

Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality



Upcoming events:

- August 3—MS Homeplace Producers Feeder Calf Board Sale, Southeast MS Livestock, Hattiesburg, MS, 7:00 P.M.
- August 20-21—Deep South Stocker Conference, Forrest County Agri-center, Hattiesburg, MS
- **September 1—Mississippi BCIA Fall Bull Sale nomination deadline**
- October 24—MAFES Prairie Research Unit Field Day, Prairie, MS
- October 29-31—MSU Fall Artificial Insemination School, Mississippi State, MS
- November 12—Mississippi BCIA Fall Bull Sale, Raymond, MS, 12 Noon

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Mississippi BCIA Accepting Fall Bull Sale Nominations

Preparations are now underway 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.

The Rules and Regulations for the BCIA Bull Sale along with a nomination form and current bull sale information are posted on the MBCIA website at msucares.com/livestock/beef/mbcia/bcia_bullsale.html and are available through county Extension offices across Mississippi.

With the continued effectiveness of distance bidding sites, the annual 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 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.

**Mississippi BCIA
Bull Sale
Nomination
Deadline**

September 1, 2009

If you have any questions about the sale, please call your local Extension Service office or contact Jane Parish in the MSU Animal and Dairy Sciences Department.

Jane Parish
662-325-7466
jparish@ads.msstate.edu

For information on centralized ultrasound scanning of Mississippi bulls for MBCIA sales contact:
Dr. Rhonda Vann
Brown Loam Branch Experiment Station
601-857-5952
rcv2@ra.msstate.edu

MBCIA Sale Participation Advantages

- ✓ Promotes Mississippi cattle
- ✓ Potential to reach new customers
- ✓ Can increase private treaty sales by expanding market areas and advertising
- ✓ Opportunity to promote individual operation, cattle, and breeds
- ✓ Chance to meet other breeders
- ✓ Divides sales costs among consignors
- ✓ Sale management handles sale logistics



The Cattle Learning Center provides educational resources for producers

New Resources Available through the Cattle Learning Center

The Cattle Learning Center has expanded their online offering of educational resources for beef cattle producers. Visit <http://www.cattlelearningcenter.org> to access these resources including:

IRM Redbook and Excel spreadsheet

The IRM Redbook has been developed into an Excel spreadsheet. This spreadsheet is a great companion tool to the Redbook in that you can enter and analyze the data that you have recorded in the field. The spreadsheet features the same record keeping sections as the Redbook in an easy to use Excel format. You can download the spreadsheet free of charge, or if you would like to order a mini-CD the cost is \$5 plus shipping and handling.

National Cattlemen magazine articles

Check out the publications section of this site to view a growing library of producer education articles from National Cattlemen magazine. The general topics include Breeding, Business, Health, Management, Nutrition, IRM News and Ask an Expert. To get the latest in these areas, visit the Publications Section of the Cattle Learning Center website.

Online courses

This site features self-paced learning courses that allow users to work step-by-step through courses on beef production. The courses include detailed illustrations, quizzes, video clips and interactive calculators. The curriculum for this course was developed by a team of producers, veterinarians and university specialists. Besides

the web version, the course is also available on CD upon request.

- Prevention Programs and Technologies to Improve Reproductive Performance
- Economics of Reproductive Efficiency
- How to Get Cows Pregnant
- Premises Registration 101

Low Stress Cattle Handling DVD

A full-length DVD on low stress handling techniques focuses on working with cattle on horseback, on foot and with dogs. Three expert cowboys — Curt Pate, Charlie Trayer, and Joel Ham — demonstrate techniques learned from Bud Williams and Ray Hunt. The stockmen first presented their skills in a live cattle handling demonstration at the 2006 Cattlemen's College® in Denver. Filming was also done on location with each of the cowboys.

