December 2011



Upcoming events:

- December 1—Herd Health Management Short Course, MSU, Biloxi, Oxford, Raymond
- January 20–Mississippi BCIA Spring Bull Sale nomination deadline
- February 10–Mississippi BCIA Annual Membership Meeting, Jackson, 1:00 p.m.
- March 1—Hinds CC Bull Test Sale and Mississippi BCIA Spring Bull Sale, Hinds Community College Bull Sale Facility, Raymond, MS
- March 13–Beef Cattle Handling Facilities Workshop, MSU, Biloxi, Oxford, Raymond
- March 15-17—MSU Artificial Insemination School, Mississippi State, MS
- April 3–Cattlemen's Exchange Feeder Calf Board Sale, Winona, MS

Inside this issue:

Cattlemen's Exchange Board Sale	2
Animal and Dairy Sciences Annual Report—Beef Cattle Research	2
MBCIA Membership Application	4

Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality

Mississippi BCIA Seeking Bull Sale Nominations for Spring Sale

Mississippi remains an excellent local source of quality herd sires. The Mississippi Beef Cattle Improvement Association (BCIA) Bull Sale program encourages production and identification of genetically superior The Rules and Regulations and nomination form are available on this website.

The Spring 2012 sale will be broadcast live from the Raymond sale site over the

bulls by purebred breeders and purchase and use of these bulls by purebred and commercial producers. It promotes the advantages of purchasing breed-leading genetics and environmentally-adapted bulls locally.

bulls locally. Starting in 2008, Mississippi BCIA hosted a Spring bull sale on the first Thursday in March in conjunction with the Hinds Community College Bull Test Sale. The Mississippi BCIA is pleased to continue to offer this spring bull marketing opportunity with its 5th annual sale. The Hinds Bull Test/Spring Mississippi BCIA Bull Sale partnership has been a great success.

Preparation is now underway for the Spring 2012 Mississippi BCIA Bull Sale to be held on March 1, 2012 at 12:00 noon at the Hinds Community College Sales Facility in Raymond, Mississippi. This sale will once again be held in conjunction with the Hinds Community College Bull Test Sale on the traditional Hinds Bull Test sale date.

Current bull sale information is posted on the BCIA website at msucares.com/ livestock/beef/mbcia/bcia_bullsale.html.

Mississippi BCIA Spring Bull Sale Nomination Deadline

January 20, 2012

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. In addition, a live Internet streaming video of the sale will be available on sale day along with a sale preview video posted the day before the sale.

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 **January 20**, **2012**. 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. If you have any questions about the sale requirements or past results, please call your local Extension Service office or contact Jane Parish at 662-325-7466 or jparish@ads.msstate.edu.



Two Traditions of Excellence One Premier Bull Source Hinds CC Bull Test Sale MBCIA Spring Bull Sale Thursday, March 1, 2012 • 12:00 Noon



"...Bull selection presents an important opportunity to enhance the profitability of the beef production enterprise. For several reasons, bull selection is one of the most important producer decisions and, as such, requires advance preparation and effort to be successful." — National Beef Cattle Evaluation Consortium, Beef Sire Selection Manual



Make plans now to consign feeder calves to the upcoming board sale to be held in April 2012

Cattlemen's Exchange Feeder Calf Board Sale—April 3, 2012

The fourth annual "Cattlemen's Exchange Producer Sale" will be held April 3, 2012 at Winona, MS. The nomination deadline is February 24, 2012. The first Cattlemen's Exchange Board Sale was held in April 2009 in Winona, MS, and was an effort to provide a new marketing option for Mississippi feeder cattle. Begun in 2008, as a collaborative effort of the Mississippi Cattlemen's Association, Mississippi Farm Bureau Federation, Mississippi State University Extension Service, and Mississippi Beef Cattle Improvement Association.

