February 2010



Upcoming events:

- February 12–Mississippi BCIA Annual Membership meeting, Jackson, MS, 1:00 p.m.
- March 4—Hinds CC Bull Test Sale and Mississippi BCIA Spring Bull Sale, Hinds Community College Bull Sale Facility, Raymond, MS
- March 18-20—MSU Artificial Insemination School, Mississippi State, MS
- April 6–Cattlemen's Exchange Feeder Calf Board Sale, Winona, MS
- April 16—Beef Cattle Boot Camp, Prairie Research Unit, Prairie, MS, 9:00 a.m. to 3:30 p.m.
- April 17—Beef Cattle Boot Camp, Brown Loam Station, Raymond, MS, 9:00 a.m. to 3:30 p.m.

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Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality

Mississippi BCIA Annual Membership Meeting Reminder

Mississippi BCIA will hold its annual membership meeting on Friday, February 12, 2010 at the Trademart on the state fairgrounds in Jackson, MS in conjunction with the Mississippi Cattlemen's Association annual convention.

The BCIA session will start at 1:00 p.m. It will feature Drs. Trent Smith and Jane Parish of the MSU Animal and Dairy Sciences Department, speaking on "Debunking Myths about Mississippi Cattle." This session will focus on Mississippi as a source of quality seedstock and feeder calves and using data to dispel myths about cattle quality.

Educational presentations at the MCA convention will begin at 1:00 p.m. on Friday, February 12 and continue through Saturday, February 13. For the complete schedule of

MBCIA Annual Membership Meeting

Friday, February 12, 2010, 1:00 p.m. Trademart, State Fairgrounds, Jackson, MS

events, call the Mississippi Cattlemen's Association at (601) 354-8951.

Hinds Bull Test & MBCIA Bull Sales Next Month

Producers looking for bulls for the upcoming spring breeding season should make plans to attend the Hinds Community College Bull Test Sale and MBCIA Spring Bull Sale. The 2 sales will be held back to back at the Hinds Bull Sale Facility in Raymond, MS starting at noon on Thursday, March 4, 2010.

Sale catalogs are currently being finalized and will become available in mid-February. The sales feature bulls backed with extensive performance information and screened for soundness. These bulls were developed in Mississippi and are adapted to local production conditions. They represent some of the top pedigrees and EPDs in their breeds.

Bids will be accepted from 2 distance bidding sites in Verona, MS and Batesville, MS as well as at the sale site. Details are included in the catalogs.



Your local source for environmentally-adapted, breed-leading genetics





Master Cattle Producer training helps develop a broad cattle production knowledge base

Master Cattle Producer Training Available Any Time

If you missed the January 2010 Mississippi Master Cattle Producers webinars, you still have an opportunity to complete the training. The webinar videos were archived online along with the training materials and exams for completion at any time.

The Mississippi Master Cattle Producer Program is a comprehensive training offered by the MSU Extension Service on major beef cattle production topics. The training focuses on improving overall management and decision-making skills and developing a broad production knowledge base.

The Master Cattle Producer Program was updated in 2009 with new course materials and format including Internet-based training modules to meet the needs of persons wanting to complete the training at their own pace and schedule. Producers must successfully review all course materials and

complete the exams for all 8 training topics to be eligible for Master Cattle Producer certification. Beef cattle producers enrolled in the Master Cattle Producer program complete training in the following subjects: 1) beef cattle nutrition, 2) forage systems, 3) beef cattle reproduction, 4) breeding and genetics, 5) economics and marketing, 6) herd health and handling, 7) beef end product, and 8) Beef Quality Assurance (BQA).

Course participants can view online training modules and download training materials free of charge. Alternately, participants completing the program can receive printed course materials, a metal farm sign, Master Cattle Producer cap, and certificate of completion for a course fee of \$75.

To participate in the training, go to msucares.com/livestock/beef/mcp.

