#### Volume 20 Issue 2 August 2023



### BCIA Annual Meeting and Field Day-Raymond

### September 29

State Fair-Jackson

October 7-16

MSU AI School, Starkville

October 27-29

Fall Bull and Heifer Sale-Raymond

November 2

North MS Beef Expo

Batesville-November 2

**Ripley November 3** 

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# M I S S I S S I P P Ι

BEEF CATTLE IMPROVEMENT ASSOCIATION

# Upcoming in 2023

gone and how it is already mid-August! These last few weeks of August have been hot and dry, but there are cooler days in our future, and hopefully rain in our future. Cattle markets are experiencing record prices, and there is optimism that that will continue.

There are 2 upcoming BCIA events this fall that I hope you can participate in.

### **BCIA Field Day and Annual** Meeting

Join us for the BCIA Field Day scheduled for September 28th in Raymond. It will be held in conjunction with the annual meeting again this year. The complete details on this event are found on page two of the newsletter. You will find a great lineup of speakers covering some cutting edge topics that tie together reproduction and genetics.

### Fall Bull and Heifer Sale

Plans for the fall bull and heifer sale held at Hinds

'm not sure where 2023 has Community College in Raymond, MS are underway, and you will find printed copies of the nomination forms enclosed with this newsletter. The sale is scheduled for Thursday November 2.

> As a reminder this sale must meet a minimum total of 50 animals including bulls, bred heifers. and open registered heifers. If the sale does not meet this requirement it will be cancelled by October 3. Bulls must meet minimum growth (weaning weight) and scrotal circumference requirements and must have birth weight and yearling weights reported to the breed association. Bulls must also have either carcass EPDs or have ultrasound carcass data reported to the breed association.

### NOMINATION DEADLINE is September 15.

Please don't hesitate to reach out with any questions on Email is best concerns. at





# FIELD DAY AND ANNUAL MEETING

## **SEPTEMBER 28 | 2 PM TO 6 PM** HINDS COMMUNITY COLLEGE BULL SALE FACILITY 1310 SEVEN SPRINGS ROAD, RAYMOND, MS

# Schedule

1:30 PM- Registration
2:00 PM- Breaking Down a BSE
2:45 PM-Evaluating Heifer Fertility
3:30 PM-Break
3:45 PM-Embryo Transfer to Advance your Herd
4:30 PM-Applied Genomics
5:15 PM Break
5:30 PM BCIA Annual Meeting and Dinner

Please RSVP by Sept. 23 to brandi.karisch@msstate.edu or by calling 662-325-7465 with the number attending the event. The event is free and open to non-BCIA members.



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## New Additions to the Beef Cattle Extension Team

In February of 2023, Libby Durst was hired as a new Extension Associate working with Beef Cattle Extension and 4-H Livestock

This fall look for her speaking at cattlemen's meetings and other events as well as assisting with 4-H Livestock events. Be sure to give her a warm welcome!

In 2022, Dr. Thiago Martins was hired at the Brown Loam Branch Experiment Station serving Central Mississippi with a 50% Extension and 50% Research appointment. He brings a wealth of knowledge particularly focused in beef cattle reproduction.

In August of 2023, Dr. Barbara dos Reis began her position as an Assistant Professor at the White Sands Experiment Station in Poplarville, MS. Dr. doe Reis has a 75% research and 25% Extension appointment. Her background is in nutrition.

## Value of Collecting Phenotypes

By Dr. Matthew Spangler, Adapted from: https://beefcattle.extension.org/value-of-collecting-phenotypes/

From a historical point of view, there have been considerable changes made to National Cattle Evaluations (NCE) over time. More recently, many beef breed associations have augmented EPD with genomic information. This step alone has included many rapid evolutions both in terms of methods of incorporation and the source of genomic information. Changes include new genotyping platforms, the usefulness of genomic information in predicting genetic merit ,and our understanding of how best to utilize it.

How well a particular genomic test improves the accuracy of an EPD in the context of selection is related to how much of the genetic variation the marker test explains. The magnitude of the bene-fits depends on the proportion of genetic variation (%GV) explained by a given marker panel, where the %GV is equal by the square of the genetic correlation multiplied by 100.