Two board sales are held each year, one in Hattiesburg (Home Place Producer's Sale) in August, and the Cattlemen's Exchange Board Sale each April. Since 2008, more than 14,900 head of cattle in 236 truckload lots have been marketed in these board sales. Together, the receipts from these sales exceeded \$10.6 million. For over 80% of the cattle in these sales to date, price premiums were achieved above Mississippi average market prices when the cattle were loaded out.

A distinct advantage of these sales, in addition to added premiums for Mississippi producers, is the ability to accommodate a large number of feeder calves while not having the cattle at the sale site, with the added flexibility of arranging delivery dates in the future. In addition, shrink, cattle handling, and comingling of animals prior to the sale are all reduced. Cattle are consigned from throughout the state and loads are assembled from single or multiple consignors. Each lot is represented by video and descriptive information, provided to buyers via the Mississippi State University Extension Service and the Mississippi Farm Bureau websites. Buyers are also provided with detailed descriptions of cattle weight, type, and management. Buyers and sellers negotiate a delivery date and time after the sale. The sales are coordinated through local livestock auctions, providing added value to Mississippi auction markets as well.

The Cattlemen's Exchange Feeder Calf Board Sale provides an opportunity for Mississippi producers to establish a reputation with buyers for cattle that perform well, and draw repeat buyers and added premiums. Last year's Cattlemen's Exchange Sale brought record high prices. Over 2,000 head of cattle were sold in less than an hour, and brought total receipts close to \$1.9 million.

For more information on the 2012 Cattlemen's Exchange Feeder Calf board sale visit: msucares.com/livestock/beef/ feedercalf.html or contact:

- Lance Newman (Mississippi State Extension Area Agent) 662.234.4451 or 662.832.4586,
- Ray Welch (Winona Stockyards) 662.283.1652,
- Jon Kilgore (Mississippi Farm Bureau) 601.278.3809, or
- Brandi Bourg (Mississippi State Extension Beef Cattle Specialist) 662.325.7465.

Animal and Dairy Sciences Annual Report—Beef Cattle Research

"...The MSU Animal and Dairy Sciences Department provides an annual report to the public." Beginning in 2009, the Mississippi State University Department of Animal and Dairy Sciences started publishing an annual report designed to share with the public concerning departmental teaching, research, and extension activities. Each year the report has grown in number of articles and total page length. The current report contains 24 such articles. A few of the research highlights from the 2011 annual report are summarized here. The complete report includes these research articles in full, additional research articles, teaching program summaries, and Extension program reports. The report is available online at *www.ads.msstate.edu* or as a print version by request at 662.325.2802. Annual reports from past years are also available on this website.

Beef Cattle Research (Cont.)

Post-weaning Feeding Behavior of Newly Weaned Heifer Calves A. N. Loyd et al.

Stress experienced by calves at weaning often culminates in poor postweaning feed intake (FI) and growth performance. The objective of this study was to characterize the feeding behavior of calves post-weaning. Brahman x British heifers (number = 48) born in spring 2010 at the Brown Loam Branch Experiment Station in Raymond, MS were abruptly weaned from their dams at 200 days of age. Heifers were penned in one of two dry-lots and received ad libitum access to a high roughage diet offered in GrowSafe® bunks. Feeding behavior was monitored for 24 to 26 days postweaning and BW was evaluated weekly beginning at weaning. The number and duration of daily meal events, the duration of daily head down time, and daily FI increased with time post-weaning. Body weight was similar for all time-points. However, there was great variation in the number of days it took heifers to first approach the feed bunks, eat feed for the first time, eat feed consistently for at least 5 days, and consume enough feed to meet estimated net energy for maintenance requirements. To account for this variation, pen, temperament score, and the proportion of Brahman influence were included in the statistical model. Brahman-influenced heifers were slower to attend the bunks. begin consuming feed, consistently consume feed, and consume enough feed to meet NEm requirements. However, there was no effect of breed type on feeding behavior or FI over the course of the entire feeding period. These data suggest there is considerable variation in post-weaning feeding behavior, of which some can be attributed to breed type. These data also highlight important considerations when utilizing newly weaned calves in feeding trials, especially those using GrowSafe® bunks or similar feeding systems, and when managing abruptly weaned calves from pasture environments into feedlot environments.

