Master Cattlemen Summit: Innovations in Cow/Calf Enterprises, Oct. 30th & 31st

For more than 10 years, Oklahoma State University’s Beef Extension team has hosted the Master Cattlemen Summit to bring you educational and hands-on learning opportunities that you can take back to the ranch. Mark your calendar for the 5th biennial Master Cattlemen Summit Oct. 30 and 31 located in Stillwater, Oklahoma. This year’s Summit invitation begins Thursday evening, October 29, with the reception in advance of the Rural Economic Outlook Conference at the Conoco Phillips OSU Alumni Center (http://agecon.okstate.edu/extension/ruralconference.asp). It continues with participation in that conference followed by an evening of fun and entertainment for past/present and future Master Cattlemen graduates. Weather permitting, on Saturday morning Oct 31st, we will travel to the Range Cow Research Center to tour ongoing research and participate in hands-on learning activities.

Day 1 (the Outlook portion of the Summit on Oct. 30) features internationally known futurist, Lowell Catlett, www.LowellCatlett.com as a keynote speaker. Other topics include:

- Big data and the role of technology, Matt Waits, CEO, SST Technology
- Soil health, William Buckner, President and CEO of the Noble Foundation
- Agricultural economics faculty research/Extension updates: Brian Whitacre and Notie Lansford
- Macroeconomic Outlook, Robert Dauffenbach, Director of Center for Economic and Management Research, OU

Outlook Panel:

- Agricultural Finance, Rodney Jones and Damona Doye
- Grain Markets, Kim Anderson
- Livestock Markets, Derrell Peel

Day 2 of the Summit (Oct 31) at the Range Cow Research Center will include discussion topics including but not limited to:

1. Future innovations in cow feeding and management in the Southern Great Plains
2. The use of semi confinement to extend forage resources and stocking rate
3. Preconditioning calves to enhance value at marketing
4. Effective technology to increase efficiency of pasture spraying
5. Cost effective brush and weed control

We look forward to seeing you in Stillwater! Please contact Damona Doye at 405-744-9836 for more information.

New Beef Genetics Education Website Launched

Megan Rolf, State Beef Extension Specialist

A new website dedicated to beef cattle genetics has been launched at the 2015 Beef Improvement Federation Conference. eBEEF.org is part of the national eXtension program with the goal of being a one-stop site for beef cattle genetics and genomics information. Beef cattle specialists from six land grant institutions have joined forces to provide educational materials that are pertinent to today’s beef cattle producers, without searching...
New Beef Genetics Education Website Launched

multiple sites or filtering through countless hits on a search. The site contains factsheets, short frequently asked question (FAQ) video clips, relevant conference recordings and webinars, a blog and links to other useful beef sites.

One of the developers of the new site, Dr. Darrh Bullock at the University of Kentucky, said “Often beef producers get frustrated when they search for information online and get information overload. We wanted to develop a user friendly site that provides information in a concise, understandable way without having to sort through enormous amounts of information.”

Only selected, peer-reviewed publications will be hosted on the website. The team is also working towards building a large group of answers to frequently asked questions in short video format. The site will also play host to archived recordings of webinars and conference presentations can be accessed through the video library. The “Ask the Expert” section of the site can be utilized to find custom answers to specific problems and covers all aspects of beef cattle production.

Another goal of the eBEEF.org website is to archive the information generated from current and future beef genetics integrated grants funded by USDA-NIFA, so that the site can be a one-stop shop for all beef genetics information needs. All eBEEF.org team members are a part of one or more of the three current grants (Integrated Program for Reducing Bovine Respiratory Disease Complex in Beef and Dairy Cattle; National Program for Genetic Improvement of Feed Efficiency in Beef Cattle; and Identification and Management of Alleles Impairing Heifer Fertility While Optimizing Genetic Gain in Beef Cattle. Another team member, Dr. Alison Van Eenennaam from the University of California – Davis, stated “A large investment has been made to develop tools to genetically improve health, feed efficiency and reproduction in cattle and we need to ensure that the information gained is available to beef producers for years to come.”

