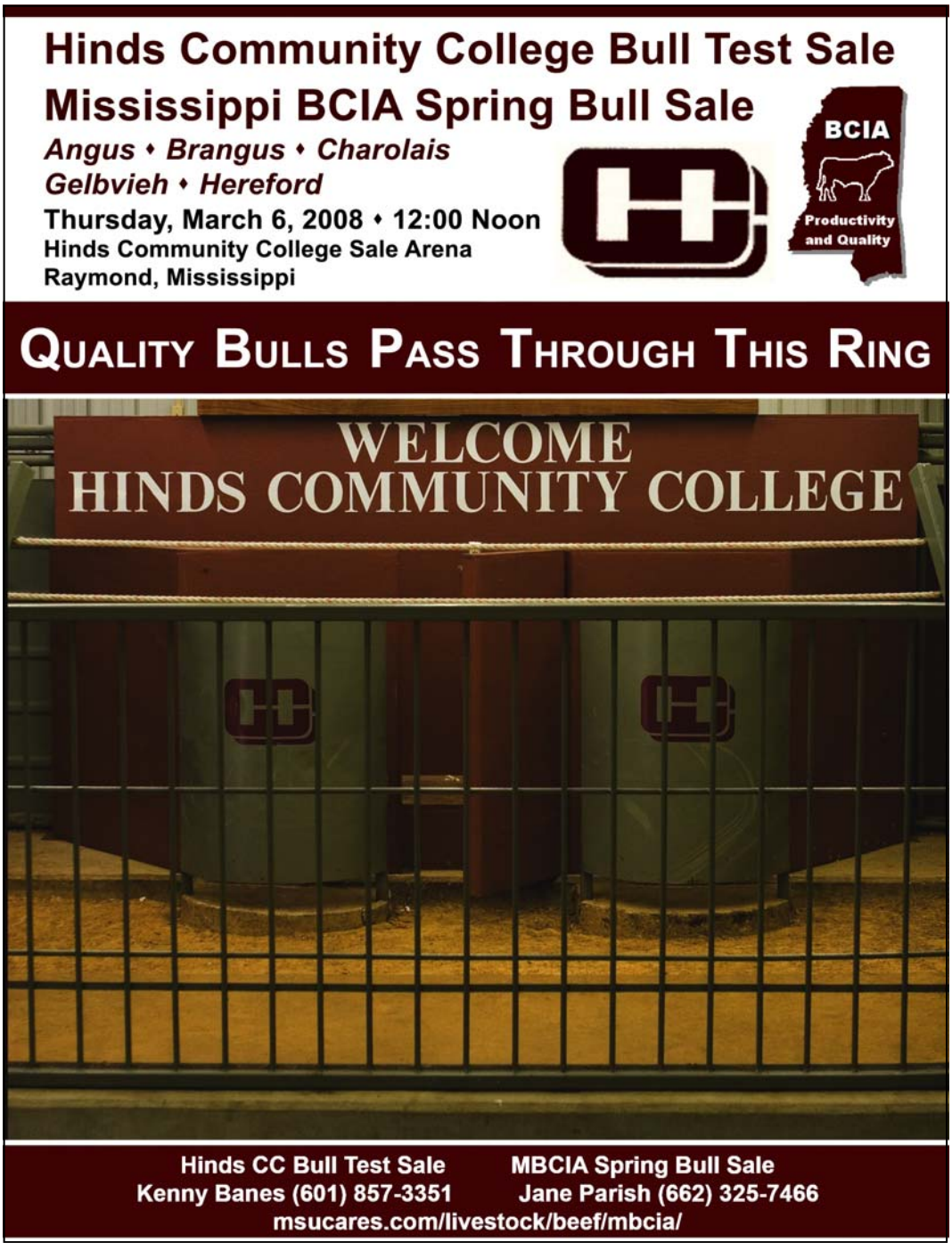
Volume 5, Issue 2

February 2008

Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality

March 6—Hinds Bull Test and MBCIA Spring Bull Sale



Upcoming events:

