

Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality



Upcoming events:

- April 2—Magnolia Beef and Poultry Expo, Raleigh, MS
- April 7—Cattlemen's Exchange Producer Sale (feeder calf board sale), E E Ranches, Winona, MS
- April 30-May 3—Beef Improvement Federation Annual Convention, Sacramento Convention Center, Sacramento, CA
- August 3—MS Homeplace Producers Feeder Calf Board Sale, Southeast MS Livestock, Hattiesburg, MS, 7:00 P.M.
- August 4—Cattlemen's Exchange Producer Sale (feeder calf board sale), E E Ranches, Winona, MS
- September 1—Mississippi BCIA Fall Bull Sale nomination deadline

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Mississippi BCIA—Hinds Bull Test 2009 Spring Bull Sale Results

The Mississippi Beef Cattle Improvement Association wrapped up its 2nd Annual Spring Bull Sale on March 5, 2009. The MBCIA Spring Bull Sale was held in conjunction with the Hinds Community College Bull Test Sale in Raymond, MS. The MBCIA Sale featured 27 performance-backed bulls from breeders across the state, while the Hinds Bull Test Sale featured 19 bulls. Thank you to all of the consignors and buyers for supporting these Spring 2009 bull sales.

The top-selling lot was This Rito S155 of 1559 Pred, an Angus bull. This Rito S155 of 1559 Pred was consigned by Cain Cattle Company of Wiggins, Mississippi and sold for \$2,500. Other breeders marketing bulls in the Hinds Test sale included 4J Beefmaster, Bayou Frais Red Brangus, JWR Land & Cattle, and Monogram Farms. In the MBCIA sale other consignors included Harvey Farms, Ingram Cattle Company, Ingram Livestock Farm, Kiani Angus, Loveless Homeplace Angus, McGee Cattle Company, Southern Shine Pastures, and Webb Farms. Sale receipts on 27 MBCIA bulls totaled \$48,425 for a sale average price of \$1,794. Sale receipts on 19 Hinds bulls totaled \$31,625 for a sale average price of \$1,664. One bull sold over interactive video to a bidder in Batesville, Mississippi.

All breeds—46 bulls
Gross receipts—\$80,050
Average price—\$1,740
High-selling lot—\$2,500



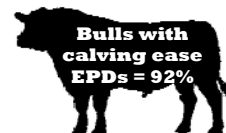
Angus—38 bulls
Gross receipts—\$69,550
Average price—\$1,830
High-selling lot—\$2,500



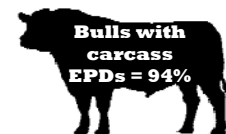
Beefmaster—1 bull
Gross receipts—\$1,550
Average price—\$1,550
High-selling lot—\$1,550



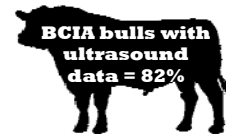
Hereford—3 bulls
Gross receipts—\$5,350
Average price—\$1,783
High-selling lot—\$1,900



Red Brangus—2 bulls
Gross receipts—\$1,600
Average price—\$800
High-selling lot—\$950



Simmental—2 bulls
Gross receipts—\$2,000
Average price—\$1,000
High-selling lot—\$1,000



Buyer appreciation is extended to: Jerry Windham, MAFES, Dwayne Davis, Mark Harvard, Hugh Ferguson, W. H. Covington, Kendall Covington, Pattridge Farms, Pope Klondike Farms, Louis Stuedeman, Danny Martin, Charles Hinton, Tim Wise, Gaddis Farms, Guy Holley, Jack Barron, Stevens Farms, Phillip Vandevere, Maurice Layton, Charles Koehn, Ralph Martin, Terry Hunt, Jimmie Hill, John Prestage, Charles Barland, and Ben Benson. Thanks also goes out to our friends at Hinds Community College for help both in hosting and conducting the sale.

Mississippi BCIA looks forward to another successful bull sale in Raymond, Mississippi on November 12, 2009. Breeders interested in nominating bulls to the Fall BCIA Bull Sale should complete and submit nomination forms to the MBCIA office by September 1, 2009. Bull sale rules, nomination forms, and other information on Mississippi BCIA are available on the BCIA website at: msucares.com/livestock/beef/mbcia/ or by contacting an office of the Mississippi State University Extension Service. Contact Kenny Baner at 601-857-3351 for information on the 2009-2010 Hinds Community College Bull Test.