Cattlemen's College® Meeting Handouts

The 16th Anniversary of the Cattlemen's College® program was held at the 2009 Cattle Industry Annual Convention & Trade Show. Each of the individual courses is linked online where you can listen to audio recordings and find presentation materials from each of the classes. The 2008 courses are archived on the website as well.



Source: <http://www.cattlelearningcenter.org>

The Value of Carcass Ultrasound in Heifers

Seedstock producers have a much better idea of what will get them to nod their head at an auction than a decade ago. In 2003, *The Western Livestock Journal* reported that carcass traits influenced over half (56%) of their readership's bull buying decisions and 3 out of 4 polled were willing to drive up to 499 miles to find their next herd sire. Many bull buyers look at carcass information and are willing to travel to find what they want. If the poll was repeated today, a new question should be: "Do the carcass attributes of a bull's mother influence buying decisions?"

Most breed associations have or will be moving genetic evaluations from a "sire model" to an "animal model" within the next year. In the most basic terms, this means that EPDs will now be determined by performance and carcass information from the sire and dam, instead of just the sire and maternal grandsire. As a result, collecting ultrasound information on purebred females in the herd has never been more important. Regardless of the size and scope of your operation, carcass ultrasound data from females is currently the "genetic fast lane"

"...If a heifer scans poorly, some profitable options are still available to the producer.."

Heifer Ultrasound (Cont.)

to help you reach your end product goals. Fortunately, there are a number of ways to use the information to your herd's benefit. Beef Improvement Federation (BIF) Guidelines recommend that heifers be scanned between 320-410 days of age. However, each breed association is different with many accepting ultrasound data from heifers older than 14 months of age. Schedule heifer scanning within the acceptable window of your breed association(s) and at an appropriate time for your operation. Many seedstock operations scan bulls early to satisfy sale catalog deadlines and bull buyer demands; heifers are simply scanned later. This allows the operation to focus labor resources on bull sales and give heifers additional time to develop. Commercial operations utilizing ultrasound technology should schedule scanning at least 30 days prior to breeding. This allows ample time to receive the information, make culling and/or breeding decisions, and order semen or buy bulls accordingly.

The heifer ultrasound contemporary group can be analyzed an entirely different way than bull ultrasound data. For bulls, disappointing results are often too late. The dollar investment in developing a bull forces most producers to sell them anyway. There is absolutely no genetic progress realized if a producer only scans bulls and does not use the information to go back and cull females. Given this scenario, a producer would be forced to cull a bred cow based on the poor carcass performance of one male progeny; a difficult economic decision at best. If one assumes a heifer will have a bull calf at age two, the only carcass information available on the cow by the time she's three will be the 50% she attributed to the bull calf. By the time the next genetic evaluation (which determines her new Carcass EPDs) is published, she should be nursing her second calf and be cycling back for her third. In most cases, the cow would be a bred 4-5 year-old before mistakes can be noticed, let alone fixed. In short, when a retained heifer finally becomes profitable (beyond age 5) you may be inclined to cull her for poor carcass performance.

The alternative is to scan heifers prior to breeding. Heifer ultrasound contemporaries

have a distinct advantage over bulls due to the lack of aggression or libido due to the effects of testosterone. It's very difficult to determine if testosterone is detrimental to a bull's scan data, but bulls in a low-stress environment have been known to scan better than their flushmates in a confined bull test setting. Scanning a heifer during her heat cycle may also impact scan results due to the added stress and activity of estrus, but no targeted research exists. In comparison, 3 days of stress due to standing estrus should have far less impact than bulls that fight or run fences every day in a pen. Outside of this, the disadvantages of scanning are the same for both sexes...added stress, time, and labor.

