

# Mississippi Beef Cattle Improvement Association

*Mississippi Beef Cattle Improvement Association—Productivity and Quality*



## Upcoming events:

- May 11—Gain on Forage Bull Test Sale, Tylertown, MS
- May 21—Beef Cattle Short Course presented by the American Breeds Coalition, Raymond, MS
- May 25-28—Beef Improvement Federation annual meeting, Sioux Falls, SD
- June 4-5—Mississippi Cattlemen's Association Summer Conference, Philadelphia, MS
- August 17-18—Cattle Nutrition Short Course, Distance Education
- October 12—Bulls arrive at Hinds Community College Bull Test
- October 26—Hinds Community College Bull Test begins

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## Doler Farm to Represent MBCIA for Outstanding Commercial Producer Award

Wayne and L. W. Doler of Calhoun City, Mississippi will represent the Mississippi Beef Cattle Improvement Association as the 2004 nominee for the Beef Improvement Federation Outstanding Commercial Producer Award. Wayne Doler's grandfather moved to Calhoun County in 1928 bringing a cow with him. There have been cattle on the Doler Farm ever since. The Doler operation is a family business that takes pride in producing a consistent, quality product and adopting cost-effective production practices. The Dolers are working towards producing a more efficient animal and better quality beef by keeping up with the latest in beef and forage production technology, addressing the needs of their customers, and continuously adapting their operation to improve profitability.

The Dolers have learned from experience by analyzing performance and carcass data on retained ownership calves that it is not always the thickest, most eye-appealing calf that is the most profitable. Detailed breeding records are kept on the entire breeding herd. Wayne and L. W. collect calving ease scores, calf birth dates, weaning and yearling weights, body condition scores, reproductive tract scores on potential replacement heifers, feedlot performance data, and carcass information. An organized, effective calf identification system is key to record keeping and performance data collection efforts. Performance data is used to select replacement heifers and cull low-performing animals. Herd health information is also recorded including vaccination and internal and external parasite control information.

Doler Farm keeps close track of financial measures important for making management decisions. Hand-written records of

cash costs and associated receipts are maintained, and net income can be determined throughout the year. Close attention has been paid to financial records dealing with nutritional supplementation. Working with the Mississippi State University Extension Service, the Dolers have made profitable adjustments to their nutritional program. Dividing the herd into a group receiving protein supplement blocks and a group receiving protein meal supplements, the farm identified that the blocks were costing approximately \$0.30 per head per day while the protein meal program cost \$0.08 per head per day and improved performance.

The most significant change that has been made in the Doler operation is the intense focus on retained ownership as an economically viable marketing option over the last ten years. Wayne and L. W. each sent 20 head through the newly established Farm to Feedlot program with the Mississippi State University Extension Service in the early 1990's. From that first cattle feeding experience, the Dolers have gone on to send the majority of their calf crop production through the feedlots and have obtained carcass data on each lot of calves shipped. Use of expected progeny differences and performance information has helped in selection for cattle that perform well in the feedlot and on the rail. Shifting the breed composition of the herd to fit the marketing environment has been another key adaptation that has helped keep Doler Farm profitable.

Congratulations and good luck to Wayne and L. W. Doler in the Beef Improvement Federation Outstanding Commercial Producer Award competition. Mississippi BCIA is well represented.



Beef cattle research results can help producers improve their operations

## Beef Cattle Research Update

Beef cattle research efforts are ongoing at Mississippi State University and many other land grant institutions. These studies continue to produce information that beef producers can use in making production and management decisions. Here are some highlights from recently published beef cattle research studies around the country.

### RESEARCH LOOKS AT CALVES PRODUCED USING SEXED SPERM

Researchers at Colorado State University were able to preselect sex of calves safely with approximately 90% accuracy using flow cytometry/cell sorting. They looked at the effects of using the sexing procedure on gestation length, birth weight, calving ease, calf vigor, weaning weight, abortion rate, and death rates up to weaning. Calves produced from sexed sperm grew and developed normally both during gestation and through weaning. This study indicates that sexed sperm will not result in increased abnormalities or affect calf characteristics. *Tubman et al. J. Anim. Sci. 2004. 82:1029-1036.*

