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2016 Rules for Section 179 Expensing and Bonus Depreciation

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For the first time in several years, the current tax year rules for the Section 179 Expensing Election and the Additional First Year (Bonus) Depreciation have been established before the December legislative recess. This will provide an opportunity to make tax management decisions in a timely manner. The following discussion presents the rules for 2016 that apply to both the Section 179 Expensing election and Bonus Depreciation provisions.

The Section 179 expensing election has been made permanent for this and future tax years. The Section 179 expensing deduction allows a business to write off (much like depreciation) all or a part of the cost of qualified business use property in the year the property is purchased and placed in service. The maximum amount that can be expensed for 2016 is \$500,000 of the cost of qualifying property with a phase-out beginning at \$2,000,000 of qualifying property investment. The phase-out affects the amount that can be expensed as explained in this example. Ron Rancher purchased a total of \$2,100,000 of depreciable property that qualifies to be expensed. The \$500,000 maximum amount is reduced by \$100,000 (\$2,100,000 - \$2,000,000) thus he can only expense \$400,000 of the investment. Qualifying property includes business property such as new or used machinery, equipment, cattle feeders, a single purpose livestock or storage facility and purchased breeding livestock.

Additional first-year depreciation has been extended but was not made perma-

nent. For 2016, 50% of the cost of new depreciable property that is placed in service during 2016 is eligible for this treatment. Therefore if Ron purchases and places in service a new feed truck for \$60,000, he can take a bonus depreciation deduction of \$30,000 plus the standard amount of MACRS depreciation allowed of \$4,500 (\$30,000 x 15%) for the truck. Unlike the Section 179 rules, there is not an investment limit on the amount of Bonus depreciation that can be utilized but the property must be new.

Beyond the 2016 tax year, the section 179 expensing annual amount allowed and the investment limit will be indexed for inflation. However, the additional first year or bonus depreciation has only been extended through the 2019 tax year. The percentage allowed for 2018 is 40 percent and for 2019 is 30 percent. If the feed truck is purchased in 2018, \$24,000 of bonus depreciation will be allowed (40 percent of \$60,000) plus normal depreciation of \$5,400 (\$36,000 x 15%). Beginning with the 2020 tax year, the Additional First Year Depreciation has been eliminated.

For additional information about the depreciation rules and how they apply to your specific situation, contact your tax advisor.

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Creep Feeding in 2016, Do the Numbers Work?

Scott Clawson, NE Area Ag Econ Specialist

A highly debated and researched topic that has an impact in most cow/calf operations through the year is creep feeding. Much of the debate centers on feed conversion. Stated another way, how many pounds of creep feed does it take to make a pound of gain? The issue of conversion will not be solved today. However, as ranch managers we can look at current feed and cattle prices to know if we are in the range of prices that could make creep feeding viable this year.

So what are the markets, both feed and cattle, telling us about this year?

Shown to the right is a table that shows the combination of feed costs, conversion rates and the corresponding feed cost of gain (FCOG). The FCOG is telling

us what it is costing in feed to get an additional pound of gain. The caveat to this number is that it does not take into account the other costs associated with the process, like equipment, labor, etc. Still, calculating a FCOG is a great place to start.

The second piece of the story is the income side of the equation. The Value of Gain (VOG) is in the far right column. This calculation shows the change in calf value for every pound of gain added between the starting and ending weights. If the VOG is greater than the FCOG, then creep feeding may be viable this year. At this point we would need to check the cost of time, any equipment needs, etc. to determine if we should creep feed. A quick caution about this VOG

calculation is that we are looking at today's prices to value the ending weight. As the ending weight would happen at some point in the future, this is only an estimate.

Comparing FCOG and VOG is step one to determining if creep feeding will pay this year. Cheap feed and high cattle are the first ingredients to signal the need for some calculations and figure out what our VOG and FCOG are for the current year. If feed prices get high, then you would have to anticipate exceptionally high cattle prices to make the equation

work. At the end of the day, conversion rates vary. Find a researched backed publication that mostly resembles your operation and use it as a guide.