If a heifer scans poorly, some profitable options are still available to the producer. She can be immediately sent to the feedlot and be marketed as USDA Grade "A" beef at 15-20 months of age, still under the age restrictions for exported beef products. Producers can also assess her carcass merit and find a bull that best compliments her shortcomings. In either case, genetic progress is much faster, and a more uniform calf crop should be evident after the first calves reach the rail. Many commercial producers develop "threshold trait levels" and cull anything that falls outside an acceptable window. Genetic antagonisms between reproductive and carcass traits must be closely monitored. For example, setting a fat thickness threshold of <0.35 inches may actually cull females that offer the highest rebreeding rate. Cows must still be suited to their environment regardless of the size of their ribeye or potential to grade Choice.

Unfortunately, some operators decide not to invest \$15-20 to scan each heifer. While a decline in heifer scanning is understandable given economic conditions, the above scenarios should help illustrate the immense value in heifer ultrasound data. When viewed as a marketing tool, ultrasound information helps seedstock producers sell bulls. When viewed as a tool to enhance profitability, ultrasound data on heifers ensures you can produce a bull that somebody wants.

Source: Walter & Associates, LLC,
Carcass Ultrasound 101, Volume 12

"...ultrasound data on heifers ensures you can produce a bull that somebody wants."



Contact Dr. Rhonda Vann for information about carcass ultrasound data

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



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the basis of race, color, religion, national origin, sex,
sexual orientation or group affiliation, age, disability,
or veteran status.

Visit MBCIA online at
[http://msucares.com/
livestock/beef/mbcia/](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 life-
time 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

MBCIA Genetic Profit Tips – July 2009

Parentage Analysis

Commercial herds using multiple-sire breeding pastures often have no way of identifying the paternity of the calves. DNA markers can be used to assign calves to their individual sires based on the inheritance of markers. Sires pass on only one of the two marker alleles that they carry for each gene. If a calf does not have a marker allele in common with a sire at a particular gene, then that sire is excluded as being the parent of that calf. Paternity “identification” involves examining each calf’s genotype at multiple different gene loci and excluding as potential sires those bulls that do not share common alleles with the calf. Because paternity identification is a process of excluding potential sires on the basis of their genotype, it is therefore important that DNA from all possible sires be included in paternity tests. While parents can be excluded using this process, results cannot be used to “prove” parentage. Parentage testing identifies individuals that, due to a specific combination of marker alleles, could qualify as a parent for a particular offspring. Paternity testing is complicated by genetic relationships between the bulls. If bulls are closely related, then they are more likely to carry the same marker alleles. Consequently, it will be more difficult to definitively make paternity assignments on closely related bulls in a multiple-sire breeding pasture. Forming multiple-sire groups for each pasture from unrelated animals, i.e., putting full brothers in with different groups of cows, will help to minimize this problem. If there is only one potential sire for a calf (e.g., an AI calf), then paternity can be “assigned” by confirming that the calf’s genotype shares a marker allele in common with the alleged sire at all of the genetic loci that are tested.

Uses of parentage testing include identifying the sire(s) of outstanding or poorly performing calves and ascertaining whether one particular bull is routinely siring progeny that require calving assistance. The costs of DNA analysis can be minimized by sampling and DNA testing only a targeted subsample of the calves (e.g., calves that have to be pulled at calving or the top 10% of carcass quality animals) and the herd bulls. More extensive sampling of the entire calf crop can allow for a determination of the proportion of the calf crop attributable to each bull in the herd. It is generally assumed that each bull contributes equally to the calf crop. However, studies have shown that some bulls sire more than their “fair share” of the progeny, while other bulls sire none of the progeny. Matching individual sires with the performance records of their entire calf crop also provides the data required to develop within-herd EPD for herd sires.

Matching individual sires with the performance records of their entire calf crop also provides the data required to develop within-herd EPD for herd sires. This may be particularly important in the case of postmortem traits such as carcass quality where progeny testing is the most accurate way to determine the genetic value of a bull. As with any new technology, the value associated with the parentage information must be estimated to ensure that it outweighs the expense of collecting and analyzing the DNA samples (currently ~ \$10-35 per DNA sample submitted, although this cost is predicted to decrease markedly in the future).

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