### ROUNDUP READY CORN COMPARED TO CONVENTIONAL CORN AS CATTLE FEED

Roundup Ready corn was compared to conventional, nontransgenic corn in studies in Nebraska and Illinois. Dry matter intake, average daily gain, and feed efficiency were similar for steers fed conventional corn reference hybrids and steers fed Roundup Ready corn. No differences were found in carcass weight, ribeye area, or marbling score between the steers fed the conventional corn and the steers fed the Roundup Ready corn. The researchers concluded that there are no significant differences in nutritive value between conventional and Roundup Ready corn when fed in cattle finishing diets. *Erickson et al. J. Anim. Sci. 2003. 81:2600-2608.*

### CALF SCOURS SHOWN TO IMPACT WEANING WEIGHTS

Montana researchers analyzed health and performance records on over 3600 calves to determine the effect of scours on calf weaning weights. Calves developing scours between birth and weaning weighed on aver-

age 20 pounds less at weaning than healthy calves. In addition, the incidence of scours was greater in calves born to younger dams. This was attributed to a greater percentage of first-calf heifers requiring assistance at calving and calved in a smaller lot, thus increasing the opportunity for additional stress and scours on their calves. *Anderson et al. Prof. Anim. Sci. 2003. 19:399-403.*

### LIFETIME IMPLANT STRATEGIES INFLUENCE BEEF QUALITY, PALATABILITY AND PRODUCTION CHARACTERISTICS

A Colorado study looked at the effects of repetitive use of anabolic implants on beef carcass quality, tenderness, and consumer ratings for palatability in crossbred steer calves. Steers were implanted at some or all of five production phases: branding, weaning, backgrounding, feedlot entry, and reimplant time. Use of implants increased average daily gain from weaning to harvest, increased hot carcass weights and ribeye areas, and decreased percentages of kidney/pelvic/heart fat. No differences were observed between the groups for dressing percentage or adjusted fat thickness. Steaks from nonimplanted steers were rated as more desirable than steaks from cattle implanted two or more times. Cattle receiving four or five implants had lower marbling scores than steers implanted twice during their lifetime. Thus, aggressive lifetime implant strategies could negatively impact beef quality grades. These results illustrate the importance of choosing implant protocols based on specific marketing targets. *Platter et al. J. Anim. Sci. 2003. 81:984-996.*

### MILK PRODUCTION LEVEL AFFECTS FORAGE DRY MATTER INTAKE

Animal scientists at Oklahoma State University examined the effects of potential genetic merit for milk production determined using sire milk EPD in Brangus cows. During early lactation high milk EPD cows consumed 8% more forage dry matter than low milk EPD cows. Milk EPD level did not affect forage dry matter intake expressed per unit of body weight during late gestation or late lactation, however. Each one pound in-

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*“Calves developing scours weighed... on average 20 pounds less at weaning than healthy calves.”*

## Beef Cattle Research Update (cont.)

crease in milk production increased forage dry matter intake by .33 pounds during early lactation and by .37 pounds during late lactation. This study showed that selection for increased genetic merit for milk production increases forage dry matter intake during early lactation.

*Johnson et al. J. Anim. Sci. 2003. 81:1837-1846.*

### ENERGY SUPPLEMENTATION AFTER CALVING IMPROVES REPRODUCTIVE PERFORMANCE OF COWS IN THIN TO MODERATE BODY CONDITION

Feeding a high-energy supplement after calving can increase reproductive performance of mature cows that calve with thin or moderate body condition (BCS 4 and 5). Cows in the study were fed to gain either 1 or 2 pounds per head per day for an average of 71 days and then all fed to gain 1 pound per head per day until 21 days after first estrus. The higher level of nutrient intake after calving shortened the postpartum interval to estrus and increased pregnancy rate at the first estrus after calving.

*Ciccioli et al. J. Anim. Sci. 2003. 81:3107-3120.*

### HAY FEEDER DESIGN AFFECTS HAY WASTE

Four different round hay bale feeder designs (cone, ring, trailer, or cradle) were compared. Dry matter hay waste was 3.5, 6.1, 11.4, and 14.6% for the cone, ring, trailer, and cradle feeders, respectively. No differences in hay dry matter intake were observed for the different feeder designs.

