Meet Your New Ag Economist

My name is Scott Clawson, and I will be serving as your NE Area Agricultural Economics Specialist. I am very excited about the chance to work with you in each of your counties. While I look forward to meeting everyone face to face, I would like to start with some background information for you to get to know me a little better.

My education in agriculture started on our family farm in El Reno, OK primarily with cattle and wheat production. I attended Connors State College in Warner, OK then continued my education at Oklahoma State University where I received my BS in Animal Science. After completing my undergraduate degree, I returned to Connors State College as an instructor and livestock judging coach for four years. Then I transitioned to the University of Arkansas and completed my MS in Agribusiness. Since then, I worked for Arvest Bank primarily as an analyst and lender focusing on agriculture.

Our family now resides in Stilwell, OK where we have a small cow calf operation. I have a wife, Tiffany, and two sons, Landon and Tate.

I am eager to hit the ground running and start serving you and the producers in your counties.

Scott Clawson
Are you prepared? Evaluating your interest rate risk

Scott Clawson

Over the past few years, most producers have benefitted from the lower interest rates that have accompanied our national economic woes. Whether it has been in the form of your line of credit, cattle loan, or real estate debt, interest rates have been cheaper than at any point in recent memory. Yet, now may be as good a time as any to sit down and evaluate the structure of your outstanding debt and the implications of interest rates rising.

Operating funds and/or an operating line of credit that typically have a one year maturity or less may be impacted first. While an increase on the rate of your operating loan may not have as large of an influence on your bottom line as a rate increase on term debt, there are still some ways to manage how much interest is paid annually. Especially if you utilize a revolving credit line, take a look at your bank accounts. If you have cash sitting in your account, consider the difference in the interest rate being earned in a deposit account versus the rate charged on your loan. While you may be earning a small amount of interest in a checking or savings account, it will most likely be significantly less than what it is costing you to have money drawn on your revolving credit line. Keeping the balance of the credit line paid down will result in lowering your interest paid annually on operating debt.

A long term note, such as a land purchase, may come in the form of a fixed rate or an adjustable rate loan product. If you have an adjustable rate product, this type of loan will have a rate adjustment built in to the loan agreement. For example, this could have a period where the rate is fixed for five years and then have a rate adjustment for the following five years. If you have experienced a rate adjustment in the past several years, then chances are you benefitted from a lower payment. But remember, the same agreement that allowed that rate to fall could also cause the rate to increase in a different financial environment. This may be a good time to dig out your loan documents and evaluate when that rate change will take place, how long that rate will be fixed for, and also estimate what your payment may change to with a rate adjustment. All three of these may impact your risk position and bottom line. Gathering this information now may give you enough lead time to align your production decisions with upcoming debt obligations.

In conclusion, we can’t predict when interest rates will change or what they will change to. However, history is warning us to be prepared for higher interest rates. Take a few moments to review your loan documents to see if there may be any upcoming changes on your financial horizon.
**Rice Bran**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Average</th>
<th>Normal Range</th>
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</thead>
<tbody>
<tr>
<td>Crude Protein</td>
<td>14%</td>
<td>10% to 18%</td>
</tr>
<tr>
<td>Crude Fat</td>
<td>15%</td>
<td>8% to 23%</td>
</tr>
<tr>
<td>TDN</td>
<td>72%</td>
<td>58% to 85%</td>
</tr>
<tr>
<td>Crude Fiber</td>
<td>8%</td>
<td>6% to 10%</td>
</tr>
</tbody>
</table>

Rice Bran is a byproduct of processing rice from unprocessed paddy rice to white rice. It is the most nutritious part of the rice. However, the range of the nutritional composition is fairly variable. Due to the high fat content and finely ground texture, storage of rice bran can be difficult. The popularity of rice bran has increased significantly in the past few years. Deer hunters are one of the largest purchasers, using it as an attractant. Horse owners are using rice bran more and more due to the high fat content which provides energy for performance horses or horses in poor condition. Rice bran can be used in cattle rations but it has its limitations. With Arkansas producing almost 50% of all the rice in the United States, rice bran is located conveniently to Oklahoma but at times availability can be limited.
Recent calls on this plant have described the leaves similar to pigweed, seed pods similar to wild indigo and a milky sap when stems are broken. This perennial plant is native to sandy prairies and open woods from Arkansas west to Roswell, New Mexico where it grows 2-3 feet tall. They are especially found in the Pecos and Canadian River systems. It is an indicator of sandy soils and only increases with overgrazing and/or drought. The leaves are thick, stem-clasping, and elongate. The yellow flowers on branch tips are monoecious (individual flowers are either male or female, but both sexes can be found on the same plant). According to Dr. Terry Bidwell, who conducted research on this plant for establishment in CRP for wildlife, the seeds are about 40% fat and are a valuable source of energy for wild turkey, bobwhite quail, prairie chickens, and other wildlife. The three lobed seed pods grow right underneath the flowers. Roots are long, tapered and reddish brown to pink-brown. Control is difficult with herbicides but is seldom warranted as it displaces little forage in most situations.