It is clear that even when the %GV is exceptionally large, the corresponding BIF accuracy is relatively low. This suggests that although genomics has the potential to add additional information, by itself it is far from a perfect predictor of an animal's genetic merit.

While these gains in accuracy from genomic information are impressive, particularly for non-parent animals, it is clear that genomic information alone cannot "prove" a sire. Or in other words, additional information is required before an animal can achieve very high levels of BIF accuracy. To reach high levels of accuracy it is necessary to collect and submit phenotypic information on the animal's progeny. The inclusion of genomic predictors into NCE offers an exciting and powerful tool to increase the rate of genetic gain by increasing accuracy of EPD, particularly of young animals, and by reducing the generation interval if younger sires are used more heavily. However, genotyping animals does not replace the need for phenotyping. Doing so inherently limits the upper bound of accuracy far below what is possible if additional phenotypes are collected. Genomic predictors should be viewed as an additional source of information for EPD calculations, not the complete picture.

## August 2023 – Management Calendar

### GENERAL

Start planning winter grazing and supplementation programs, evaluating cool-season pasture options and byproduct commodity alternatives. Keep proper free-choice minerals, adequate shade, and clean water available for cattle at all times, and check mineral and water supplies often. Remove fly tags as they become ineffective, and implement additional fly control methods as needed. Maintain a complete herd health program in consultation with a veterinarian including internal and external parasite control and vaccinations. Rotationally graze summer pastures, clipping overgrown pastures or harvesting excess for hay. Avoid grazing heavily nitrogen fertilized sudangrass, sorghum-sudan hybrid, or pearl millet pastures during drought or cool, cloudy weather. If cattle are grazed on these pastures, they should be observed carefully for signs of nitrate poisoning. Continue harvesting hay at 4-5 week intervals when possible for optimum forage maturity and quality. Fertilize hay fields between cuttings or on a regular interval to replace soil nutrients removed by hay production and improve hay yield and quality. Continue recording hay yields and forage testing each cutting. Store hay to minimize storage losses and allow matching of forage test results with individual lots of hay for use in hay feeding and supplementation decisions. Continue good production and financial record keeping.

### SPRING CALVING—January, February, March

Plan for fall cattle working by determining vaccination, deworming, and implant needs and acquiring supplies ahead of time. Wean calves based on market and pasture conditions using weaning strategies that minimize calf stress. Monitor herd performance and nutritional status by recording weights and cow body condition scores at weaning. Assess weaning percentage (calves weaned/cows exposed to breeding) and cow efficiency (calf weight/cow weight). Put a heifer development program in action to reach target breeding weights by the start of the next breeding season. Keep an eye on declining forage quality. Implement calf preconditioning, marketing, or retained ownership plans as appropriate considering seasonal price risks and breakevens on calves. Pregnancy check females and use effective culling criteria for less productive or problem cattle. Establish permanent identification (tattoos or brands) for bred heifers that will remain in the herd.

### FALL CALVING—October, November, December

Start preparing for the upcoming fall calving season. Cows need to be in moderately good condition prior to calving. Purchase or assemble calving supplies including calf identification tags and obstetric equipment. Move fall-calving heifers and cows close to handling facilities and observe cattle frequently.

Contact Information: Box 9815   Mississippi State, MS 39762	Membership Application
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Dr. Brandi Karisch, Beef Cattle Extension Specialist Email: brandi.karisch@msstate.edu	County: State: Zip:
Find us on Social Media:	Phone: Email: (Check one) Seedstock: Commercial:
You Tube youtube.com/MSUBeefCattle	Cattle breed(s):
facebook.com/MSStateExtBeef           Image: Contract of the sector of th	Completed applications and \$10 annual dues payable to Mississippi BCIA should be mailed to: Mississippi Beef Cattle Improvement Association
MISSISSIPPI STATE UNIVERSITY	Box 9815, Mississippi State, MS 39762

**EXTENSION** We are an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.