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Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality

Mississippi Homeplace Producers Board Sale Results

Thanks in large part to support from the MBCIA, cattle producers from across the state have accomplished a major advancement in marketing their feeder calves; the second Homeplace Producers board sale. It was held on August 3rd at the Southeast Mississippi Livestock Auction in Hattiesburg. The cattle were represented in 35 loads varying in weight, type and management. The sale lasted only one hour and generated **$1.9 million** in total receipts. The cattle will be loaded at several different locations from Verona to Tylertown through late October. This year, all the calves were weaned and preconditioned for 45 days with boostered vaccinations for at least blackleg and respiratory disease complex.

Steers, including those in split loads, sold for an average of $98.75/cwt at an average weight of 686 pounds. Heifers, including those in split loads, sold for an average of $93.53/cwt at an average weight of 635 pounds. Full loads of steers averaged $98.98/cwt at an average weight of 708 pounds while full loads of heifers averaged $94.50/cwt weighing an average of 635 pounds.

These results are notably different from last year, keeping with general market trends compared to year-ago averages. During the two weeks leading up to the sale, corn had steadily risen while the August and September feeder calf board steadily declined.

At the time of publishing this newsletter, a daily or weekly market report for Mississippi auctions had not been posted by the USDA Agricultural Marketing Service. A full comparison and detailed market report can be expected in next month's issue. Market observation does indicate a marked improvement over the average local market.

Beyond an increase in price per pound by marketing through this sale, revenue was also increased in other ways. Shrink (weight loss) for most loads was set at 2% and a few loads were sold with no shrink because they are to be shipped 50 miles prior to taking the pay weight. By controlling shrink prior to pay weight determination, fewer dollars will be lost compared to some other marketing strategies. Additionally, commission for the sale was set at 2%. In some cases, this is a significant cost savings and results in yet another increase in revenue. Each group of consigners had the choice to use their local marketing agent assuming they would agree to represent the cattle under the same terms.

Given the current downward trend in the feeder cattle market, the producers involved consider this year's sale to be another success in capturing full value for the management they put into these calves. As they plan for next year, increasing the volume of cattle offered is still one of their main objectives that will hopefully attract more buyers. The Homeplace Producers Sale is not exclusive and is open to any producers who agree to the terms and conditions and can be fitted with a load in their area.

Consider meeting with one of this year's consigners in your area to discuss their opinions and how to participate. Several producer and educational groups have helped the Homeplace Producers with their sale and are willing to discuss the results or opportunities for participation next year. Please feel free to contact representatives of the Mississippi Beef Cattle Improvement Association, Mississippi Cattlemen's Association, Mississippi Farm Bureau Federation, or the Mississippi State University Extension Service. Individual load information, terms and conditions, more detailed results and a video of the actual sale can be found on the Internet at *http://msucares.com/livestock/beef/feedercalf.html*.

Upcoming events:

- August 20-21—Deep South Stocker Conference, Forrest County Multipurpose Center, Hattiesburg. MS
- **September 1—Mississippi BCIA Fall Bull Sale nomination deadline**
- October —Bulls arrive at Hinds CC Bull Test, Raymond, MS
- October 24—Prairie Research Unit Field Day, Prairie, MS
- October 29-31—MSU Extension Service Artificial Insemination School, Mississippi State, MS
- **November 12—Mississippi BCIA Fall Bull Sale, Hinds Community College Bull Sale Facility, Raymond, MS**
- January 20—Mississippi BCIA Spring Bull Sale nomination deadline
- March 4—Hinds CC Bull Test Sale and Mississippi BCIA Spring Bull Sale, Hinds Community College Bull Sale Facility, Raymond, MS

Inside this issue:

Deep South Stocker Conference Coming to Mississippi

Stocker cattle account for approximately half of Mississippi's cattle inventory

The first "Deep South Stocker Conference" will be held at the Forrest County Multipurpose Center in Hattiesburg, MS on August 20th and 21st. This conference is a joint effort between the Mississippi State University Extension Service, Alabama Cooperative Extension System, and the University of Georgia Cooperative Extension Service. It will be held in each cooperating state on a triennial rotation. The concept is based on the successful Triennial Stocker Conference held at Auburn University. Next year the conference will be held in Georgia, it will be in Alabama in 2011 and will return to Mississippi again in 2012.