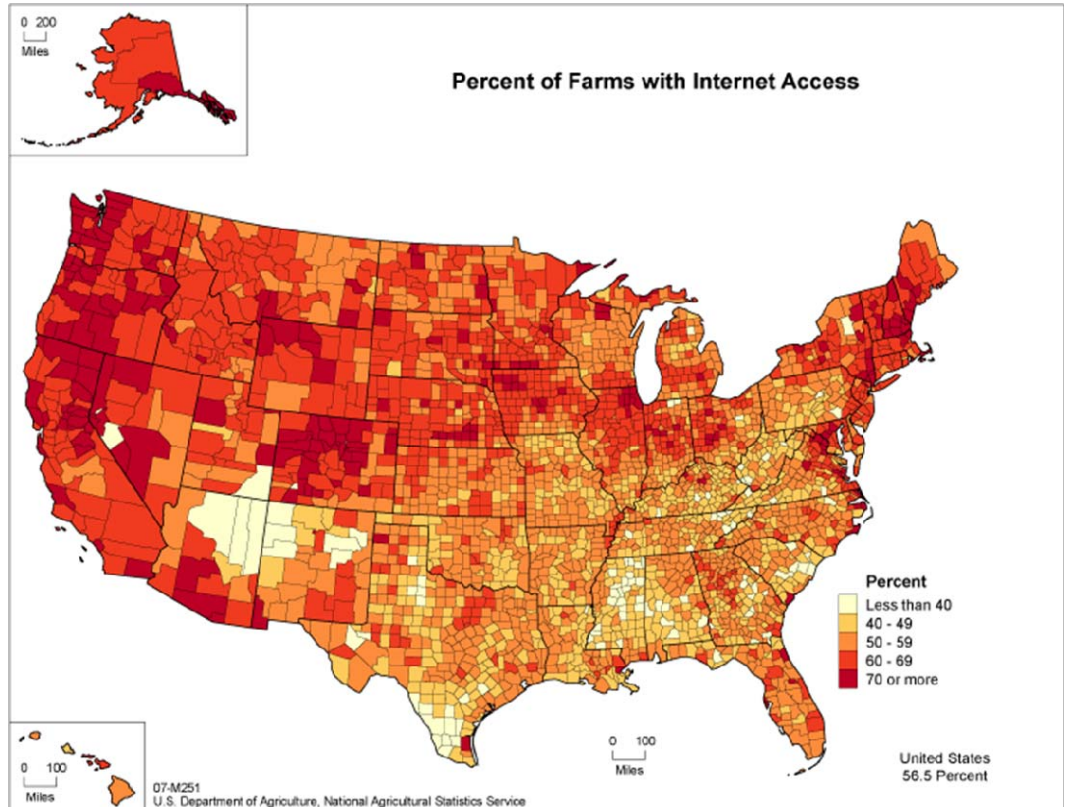


Computer applications in production agriculture are steadily increasing

On-farm Internet Use on the Rise

According to the recently released 2007 U.S. Census of Agriculture. The percentage of farm operations with Internet access has increased over the past five years, from 50 percent in 2002 to 57 percent in 2007. For the first time in 2007, the Census looked at high-speed Internet access, an important

measure of farmers' ability to use the Internet effectively. Of the U.S. farms with Internet access, 58 percent reported having a high-speed connection. The 2007 Census shows both Internet access and high-speed Internet access at the county level for the first time.



Recent Pasture Rent Comparisons

Source: MS Agricultural Statistics Service

Pasture Rented for Cash, Average Cash Rent per Acre, by Selected States and United States, 2004-2008

State	2004	2005	2006	2007	2008
	Dollars				
Alabama	18.00	17.50	18.50	19.50	19.50
California	11.50	12.00	13.00	14.00	15.00
Florida	17.50	18.50	22.00	24.00	25.00
Georgia	24.00	22.00	25.00	25.00	27.00
Illinois	34.00	34.50	34.00	35.00	37.00
Louisiana	15.50	16.50	19.00	23.00	27.00
Mississippi	16.50	16.50	16.00	18.00	18.50
Missouri	26.00	27.00	26.00	26.00	26.00
North Carolina	23.00	25.00	25.00	27.00	29.00
Oklahoma	9.00	9.00	8.50	9.50	10.50
Tennessee	19.00	18.00	19.00	20.00	22.00
South Dakota	11.60	12.30	12.90	13.80	15.90
Texas	7.20	6.20	6.10	6.20	6.50
Virginia	17.50	20.00	20.00	21.00	21.00
United States	9.60	10.30	10.80	10.00	10.50

"...Pasture rents in Mississippi are on the rise. Rents vary significantly by state."

NAHMS Beef 2007-2008 Breeding Management Survey Highlights

Overall, nearly 7 of 10 operations purchased a bull from a purebred breeder during the last 10 years. A higher percentage of operations with 50 or more cows than operations with 1 to 49 cows purchased a bull from a purebred breeder.

More than 9 of 10 operations (95.7 percent) used bulls only instead of artificial insemination to breed at least some replacement heifers and cows.

Most heifers and nearly all cows were only exposed to a bull (79.2 and 94.2 percent, respectively). A higher percentage of heifers than cows were only artificially inseminated (3.9 and 1.1 percent, respectively), and a higher percentage of heifers than cows were brought onto the operation already pregnant (4.5 and 0.6 percent, respectively).

Despite research suggesting that bulls can breed and impregnate a substantial number of females over a short breeding season, producers continue to use traditional cow-to-bull ratios in breeding pastures. On average, yearling bulls (bulls less than 2 years of age) were expected to breed fewer females than mature bulls (16.3 and 23.7, respectively). On operations with 200 or more beef cows, yearling bulls were expected to breed more females than yearling bulls on operations with fewer than 100 cows. On operations with 50 or more cows, mature bulls were expected to breed more females than mature bulls on operations with fewer than 50 cows.