For more information or to make suggestions please contact any of the eBEEF.org team members. The other team members are Dr. Jared Decker, University of Missouri; Dr. Megan Rolf, Oklahoma State University; Dr. Matt Spangler, University of Nebraska; and Dr. Bob Weaber, Kansas State University.

Late Summer Management for Growing Cattle
David Lalman, Extension Beef Cattle Specialist

In the cattle business, there are a lot ways to spend money. Some may be cost effective (profitable) and some may benefit your business in ways beyond profitability. Others may simply relieve you of some of your income. Knowing the difference is a challenge. Most of us would consider any management intervention to be successful if the short or long-term benefits outweigh the cost. The cost of most management decisions can be determined without a lot of difficulty. The problem of course is that the benefits are not always measurable and can be variable. The purpose of this article is to provide some guidelines on expected responses of various technologies available for growing cattle so that producers can determine if they are beneficial in their situation.

Depending on how you calculate it, current value of additional gain or value of additional weight is somewhere between $1.04 per pound to $1.32 per pound. I consider the value of additional gain to be the projected value of weight gain put on cattle over time…so the future price and the future weight has been estimated or predicted. On the other hand, the value of additional weight is the difference in value of one weight class of cattle compared to another weight class on any given day in the market, assuming everything else (flesh, quality, breed, etc.) is constant.

For example, last week, 624 lb calves averaged $251.57 per cwt according to the weighted average feeder cattle report for the state of Oklahoma. Steers averaging 778 lb brought $226.65 per cwt. The difference was $203.54 more value for an additional 154 lb of weight in last week’s market. Consequently, the value of additional weight was $1.32 per lb (203.54/154). If you were to sell 778 lb steers and buy back 624 lb steers on the same day,
Late Summer Management for Growing Cattle (cont.)

you essentially traded the heavier weight for $1.30 per lb.

In some cases, the value of added weight could be market price. For example, if the market price has already been established and cattle are not projected to reach the target market weight, then additional weight gain could be worth the market price; $226.65 in this example.

The Oklahoma Gold program is designed to stimulate or maintain weight gain of growing cattle through mid and late-summer. This program can be characterized as a small package of protein supplement (about 0.4 lb of protein per day) provided during this time period and includes an ionophore feed additive such as Bovatec® or Rumensin®. Examples would be feeding about one pound per day of a 38% crude protein product or 1.5 lb per day of distiller’s dried grains with solubles plus the ionophore and minerals. The Oklahoma Gold program is particularly efficient for cattle grazing late-summer forage that is declining in quality as the forage matures. This summer in particular, I anticipate that much of our summer grass will be lower quality than normal, even though there will be a lot of it.

Through ten different experiments, the Oklahoma Gold program has resulted in an average weight gain response of 0.57 lb per head per day. In each study, cattle grazed native rangeland or bermudagrass pasture during mid and late-summer. Performance of cattle receiving Oklahoma Gold supplement were compared to the performance of cattle receiving no supplement. Consequently, this is one management practice that has been well proven to provide a consistent weight gain response under conditions where forage is abundant although declining in quality over time.

With the normal variation in the market for feed protein sources, an Oklahoma Gold supplement could cost as little as about $0.16 per day and as much as around $0.22 per day. Consider that the additional 0.57 lb of daily weight gain should be worth somewhere between $0.59 (0.57 * $1.04) and $0.75 (0.57 * $1.32). Obviously, these projections suggest that this late-summer supplementation program could be highly profitable this year.

Depending on the feed additive, this supplementation program can be delivered on an interval basis or on a daily basis. If a Gold-type feed is targeted for average consumption of one lb per day (7 lb per week), then 2.3 lb could be delivered on Monday, Wednesday and Friday, for example.

Implants will cost around $1.50 per head, give or take. This technology is expected to increase weight gain by about 12% above non-implanted cattle. Therefore, if non-implanted calves are gaining 1.5 pounds per day, implanted calves would be expected to gain about 1.68 pounds per day or 16 additional pounds over a 90-day period. Remember, those additional 16 pounds should be worth about $17 to $21.

