAC) denotes group numbers for each mode of action of fungicides. The three main groups used in wheat include Triazole (group 3), SDH Inhibitors (group 7), and Strobilurins (group 11).

Application timing can be very critical to adequately protect wheat from diseases. Leaf rust can be seen in the crop for up to five to six weeks. Some 2016 OSU data indicates that most of the newer fungicides provided about 30 days of protection. Once the flag leaf is fully emerged, periodic field scouting is needed to identify leaf rust at early onset. Fungicide applications can only protect yield and cannot regain yield.

Over a 20 year period, OSU data suggests a typical yield advantage of 10% when using a fungicide correctly. Last year, the OSU fungicide trials in Stillwater resulted in an 18% yield increase when a fungicide was applied at flag leaf, as well as a 29% yield increase in yield when a fungicide was applied at jointing and at flag leaf. Crop price and yield potential are needed to estimate the potential return on investment of a fungicide application. Using a 10% yield advantage, 30 bu/A yield, and \$4 crop price a \$12/A return could be expected. This would cover most generic fungicide application costs.

The recently updated OSU factsheet "CR-7668 Foliar Fungicides and Wheat Production in Oklahoma" is a great resource for more information.



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