*Buskirk et al. J. Anim. Sci. 2003. 81:109-115.*

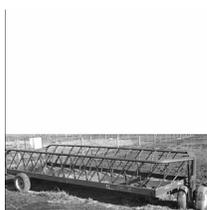
*“Higher... nutrient intake after calving shortened the... interval to estrus and increased pregnancy rate at first estrus.”*



Cone



Ring



Trailer



Cradle

## 2004–2005 Hinds Bull Test Dates Set

Dates for the 2004–2005 Hinds Community College Bull Test are as follows:

*October 12, 2004—bulls arrive*

*October 26, 2004—test begins*

*November 23, 2004—first period*

*December 21, 2004—second period*

*January 18, 2005—third period*

*February 15, 2005—fourth period (test ends)*

*March 3, 2005—sale*

The Hinds Community College Bull Test is a 112-day feed-based gain performance test held annually at the Hinds Community College Bull Test Station in Raymond, Mississippi. For more information on the bull test, contact Kenny Baner at 601-857-3351.

## MBCIA Displays Booth at Magnolia Beef and Poultry Expo

The Mississippi Beef Cattle Improvement Association has use of new display booth courtesy of Pennington Seed, Inc. A big thank you goes out to Webb Flowers with the Mississippi State University Extension Service for designing and creating the display for the new MBCIA booth. The display fea-

tures information on MBCIA activities such as the Fall BCIA Sale, the Hinds Community College Bull Test, and the South Mississippi Gain on Forage Bull Test, as well as producer education programs. The display made its debut in April at the Magnolia Beef and Poultry Expo in Raleigh, Mississippi.



The Mississippi Beef Cattle Improvement Association display booth

Mississippi Beef Cattle Improvement Association—Productivity and Quality

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Mississippi State, MS 39762

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Send questions or comments about this newsletter to Jane Parish, Extension Beef Specialist, Mississippi State University Extension Service



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Visit MBCIA online at <http://msucares.com/livestock/beef/mbcia/>

## MBCIA Membership Application

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_

(Check one) Seedstock:  Commercial:

Cattle breed(s): \_\_\_\_\_

Completed applications and \$5 annual dues payable to Mississippi BCIA should be mailed to:

Mississippi Beef Cattle Improvement Association  
c/o Jane Parish, Extension Beef Specialist  
Box 9815, Mississippi State, MS 39762

## BCIA Management Calendar—May 2004

### GENERAL

Fertilize warm-season pastures (bermudagrass, bahiagrass, etc.) according to soil test recommendations. Stay on top of weed control. Sprig hybrid bermudagrass before moisture becomes limiting. Plant summer annual forages. Graze sodseeded ryegrass pastures to prevent shading of warm-season forages. Manage pastures to graze young growth and harvest excess for hay. Check hay equipment to make sure it is ready for operation. Record hay yields, forage test each cutting, and develop a hay storage program that will minimize storage losses and allow matching of forage test results with individual lots of hay for use in hay feeding and supplementation decisions. Provide proper free-choice minerals and fresh water at all times. Make sure adequate shade is available for cattle going into the summer months. Watch for flies, and implement a fly control program when needed. Maintain a complete herd health program in consultation with a veterinarian including internal and external parasite control, calfhood (Bangs) vaccinations for heifer calves four to eight months of age, and blackleg (7-way) vaccinations for all calves over three months of age if not done earlier. Keep good production and financial records.

### SPRING CALVING

#### January, February, March

Calving should be done. Complete management practices for late calves, and castrate and dehorn any calves

missed at birth. Implant calves that will not be retained as breeding stock. Read implant product labels to determine when calves that were implanted at birth may be re-implanted. Monitor condition of bulls during the breeding season, and hand feed if necessary. Be ready to remove bulls from heifers after a 45-60 day breeding season. Observe breeding herds to make sure that cows are settling. Maintain good breeding records including heat detection records, artificial insemination dates, dates bulls turned in and out, identification of herd females and breeding groups, dates bred, returns to heat, and expected calving dates.

### FALL CALVING

#### October, November, December

Maintain bulls in small pasture traps and provide a nutritional program designed for starting the next breeding season in good condition. To precondition calves, vaccinate for respiratory diseases (IBR, BVD, PI3, BRSV, and others upon veterinary advise), and wean for at least 45 days before shipment. Implement weaning strategies, such as fenceline weaning, that minimize calf stress. Train calves to eat from a bunk and drink from a water trough during the preconditioning period. Pregnancy check herd females about 60 days after the end of the breeding season. Cull cows based on pregnancy status, soundness (eyes, udders, feet, legs, teeth), and performance records. Develop plans for marketing cull cows based on market conditions and cow body condition.