Warnings: The latex in the sap can cause blistering on the skin. Large doses of the plant are said to be toxic.

So what are we looking at?

*Stillingia sylvatica* – Queen’s Delight
Growth Promoters: Implants

Earl H. Ward

Growth promoting implants have been used to boost beef production since their approval by the Food and Drug Administration in the 1950’s. Implants are approved for the use in beef cattle to increase weight gain and increase feed efficiency. There are three natural hormones (estradiol, progesterone, and testosterone) and two synthetic hormones (zeranol and trenbolone acetate) used in the beef cattle implants. Estradiol, progesterone, and zeranol are estrogenic hormones, which are hormones that affect female characteristics. Testosterone and trenbolone acetate are androgenic, which refers to hormones affecting the male characteristics.

Implants are small pellets that are inserted into the middle third on the back side of the animal’s ear, between the skin and cartilage and slowly dissolve into the blood stream. The ear is used because it does not enter into the food system. Estrogenic implants increase the amount of somatotropin and insulin-like growth factor in circulation. Androgenic implants increase the insulin-like growth factor as well as decrease the loss of muscle tissue. Some implants use a combination of both estrogenic and androgenic hormones. Since implants affect the hormone production by the animal, they are not recommended for the use in animals intended for breeding.

A multitude of implants are marketed for beef production. They will be marketed as gender specific, be targeted for a certain stage of production, and they have various levels of potency. A higher level of potency is only recommended when the increased potential can be met nutritionally. Much like an animal’s genetic potential, it would not be able to reach the implants full potential without adequate nutrition provided.

The downfalls to implants are that they reduce the amount of intramuscular fat deposition, which leads to leaner carcasses, and dark cutters and bullers become more common. However, the added value of additional pounds and decrease in cost of production outweighs any negative associations.

Drug Therapy Resistance Increasing in BRD Cases

Dave Sparks DVM

A survey of records of bovine respiratory disease (BRD) cases at the Kansas State Veterinary Diagnostic Laboratory showed that drug resistance in *Mannheimia hemolytica*, one of the primary organisms associated with BRD, increased over the three year period from 2009 to 2011. Researchers found that over that period a high percentage of the organisms recovered from cattle lungs were resistant to several of the drugs typically used to treat that pathogen. Six antimicrobial drugs were tested. Using the parameter of resistance to at least
three of the six drugs as a definition of multi-drug resistance they found that 63\% of the bacteria were multi-drug resistant in 2011 compared to 46\% in 2010 and 42\% in 2009.

Several factors are known to contribute to the development of drug resistant organisms. These include use of antimicrobial drugs when they are not indicated, improper dosing, and failure to follow label directions. Perhaps the greatest factor is discontinuance of the therapy when improvement is seen rather than maintaining drug levels throughout a full recommended course of treatment. To prevent or delay the development of resistance, always follow closely the label as well as your veterinarian’s directions.

While many of the recovered organisms were resistant to three or more of the six antimicrobials tested, none were resistant to all six. This emphasizes the importance of antimicrobial sensitivity testing that can be done easily and inexpensively by your veterinarian or the Oklahoma Animal Disease Diagnostic Laboratory. Using the right drug for the particular organisms causing your BRD problems not only helps to prevent the development of further resistance but also minimizes death loss, economic loss, labor, and animal suffering in your herd.

Forage and Hay Sampling is too Often Overlooked

Brian Pugh and Earl Ward

I have often remarked that nothing will get a producer as mad as finding a bag of purchased supplement without a feed tag, or worse yet, a supplement that doesn’t live up to the quality printed on that tag. This is odd to me that so many put such a huge stock in the quality of their feed, yet have no idea what their hay will test. Most supplements are fed at a rate of 2-6 lbs/day. A 1200 lb cow will eat 30 lbs of dry matter per day. Assuming we feed 4 lbs of the supplement, this cow will still need 26 lbs of something else, usually this is hay. This indicates the feed tag tells us the quality of only 1/8th of her diet. In this scenario the quality of the largest portion of her diet (hay) is not known. And since it is 7/8 of her daily intake it will, for a large part, determine the overall quality of the diet. Hay sampling is critical to evaluate daily nutrient intake and therefore effectively winter a cow!