Webinars to Feature Breeding Program Advice

Managing genetic defects in beef cattle and the power of crossbreeding through heterosis will be the topics of two upcoming Webinars, hosted by eXtension Beef Cattle Clearinghouse Community of Practice. The Webinars will feature Dr. Bob Weaber, University of Missouri and Dr. Matt Spangler, University of Nebraska and will run February 11 and February 25 at noon Central Standard Time for one hour each.

In the first session, the speakers will discuss managing genetic defects in beef cattle and offer practical advice for protecting your herd and investment. Topics covered will include a review of the mode of inheritance common to many genetic defects, understanding inbreeding, the importance of pedigree analysis, common genetic defects, practical advice for selection and culling to avoid or eliminate genetic defects in your herd.

In the second session, the speakers will

discuss mating systems to solve problems and add value to beef production systems through crossbreeding and the power of

heterosis. Topics covered will include a review of the fundamentals of heterosis (hybrid vigor), the power of crossbreeding to improve production efficiency, breed complementarity, simple and effective crossbreeding systems for large and small herds and why there's been a surge in popularity of hybrid genetics.

At the meeting time, simply click on the following link or copy and paste it into your browser to enter the meeting:

http://connect.extension.iastate.edu/ beefcattle/

At the login page, enter your name under the "Enter as a Guest" heading. Click on "Enter Room." The instructions that detail how to join the integrated phone audio conference will be on the screen when you join the meeting.

Anytime before the meeting you can visit the following URL to confirm your ability to connect to the Connect server: http:// www.extension.iastate.edu/testconnect/.

"....Managing genetic defects and crossbreeding will be the topics covered in upcoming webinars on February 11 and 25."

Updated Cattle Inventory Estimates Released

The U.S. Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) released the January Cattle Inventory Report on Friday, January 29, 2010. While U.S. cattle inventory declined, Mississippi cattle numbers rose in 2009.

U.S. Cattle Inventory Down 1 Percent

All cattle and calves in the United States as of January 1, 2010, totaled 93.7 million head, 1 percent below the 94.5 million on January 1, 2009.

All cows and heifers that have calved, at 40.5 million, were down 1 percent from the 41.0 million on January 1, 2009.

• Beef cows, at 31.4 million, were down 1 percent from January 1, 2009.

• Milk cows, at 9.1 million, were down 3 percent from January 1, 2009. Other class estimates on January 1, 2010, and the change from January 1, 2009, are as follows:

• All heifers 500 pounds and over, 19.7 million, up slightly.

• Beef replacement heifers, 5.4 million, down 2 percent.

• Milk replacement heifers, 4.5 million, up 2 percent.

• Other heifers, 9.7 million, up 1 percent.

• Steers weighing 500 pounds and over, 16.4 million, down 2 percent.

• Bulls weighing 500 pounds and over, 2.2 million, up slightly.

• Calves under 500 pounds, 14.9 million, up slightly.

• Cattle and calves on feed for slaughter in all feedlots, 13.6 million, down 2 percent.

• The combined total of calves under 500 pounds, and other heifers and steers over 500 pounds outside of feedlots was 27.5 million, down slightly.

U.S. Calf Crop Down 1 Percent

The 2009 U.S. calf crop was estimated at 35.8 million head, down 1 percent from 2008. Calves born during the first half of the year are estimated at 26.0 million, down 1 percent from 2008.

Mississippi Cattle Inventory Rising

All cattle and calves in Mississippi as of January 1, 2010, totaled 970,000, 1 percent above the 960,000 on January 1, 2009.

All cows and heifers that have calved, at 520,000, were up 2 percent from the 510,000 on January 1, 2009.

• Beef cows, at 503,000, were up 2 percent from January 1, 2009.

• Milk cows, at 17,000, were down 11 percent from January 1, 2009.

Other class estimates on January 1, 2010, and the change from January 1, 2009, are as follows:

• All heifers 500 pounds and over, 136,000, up from 126,000 in 2009.

• Beef replacement heifers, 92,000, up from 83,000 in 2009.

• Milk replacement heifers, held steady at 7,000.