Deworming cattle with a commercially available anthelmintic product is yet another technology that is sure to make a difference in cattle performance this summer. Response of grazing cattle to anthelmintics is extremely variable. However, due to the extreme wet conditions this spring and summer, one would anticipate heavy parasite loads in grazing cattle and in pastures. This is especially true in pastures that had not been kept clean in previous years through the use of strategic deworming practices. In general, growing cattle that are free from parasites gain between .1 to .2 pounds per day faster when compared to cattle carrying a moderate parasite infestation. Let’s assume a response of .15 pounds per day or 13.5 pounds over a 90-day period and a cost to treat calves with an anthelmintic of about $3.50 per head. This cost will vary quite a bit depending on the product you choose to use. Consult your veterinarian regarding the appropriate timing for treatment and product to use. The additional 13.5 pounds is projected to be worth about $14 to $18 using the value of additional gain calculated above.

All of the technologies mentioned enhance performance of cattle in different ways. Research indicates that the responses should be additive. Therefore, a producer has the opportunity to increase performance of stocker cattle and/or replacement heifers by as much as .8 to 1 pound per head per day. However, limited forage availability, marginal to low parasite infestation, and overall low performance of cattle are examples of conditions that would diminish the expected response to all of these “technologies”. Therefore, each practice must be considered within one’s specific current and anticipated situation.
Emergency Loan Program

JJ Jones, Area Ag Economics Specialist

Farm Service Agency (FSA) provides emergency loans to help producers recover from production and physical losses due to drought, flooding, other natural disasters or quarantine.

**Loan Uses**

Emergency loan funds may be used to:

- Restore or replace essential property;
- Pay all or part of production costs associated with the disaster year;
- Pay essential family living expenses;
- Reorganize the farming operation and;
- Refinance certain debts.

**Eligibility**

Emergency loans may be made to farmers and ranchers who:

- Own or operate land located in a county declared by the President or designated by the Secretary of Agriculture as a primary disaster area or quarantine area. All counties contiguous to the declared, designated, or quarantined primary counties also are eligible for emergency loans. A disaster designation by the FSA administrator authorizes emergency loan assistance for physical losses only in the designated and contiguous counties;
- Are established family farm operators and have sufficient farming or ranching experience;
- Are citizens or permanent residents of the United States;
- Have suffered at least a 30 percent loss in crop production or a physical loss to livestock, livestock products, real estate or chattel property;
- Have an acceptable credit history;
- Are unable to receive credit from commercial sources;
- Can provide collateral to secure the loan and;
- Have repayment ability.

**Loan Requirements**

FSA loan requirements are different from those of other lenders. Some of the more significant differences are the following:

- Borrowers must keep acceptable farm records;
- Borrowers must operate in accordance with a farm plan they develop and agree to with local FSA staff and;
- Borrowers may be required to participate in a financial management training program and obtain crop insurance.

**Collateral is Required**

All emergency loans must be fully collateralized. The specific type of collateral may vary depending on the loan purpose, repayment ability and the individual circumstances of the applicant. If applicants cannot provide adequate collateral, their repayment ability may be considered as collateral to secure the loan. A first lien is required on property or products acquired, produced or refinanced with loan funds.

**Loan Limit**

Producers can borrow up to 100 percent of actual production or physical losses, to a maximum amount of $500,000.

**Loan Terms**

Loans for crop, livestock, and non-real estate losses are normally repaid within one to seven years, depending on the loan purpose, repayment ability and collateral available as loan security. In special circumstances, terms of up to 20 years may be authorized. Loans for physical losses to real estate are normally repaid within 30 years. In certain circumstances, repayment may be made over a maximum of 40 years.

Producers interested in the Emergency Loan Program need to visit their local county Farm Service Agency (FSA) office.
Strategies to increase profitability of small and medium-sized beef cow enterprises like those most prevalent in Oklahoma are crucial to increasing the overall profitability of the industry. Following research-based recommended best management practices as encouraged by extension educational programming can help producers both manage costs and generate more gross income per cow. Cow herd management practices such as limiting the breeding season and limiting the use of harvested forages are generally more cost-effective than alternative strategies and enhance profitability, but adoption among Oklahoma cow-calf producers is inconsistent at best. Examples of recommended management practices for calves include castration of bull calves with ample on-farm time for healing prior to marketing, retention of calves on the ranch for a significant period after weaning, administering respiratory and other vaccinations with ample on-farm time post-vaccination prior to marketing – practices that when bundled together are known as preconditioning. Science indicates that calf health – and calf performance - is improved by these practices as calves move through the supply chain.