The first day of the program will consist of producer tours. The busses will leave Hattiesburg at Noon on the 20th and travel to the Poplarville area to visit a large-scale stocker operator that will discuss how he sources calves, manages forages and what he does with his end product. From there, the busses will travel to the White Sand Research Unit; a branch of the Mississippi Agriculture and Forestry Experiment Station (MAFES). At white Sand, personnel form MAFES and MSU Extension will discuss new varieties of commonly used forages, their results from testing forages that are novel to the Gulf Coast region and rotating peanuts with annual ryegrass to reduce soil nitrogen requirements. That evening, a meal will be provided during a presentation on price risk management. The tradeshow will also be open that night.

The next day (August 21st) will be dedicated to seminars addressing: health management, soil nutrient management, grazing management, and market trends for feeders and fed cattle. There will also be a "Producer Panel Discussion" where three stocker operators with different business models will explain how they run their operations and field questions from the audience. Again, the tradeshow will be open during breaks and at the lunch hour.

If you would like to attend, see the registration flyer in this envelope or contact Justin Rhinehart at 662-325-0645 or jrhinehart@ads.msstate.edu.

MBCIA Bull Sale Nomination Deadline Approaching

Plans are being made for the 2009 Mississippi Beef Cattle Improvement Association Fall Bull Sale. The Mississippi Fall BCIA Bull Sale program encourages production and identification of genetically superior bulls by purebred breeders and purchase and use of these bulls by commercial producers.

The 2009 sale is scheduled for Thursday, November 12, 2009 at 12:00 noon at the Hinds Community College Sales Facility in Raymond, Mississippi. This is an excellent sale facility that allows for a very professional presentation of the bulls.

Mississippi beef breeders are encouraged to nominate quality bulls that meet all the requirements for the sale. Enclosed are the Rules and Regulations for the BCIA Bull Sale along with a nomination form. Current bull sale information is also posted on the BCIA website at *msucares.com/livestock/beef/mbcia/bcia_bullsale.html*.

"…The MBCIA Fall Bull Sale is held at an excellent sale facility that allow for a very professional presentation of the bulls."

This year's sale will once again be broadcast live from the Raymond sale site over the Extension distance education system to interactive bidding sites in the Panola County Extension office in Batesville, MS and the North MS Research and Extension Center in Verona, MS. Producers at the remote sites will have the opportunity to view video of the bulls immediately prior to the sale, view and hear the sale live, and bid on bulls from Batesville and Verona. Look for sale advertisements in the future with more details on this.

If you are interested in consigning bulls to this sale, please complete the nomination form and return it to Jane Parish at Box 9815, Mississippi State, MS 39762 no later than September 1, 2009. Be sure to include the nomination fee, a signed registration certificate, actual birth weight, and adjusted weaning and yearling weights and ratios for each bull.

MAFES Research: Methods of Calf Birth Weight Data Collection

Reporting accurate calf birth weight is important for accurate calculation of birth weight and calving ease EPD and for assessing calving ease as it relates to birth weight. Calf birth weight information is used by cow-calf producers as an indicator trait for calving ease in animal selection and culling decisions to minimize the risk of dystocia in their herds.

Several methods are available for collecting calf birth weights. To avoid handling calves, some producers simply visually estimate birth weight or weigh one or a few calves at the beginning of the calving season and estimate birth weights for calves born later.

Birth weights are also estimated using hoof circumference measuring tapes. Although these tapes are a convenient alternative to using scales, they have been shown to overestimate low birth weights and underestimate high birth weights compared to hanging scales.

Hand-held hanging spring scales are used to measure birth weight by suspending the calf off of the ground in a sling or by a rope attached to the scale. Spring scales are typically read in 2.0-lb increments and must be manually held and read overhead. Calf movement or operator error in reading overhead may result in inaccurate measurements. The physical requirements for operating a spring scale may also preclude some cow-calf operators from utilizing this method.

Digital scales are often used for collection of weaning and yearling weights but are not yet widely used to collect calf birth weights. Unlike hand-held spring scales, digital scales offer a higher degree of precision and do not require overhead lifting.

The objectives of this study were to: 1) evaluate the accuracy of the following birth weight collection methods: estimation via visual appraisal, estimation using hoof circumference tapes, measurement with hand-held hanging spring scales, and measurement using digital scales and 2) to determine if visual birth weight estimations change in accuracy with increasing operator experience as the calving season progresses.

Within the first 24 hours of life, birth weight estimates and measurements were collected on each calf (n = 587) born at the Mississippi Agricultural and Forestry Experiment Station Leveck Animal Research Center (Mississippi State, MS) and the Prairie Research Unit (Prairie, MS) during routine calf tagging and processing over a spring and autumn period at each location.

