September 2007



Upcoming events:

- September 14-15—Master Stockman Program, MSU Beef and Horse Units, Mississippi State, MS
- September 25–Gulf Coast Beef Education Alliance, Beef Nutrition Series - Weaned Calf Nutrition and Economics, 7:00 P.M. to 9:00 P.M., distance education sites throughout MS, AL, LA and FL
- October 23-Hinds Community College Bull Test Begins, Raymond, MS
- October 25-27–MSU Artificial Insemination School, Mississippi State, MS
- October 30–Gulf Coast Beef Education Alliance, Beef Nutrition Series - Commodity Feeds in Detail, 6:00 P.M. to 8:00 P.M., distance education sites throughout MS, AL, LA and FL

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Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality

Mississippi BCIA Board Approves Spring 2008 Bull Sale

The Mississippi BCIA Board of Directors met in August 2007. Several items of interest to MBCIA members were discussed. A motion to add a spring bull sale was passed by the MBCIA Board.

Nomination forms and sale rules and regulations for the Spring 2008 sale will be posted on the website in mid-September 2007. The nomination deadline for the Spring 2008 sale is January 7, 2008.

The spring sale will be conducted in addition to the current annual fall sale. This gives both spring- and fall-calving operations similar options for choosing the

optimum age of bulls they would like to market through MBCIA sales. Kenny Banes, Hinds Community College Bull Test Station Manager, stated that the proposed sale would provide bull test participants with a marketing alternative for their bulls. The sale will feature both Hinds Test bulls and bulls from other consignors.

The spring MBCIA bull sale will be held in conjunction with the Hinds Bull Test annual sale date on the 1st Thursday in March beginning in 2008. The 2008 sale date is set for Thursday, March 6, 2008 at 12:00 noon. Bull sale guidelines for all MBCIA bull sales are posted on the MBCIA Bull Sale website at msucares.com/livestock/beef/mbcia/ bcia bullsale.html.

Mississippi BCIA 2008 Spring Bull Sale Sale Location: Hinds Bull Test Sale Facility Sale Date: Thursday, March 6, 2008



Fall-calving herds interested in nominating bulls for the sale should be mindful of upcoming yearling data collection dates for their herds. Producers interested in ultrasound body composition scanning for MBCIA bull sales should contact Rhonda Vann at 601-857-5952 or rcv2@ra.msstate.edu. Several breeders have taken advantage of Dr. Vann's continued efforts to ultrasound scan bulls at central ultrasound scanning sites to assist in qualifying bulls for MBCIA sales. The price for scanning is set at \$15 per head to cover expenses. Rhonda has been very flexible and helpful in providing this service. Contact Rhonda for more information or to schedule an ultrasound scanning appointment for prospective MBCIA bull sale consignments.

County Cattle Estimates Released for 2007

The top ten cattle producing counties in Mississippi as of January 1, 2007 and the estimated number of all cattle and calves in those counties according to the Mississippi Agricultural Statistics Service were:

1) Hinds-33,300 head

- 2) Walthall-29,100 head
- 3) Jones-25,600 head
- 4) Tate-25,000 head

- Covington-24,100 head 5)
- Lincoln-22,500 head 6)
- 7) Newton-22.300 head
- 8) Neshoba-21.500 head
- 9) Chickasaw-21,200 head
- 10) Noxubee-21,000 head

The statewide total number of all cattle and calves was reported as 980,000 head.



Practical AI equipment training and semen handling techniques are part of the MSU AI School program

MSU Fall 2007 Artificial Insemination School Ahead

Mississippi State Beef Cattle Extension and the Department of Animal and Dairy Sciences will be hosting its annual Fall artificial insemination class Oct. 25th through 27th. The class will be held in Starkville on the Leveck Animal Research Center Beef Unit and the Bearden Dairy Research Center with classroom instruction conducted at the Wise Center. The registration fee is \$150 per person but is limited to the first 30 registrations. As in the past, husband and wife teams may enroll for a single registration fee. Take a look at the following agenda and, if you are interested in taking the class, please send a check, payable to Northeast Livestock. to:

> Mike Howell N.E. Area Livestock Agent PO Box 1690 Verona, MS 38879

Thursday, October 25, 2007

- 6:00 6:15 p.m. Introductions/ Opening Comments (WISE 4036)
- 6:15 6:45 p.m. Economics of Artificial Insemination
- 6:45 7:30 p.m. Reproductive Anatomy and the Estrous Cycle
- 7:30 8:30 p.m. Estrus Synchronization