DNA analysis of calves can identify the calves' sires when multisire mating groups are used. This relatively new technology allows producers to determine how the offspring of specific bulls are performing. Producers can use this information to make selection or culling decisions. Only 1 of 20 operations used commercially available DNA markers for sire identification. A higher percentage of operations with 200 or more cows used DNA markers for sires compared with operations with 1 to 49 cows.

Examining bulls for reproductive soundness has been associated with increased conception rates in females serviced by those bulls. The percentage of operations that performed reproductive examination proce-

dures on bulls that had been on the operation for two or more breeding seasons varied with herd size. In general, a higher percentage of operations with 200 or more cows performed semen tests, scrotal measurements, and *Tritrichomonas* cultures on at least some bulls compared with operations with fewer than 100 cows. A lower percentage of operations with 1 to 49 cows performed semen tests and scrotal measurements compared with larger operations.

Of the reproductive examination procedures, semen testing was performed on the highest percentage of bulls (44.1 percent), followed by scrotal measurement (28.6 percent of bulls), and *Tritrichomonas* culture (18.5 percent of bulls).

As expected, the percentages of operations that purchased, leased, or borrowed bulls for the last breeding season increased as herd size increased, ranging from 25.1 percent of operations with 1 to 49 beef cows to 68.2 percent of operations with 200 or more beef cows.

About one of three operations (30.7 percent) purchased, leased, or borrowed a bull. The percentage operations that performed reproductive examination procedures on bulls that had been purchased, leased, or borrowed varied by herd size. In general, a higher percentage of operations with 200 or more cows performed semen tests, scrotal measurements, and *Tritrichomonas* cultures on at least some bulls than on operations with fewer than 100 cows. A lower percentage of operations with 1 to 49 cows performed semen tests and scrotal measurements than larger operations.

Over one-half of operations (53.3 percent) that purchased, leased, or borrowed bulls for breeding added bulls over 18 months of age or nonvirgin bulls to the herd. A higher percentage of operations with 1 to 49 cows than operations with 200 or more cows added these bulls. Still, two of five large operations (41.2 percent) added bulls older than 18 months or no longer considered virgin, which could risk introducing venereally transmitted diseases such as trichomoniasis.

Source: National Animal Health Monitoring System

“...Nearly 7 of 10 operations purchased a bull from a purebred breeder in during the last 10 years. The other 3 of 10 missed out on the advantages of genetic predictions (EPDs) and performance data that only the registered bulls could offer.”



BCIA bull sales provide opportunities to market and purchase beef bulls with performance information.

Mississippi Beef Cattle Improvement Association—Productivity and Quality

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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 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 – April 2009

Visual and Phenotypic Evaluation of Bulls

While a majority of the emphasis in bull selection should be placed on objective performance information, visual and phenotypic evaluation of bulls remains important for two reasons. First, bulls must be evaluated for traits that affect their physical ability to breed cows. In addition, some traits of economic relevance are not included in genetic evaluation programs. Successful commercial cow-calf operators should strive to select bulls that combine the genetic potential to improve profitability with the physical ability to work and survive in their production environment.

There may be a few instances where traits of economic importance are not included in genetic evaluations, usually because the traits are subjectively measured. For example, bull buyers may evaluate feet and leg structure, not only to ensure that the bull can service cows but also to maintain feet and leg soundness in the bull's daughters. Again, the degree to which a sire's conformation for such traits will be reflected in their progeny depends on the heritability of the trait in question. For feet and leg conformation, limited data have been collected in beef cattle. One example of such a scoring system is the Genetic Trait Summary provided by ABS Global (Kirschten, 2002a). A sample of heritability estimates for type scores in Simmental appears in Table 1.

Table 1. Heritability estimates for type traits in Simmental cattle (Kirschten, 2002b).

Trait	Heritability	Trait	Heritability
Stature (height)	0.60	Rear legs (hock set)	0.12
Body length	0.39	Foot/pastern angle	0.13
Muscling	0.42	Udder attachment	0.23
Capacity	0.44	Udder depth	0.35
Femininity	0.32	Teat size	0.39

Heritability above 0.40 is considered high, while heritability of 0.15 or less is considered low. From the table above, height in this population is highly heritable, indicating that selecting sires that are taller or shorter in height than their contemporary group mates should result in daughters with somewhat similar characteristics. Rear leg and pastern set, in contrast, is low in heritability; so post legs and weak pasterns are more likely the result of environmental effects rather than genetics. Udder depth and teat length are moderate in heritability, offering some opportunity for improvement through visual selection. However, those traits can only be observed in females. While it may be possible to observe a bull's dam for her udder characteristics, only half of her genetics for those traits are passed to any one son, and only half of that passed from the son to his daughter. Culling the cowherd on udder traits is more likely to improve those traits than is sire selection. The exception would be when selecting AI sires with a large number of daughters in production that can be visually evaluated.

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