Hay sampling is not difficult and should be part of a yearly routine to prepare for winter feeding. Samples can be taken from the windrow once hay has cured, but may be easier and more representative once the hay is baled at proper moisture. If hay is baled slightly green and going through a heat, wait until this process is complete before sampling. Your local County Extension Educator has sample probes that can be checked out which makes the job much easier. Much like soil sampling, getting a representative sample is critical to obtain useful information. Take cores randomly through the hay stack from at least 10-15 bales, mix these cores together and deliver to your local OSU Extension office. If you have hay from different cuttings, fields or grass species send these in separately as they will all test differently. Hay feeding strategy (feeding the worst first) and needed supplementation will be easy to calculate once samples are analyzed and the results become available. More information regarding forage and hay sampling can be found in OSU factsheet PSS – 2589.
Most producers have a protocol such as “I start feeding cubes on the 15th of November,” but how can a producer make that decision without ever looking at the nutrients that he already possesses? Is that producer spending money that is not required? Let us remember that supplementation is not just merely feeding, its purpose is to supplement the existing forage. The protein content of the hay or forage is important, but for the winter months the energy (Total Digestible Nutrients, TDN) value of a hay is the determining factor to whether the cow can maintain her body condition or not. A mature 1200 lb cow needs about 2.75 lbs of protein and about 16.5 lbs of TDN each day to meet her nutrient requirements. If your hay is testing at 10% CP and 55% TDN then your cow can meet her protein requirement by eating 27.5 lbs of hay, but must eat 30 lbs to reach the amount of TDN she needs to maintain body condition. Understanding the nutrient requirements of your cows and the protein and TDN value of your forages allows you to make educated decisions on when to start supplementation if at all.

Forage sampling has to be the least utilized test that could result in the largest impact to a producer’s bottom-line. The cost of sampling hay with the BASIC test for protein is $6/sample and the BASIC PLUS test which adds energy analysis (TDN), costs an additional $6. This $12 investment provides information on the largest portion of nutrients available for your cows’ requirements and ultimately their winter feeding costs. If this hay sample reduced your dependence on a $300/ton supplement at 4 lbs/day for one month, that would equate to a $18 savings for each cow in the herd.

Hay testing provides the information needed to establish a successful feeding plan that minimizes winter supplementation costs. Now is the time to begin considering our winter feeding strategy for the cowherd. We should put a sharp pencil to the use of forage, hay and supplementation in order to cost effectively meet the cows’ requirements.

Round Bale Feeders Worth the Investment
Brian Pugh

Hay feeding losses occur primarily from trampling, refusal, and leaf shatter. Some feeding loss is inevitable but can vary from as little as 2% to more than 50%. A study conducted by Arkansas Extension Service found that feeding round bales in open bottom hay rings reduced the amount of hay fed by 29% when compared to feeding round bales unprotected (13% loss vs. 42% loss). If a 1200 pound round bale cost $35, a 29% reduction in hay loss is equivalent to a $10.15 savings per bale. These savings from using a ring on 15 bales would pay for a round bale feeder that cost $150. Feeding 150 bales per year (1 bale per day through the winter) would save $1520, more than enough to buy one of the newer designed and highly efficient cone-style hay feeders that further reduces loss (usually less than 5% loss). It is easy to see that round bale feeders are a wise investment when free-choice hay feeding is necessary.
Dates to Remember:

August 1 - Cotton 101
Beginning Cotton Production  Altus, OK

August 6 - Current
Issues in Forage and Pasture Management
Stillwater, OK

August 8-9 - Statewide
Women in Agriculture and Small Business Conference  OKC

August 14 - August Horticulture Update

FERTILIZER PRICES

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<tr>
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<th>Average*</th>
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<td>Urea</td>
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<tr>
<td>DAP</td>
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<tr>
<td>Potash</td>
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<td>$512 - $600</td>
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*Average of 4 dealers in NE OK on 7/29/13

Value Return on Additional Calf Gain

Oklahoma Weighted Average Summary
July 25, 2013

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of $4.10 for 10 copies. 0713

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