Additional time and care were needed in recording digital scale measurements to ensure that the calf container was squarely placed on the digital scales and calf struggling ceased to impact scale reading. Improper technique could impact spring scale measurements, particularly during calf struggling and when reading the scale dial overhead from an angle not square with the scale dial. Likewise, hoof tape measurements were subject to technique problems if the location and snugness of the band around the calf's hoof were not appropriate and consistent. Operator error could affect birth weight measurements regardless of collection method.

Results indicate that birth weight records can vary due to the birth weight collection method used. When birth weight levels were examined, visual estimates and hoof tape measurements tended to underestimate high birth weights, whereas hoof tape measurements tended to overestimate low birth weights. Birth weight data collection via either spring or digital scales resulted in more accurate measurements.

Inaccurate calf birth weight data could be submitted to breed associations for calculations of birth weight and calving ease predictors if less accurate data collection methods are utilized and precautions are not taken to ensure proper collection technique. Cattle producers should consult with breed associations regarding allowed birth weight data collection methods for use of birth weight data in national cattle evaluations, select the most accurate collection method feasible, and use care in the technique for collecting birth weight data.

For more information about this MAFES research project, contact Jane Parish at 662-325-7466 or Trent Smith at 662-325-3516.

"…Calf birth weight data collected using either spring or digital scales resulted in more accurate measurements."

Hoof tape measurements tend to underestimate high birth weights and overestimate low birth weights

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Send questions or comments to Jane Parish or Justin Rhinehart, Extension Beef Specialists, Mississippi State University Extension Service

Visit MBCIA online at http://msucares.com/livestock/beef/mbcia/

MBCIA Membership Application

Name:_____

Address:_____

City:_____

County:_____ State:_____ Zip:_____

Phone:_____ Email:_____

(Check one) Seedstock:____ Commercial:____

Cattle breed(s):_____

Completed applications and $5 annual dues or $100 lifetime dues payable to Mississippi BCIA should be mailed to:

Mississippi Beef Cattle Improvement Association
Jane Parish, Extension Beef Cattle Specialist
Box 9815, Mississippi State, MS 39762

BCIA Genetic Profit Tips — August 2009

Marker-Assisted Selection Scenarios

Marker-Assisted Selection is the process of using the results of DNA-marker tests to assist in the selection of individuals to become the parents in the next generation of a genetic improvement program. That is, instead of using only a traditional or EPD selection program to increase the proportion of favorable alleles for the genes that affect a certain trait, specific DNA tests are used to assist in the selection of those favorable alleles. Whether to use DNA-based marker-assisted selection in a breeding program is the most important question for producers and one that is not easily answered, as it will differ for every producer based on the production system, costs for obtaining the genetic information, and marketing considerations.

Consider the following two scenarios where you are choosing between two bulls. One carries two copies of a marker allele that is associated in a positive way with a trait that you are interested in improving, while the other bull carries no copies of the marker allele.

Two full brothers produced by embryo transfer that have identical, low-accuracy EPD based on their pedigree data. This is a simple choice, and it would clearly be the animal carrying two copies of the marker allele. The DNA test tells you with a fair degree of certainty that one bull is carrying two "good" alleles for one of the genes associated with the trait of interest. Subsequent progeny testing may prove the other bull superior based as a result of chance inheritance of good alleles for the many other genes associated with the trait, but the markers provide some definitive information to enhance your chances of choosing the better of the two bulls at an early age.

Two well-proven bulls have identical, high-accuracy EPD based on progeny testing. This is a more difficult scenario. The marker test tells you that the bull with the two copies will transmit a favorable form of the gene associated with the marker to all of his progeny. If the marker allele accounts for a large proportion of the additive genetic variance, then using him as a herd sire will ensure that all of his calves get this desirable form of the gene. Using this bull may make sense if your herd has a low frequency of the marker allele. However, if your herd already has a high frequency of the marker-linked allele, then using the bull that carries desirable alleles of all of the other genes that contribute to trait, as evidenced by an EPD equal to the homozygous marker bull's EPD, will likely accelerate genetic progress more rapidly by bringing in new sources of genetic variation.

Seedstock breeders need to be particularly careful not to inappropriately discriminate against bulls that have well-ranked, high-accuracy EPD but that are found to carry no markers associated with a given trait. They represent a valuable source of alleles for all of the unmarked genes associated with the trait of interest. Offspring that inherit both the marker-allele from their dam and desirable alleles of unmarked genes from high-rank EPD bulls carrying no copies of the marker are likely to inherit the greatest number of favorable alleles for both the unmarked and marked genes that affect the trait of interest.

Source: National Beef Cattle Evaluation Consortium. 2006. Beef Sire Selection Manual.