- **February 1—Mississippi BCIA Annual Membership Meeting, Regency Inn, Jackson, MS, 1:00 P.M.**
- February 19—Cattlemen's Exchange: Initial meeting – Cost of production, Marshall County Extension office, Holly Springs, MS, 6:00 p.m.
- February 25—Cattlemen's Exchange: Forages, EE Ranches, Winona, MS, 7:00 p.m.
- **March 6—Mississippi BCIA Spring Bull Sale/ Hinds Bull Test Sale, Hinds Community College Bull Sale Facility, Raymond, MS, 12:00 noon**
- March 13-15—MSU Artificial Insemination School, Mississippi State, MS
- June 7—Mississippi Hereford Association Annual Field Day, Mississippi State, MS
- June 30-July 3—Beef Improvement Federation Annual Convention, Hyatt Hotel, Calgary, Alberta, Canada

Inside this issue:

Computer Spreadsheet Tools for Beef Cattle Producers

Estrus Synchronization Calendar

Single Injection Prostaglandin without Prior Heat Detection

February 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5 PGF injection for all females in the breeding group; detect estrus and	6 Detect estrus and breed	7 Detect estrus and breed	8 Detect estrus and breed	9 Detect estrus and breed
10 Detect estrus and breed	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

Beef cattle producer management tools are available as free file downloads from MSU-ES & MBCIA

The Mississippi State University Extension Service and the Mississippi Beef Cattle Improvement Association have developed new computer spreadsheet tools for beef cattle producers. The spreadsheets are Microsoft Excel files offered on the MSUcares website for free download.

Initial file offerings include:

- MBCIA Commercial Cattle Adjusted Weaning Weight Calculator
- MBCIA Cow Herd Performance Record Manager
- MBCIA Estrus Synchronization Calendar
- MBCIA Performance Data Collection Calendar

These files function best in Excel 2007. Compatibility with earlier versions of Excel will be addressed in updated file offerings in the coming months.

The Mississippi BCIA and MSUcares Beef Cattle homepages contain links to these new files.

msucares.com/livestock/beef

Register Now for Spring 2008 MSU Artificial Insemination School

Practical AI equipment training and semen handling techniques are part of the MSU AI School program

It is time to register for the Spring 2008 MSU Artificial Insemination School to be held March 13th through the 15th. The Fall AI School was a huge success with 35 participants and 10 instructors. One-on-one instruction and hands-on practice time were cited as the most valuable aspects of the course. Additionally, classroom and instruction and take-home materials were beneficial to the attendees. In their words:

- *"Excellent program, excellent pace and excellent hands on help."*
- *"Very good info — speakers who were willing to answer questions."*
- *"I am pleased with what I learned in the short time."*
- *"Thanks for giving me the opportunities to practice. Hands on was great."*

The class will be held in Starkville on the Leveck Animal Research Center Beef Unit and the Bearden Dairy Research Center with classroom instruction conducted at the Wise Center. The registration fee is $150 per person but is limited to the first 30 registrations. As in the past, husband and wife teams may enroll for a single registration fee. Take a look at the following agenda:

Thursday, March 13, 2008

- 6:00 – 6:15 p.m. Introductions/ Opening Comments (WISE 4036)
- 6:15 – 6:45 p.m. Economics of Artificial Insemination
- 6:45 – 7:30 p.m. Reproductive Anatomy and the Estrous Cycle
- 7:30 – 8:30 p.m. Estrus Synchronization
- 8:30 – 8:45 p.m. Break
- 8:45 – 9:00 p.m. Artificial Insemination Equipment
- 9:00 – 9:45 p.m. Work with Reproductive Tracts