Feed Costs		Feed Conversion Rate					
\$/ton	\$/bag	5:1	7:1	9:1	11:1	13:1	15:1
\$ 200	\$ 5.00	\$ 0.50	\$ 0.70	\$ 0.90	\$ 1.10	\$ 1.30	\$ 1.50
\$ 225	\$ 5.63	\$ 0.56	\$ 0.79	\$ 1.01	\$ 1.24	\$ 1.46	\$ 1.69
\$ 250	\$ 6.25	\$ 0.63	\$ 0.88	\$ 1.13	\$ 1.38	\$ 1.63	\$ 1.88
\$ 275	\$ 6.88	\$ 0.69	\$ 0.96	\$ 1.24	\$ 1.51	\$ 1.79	\$ 2.06
\$ 300	\$ 7.50	\$ 0.75	\$ 1.05	\$ 1.35	\$ 1.65	\$ 1.95	\$ 2.25
\$ 325	\$ 8.13	\$ 0.81	\$ 1.14	\$ 1.46	\$ 1.79	\$ 2.11	\$ 2.44
\$ 350	\$ 8.75	\$ 0.88	\$ 1.23	\$ 1.58	\$ 1.93	\$ 2.28	\$ 2.63

Weight	\$/lb	Value/hd	Added lb.	Added \$	\$/lb Added
382	\$ 1.70	\$ 649.40			
434	\$ 1.56	\$ 677.04	52	\$ 27.64	\$ 0.53
484	\$ 1.54	\$ 745.36	50	\$ 68.32	\$ 1.37
522	\$ 1.46	\$ 762.12	38	\$ 16.76	\$ 0.44
580	\$ 1.44	\$ 835.20	58	\$ 73.08	\$ 1.26
633	\$ 1.39	\$ 879.87	53	\$ 44.67	\$ 0.84
662	\$ 1.36	\$ 900.32	29	\$ 20.45	\$ 0.71

Based on OKC Weighted Avg 6/24/16 via USDA AMS KO_LS794

What Does Grazed Forage Cost?

Derrell S. Peel, Extension Livestock Marketing Specialist

Feed cost is the largest cost component of cow-calf production costs. Total pasture plus non-pasture feed costs typically represent 45-50 percent of total annual costs per cow (Dhuyvetter and Herbel). Controlling feed costs is essential to maximize cow-calf returns. The principal investment in most ranches is land. The feed management objective is to best utilize pasture production of that land supplemented by non-pasture feed as needed seasonally to provide proper nutrition for cows and maintain optimal herd productivity. In many instances, there are opportunities to tradeoff pasture for non-pasture feeds to meet nutritional requirements. It is important for producers to understand what pasture really costs in order to evaluate tradeoffs of pasture for more costly feeds such as harvested forages or purchased energy and protein supplements.

Reported pasture rental rates provide a means to estimate the cost of grazed forage. Table 1 shows calculated grazed forage cost for various forages utilized in different regions of Oklahoma. Despite wide variation in reported rental rates and stocking rates,

the cost of pasture is quite consistent at roughly 1.5 cents per pound of grass or about \$0.45/head/day for forage cost. Grazing capitalizes on the ability of cows to harvest forage and eliminate costs associated with harvesting, hauling, storage, feeding and wastage for hay.

How does hay cost compare to grazed forage cost? Bermuda hay (good quality) was quoted in mid-May at \$50-65/bale for large (5x6) bales in central and eastern Oklahoma. Local hauling will add about \$5/bale so the average price is \$62.50/bale. If those bales weigh the expected 1500 pounds, the cost is \$83/ton. (If the bales weigh five percent less, i.e. 1425 pounds, the cost is \$88/ton!). Storage and feeding losses of 15 percent can be expected with round bales assuming average to above-average management. Thus, 1700 pounds of each ton of hay purchased will be consumed by cows. The losses can easily be more than 15 percent. The \$83/ton hay cost results in feed cost of 4.9 cents per pound when losses are accounted for (Table 1). This results in feed costs of \$1.47/head per day. This does not include

Table 1. Calculated Grazed Forage and Hay Cost

	Type of Forage				
	Native (State average)	Bermuda (State average)	Old World Bluestem* (W. Okla.)	Fescue (E. Okla.)	Bermuda Hay
Pasture rental rate, (\$/acre/year)	\$13.39	\$21.05	\$15.25	\$25.86	\$83/ton
Stocking rate, Spring calving cow-calf (acres /cow)	9.1	5.5	9.0	3.5	
Grazing season (days)	265	270	285	180*	1700 lbs. available forage
Calculated cost of forage (\$/pound)^	\$0.015	\$0.014	\$0.016	\$0.017	\$0.049
Range across regions	\$0.012-\$0.018	\$0.012-\$0.014			