- 8:30 8:45 p.m. Break
- 8:45 9:00 p.m. Artificial Insemination Equipment
- 9:00 9:45 p.m. Work with Reproductive Tracts

Friday, October 26, 2007

- 8:00 8:30 a.m. Heat Detection and Heat Detection Aids (WISE 4043)
- 8:30 9:00 a.m. Nutritional Programs for A.I. Success – Part I
- 9:00 10:00 a.m. Reproductive Herd Health and Biosecurity
- 10:00 a.m. Noon Corral Work (semen handling and A.I. technique practice) (Dairy Unit)
- Noon 1:00 p.m. Lunch (provided) (Beef Unit)
- 1:00 2:00 p.m. Beef Sire Selection Exercise (Beef Unit)
- 2:00 5:00 p.m. Corral Work (A.I. technique practice) (Dairy Unit)

Saturday, October 27, 2007

- 8:00 8:30 a.m. Nutritional Programs for A.I. Success – Part II (Beef Unit)
- 8:30 11:30 a.m. Corral Work (A.I. technique practice) (Dairy Unit)

Consider Age and Source Verification as Fall Calves Arrive

For many cow-calf producers, fall calves have started arriving early this year. Most speculation has pointed to the extreme heat as the culprit in shortening gestation periods. Even with the rush brought about by earlier than expected calving, it is important to maintain an accurate record of birth dates. Keeping these simple records could translate into more money when this group of calves is marketed. At very least, it will provide a means to guard against potential discounts.

"Keeping these simple records could translate into **more money** when this group of calves is marketed."

Of the several groups who act as third-party verification providers, most will accept the birth date of the first calf born in that group. However, having the birth date on each calf will afford more flexibility in marketing. The original purpose of source and age verification programs was to ensure that beef intended for export to Japan came from cattle less than 21 months of age at slaughter. While most cow-calf producers maintain birth date records, the efforts of third party verification providers now focus on transferring these data, with the calf, through the different market segments.

For more information on how to use birth date records to get more profit from feeder and stocker cattle, please contact:

Justin Rhinehart Beef Cattle Extension Specialist 662-325-7465 jrhinehart@ads.msstate.edu

New Bull Sale Order Guidelines Established

At the recent Mississippi BCIA Board of Directors meeting, new bull sale order guidelines were established. These guidelines address carcass merit for the first time in MBCIA history. They also attempt to recognize breeder selection for a variety of economically relevant traits. Breeders are still given a sale order incentive to have bulls scanned for ultrasound body composition.

MBCIA BULL SALE ORDER GUIDELINES

Adopted by the MBCIA Board of Directors -August 16, 2007 Effective as of the Spring 2008 MBCIA Bull Sale and all MBCIA sales thereafter

Sale Order Index

The following sale order formula applies to all MBCIA sale bulls regardless of age:

Sale Order Index (100 points max) consisting of the following components:

Calving Ease (CE) EPD or Birth Weight EPD in place of CE EPD when no CE EPD is reported by the breed association (5 points max) top 10% of breed - 5 points

top 25% of breed - 3 points top 50% of breed - 1 point

Weaning Weight EPD (7.5 points max)

top 10% of breed – 7.5 points top 25% of breed – 4.5 points top 50% of breed – 1.5 points

Yearling Weight EPD (7.5 points max)

top 10% of breed – 7.5 points top 25% of breed – 4.5 points top 50% of breed – 1.5 points

Actual Scrotal Circumference as Reported on Breeding Soundness Evaluation Form (5 points max)

13-16 month old bulls <34 cm - 0 points $\geq 34 \text{ cm} - 3 \text{ points}$ $\geq 36 \text{ cm} - 5 \text{ points}$ 17-23 month old bulls <36 cm - 0 points $\geq 36 \text{ cm} - 3 \text{ points}$ $\geq 38 \text{ cm} - 5 \text{ points}$ 24+ month old bulls <38 cm - 0 points \geq 38 cm - 3 points \geq 40 cm - 5 points

Weight per Day of Age (15 points max)

Exceeds minimum qualifying weight per day of age by: 0.1 lbs. - 3.75 points 0.25 lbs - 7.5 points 0.4 lbs. - 12.75 points 0.5 lbs. - 15 points