• Other heifers, 37,000, up from 36,000 in 2009.

• Steers weighing 500 pounds and over, 50,000, down from 55,000 in 2009.

• Bulls weighing 500 pounds and over, held steady at 39,000.

• Calves under 500 pounds, 225,000, down from 230,000 in 2009.

The 2009 Mississippi calf crop was estimated at 420,000 head, up 8 percent from 2008. "...Mississippi cattle inventory grew 1 percent in 2009 to 970,000 head of cattle and calves on January 1, 2010."



The despite challenging production conditions, the 2009 Mississippi calf crop was up 8% from 2008.

A Mississippi Beef Cattle Improvement Association—Productivity and Quality	MBCIA Membership Application
Mississippi Beef Cattle Improvement Assn. Box 9815	Name:
Mississippi State, MS 39762 Phones: 662-325-7466, 662-325-7465	Address:
Fax: 662-325-8873 Email: jparish@ads.msstate.edu	City:
jrhinehart@ads.msstate.edu	County: State: Zip:
Send questions or comments to Jane Parish or Justin Rhinehart, Extension Beef Specialists, Mississippi State University	Phone: Email:
Extension Service	(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 or \$100 life- time dues payable to Mississippi BCIA should be mailed to:
Visit MBCIA online at	Mississippi Beef Cattle Improvement Association

http://msucares.com/ livestock/beef/mbcia/

Improved adaptation reduces cost and enhances quality of beef. Typically, a portion of the economic benefit of improved agricultural efficiency is passed on to the consumer as lower prices and/or better quality of product.

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

Improved adaptation enhances food security. Well-adapted populations are resilient to temporal variation in their environment, differences among years in weather, feed quantity and feed quality, for example. Accordingly, annual product yield from well adapted herds will vary less than that of poorlyadapted herds. When cow herds and market animals are well adapted to their production environment, it is easier to maintain a safe, reliable and uniform supply of beef. Improved adaptation lessens the need to modify production

environments. Beef cows have been called a scavenger species. Their traditional agro-ecological role has been to convert foodstuffs not directly usable by man to wholesome, nutritious meat and other valuable products. They do this best when they are well adapted to the environment in which they find themselves. When they are not well adapted to a prevalent challenge, a management option is to modify the environment to more closely satisfy their needs. Such modifications are never without monetary cost and may include social costs.

Improved adaptation enhances resource conservation and utilization. Cattle production has sometimes been criticized for contributing to environmental deterioration. It also, however, can serve to maintain or improve pastoral environments. To contribute effectively to environmental conservation, cattle must be satisfactorily adapted to the particular environment that they are assisting to conserve.

Source: W. Hohenboken et al. 2004. www.nbcec.org.

Who benefits from improved beef cattle adaptation?

Potential benefits from improved beef cattle adaptation include enhanced animal wellbeing, increased profitability for beef cattle producers, more desirable products for beef consumers, enhanced resource conservation and more effective forage resource utilization.

Improved adaptation enhances animal well-being. Stress is a fact of life. Fortunately, response mechanisms have evolved to stressors commonly encountered in a population's evolutionary past. These physiological, immunological, metabolic and behavioral responses generally are sufficient to maintain biological integrity and physical wellbeing. However, when responses are inappropriate or inadequate, stress can lead to distress, defined here as ill health or compromised well-being. A poorly adapted population is one in which inherent response mechanisms to prevailing environmental challenges do not maintain satisfactory wellbeing in many individuals. An adapted population is one in which most individuals do cope successfully with stresses commonly encountered in their environment.

Improved adaptation enhances financial well-being of beef cattle producers. Beef cattle production cannot be profitable unless cattle are productive, efficient and produce a desirable end product. Selection to improve traits contributing to these ends is desirable if not required. In addition, cattle that are genetically adapted to their environment incur lower costs than unadapted but otherwise comparable cattle. Profitability of beef cattle production would be enhanced by including locally-rational measures of adaptability in industry selection schemes and breeding objectives.