*Adapted from several sources. Assumes 30 pounds of forage per cow per day. Principal Source: Oklahoma Pasture Rental Rates: 2014-2015, CR-216, Oklahoma Cooperative Extension Service

What Does Grazed Forage Cost? (cont.)

any additional labor, fuel or equipment cost to feed the hay. Raised hay may not have the hauling costs but should be valued at the market price and results in hay costs of 4.5 cents per pound or \$1.35/cow/day. Hay quality is a separate issue but is critical to understand the actual cost of nutrients for hay versus grazing or other purchased supplement feeds.

It seems likely that many operations could extend grazing by one, two or more weeks simply with a little planning and better summer grazing management with little or no change in costs. The analysis above suggests that every day of grazing and not feeding hay saves \$1.02/per cow (\$1.47-\$0.45) in cost or, for example, \$14.28/cow every two weeks. Again, feed quality matters and these decisions must account for nutritional implications.

Additionally, stockpiled forage is another way to extend grazing and reduce hay needs. Forage type and climate determine what is feasible using stockpiled forage. Native pastures can be deferred in the summer and may retain good quality through much of the winter in drier climates (western Oklahoma) providing the same \$1.02/day in feed cost savings for each additional grazing day. Both Bermuda and Fes-

cue can be stockpiled for fall/winter use with deferred late summer grazing and additional fertilization. Given current fertilizer costs, the cost of stockpiled grass is estimated at 2.2 cents per pound for Bermuda (\$0.66/cow/day) and 2.7 cents per pound for Fescue (\$0.81/cow/day). On average, an acre of stockpiled Bermuda can provide up to 50 days of grazing for a cow which, compared to feeding hay, saves \$0.81/day or \$40.51/cow. An acre of stockpiled Fescue can be expected to provide 40 days of grazing for a cow, and saves \$0.66/cow/day or \$26.40/cow compared to feeding hay. In wetter regions (southern and eastern Oklahoma), the quality of stockpiled forage can deteriorate rapidly in the winter so the extent of use of stockpiled forages must be planned and managed carefully. However, the payoff to enhanced management can be substantial. In many cases, \$50-\$100 in cost savings per cow is possible, which is a direct contribution to per cow net returns.

Dhuyvetter, Kevin and Kevin Herbel, "Feed Costs: Pasture vs Non-pasture Costs" AgManager, Kansas State University, August 2013.

http://www.agmanager.info/livestock/budgets/production/beef/FeedCosts_2015.pdf

Oklahoma's Agricultural Land Market Stays Resilient

Roger Sahs, Assistant Extension Specialist

The latest trends and patterns in Oklahoma's agricultural real estate landscape have been updated through 2015 and can be found at <http://agecon.okstate.edu/oklandvalues/> Statewide statistics, regional comparisons, and county summaries are presented in chart and tabular form (see chart example below). Cropland and pasture tracts are defined as having 85%+ cropland and pasture utilization respectively. The Farm Credit Associations of Oklahoma provided information on 1335 sales tracts that were considered representative of the 2015 agricultural land market. This provides a perspective into the characteristics of recent sales as well as benchmark indicators for studying trends over time.

Our study reveals that average values for all agricultural real estate held firm in 2015 and increased 6.3% over 2014. Pasture values increased 5.1% and were supported by improved forage conditions along with continued, albeit lower, profits in the cattle sector. These conditions encouraged further herd expansion in Oklahoma and a steady demand for pasture acreage. Ranchland values for the remainder of 2016 will feel a downward pressure from the prospect of weaker profit margins due to declines in the cattle markets.

Cropland values in Oklahoma also held firm and increased a modest 4.7% despite lower prices in the grain markets. Improving weather conditions provid-

Oklahoma’s Agricultural Land Market Stays Resilient (cont.)

ed a boost in wheat production compared to the disastrous 2014 crop and the cotton crop was the best in years. The growth in cropland values has generally exceeded ranchland over the past several years. However, commodity prices appear to have moved to a new, lower plateau and current projections show poor profit margins with average costs and yields. Therefore, cropland values are expected to hold steady for the near future.