Exposure of Beef Females to the Biostimulatory Effects of Bulls Prior to Artificial Insemination *K. E. Pfeiffer et al.*

In order to evaluate the biostimulatory effect of bull exposure on expression of estrus and pregnancy rate to artificial insemination (AI). Angus, Charolais, Hereford, and crossbred heifers (number = 86) and cows (number = 193) were assigned to one of three treatments: 1) no bull exposure (CON; number = 95), 2) exposure to a bull with a surgically-deviated penis for 21 days prior to AI (SB; number = 88), or 3) exposure to a vasectomized bull for 21 days prior to AI (VB; number = 96) during the fall breeding seasons of 2009 and 2010. Ten days prior to and at the initiation of treatments, blood samples were taken to determine cyclicity. Body condition scores of the cows and weights of the heifers were also recorded at the initiation of treatments. The estrous cycles of all females were synchronized using the Select Synch + CIDR protocol. Treatments ceased at the time of AI. Pregnancy was determined by transrectal ultrasonography at 35 days post Al. At the onset of the experiment, 75.7% of heifers and 86.1% of cows were cycling. The percentages of females that displayed estrus were similar among treatments (70.5, 77.3, and 72.9% for CON, SB, and VB, respectively) but increased in heifers exposed to SB treatment compared to VB treatment and control (96.3, 73.8, and 69.7%, respectively). Pregnancy rates were also increased in females in the SB treatment (59.1%) compared to females treated in the VB treatment (40.6%) with the control group intermediate (49.5%). In conclusion, biostimulation did not have an effect on the expression of estrus but females exposed to the SB treatment had an increased pregnancy rate, with heifers having a greater response to bull exposure than cows.

"...Beef females (especially heifers) showed improved pregnancy rates after exposure to a (gomer) bull with a surgically-deviated penis for 21 days prior to AI."



The MSU Animal and Dairy Sciences website contains annual reports and other departmental information at www.ads.msstate.edu

Mississippi Beef Cattle Improvement Association—Productivity and Quality

Mississippi Beef Cattle Improvement Assn. Box 9815 Mississippi State, MS 39762

Phone: 662-325-7466 Fax: 662-325-8873 Email: jparish@ads.msstate.edu



Send questions or comments to Jane Parish, Extension Beef Cattle Specialist, Mississippi State University Extension Service

- Parish

Mississippi State



University does not discriminate on 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/

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
L

Beef Cattle Research (Cont.)

Effects of Calf Disposition, Morbidity, and Finishing Net Return Quartile on Feedlot Performance, Carcass Traits, and Finishing Economics J. A. Parish

Records of steers (number = 1,987) and heifers (number = 764) consigned to the Mississippi Farm to Feedlot Program from 2005 to 2011 and shipped to lowa feedlots as part of the Tri-County Steer Carcass Futurity were used to evaluate the effects of calf disposition, morbidity, and finishing net return quartile on feedlot performance, carcass traits, and finishing economics. As disposition score increased, indicating less desirable temperaments, feedlot average daily gain, final body weight, backfat thickness, calculated yield grade, final live value, and net return from finishing decreased. Calves that were medically treated had reduced feedlot average daily gain, hot carcass weight, backfat thickness, calculated yield grade, final live value, and net return from finishing than their healthy counterparts. Finally, calves with less morbidity, treatment cost, backfat thickness, and calculated yield grade and greater feedlot entry weight, feedlot average daily gain, final body weight, hot carcass weight, dressing percent, percent retail product, ribeye area, marbling score, and USDA quality grade had greater finishing net return. These results indicate the importance of selection for docile disposition and implementation of effective health management protocols. Characteristics of fed cattle and their carcasses that result in greater finishing net return include less-morbid, faster-growing cattle that result in heavier carcass with more desirable USDA quality and calculated yield grade.

Mississippi State University
Animal and Dairy Sciences

Department Report • 2011