Intramuscular Fat EPD (7.5 points max)

IMF or Marbling EPD used shall be based on ultrasound or ultrasound plus carcass data unless the breed association only reports carcass EPDs, in which case IMF or Marbling EPD based on carcass data shall be used. top 10% of breed – 7.5 points top 25% of breed – 4.5 points top 50% of breed – 1.5 points

Ribeye Area (REA) EPD (7.5 points max)

REA EPD used shall be based on ultrasound or ultrasound plus carcass data unless the breed association only reports carcass EPDs, in which case REA EPD based on carcass data shall be used. top 10% of breed – 7.5 points top 25% of breed – 4.5 points top 50% of breed – 1.5 points

Ultrasound Body Composition Scan Data (5 points)

Five points will be added to a bull's selection index total if ultrasound body composition scan results collected and reported according to respective breed association guidelines are provided.

Visual Appraisal (40 points max)

A 3-person screening committee shall inspect bulls at the official sale weigh-in and each independently assign a visual appraisal score on each bull using a 1 to 10 scale with 1 being the lowest (least desirable) score and 10 being the highest (most desirable) score. The 3 scores on each bull shall then be averaged. This average visual appraisal score shall then be multiplied by 4 to produce the number of points to be used in the sale order formula for the visual appraisal category. "... These (bull sale order) guidelines address carcass merit for the first time in MBCIA history."



The new bull sale order guidelines will be in effect for the Spring 2008 MBCIA Bull Sale

Mississippi Beef Cattle Improvement Association—Productivity and Quality	MBCIA Membership Application
Mississippi Beef Cattle Improvement Assn. Box 9815	Name:
Mississippi State, MS 39762	Address:
Phones: 662-325-7466, 662-325-7465 Fax: 662-325-8873 Email: jparish@ads.msstate.edu	City:
jrhinehart@ads.msstate.edu Send guestions or comments to Jane Parish or	County: State: Zip:
Justin Rhinehart, Extension Beef Specialists, Mississippi State University Extension Service	Phone: Email:
	(Check one) Seedstock: Commercial:
Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation or group affiliation, age, disability,	Cattle breed(s):
or veteran status.	Completed applications and \$5 annual dues payable to Mississippi BCIA should be mailed to:
Visit MBCIA online at http://msucares.com/ livestock/beef/mbcia/	Mississippi Beef Cattle Improvement Association Jane Parish, Extension Beef Specialist Box 9815, Mississippi State, MS 39762

BCIA Genetic Profit Tips – September 2007

Selection for Optimum Trait Levels

Appropriate use of performance records and EPDs allows producers to increase genetic potential for profit. Profit is determined both from income (a function of reproductive rate, growth rate, and product quality) and expense (a function of feed requirements and managerial interventions). Thus, in order to improve genetic potential for profit, selection decisions must consider several traits simultaneously.

Because genetic antagonisms exist among some of the traits influencing profit, selection for extreme phenotypes or genotypes frequently is not warranted. It is far more likely that the greatest profit will be realized from cattle with an optimal balance among traits.

Many traits have intermediate optima. Examples include:

- 1. **Birth weight.** Calves that are too heavy at birth experience increased dystocia, require higher management input, and suffer higher mortality. Conversely, calves that are too light at birth are more prone to starvation and thermal stress, with similar consequences.
- 2. Leanness. Concerns about the relationship between diet and health have led consumers to favor leaner

beef. However, cows that lack the ability to conserve energy as fat are at risk of impaired fertility during lactation and may require increased supplemental feeding in harsh environments. When fed cattle are marketed, premiums are paid for increasing levels of intramuscular fat or marbling, but increasing levels of intermuscular fat are discounted.

- 3. Age at puberty. Heifer calves that reach puberty at extremely young ages may become pregnant before being weaned and require increased managerial intervention to assure the survival of the heifer and her calf. However, heifers reaching puberty at too advanced an age are at increased risk of not becoming pregnant as a yearling to calve first at two years of age, thereby reducing lifetime productivity.
- 4. **Mature size.** Increasing growth rate and mature size result in greater throughput in a beef production system and allow producers and processors to capture economies of scale. However, faster growing and larger cattle have greater feed requirements and thus cost more to maintain than smaller cattle.

Source: Beef Improvement Federation. 2002. Guidelines for Uniform Beef Improvement Programs, 8th ed.