

# The Back Forty News



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## In this Issue.....

From the Agents Desk

By-Product Feed Workshop

Tri-County Field Day Planned

Steer Feedout Program

Pasture Weed Control Calendar

Forage Testing up 51%

## From the Agents Desk.....

### Do I Raise or Buy My Replacement Heifers?



The summer is going quickly, and before long, it will be time to wean spring calves. Many producers will have to make the decision of which heifers to keep or to buy replacements from off the farm. For producers with small herds, it may be best to purchase heifers. Raising replacement heifers can be costly and requires extra time, labor, pasture and other resources that many small producers may not have.

The Arkansas beef improvement program has assisted many producers with raising quality replacement heifers. This program indicated the average cost of raising a pregnant replacement heifer is \$728 with a range of \$600 to \$901. This figure is several years old and with production costs increasing dramatically over the past several years, I would say this number is now significantly higher. Producers need to carefully weigh the advantages of home-raised heifers against their costs. When

evaluating the cost of home-raised heifers, a number of items should be considered. These items include costs of production (feed, veterinary cost, mineral supplementation, utilities, labor, bull or AI cost, etc.), opportunity cost of operator labor and owned feed resources, pregnancy rates from the first breeding, death loss, cull income (non-breeding culls, culled yearlings, etc.), initial weight and growth rate and heifer value at weaning.

For those that decide to raise their own heifers here should be your goals:

1. Reach puberty by 12 to 14 months of age.
2. Have a high percentage conceiving early in the breeding season.
3. Be structurally large enough at calving to minimize calving difficulty.
4. Re-breed in a timely manner.
5. Raise a good calf to weaning.

When selecting heifers at weaning, evaluate each heifer for weight, height, body capacity, structural soundness, health (thriftness) and other important production traits. Rank the heifers on traits such as 205-day adjusted weaning weight and frame score. If a heifer is structurally unsound, then eliminate her from consideration. Select those heifers with above average 205-day adjusted weights. Take into consideration that heifers that are overly fat at weaning may be uneconomical as mothers. Select against extreme muscling patterns and frame sizes (large and small). Do not keep heifers that were twinned with a bull. These heifers, also known as freemartins, are usually sterile.

Performance records are helpful in determining growth and reproductive potential and in identifying the calves from above average producing cows. It is desired to select heifers from dams that have shown a history of producing a heavy weaning weight calf every 365 days. The old rule of thumb to select the largest and oldest heifers because they will usually reach puberty earliest is still true. It also indicates that these heifers were conceived early in the breeding season, which gives some indication of dam fertility.

Replacement heifers are the future of the herd, and selecting the right replacements has a long term impact on cow herd performance and profitability. For more info on selecting replacement heifers, contact the Extension Office.

## By-Product Feed Utilization Workshop

The University of Arkansas Division of Agriculture and Furst-McNess will be hosting a by-product feed utilization workshop. The workshop will be held September 16, 2008, at Livestock and Forestry Branch Experiment Station in Batesville.

Ingredient costs have nearly doubled within a year's time. As a result, cattle producers are looking for feeding options that will help reduce cost and improve efficiency. Three key topics

addressed in this program include when and how to purchase commodities to reduce cost, how byproducts compliment or impede forage utilization, and how computer assisted diet formulation can help evaluate feeding options.

The meeting will begin at 6:00 p.m. A meal will be served and pre-registration is required by September 9<sup>th</sup>. Pre-register by calling the Extension Office at 895-3301.

## Tri-County Field Day Planned

The Fulton, Izard and Sharp County Extension Services will be hosting a Tri-County Field Day, September 30, 2008. The field day will begin at 6:00 p.m. and be conducted at the David and Paula Baldrige Farm south of Mammoth Springs on Hwy. 63.

Topics will include results from various in-county demonstrations including comparison of N fertilizer sources, weed control demonstrations, and the use of growth implants for added weight gain in cattle. In addition, Carroll Prewett, Izard County Agent, will discuss a replacement heifer development project recently conducted in his county.

For more information or to pre-register, contact the Extension Office at 895-3301.

## Steer Feedout Program

The Steer Feedout Program is one of the most unique educational programs offered by the University of Arkansas Cooperative Extension Service. The feedout program is an opportunity for cow-calf producers to see how their calves fit the needs of the beef industry. The information generated by the program also helps producers determine if they need to change their herd's genetics or their management practices to be more competitive in the cattle market.

The calves that are enrolled in this program are sent to Wheeler Brothers Feedyard near Watonga, Oklahoma, on Nov. 15. On arrival at the feedyard, the calves will be identified,

weighed and processed. After the feeding phase, the animals will be sold on a carcass basis. Participating producers will receive the average daily gain, break-even, net return, dressing percent, carcass weight, ribeye area, fat thickness, USDA yield grade and USDA quality grade for each of their calves.

The feedout program is not a contest to compare breeds or breeder, and it's not a retained-ownership promotion program. The feedout program provides producers with information about their calves, and it gives them an understanding of the factors that influence value beyond the weaned-calf phase of beef production.