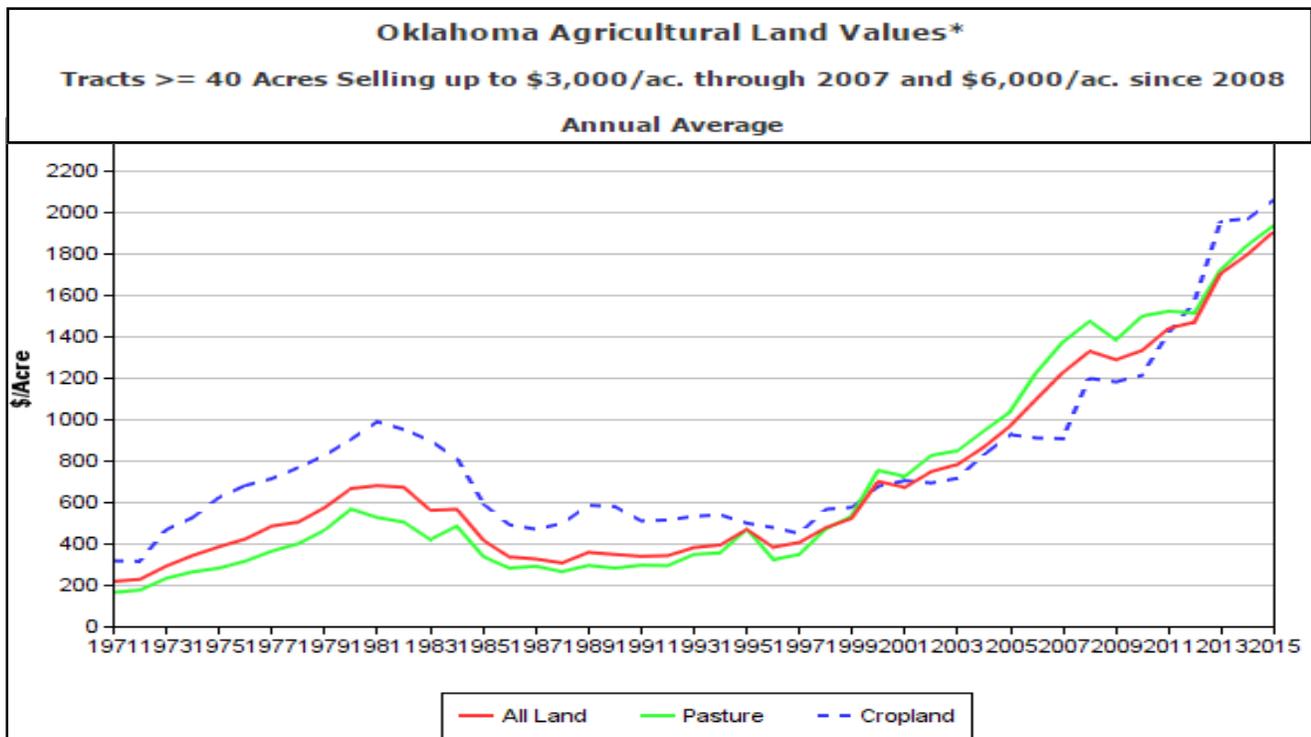
Although crop and cattle prices have declined relative to recent years, several factors have played a positive role on agricultural real estate values in Oklahoma. Most producers still have strong equity positions in their balance sheets and interest rates remain very reasonable for those who seek debt financing. Income from recreational interests offers support in many areas of the state. However, moderating farmland values may create concerns for some farmland real estate borrowers who have become highly leveraged with large amounts of debt and poor liquidity to service it. This situation warrants close attention especially if forecasts for diminishing commodity prices are realized for the next several years.

In conclusion, the Oklahoma farmland real estate market remains resilient in the face of lower prices in the grain and livestock markets. It appears that most agricultural producers still have ability to mitigate their exposure to risk in this new price environment. However, producers who bet on high commodity prices and aggressively expanded or borrowed heavily in recent years may face significant debt repayment issues. A slower growth in agricultural real estate values is expected for the remainder of 2016.

Other sources of land value information can be found at:

Agricultural Land Values, National Agricultural Statistics Service, USDA. <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1446>

Survey of Tenth District Agricultural Credit Conditions, Federal Reserve Bank of Kansas City. <https://www.kansascityfed.org/research/agriculture>.



