

# Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality



## Upcoming events:

- January 11-12—Cattle reproduction short course, Distance education sites throughout Mississippi
- January 17—Cattlemen's Exchange: Understanding feed and mineral tags, Jones/Perry County, Calhoun, MS, Community Center, 6:00 p.m.
- January 18—Cattlemen's Exchange: Cattle nutrition and understanding feed and mineral tags, Oktibbeha/Webster/Choctaw County, Starkville, MS, Oktibbeha County Extension office, 6:00 p.m.
- January 18—Cattlemen's Exchange: Facilities, Clarke/Lauderdale County, Quitman, MS, Clarke County Extension office, 6:00 p.m.
- January 18—Angus Outreach Seminar presented by the American Angus Association, EE Ranches, Winona, MS, 6:30 p.m.
- January 25—Cattlemen's Exchange: Calving/post-calving management for reproductive efficiency, EE Ranches cafeteria, Winona, MS, 6:00 p.m.
- January 27—Cattlemen's Exchange: Herd health, Amite/Adams/Wilkinson/Franklin/Jefferson County, Gloster, MS, Gloster Public Library, 6:00 p.m.
- February 1—Cattlemen's Exchange: Feed and mineral tags, Verona, MS, NE Mississippi Research and Extension Center, 7:00 p.m.
- February 2-5—Cattle Industry Convention and Trade Show, San Antonio, TX
- February 12—Mississippi BCIA annual membership meeting, Jackson, MS, Hilton, 1:00 p.m.
- February 11-12—Mississippi Cattlemen's Association annual convention, Jackson, MS, Hilton Hotel
- February 14—Cattlemen's Exchange: Tall fescue vs. annual ryegrass, Covington/Jeff Davis/Simpson/Copiah County, Simpson County Extension office, 6:00 p.m.

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## Cattlemen's College and MBCIA Annual Meeting Ahead

A great lineup of educational programs is scheduled as part of the Mississippi Cattlemen's Association annual convention and trade show on February 11-12, 2005 at the Hilton Hotel off of County Line Road in Jackson, MS. Producer education programs kick off on Friday, February 11 at 1:00 p.m. with the Mississippi BCIA session. The BCIA session features Dr. Scott Greiner, Extension Beef Cattle and Sheep Specialist from Virginia Polytechnic Institute and State University. Dr. Greiner serves as the educational advisor for the Virginia BCIA and will share information on Virginia BCIA programs and activities. He will also speak on the "Pitfalls of Single Trait Selection". The MBCIA annual membership meeting follows Dr. Greiner's presentation.

Additional educational presentations at the MCA convention are a part of the Pfizer Cattlemen's College that begins at 3:00 p.m. on Friday, February 11 and continues through Saturday, February 12. The Friday program leads off with MSU alumnus and renowned forage breeder, Dr. Joe Bouton, of the Noble Foundation in Ardmore, Oklahoma. His forage breeding accomplishments include Alfa-graze alfalfa, MaxQ tall fescue, and Durana and Patriot white clover. Dr. Bouton will talk

about the potential for new forage varieties in Mississippi.

The remainder of the Friday program will consist of MSU Extension Beef Specialist, Jane Parish, addressing "Managing the Breeding Season" and a purebred cattle marketing panel that includes Jarvene Shackelford, Richard Dyer, and Jack Evans. Other Friday events on tap are the trade show and "Taste of Beef" and auction at the Mississippi Ag Museum.

On Saturday morning, National Cattlemen's Beef Association president, Jan Lyons, is expected to speak to MCA members at 9:00 a.m. The Cattlemen's College continues at 10:15 a.m. with Dr. Greiner discussing "Genetic Selection for Improved Herd Health". MSU veterinarian, Brad White, then talks about "BRD Management Programs". After lunch, John Stevenson from the University of Kentucky plans to provide an animal ID update. Dr. John Anderson, MSU Extension Livestock Economist, closes the program with a market update.

For more information on these events, contact the Mississippi Cattlemen's Association at (601) 354-8951.