Friday, October 26, 2007

- 8:00 – 8:30 a.m. Heat Detection and Heat Detection Aids (WISE 4043)
- 8:30 – 9:00 a.m. Nutritional Programs for A.I. Success – Part I
- 9:00 – 10:00 a.m. Reproductive Herd Health and Biosecurity
- 10:00 a.m. – Noon Corral Work (semen handling and A.I. technique practice; Dairy Unit)
- Noon – 1:00 p.m. Lunch (provided; Beef Unit)
- 1:00 – 2:00 p.m. Beef Sire Selection Exercise (Beef Unit)
- 2:00 – 5:00 p.m. Corral Work (A.I. technique Practice; Dairy Unit)

Saturday, October 27, 2007

- 8:00 – 8:30 a.m. Nutritional Programs for A.I. Success – Part II (Beef Unit)
- 8:30 – 11:30 a.m. Corral Work (A.I. technique practice; Dairy Unit)

If you are interested in taking the class, please send a $150 check, payable to Northeast Area Livestock, to:

Mike Howell, N.E. Area Livestock Agent
PO Box 1690, Verona, MS 38879

"…Very good info — speakers who were willing to answer questions."

Mississippi VCHAP Program Summary

The Mississippi Veterinarian Certified Health Assurance Program (MS-VCHAP) provides a system for certification and verification of procedures performed to preconditioned feeder calves in the state of Mississippi. Accountability and standardization are necessary components to establish a program that creates a reputation for producing a quality, consistent product. The system addresses management procedures to increase the health and immune status of calves, and beef quality assurance issues.

Calves placed in the program must meet the minimum standards outlined in the program specifics section found below. Veterinarians and producers are accountable for ensuring that all calves tagged and listed on the travel sheet met the minimum guidelines for program enrollment. Additional preventative health procedures are acceptable and should be noted in the comments section of the travel sheet.

All participants in the program must be Beef Quality Assurance certified. Residue avoidance and Beef Quality Assurance are important topics because they stress the importance the cow/calf producer plays in the production of safe, desirable beef.

The formation of a successful preconditioning program is dependant on creating a solid reputation for calves that complete the program. Accountability will be maintained by using BQA certification numbers for both veterinarians and producers to verify that they have undergone the proper training. Calves enrolled in the program will be individually tagged with a maroon metal clip tag distributed by the veterinarian certifying the calves. Calves will be accompanied at sale by travel sheets including listing of specific procedures performed to the calves. This documentation enables the buyer to avoid duplication of procedures and have increased knowledge about the calves being purchased.

All participants will undergo BQA training to become certified prior to enrolling animals in the program. All documentation must be completed with the veterinarian and producer BQA certification number to be valid.

After the producer has been certified, tags and documentation forms will be issued by the certifying veterinarian for calves that have completed the requirements. Producers and veterinarians should be certified prior to processing the calves. At processing, calves should be individually tagged in the left ear with the official program maroon metal clip tag. Immunizations must include a Clostridial, Pasteurella/Mannheimia and 4-way (IBR/BVD/PI3/BRSV) viral vaccine in both rounds. Vaccinating for other diseases is optional. At least one round of vaccinations must include a 4-way modified-live product given in accordance with label directions.

Appropriate paperwork should be completed and accompany calves at sale. The processing travel sheets must include name, address and phone number of producer. The records should also include all treatments administered to each animal, serial number and name of product used, and the date administered. All procedures must be performed in accordance with Beef Quality Assurance guidelines. Both veterinarian and producer need to sign and place their BQA certification number on the travel sheet.

