

WEST CENTRAL MISSOURI
SPRING 2009

Comparing feeding methods

Studies in Iowa and Kansas show that 52 percent of the difference from the most profitable to the least profitable beef herds can be explained by feed costs. Feed costs have such a large impact on profit, beef producers need to look at ways to reduce them. Feed expenses include hard feed like corn and other grains, hay and pasture.

What is the difference between the two operations described here? Simply put, one farmer manages his forage much better. By splitting the pastures into paddocks, grass wastage tumbles. The improved rate of grass use reduces the number of acres required for each cow. As management improves, the opportunity to stockpile fescue for the fall increases. This enables strip grazing into early winter, further reducing hay costs. The comparison of these two operations confirms the best way to increase beef profits is to reduce feed costs.



a look ahead

May 15 - Missouri Century Farm applications due

Fee \$40 before April 30 and

\$50 after that date

extension.missouri.edu/centuryfarm

June 12-13 - Master Gardener Tour

Master Gardeners of Greater Kansas City

816.252.5051

The economic impact of grazing efficiency

Beef producers who turn cows out in a pasture and do nothing to manage the grazing patterns or split the pasture into paddocks experience a 30 percent to 35 percent utilization of the total grass produced. That means for every 100 blades of grass grown, the cows harvest about 35; the rest are wasted.

This system requires four or more acres to support a cow and calf. Assuming land rent or land costs are \$40 per acre, pasture costs alone can translate to \$160 or more. If hay requirements are 2 to 2.5 tons, hay costs can run up to \$100. The feed costs can be up to \$260 per cow.

What kind of return does this system generate? Four acres per cow at \$1,500 per acre is a land investment of \$6,000. Assume \$800 per cow and add another \$300 in equipment, for a total investment of \$7,100 per cow. Assume the calf brings \$625 and subtract \$260 for feed costs, which leaves \$365. Further reduce the income for replacement calves, with a 15 percent allowance for the cows that do not calve. That leaves \$177

to cover remaining costs, including breeding, minerals/salts, medications, equipments and interest. The return for this scenario is bleak at best.

On the other hand, there are farmers in the West Central Region who use as few as two acres per cow and feed hay for less than 60 days and usually less than 30 days. Estimate feed costs as low as \$80 for the pasture and \$40 for the hay for a total of \$120. The difference in feed costs creates an extra \$140 to cover other production costs.

This operation certainly provides a higher return with a much lower investment. On these farms, improved forage management techniques increase use of the grass. This reduces the necessary total investment per cow by as much as 42 percent, generating a much larger profit and return on assets.

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Selecting the right cultivar

Tomatoes are described as either determinate or indeterminate plants. A determinate tomato plant grows like a bush to a certain size (about 3 to 5 feet), flowers, sets fruit and then declines. An indeterminate plant continues to grow, flower and set fruit until frost kills the plant.

A few recommended hybrid determinates for this area are Celebrity, Florida 47, Florida 91 and Mountain Fresh. Hybrid indeterminate recommendations include Jet Star, Early Girl, Pink Girl and Big Beef.

One standard cherry tomato plant is usually sufficient for an average family because they generally produce abundantly. Grape tomatoes, which are more elongated, are becoming popular.

Gardeners also have the choice of growing open-pollinated heirloom cultivars such as Brandywine, Cherokee Purple, Green Zebra and German Stripe. Many of these older cultivars are available in local nurseries.



Productive techniques for growing tomatoes

Common problems with this vegetable can be avoided by selecting resistant varieties.

Tomatoes are warm-season plants that should be planted only after the danger of frost has passed. The best time to transplant tomatoes in this area is May 5 to 25. Choose tomato transplants with straight, sturdy stems about the thickness of a pencil and about 8- to 10-inches tall. Normally six to eight weeks are needed to produce this type of plant from seed.

Many hybrid tomato varieties are available for planting. Fusarium and Verticillium wilts are two common problems that can be overcome by selecting resistant varieties.

Tomatoes grow best when they receive full sunshine. A deep, loamy soil, well-drained and supplied with organic matter is most suitable. The optimum soil pH is 6.2 to 6.8.

Apply a 1-inch layer of organic matter (compost,

manure, etc.) to the vegetable garden soil every year. In the absence of a soil test (available at your local MU Extension Center), the general fertilizer recommendation is to apply 5-10-5, 5-10-10 or a similar fertilizer at the rate of two pounds per 100 square feet. Work the fertilizer thoroughly into the upper 6 inches of the garden soil.

Space tomatoes 2 to 3 feet apart within the row with 3 to 4 feet between rows. By staking plants, the fruit is easier to harvest, larger, cleaner and free of ground rot.

Give tomatoes at least 1 inch of water per week during May and June and 2 inches per week during July and September. Frequent light watering encourages a weak root system. Use mulches to avoid excessive hoeing and

hand-weeding and reduce moisture evaporation from the soil.