## Angus Outreach Seminar Planned for Winona

The American Angus Association will continue a series of Outreach Seminars in the Southeastern U.S. in an effort to boost communications with the membership. Outreach Seminars are planned for mid-January in Winona, Mississippi, and Spring Hill, Tennessee. Association staff will travel to these sites to provide updates on Association programs including AngusSource and current performance program enhancements. In addition, breeders will have an opportunity to

provide input to Association staff and directors during interactive discussions about ways the Association can best serve members today and in the future.

The Mississippi meeting will be held at 6:30 p.m., January 18 at EE Ranches Inc., near Winona, Mississippi. Contact Cheryl Evans at (662) 283-3337 for directions. Reservations are not required, and the meeting will last approximately three hours.



Research shows weaning age impacts cow-calf performance

## Beef Cattle Research Update

Ongoing efforts at Mississippi State University and other land grant institutions around the country are directed at solving beef production problems and answering production questions through research. These efforts lead to improved production methods and technologies and are used to refine Extension recommendations. Research findings from recently published studies are highlighted below.

### REVIEW OF EARLY WEANING STUDIES SHOWS PRODUCTION IMPACTS

In most spring- and fall-calving beef herds, calves are weaned at six to eight months of age. Early weaning is often considered when forage is limited or when rebreeding performance of the cowherd needs improvement. Results summarized for research trials looking at early weaning reveal that, in general, if early weaned calves are fed some form of concentrate diet from time of early weaning until the age at which they would have been conventionally weaned, they weigh the same or more than calves left on their dams. Early weaned calves tend to gain less in the feedlot, have lighter carcass weights, and yet similar yield grades. The percentage of carcasses grading Low Choice or better tend to be equal to or greater for early weaned calves.

*Thrift and Thrift. 2004. Prof. Anim. Sci. 20:490-502.*

### FRIENDLY ENDOPHYTE-INFECTED TALL FESCUE IMPROVES CALF GROWTH RATES AND COW CONDITION OVER TOXIC TALL FESCUE

A 3-year Georgia study compared cow-calf performance on toxic endophyte-infected tall fescue and non-toxic endophyte-infected (MaxQ) tall fescue. While no differences in reproductive performance were observed, cow body condition and average daily gain were higher in cows grazing the non-toxic tall fescue. There was also a significant advantage in calf growth performance for both heifers and steers nursing cows in non-toxic tall fescue pastures.

*Watson et al. 2004. J. Anim. Sci. 82:3388-3393.*

### CONSUMPTION OF TOXIC FESCUE IMPAIRS BULL REPRODUCTION

The detrimental effects of toxic endophyte-infected tall fescue on reproductive performance of beef females has long been documented. Researchers in Illinois went one

step further and looked at the effects of toxic endophyte-infected tall fescue on reproductive traits in beef bulls. They found that bulls fed toxic endophyte-infected tall fescue exhibited higher scrotal temperatures, smaller scrotal circumferences, and greater spermatozoal concentrations than bulls on control diets. There appeared to be a detrimental effect associated with toxic tall fescue consumption on sperm motility during the last two weeks of the 60-day trial period. These results indicate that bulls consuming toxic endophyte-infected tall fescue can experience impaired reproductive capabilities.

*Jones et al. 2004. Prof. Anim. Sci. 20:437-442.*

### EFFECT OF STAGE OF GROWTH AND IMPLANT EXPOSURE ON STEER PERFORMANCE AND CARCASS COMPOSITION

Weaned Angus and Angus x Limousin cross steers were backgrounded 47 days and then put on feed. Steers that were implanted with an estradiol-trenbolone acetate implant had increased rate of gain and feed efficiency. At the conclusion of 112 days on feed, there was no difference in rate of gain or feed efficiency between cattle implanted on day 0 and cattle not implanted until day 56. Implanting increased hot carcass weight and dressing percentage compared to non-implanted cattle. In addition, marbling scores were decreased by early implanting on day 0 but not by late implanting on day 56. The study suggests that growth of intramuscular fat is sensitive to growth implants administered during early periods of growth.

