Changes in the Economics of the Beef Sector: An Advantage for Arkansas Producers

At a recent producer meeting at the University of Arkansas, Livestock and Forestry Branch Station, the economist Dr. Harlan Hughes spoke about the improved profitability beef producers will have in the current economic conditions if they can retain ownership of calves until they weigh 850 pounds. Dr Hughes stated "…a producer that can grow his calves up to 850 pounds on grass for less than 50 to 60 cents per pound will be in the driver's seat, even if he has to decrease the number of cows on the ranch to do so."

In Arkansas mild winters and ample rainfall create an environment that puts its producers in this "driver's seat" of profitability when feedlot costs of gain create a decrease in the demand for light-weight feeder calves and an increase in demand for heavier feeder cattle. The value of calves has the potential to increase by $250 to 300 per head from weaning this fall to next spring's markets.

The availability of cool-season perennial grasses and the ability to easily grow high quality cool-season annual grasses and legumes should make Arkansas producers the envy of producers in neighboring states. The Table below shows the average fall and spring performance and costs of gain for different forage systems in stocker cattle research conducted over the last 10 years at the University of Arkansas, Livestock & Forestry Branch Station (LFBS) near Batesville and the Southwest Research & Extension Center (SWREC) near Hope. Stocker calves grazing toxic endophyte tall fescue are not in the most productive grazing system, but performance during the fall and winter of weaned calves grazing this forage is usually between 1.25 and 1.50 pounds per day. The biggest advantage to toxic endophyte tall fescue is that, if available, it is a very cheap forage to produce and calves can utilize this until higher quality forage is available in the spring. Small grains (wheat, rye, and oats) or annual ryegrass can be used for grazing calves in any area of the state. Small grains and ryegrass are more productive when planted in crop fields but can be effectively interseeded into bermudagrass pastures. When interseeded the risk of establishment is greater, fall forage production is less, and thus initiation of grazing is delayed and performance during the fall and winter is less. Novel endophyte tall fescue is very productive in stocker cattle production systems and does not require yearly re-establishment that annual grasses require and stocker calves perform similarly to calves grazing annual pastures. The major disadvantage to novel endophyte tall fescue is the cost of establishment and the one-year establishment period.

In the short term, a producer does have the potential to utilize toxic endophyte tall fescue for 90 days this fall and winter, from November through February until annual grasses interseeded into warm-season grass sod becomes available next spring to be used from March through May. This could result in 360 pounds of added weight gain per calf while reducing the acreage required for establishment of annuals. Only utilizing toxic fescue in the fall and winter will also decrease the exposure of calves to toxic fescue when toxicity effects are greatest. This program has the potential to increase profitability by $50 to 100 per calf under the current market outlook. However, one final word of caution: the current market is volatile and marketing options should be evaluated periodically.

For more information on retained ownership of your calves and forage management contact your local county Extension office.

Animal performance and estimated pasture cost of gain based on stocker cattle research at the University of Arkansas Livestock & Forestry Branch Station and Southwest Research & Extension Center from 1997 to 2007.

	Toxic Tall Fescue	Novel Endophyte Tall Fescue[1]	Crop-Field Winter Annuals	Interseeded Winter Annuals
Fall ADG, lb/d	1.4	2.0	2.2	1.2
Spring ADG, lb/d	1.0	1.9	2.3	2.6
Stocking Rate, calves/acre				
Fall	1	0.75 to 1	0.75 to 1	0.5 to 1
Spring	2 to 3	2 to 3	2 to 4	2 to 4
Cost of gain, ¢/lb[2]	33¢	27¢	40¢	42¢

[1] Cost of gain includes $250/acre establishment cost pro-rated over 8 years.
[2] Pasture only cost of gain: includes establishment cost of annuals, fertilizer etc.