Economic studies have shown that buyers value these practices enough to pay higher market prices for such calves, relative to similar calves without these back-grounds (Williams et al. 2012). However, producers do not always adopt recommended management practices. Non-adoption among Oklahoma producers is high across many recommended practices for calf health management and marketing (Figure 1). On a positive note, the percentage of Oklahoma’s calf crop marketed as value-added increased from 3.06% in 2007 to 6.43% in 2012, but there is much room to improve in this area.

Producer-identified constraints to adoption often include a lack of technical knowledge or doubt in the returns for practice adoption. For example, producers with herds of 50-99 head are more likely to doubt returns from a 45 day
weaning period than other herd sizes. Recently, survey and marketing data has identified that adoption of castration and implantation, two very specific management practices proven to add value and increase efficiency in cow/calf operations, have been on the decline. Raper (2015) reports that of those respondents to the Oklahoma Beef Management and Marketing survey in 2010 who did not castrate bull calves prior to marketing, 44% of them indicated that (a lack of) technical education was a constraint to castration in their cow-calf operation (Figure 2). For producers who do not dehorn calves prior to marketing, 52% indicated that technical education was a constraint (Figure 2). This lack of castration could also be considered an animal welfare issue. Stress of castration on 600-700 lbs bulls is significantly more as compared 300-400 lbs animals and even more so as bulls approach 900-1000 lbs. This increased stress lowers immune response to vaccine and increase over morbidity in these larger animals. These uncastrated males also increase risk of injury to other animals and to humans as they are more aggressive and more dangerous to handle. The value to producers of marketing steers versus bulls continues to be $8-10 cwt.

Implanting of beef cattle has and continues to be one of the most relevant technologies developed to increase both biologic and economic efficiency of cattle production in the United States. Raper (2015) found 74% of ranches within the state of Oklahoma do not adopt implants as a management practice (Figure 1). These numbers are in stark contrast to finishing operations of which 99% of feedlots use implants to increase efficiency. For non-adopters, 74% list a lack of technical education as a constraint (Figure 3). That is, producers are unsure of when and how to implant feeder calves and likely are unsure of what type of implant to use. Economically, this increase in efficiency of resources can account for 18 lbs or more in a 180 day grazing system. This increase in weight is not at the expense of increased inputs. In the current market situation, 18 lbs extra weight is worth $23.40 (at $1.30 value of gain) with a cost per implant of approximately $2.00.

Increasing adoption rates of basic recommended management practices in beef production increases market access for small and medium-sized farmers, particularly as producers begin to bundle various management practices together, such as the bundle of on-farm calf health management practices known as preconditioning. The implications for future calf health and quality make those calves more attractive to buyers and increase the probability of premiums. Adoption of basic recommended production and management practices for cow herds can decrease input costs and increase the economic viability of Oklahoma’s beef industry.


As we move into the dog days of summer, we start to plan ahead for what might await this winter for our cow herds. Both fall and spring calving cows are going to need a change in nutrition and management, as we will be moving into weaning or calving season this fall. These preparations may include a late summer burn of pastures, figuring how much hay to cut and bale or even may be building new facilities. As busy as we are, we may still find we need a quick reference for our cow herd to accomplish our goals.

**Top 10 Quick References**

1. On average, a cow will eat one round bale of hay per month.
2. A hay ring can reduce hay waste by 10% or more.
3. Cattle drink 1 gallon of water for every 100 lbs of body weight in winter or 2 gallons of water for every 100 lbs of body weight in summer.
4. A 50 lbs bag of mineral should last 10 cows about a month.
5. Cows need 30-40 ft² of shade per head.
6. 7-9-11, Cows require 7% CP feed during mid-gestation, 9% CP during late gestation and 11% CP during lactation.
7. Cattle need about 24 inches of bunk space per head.
8. Cattle consume 1.5% of body weight of low quality forage per day, 2% of their body weight of medium quality forage and 3% of high quality forage.
9. Wheat pasture lease prices are typically about 2/3 of current feedyard cost of gain.
10. An increase of 10 cents per bushel of corn will reduce feeder cattle price by about 80 cents per hundred weight.