*Bruns et al. 2005. J. Anim. Sci. 83:108-116.*

### MORBIDITY AFFECTS PRODUCTIVITY AND PROFITABILITY OF STOCKER CATTLE

A Texas study looked at the effect of bovine respiratory disease and castration on stocker cattle performance and profitability. Bull calves castrated after arrival gained 10.3% less over the grazing season than calves arriving as steers. While only 28% of steers exhibited illness, 60% of bulls castrated after arrival showed signs of illness. Heifers requiring two or more antibiotic treatments gained less than healthy heifers and had significantly lower conception rates. Respiratory disease reduced net returns from 9.7 to 21.3% per animal in male calves and from 3 to 7.8% in heifers.

*Pinchak et al. 2004. J. Anim. Sci. 82:2773-2779.*

*“Respiratory disease reduced net returns from 9.7 to 21.3% per animal in male (stocker) calves...”*

## Hay Crops and Grazing Schools

**Dr. Richard Watson**  
MSU Extension Forages Specialist

### Focus on quality not quantity for 2005

Hay continues to be a significant commodity crop in Mississippi. Statistics released late last year by the Mississippi Agricultural Statistics Service, and the Mississippi State University Department of Agricultural Economics, estimate the 2004 crop to be worth around \$85-\$90 million. This represents about 2.1 million tons of hay production off 720,000 acres. Overall, the number of acres is down about 30,000 acres on 2003, but the moist summer lifted yields to an average of 2.9 tons/acre, resulting in total production that was 200,000 tons above 2003 estimates.

While yields in 2004 were generally good, the wet summer also created many problems with quality, and many producers lost one or more cuttings to the frequent rainfall. Therefore, hay stocks will be generally adequate from a tonnage standpoint, but finding good quality hay will be more of a challenge. This means that cattle producers will require more supplemental feeds for their cattle this winter.

The focus for 2005 hay season should be lifting the overall quality of hay produced in the state rather than trying to maximize tonnage. The humid Southeast will always have its challenges for hay production. Some producers are minimizing the negative impacts of weather on hay production by producing high moisture wrapped hay or baleage. This method of forage storage is particularly effective for spring harvests of annual ryegrass and other high-moisture crops, for the first cutting of bermudagrass, or even for a hay crop where the weather has prevented effective drying.

For more information on hay production practices that will optimize your quality and yield, contact your local county extension office.

### South Mississippi Spring Grazing School

The Mississippi State University Extension Service, in conjunction with the USDA-NRCS,

will be conducting a grazing school this spring to cater for livestock and hay producers in Southern Mississippi. The two-day school will be conducted on the 17<sup>th</sup> and 18<sup>th</sup> March 2005 at the Mississippi State University White Sands Beef Cattle Research Unit near Poplarville, MS. The White Sands Research Unit is located on MS HWY 26 about 20 minutes West of Poplarville.

The program will include practical courses on the management of forage crops important to South Mississippi. This includes the grazing and fertility management of annual ryegrass, bermudagrass, bahiagrass, and clovers. Other topics include weed control, and animal nutrition. The program will cater for all types of forage-based livestock, including beef cattle, dairy cattle, sheep/goats, and horses. The school will offer demonstration and hands-on activities to allow participants to put many of the forage management principles into practice. Practical exercises will include pasture allocation to livestock, balancing your forage and feed diets, and the calibration of spray and fertilizer spreading equipment.

Participants will be provided with lunch and refreshments on both days, and course materials will include a grazing school booklet with summaries of the information covered in the school, a copy of the Southern Forages Pocket Guide, a forage measurement stick, and a pocket calculator for calibration and allocation exercises.

People interested in participating are asked to register for the school by sending in a registration form by the March 10, 2005. A registration fee of \$25 is required to cover the cost of course materials, and the fee also includes a year membership to the Mississippi Forage and Grassland Council, as well as the American Forage and Grassland Council, which provides quarterly publications highlighting innovations and news in the forage industries.