Producers who desire to participate should contact their local veterinarian. Veterinarians wanting to participate can contact Dr. Jim Watson's office at the Mississippi Board of Animal Health for tags and forms for distribution to participating clients.
www.mbah.state.ms.us

MS-VCHAP is a joint effort among:

- *Mississippi State University College of Veterinary Medicine*
- *Mississippi Cattlemen's Association*
- *Mississippi Veterinary Medical Association - Animal Health Committee*
- *Mississippi State University Extension Service*
- *Mississippi Board of Animal Health*

MS Veterinarian Certified Health Assurance Program Specifics

	Initial Immunizations	*Booster Immunizations*
Time Frame:	Calves minimum of 5 months old	2-4 weeks after initial vaccinations, minimum 10 days prior to sale
Required Immunizations:	Clostridial Disease (7-way Blackleg) Viruses: IBR, BVD, PI3, BRSV Pasteurella multocida & haemolytica (w/ leukotoxoid)	Clostridial Disease (7-way Blackleg) Viruses: IBR, BVD, PI3, BRSV -- Minimum of one round Modified-Live, can be given at initial or booster round, both rounds may be MLV if desired
Optional Immunizations:	Hemophilus Mycoplasma Brucellosis (Heifers only)	Vaccinate in accordance with label
Procedures:	Dehorn Castration (or banding) of steers	Must be healed by time of sale
Feeding:	Calves must be bunk broke by sale.	
Weaning:	Calves must be weaned 45 days before offering for sale.	
Parasite Control:	Calves must be treated for internal and external parasites within 45 days of sale with a product labeled to control encysted L3 parasite stages. Optional-Coccidiosis Control	

Mississippi Beef Cattle Improvement Association—Productivity and Quality

Mississippi Beef Cattle Improvement Assn.
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Mississippi State, MS 39762

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

Send questions or comments to Jane Parish or Justin Rhinehart, Extension Beef Specialists, 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:_____ Email:_____

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

BCIA Genetic Profit Tips — February 2008

The Power of Breed Complementarity

Breed complementarity is the effect of combining breeds that have different strengths. When considering crossbreeding from the standpoint of producing replacement females, one could select breeds that have complementary maternal traits such that females are most ideally matched to their production environment. Matings to produce calves for market should focus on complementing the traits of the cows and fine-tuning calf performance (growth and carcass traits) to the marketplace.

An abundance of research describes the core competencies (biological type) of many of today's commonly used beef breeds. Traits are typically combined into groupings such as maternal/reproduction, growth, and carcass. When selecting animals for a crossbreeding system, their breed should be your first consideration. What breeds you select for inclusion in your mating program will depend on a number of factors including the current breed composition of your cow herd, your forage and production environment, your replacement female development system, and your calf marketing endpoint. All of these factors help determine the relative importance of traits for each production phase.

If you implement a crossbreeding system, do not be fooled into the idea that you no longer need to select and purchase quality bulls or semen for your herd. Heterosis cannot overcome low-quality genetic inputs. The quality of progeny from a crossbreeding system is limited by the quality of the parent stock that produced them. Conversely, do not believe that selection of extremely high-quality bulls or semen or choosing the right breed will offset the advantages of an effective crossbreeding system. Crossbreeding and sire selection are complementary and should be used in tandem to build an optimum mating system in commercial herds.

The use of breed differences across multiple traits *may be* achieved through the implementation of the concept of breed complementarity. Breeds are complementary to each other when they excel in different traits and their crossbred progeny have desirable levels of performance in a larger number of traits than either of the parent breeds alone. Making breed and mating selections that utilize breed complementarity provides an effective way to aggregate the core competencies of two or more breeds in the progeny. Moreover, use of breed complementarity can be a powerful strategy to genetically match cows to their production environment and progeny to the marketplace. For example, a crossbreeding system that mates Charolais bulls to Hereford-Angus crossbred cows utilizes breed complementarity. The Charolais bull contributes growth and carcass yield to progeny genetics, while the Hereford-Angus crossbred cows have many desirable maternal attributes and contribute genetics for carcass quality. When considering crossbreeding from the standpoint of producing replacement females, one could select breeds that have complementary maternal traits such that females are most ideally matched to their production environment. Matings to produce calves for market should focus on complementing traits of the cows and fine-tuning calf performance (growth and carcass traits) to the marketplace.

Source: National Beef Cattle Evaluation Consortium. 2006. Beef Sire Selection Manual. B. Weaber , University of Missouri.