Calves should weigh between 500 and 850 pounds when they arrive at the feedyard. The cost is \$25 per head. The consignor must nominate at least five head, and there are no limits on the number of animals a consignor can nominate. The Extension Service will coordinate the shipping of calves, and electronic and visible ear tags will be furnished. Producers must fill out a background information form for each calf.

Beef cattle producers who want to enroll calves in the Arkansas Steer Feedout Program for 2008-2009 must return their nomination form to the University of Arkansas Cooperative Extension Service by October 1, 2007. During the past nine years, 1,600 head of cattle have gone through the feedout program.

For more information, contact the Extension Office.

## Pasture Weed Control Calendar

A suggestion that came out of our County Extension Council meeting from last year was the development of a pasture weed and brush control calendar. You will find the first version of this inserted in this newsletter. I hope you find this useful. If you have any questions about this calendar, please contact the Extension Office.

## Forage Testing Up 51% in Arkansas

Dr. Shane Gadberry

U of A Extension Beef Cattle Specialist

A survey at two Arkansas Beef Improvement Program workshops this past winter revealed 92% of the participants fed hay at least 1/3 of the year. The survey also revealed between the two workshops, 2/3 of the participants never had their hay lots analyzed for nutrient content. Although having forages analyzed for nutrient composition isn't a common practice for livestock producers, the number of samples submitted to the University of Arkansas, Diagnostics Laboratory was up during the 2007-08 hay production and feeding seasons.

Higher feed prices may be the driving force behind the 51% growth, compared to 2006-07, in the number of hay samples submitted to the Diagnostics Laboratory between May, 2007 and April, 2008. Hay analyses reached almost 1000 samples, up from the previous 9 year average of 554 samples. Bermudagrass and mixed grass accounted for 37% and 35% of the samples with the remaining representing Fescue, Johnsongrass, forage sorghums, and Alfalfa.

Twenty-four percent of the samples submitted requested nitrate analysis. Within this group, 34% contained 700 ppm (beginning level for cautionary measures) or greater nitrate-nitrogen. While higher nitrogen costs have producers talking about reducing fertilization, concerns over nitrate accumulation do not diminish, especially with certain forages (Johnsongrass, Sudangrass, and Sorghum-sudan hybrids). Fortunately, many of the county Extension offices are now equipped with qualitative nitrate test kits that can be used to screen hay samples or standing crops prior to harvest.

The protein and energy content of the hays tested in 2007-08 remained the same compared to past years. Crude protein averaged 12% with 68% of the samples within the range of 8.2 to 15.8% CP. Energy content, expressed as TDN (total digestible nutrients) average 56.5% with

68% of the samples within the range of 51.2 to 61.8% TDN.

Very few of the hay samples analyzed did not have enough combined protein and energy to meet gestating cow requires. Overall, 95% contained a sufficient amount of protein for late-gestation and 84% percent contained an adequate amount of TDN.

Due to the additional protein requirement associated with milk production, there were fewer samples that met the protein requirement for lactation; however, 79% still contained enough protein for cows with moderate milking ability. Total digestible nutrients, unfortunately, was almost opposite of what was observed with protein. Sixty-two percent of the hays WERE NOT adequate in TDN for lactation.

High feed prices and other input costs are causing livestock producers to re-think forage production and supplemental feed practices. Hopefully, the value of forage testing is becoming realized. At the writing of this article, winter corn futures were trading for \$6/bu. This could keep the byproduct feed energy market in the \$150 to \$170/ton range or greater and supplemental energy feed costs during lactation over \$0.15 per head, daily, not including hauling or local feed mill mark-ups.

Not only does forage testing help identify where nutrient shortfalls occur and the type of supplemental feed needed to compensate for deficiencies, but forage testing is also a valuable tool to help determine if pre-harvest forage management practices need adjusting so the reliance on purchased concentrate feeds can be minimized. Grass hay protein content can be correlated with the amount of nitrogen fertilization. Reducing or eliminating nitrogen fertilization rates will not only reduce hay yields but will also result in lower hay protein content, increasing the odds for needing protein supplementation. On the other hand, TDN is highly correlated with plant fiber content—the higher the fiber, the lower the digestible energy. Fiber increases as the plant matures over time. If a forage analysis returns with an undesirably low TDN content, it can be interpreted as harvest was delayed too long. To improve

TDN, the forage will have to be harvested at an earlier stage of maturity.

Rainfall patterns kept many producers in Arkansas from getting in the hay fields soon enough this spring, and a lot of fescue and ryegrass was being harvested at a mature stage. Ideally, cool season grasses are harvested at a late boot, early head stage which means the seed heads are just beginning to emerge from the stem. Harvesting at this stage will generally result in a TDN content that is sufficient for a lactating beef cow. Because of the delayed harvest, many of the hays cut this spring will be inadequate in energy for lactation.

The additional fuel and fertilizer costs along with short hay supplies have kept hay markets 54% above the 5-year average reported by USDA. High feed prices and the lack of storage and handling facilities will limit the adoption of replacing hay with alternative feedstuffs in a wintering diet. Until the reliance on hay for wintering beef cattle is minimized by stocking piling forages in fall and establishing complimentary forage systems, forage testing will continue to be a valuable tool for making cost-effective winter feeding and harvested forage management decisions.

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Brad McGinley  
County Extension Agent – Agriculture

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