For further information on the grazing school, and registrations forms, please contact your local county extension office or Richard Watson; Email: [rwatson@pss.msstate.edu](mailto:rwatson@pss.msstate.edu); Phone (662) 325-5463.

*“Practical exercises (at the grazing school) will include pasture allocation to livestock, balancing your forage and feed diets, and the calibration of spray and fertilizer spreading equipment.”*



Last fall's North Mississippi Grazing School was very hands-on and interactive

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Send questions or comments about this newsletter to Jane Parish, Extension Beef Specialist, MSU Extension Service



*Jane Parish*

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Visit MBCIA online at  
<http://msucare.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—January 2005

### GENERAL

Continue the winter-feeding program. Watch body condition, and utilize winter-feeding groups according to cattle nutritional demands and feed and forage supplies. Lush winter grazing may work well for stockers, heifers, and fall pairs. Manage winter annual pastures to maintain at least four inches of stubble height to keep from limiting winter production. Limit grazing can be used to stretch winter pastures and hay and provide acceptable protein supplementation. Limit graze winter annual forages for a few hours per day for efficient use. Make plans for the spring pasture program including fertilization, weed control, and establishment needs. Plan to fertilize annual ryegrass and tall fescue before the flush of spring growth. Keep proper free-choice minerals available for cattle at all times. High magnesium mineral supplements should be used for cows on lush winter pastures to prevent grass tetany. Vitamin A supplementation should be an important part of the nutritional program, particularly if frosted grass, weathered hay or by-products are the primary feedstuffs. Water is just as important for cattle in the winter as in the summer. Monitor water sources, breaking ice at least daily on watering tanks that are not freeze-proofed. Maintain a complete herd health program in consultation with a veterinarian including internal and external parasite control and vaccinations. Check for lice, and treat as needed. Start gathering records for tax purposes, continuing good production and financial record keeping. Now is a good time to set yearly and long-term goals for the farm.

### SPRING CALVING—January, February, March

Continue supplementation of pregnant females so that they will be in good condition at calving. Have calving supplies on hand including calving record books, ear tags, obstetric equipment, disinfectants, calf scales, and colostrum. Check expected calving dates, and observe bred cattle closely as calving approaches, giving heifers extra attention. Make sure calves receive colostrum during the first six

hours of life. If calves do not nurse, administer colostrum with a bottle or stomach tube. Separate lactating cows from dry cows after calving to feed more efficiently. After calving, move pairs to clean pasture, and watch calves for scours. Consult with a veterinarian for advise on scours prevention and treatment. Tag, castrate, dehorn, and implant calves as appropriate. Always maintain good calving records including calf birth weights. Consult with a veterinarian to schedule pre-breeding vaccinations or order vaccines. Keep yearling heifers gaining weight to reach 2/3 of mature weight by breeding time in early spring. Take yearling measurements, and report performance data on seedstock cattle to breed associations. Base heifer selection on both weaning and yearling information also evaluating temperament, structural soundness, and breeding goals. Determine bull power needs. Although yearling bulls should not be placed with as many females in the breeding herd as mature bulls, they can make good herd sires with proper management. Make bull selection and procurement decisions for the upcoming breeding season taking into account complementing herd females and marketing objectives. Gather information about bulls at central test stations and in purebred herds to locate potential herd sires. Check sale dates and review bull performance information. Line up breeding soundness evaluations, and make sure bulls are in good condition prior to the breeding season.

### FALL CALVING—October, November, December

Fall calving season should be completed. Calculate fall calving percentage. Cow nutrient needs increase dramatically after calving, so use the best hay and feeds for lactating cows now. A forage analysis allows more precise matching of feed nutrients and cattle nutrient needs. Monitor breeding activities in herds exposed for fall calving, and be prepared to remove bulls after a controlled breeding season. If a high percentage of cows return to heat after 40 days of breeding, have bulls rechecked for breeding soundness, consult with a veterinarian on possible reproductive disease problems, and re-evaluate the nutritional program.