Before relying on any of these references, consider that cows and situations can vary. Your Extension specialist, nutritionist, or veterinarian can help you make more accurate calculations for your herd. The quick references above are useful, but they aren’t guaranteed!

---

**2014 Farm Bill Signup Results**

*Eric A. DeVuyst, Professor, Farm & Production Management*

USDA recently released summary statistics on farms and acres electing each of the farm bill programs. For a few crops, Price Loss Coverage (PLC) was clearly the most likely to provide payments to producers given the level of support (reference price) and current market prices. Canola and peanuts, for example, are crops with high reference prices relative to current market prices. Elections for these crops reflect those ratios. Few of Oklahoma’s producers elected Ag Risk Coverage-Individual (ARC-IC). Under ARC-IC, all the farm’s base acres for all crops are enrolled in this option. This option was forecasted to be attractive only if a producer had very high yields or very low yields relative to county average yields. Given that ARC-IC only pays on 65% of base acres, as opposed to 85% under Ag Risk Coverage-County (ARC-CO) and PLC, few producers preferred this option.

From the table below, 89% of Oklahoma canola producers controlling 95% of canola base acres elected PLC. The reference price for canola is $10.075 per bushel with the 2014-2015 cash price expected to average around $8.56 per bushel, so PLC was a very obvious choice. Similarly, peanuts have a reference price of $0.2675 per pound and an expected 2014-2015 average price of about $0.2169 per pound. So, 97% of Oklahoma producers responded by electing in PLC, totaling 99% of Oklahoma’s peanut base acres. Nationally, producers also responded to the relatively high reference prices for canola and peanuts with 97% of canola base acres and nearly 100% of peanut base acres enrolled in PLC.

Oklahoma’s main crop, wheat, did not have a program with a clear advantage, so producers and acres were not as definitively elected into any one program. Oklahoma’s wheat farmers elected to put 62% of base acres in ARC-CO and 38% of base acres in PLC. For 2014-2015 marketing year, wheat price is expected to average about $6.05 per bushel. With a reference price of $5.50, there will not be a PLC payment for the 2014-2015 marketing year. ARC-CO payments will vary by county based on yields, but many
2014 Farm Bill Signup Results (cont)

Oklahoma counties will receive ARC-CO payments for 2014-2015. Nationally, 56% of wheat base acres were enrolled in PLC with 42% in ARC-CO.

The majority of Oklahoma’s corn and soybean farmers also elected ARC-CO. Soybean base acres broke 94% for ARC-CO and 78% of corn base acres were elected in ARC-CO. The reference prices of $8.40 (soybeans) and $3.70 (corn) are not likely to result in sizable PLC payments for the 2014-2015 marketing year. Grain sorghum base was split more evenly with 53% elected in PLC and 47% in ARC-CO. PLC payments for sorghum look about unlikely for 2014-2015 marketing year and will likely be a few cents per bushel if triggered. Nationally, 93% of corn base acres were enrolled in ARC-CO with only 7% in PLC. Even more striking, 97% of US soybean base acres were placed in ARC-CO and a mere 3% in PLC. US grain sorghum base acres went 33% for ARC-CO and 66% for PLC.