Common problems are fungal diseases such as septoria leaf spot and early and late blight plus spider mite infestations. Many diseases can be controlled by proper crop rotation, planting disease-free seedlings, removing

crop residues and proper spacing and staking.

To combat disease, a fungicide can be sprayed

on tomato plants every 10 days during the growing season. Spray a miticide such as an insecticidal soap or horticulture oil to control mites. Always read the label before using a spray.

More cultivars are available for tomatoes than any other vegetable.

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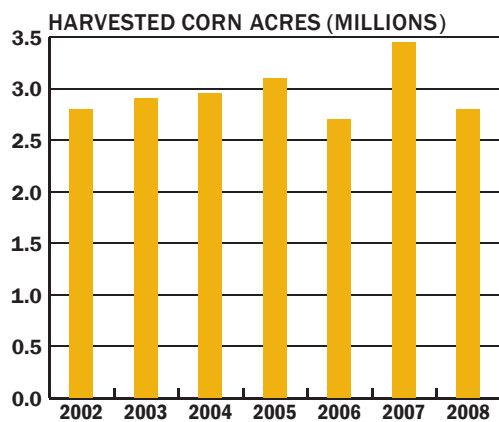
Will the trend of increased corn acreage continue?

From 2002 to 2007, the number of Missouri farms increased from 106,797 to 107,825 according to the 2007 Census of Agriculture. As of 2007, Missouri farms totaled in excess of 29 million acres, with an average farm size of 269 acres. The highest percentage of Missouri farms was in the 50- to 179-acre category.

Missouri corn crops increased from more than 2.7 million acres in 2002 to 3.4 million acres in 2007. This increase occurred largely at the expense of soybean acres, which dropped from 5.0 million acres in 2002 to slightly fewer than 4.7 million acres in 2007.

Corn acreage was up in nearly all states in 2007, due to favorable prices fueled by increased demand from ethanol producers and strong export sales.

In 2008, the market bid for soybean acres, which resulted in the return of many corn acres to soybean. Do market analysts expect the market to favor corn production in 2009 as it did in 2007 or will the current market bid for soybean acres as in 2008?



The Feb. 10, USDA *World Agricultural Supply and Demand Estimates* report appeared to support a bullish outlook for soybean prices, prompting an anticipated increase in soybean acres for 2009. Despite apparent bullish fundamental factors, the soybean market doesn't seem to be bidding for acres.

In a recent *Decisive Marketing* report, MU Economist Melvin Brees says the expected battle for acres between corn and soybean has become a non-event. "Instead of markets bidding corn or soybean prices higher to attract planting, other factors such as production risks, input costs or whichever crop's prices decline the least may be what influences planted acreages," he says.

Market signals for whether to plant corn or soybean are mixed. Check the Mar. 31 USDA Prospective Plantings report for a better estimate of the acreage expected to be planted in 2009.

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Resources available for farmers' markets

As the number of farmers' markets continues to increase throughout the state, MU Extension has created an online resource *Starting and Operating a Farmers' Market*.

The easy-to-read guide is laid out in a question-and-answer format that expands information for frequently asked questions on the topic of farmers' markets.

Topics in the guide include the complexities of developing an organizational structure to sustain markets, understanding customer expectations, farmers' market resources and how farmers' market vendors can work with health departments.

Find the guide online at <http://extension.missouri.edu/explore/agguides/hort/g06223.htm>.

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Analyzing rural legends about bred heifers

A common rural legend is that a heifer's first calf will likely be inferior and lack the performance of calves from adult cows. Data from eight calf crops at the Noble Foundation Farm in Ardmore, Okla., shows the opposite result. On average, the calves from first calf heifers were slightly heavier to calves from adult cows. They do calve the heifers about one month earlier than cows, explaining some of the benefit. With proper management and bull selection, calves from first-calf heifers are quite acceptable.

Another rural legend is that first-calf heifers are a problem to rebreed. The truth is when handled properly, first-calf heifers will rebreed well. Looking at data from the same 8-year period used to evaluate calf performance, first-calf heifers had the same pregnancy rate as adult cows. Managed heifers reached 85 percent to 90 percent of their mature weight at first calving. That level of weight put them in a body condition score of 6 to 7 at calving. Following calving they were fed a diet of high quality hay and an adequate-to-surplus level of protein.

How much value is lost when a bred heifer at 2 years of age becomes an open cow at 2.5 years? Market reports from the Joplin Regional Stockyards during the week of Feb. 15, 2009, indicate the average value of a young open cow to be \$624. The maximum value reported was \$870, so a heifer that fails to re-breed after delivering her first calf will decrease in value by at least \$250. If she is closer to average value, the decline will be approximately \$500.

Being a least-cost producer is critically important to long-term survival in the cow business, but cutting corners on heifer development and management can easily increase production costs.

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