Watching For Signs of Financial Stress

Damona Doye, Extension Farm Management Specialist

Many producers in the Corn Belt are experiencing significant financial stress associated with lower crop prices, continued high rental rates negotiated when the profit outlook was much better, little if any decrease in other input prices, and in some cases, debt repayments associated with new asset purchases. Educators and lenders there are worried about the potential for worsening of producer's financial situations with spillover effects on agricultural land values as well as other agribusinesses and rural communities. Often the first and worst hit are new and beginning producers who do not have equity reserves on which to draw; they tend to be the most highly leveraged and vulnerable.

While neither rental rates nor land values increased as dramatically in Oklahoma as happened in states with corn and soybeans as principal crops, softening of record high cattle prices may lead to financial stress for operators who started new operations or expanded quickly or significantly after the drought, particularly if they bought cows at record high prices. And, now in hindsight, from Kansas Farm Management Association data reported by Pendell, Kim and Herbel, we can see just how high returns over variable costs for the cow/calf sector were in 2014 compared to historical values (Figure 1); profits (returns above all costs to include fixed costs) were likewise phenomenal (Figure 2.) Now, producers must be vigilant with regards to cash flow in the near term as well as profitability longer term.

While monitoring the cash balance in the checking account is a necessary business practice, it is not suf-

ficient to understanding business liquidity. Of great concern to agricultural lenders (and hence also to producers) is working capital, which measures the business' ability to meet financial obligations as they come due. Working capital is calculated by subtracting total current liabilities from current farm assets. Current liabilities include accounts and short-term notes payable, interest and principal payments on long-term debt, accrued income taxes, and other accrued expenses while current farm assets include cash, marketable securities, accounts receivable, and invento-

ries of assets that can be easily converted to cash such as feed and hay. Working capital is the amount of cash left to purchase inputs and inventory items if the business sold all current assets and paid all current liabilities.

Let's work through an example: Rancher Rob has an operating line of credit with \$55,000 outstanding plus a land note with approximately \$22,000 in principal and interest payments due in the next 12 months (\$250,000 was borrowed for 25 years at 7.5 percent interest to purchase 160 acres at \$1,750 per acre with a \$30,000 down payment) plus anticipated tax payments of \$8,000; Rob has \$85,000 in current liabilities. If Rob's farm has \$10,000 in the checking account, \$20,000 in prepaid rent, \$15,000 in hay sales for which payment is expected this month, hay inventory valued at \$27,500

(500 bales at \$55 per bale) plus market livestock valued at \$15,525 (23 head at 450 lbs x \$150/cwt), Rob has \$88,025 in current assets. Working capital in this case is $\$88,025 - \$85,000 = \$3,025$, not much of a cushion. Consider doing a similar calculation for your

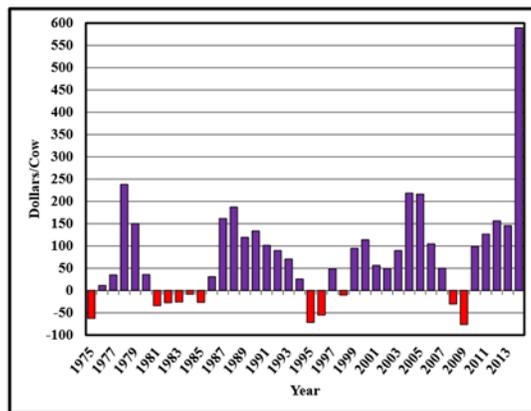


Figure 1. Returns over Variable Cost for Cow-Calf Enterprise, 1975-2014

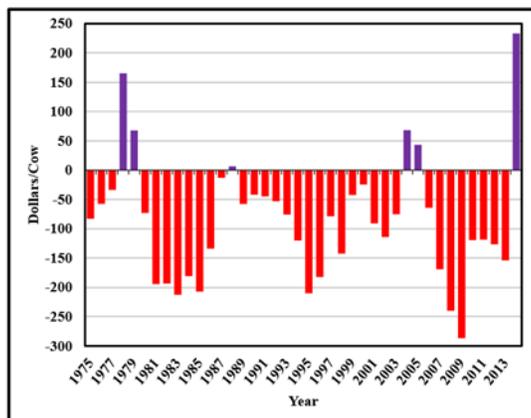


Figure 2. Returns over Total Cost for Cow-Calf Enterprise, 1975-2014

Watching For Signs of Financial Stress (cont.)

operation. If you need help identifying current assets and liabilities, refer to AGE-752, Developing a Balance Sheet, for more information, available at osufacts.okstate.edu.