While producers previously elected acres into these farm bill programs, they still need to complete the enrollment process by returning to their local FSA offices before September 30, 2015.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percent of Farms Electing</th>
<th>Percent of Bases Electing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PLC</td>
<td>ARC-CO</td>
</tr>
<tr>
<td>Barley</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Canola</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Corn</td>
<td>37%</td>
<td>63%</td>
</tr>
<tr>
<td>Dry Peas</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>G. Sorghum</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Lentils</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>LG Rice</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Oats</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>Peanuts</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>Safflower</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Sesame</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>Sunflowers</td>
<td>52%</td>
<td>42%</td>
</tr>
<tr>
<td>Wheat</td>
<td>37%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Farmland Sales and What the Leasing Parties Need to Know

If you sell the farm, what happens to the lease on the land? If there is a written lease agreement, its terms will govern any procedures for early termination of the lease. If it contains no such terms, early termination of the lease would constitute a breach of the lease, meaning the tenant could seek damages for, among other things, the costs incurred in finding and renting comparable land.

If there is no written lease on the property (i.e. the lease was oral), then to be enforceable it can only serve as a one-year periodic lease, meaning it renews on one-year intervals (with those intervals generally defined by the date rent is paid) automatically renewing unless either the landlord or tenant provides written notice to the other at least three months before the next renewal date that they wish to terminate the lease.

Under Oklahoma law, a purchaser of the property would “step into the shoes” of the previous landlord. That is, the lease would continue in effect as to the new landlord. However, if there is a written lease, the lease could provide that sale of the property terminates the lease interest, though that is relatively rare.
Cow Bid Price Estimate Calculator

Recent rains and abundant forage along with continued high calf prices encourage thoughts of cow herd expansion. However, purchasing replacements will be costly. How much is too much to pay? The maximum price that can be paid for a replacement is based on an evaluation of profit potential associated with that replacement over her expected life. That profit potential is a function of expected revenues and costs in future years. Calf prices are projected to be at historically high levels for several years. Feed prices have moderated from record highs. While interest rates are expected to increase before year end, they remain at historically low levels. All these factors build expectations of future profits.

The Cow Bid Price Estimate Calculator calculates the net present value of a cow purchase. It also estimates financing requirements and rates of return on investment. This spreadsheet tool helps users see if an investment makes financial sense. Pre-tax cash flows are calculated based on numbers entered by the user. Users enter the purchase price for a cow or cow/calf pair plus information on projected future calf prices and weights, cull cow price and weight, number of calving opportunities, and cow operating cost per year. The spreadsheet calculates interest payment, principal payment, debt service requirement, cash flows available for debt service, and net cash flows if financing the purchase of the cow. A range of scenarios can easily be evaluated to assess the likelihood of a positive cash flow. This simple Excel spreadsheet helps users consolidate the multi-year budgeting problem into a manageable framework and appropriately accounts for the time value of money.

The example shown here illustrates a recent calculation showing that if the user believes calf prices will remain relatively high (from a historical perspective) for the foreseeable future and the producer is better than average at controlling costs, then investing upwards of $3,600 in a ready-to-calve replacement female would still yield a positive return over time (positive NPV). Of course, calf prices may not remain as high as projected in the illustration, and the user must also allow for other risk realities (like a certain percentage of females that fail to re-breed, die, etc.). But, the illustration points out that the current “value” of young beef replacements is currently at shockingly high levels. After factoring in some aforementioned risks and other considerations, values could still realistically be placed at $2,500 plus per replacement female.

This OSU Cow Bid Price Estimate Calculator and additional OSU software tools may be accessed online at: http://agecon.okstate.edu/extension/software.asp

The Oklahoma Cooperative Extension Service along with USDA’s Risk Management Agency is pleased to announce the annual conference for women in agriculture and small business, August 6-7, in Oklahoma City at the Moore-Norman Vo Tech Center. The 2-day conference offers a variety of sessions to assist participants in successfully managing risk for their families, farms and/or businesses. Twenty concurrent sessions will be offered from three tracks—agriculture, alternative enterprises and business & finance—with participants able to choose whatever session is of most value to them.

The registration fee is $50 per person by August 1 or $60 per person after August 1. The registration fee includes two breakfasts, two lunches, and all breaks. The registration brochure, agenda, hotel information and more can be found on the Oklahoma Statewide Women in Ag website at: http://www.okwomeninagandsmallbusiness.com/. For questions, please call or email Sara Siems at 405-744-9826 or sara.siems@okstate.edu. To register over the phone, please call 405-744-9836.

We hope you’ll join us!