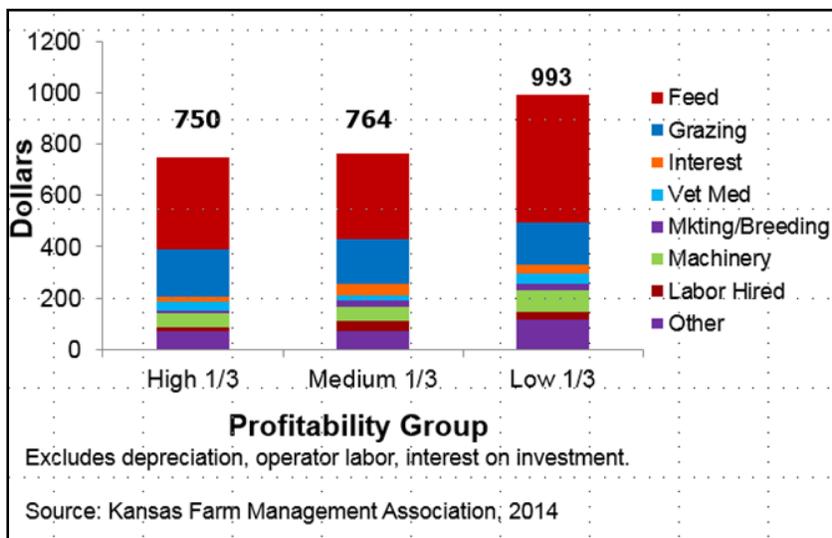
Generally, working capital should be positive, but the amount needed depends upon the type and size of business. Seasonal borrowing and repayment of credit lines or operating notes will cause the measure to fluctuate in value during the year. Some farms have relatively few current assets with significant current liabilities at a point in time. While having negative working capital temporary doesn't mean the operation will be forced out of business, it indicates a liquidity problem which should be subject to further evaluation.

To anticipate possible changes in working capital, you may want to develop a budget or budgets based on your farm activities. For instance, if you have a cow/calf operation, use a tool like the one found on agecon.okstate.edu/budgets to estimate the calf and cull sales and operating input expenses, including pasture, hay, grain, protein supplement, veterinary and medicine, marketing, labor, and machinery expenses. Any returns above operating costs yield cash that adds to current assets and can be contributed to cover fixed costs.

Don't fool yourself. There is a great deal of variability in the cost of production across operations as

shown in the KFMA chart below. Are you a low cost producer or not? If you don't have a good record keeping system, you can't honestly answer this question. If you are still relying on a shoebox or notebook, consider investing some time in learning to use a software package that will make sorting and summarizing data easy. If you want to better understand your profit and loss centers, think about tracking income and expenses for the different enterprises in your farm: cow/calf, wheat, canola, stockers, alfalfa, etc. While there is value in diversification, understanding the financial contributions of each to the farm's cash flow and profitability is important. Step-by-step instructions on how to adapt Quicken for farm use along with a file to import farm categories that match Schedule F for tax purposes are available on our website, agecon.okstate.edu/quicken.

If you have multiple employees on payroll or jobs that require invoicing and tracking accounts payable and receivable, QuickBooks or similar programs might be a better option for you. Read more about the advantages of each of these software tools in AGE-266, "Quicken or QuickBooks: What's the Best Choice for Agricultural Producers?" on osufacts.okstate.edu.



Upcoming Events

Merck Animal Health and OSU Cooperative Extension Cattle Conference, July 16. Free and open to the public, the conference will be 1:00—7:00 p.m. at the Grady County Fairgrounds and Event Center, in Chickasha. Dinner will be provided in part by the Beef Check Off and the Oklahoma Beef Quality Assurance Program. To RSVP for the conference, call 405-744-6060 or email Gant Mourer at gantm@okstate.edu by July 11.

Women in Agricultural and Small Business Statewide Conference, August 4th and 5th at the Moore-Norman Technology Center, 13301 S. Penn Avenue. The two day conference offers a variety of sessions to assist participants in successfully managing risk for their families, farms and/or business. Registration is \$50 per person by July 29 or \$60 at the door. For more information visit <http://okwomeninagandsmallbusiness.com/> or contact Sara Siems at 405-744-9826 or sara.siems@okstate.edu.

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