



M I S S I S S I P P I  
**BCIA**  
BEEF CATTLE IMPROVEMENT ASSOCIATION

**Upcoming events:**

- November 12—MBCIA Educational Meeting and Supper, Raymond, MS
- November 13—MBCIA Fall Bull and Heifer Sale, Raymond, MS
- November 14—Beginning of Gain on Forage Bull Test
- January 20—MBCIA Spring Bull and Heifer Sale Nomination Deadline
- March 4- MBCIA Annual Membership and Educational Meeting and Supper, Raymond, MS
- March 5- Hinds Bull Test and MBCIA Spring Bull and Heifer Sale, Raymond, MS
- March 12-14- MSU-ES Cattle Artificial Insemination School, Mississippi State, MS

**Bull and Heifer Sale  
Fall 2014**

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Hinds CC Bull Sale Facility

Interactive video bidding sites:  
North Mississippi R&E Center, Verona, MS  
Panola County Extension Office, Batesville, MS

Sale at 12:00 noon  
**11.13.14**

[msucares.com/livestock/beef/mbcia](http://msucares.com/livestock/beef/mbcia)

**Inside this issue:**

Sexed Semen	2
Plan for 2015 BCIA Sale	2
Economically Relevant Traits	3
Did You Know	4
MBCIA Membership Application	4
Mississippi Forage and Grassland	4

**Catalog updates, sale preview, and educational dinner**

Several lots have had updated information on performance data, carcass EPDs, and pedigree information has been updated on Lots 4, 9, 10, 11, and 22 have been updated since printed catalogs were made available. Updates will be available on sale day. The most current version of the catalog can be found: <http://msucares.com/>

[livestock/beef/mbcia/mbciafall2014catalog.pdf](http://livestock/beef/mbcia/mbciafall2014catalog.pdf)  
Be sure to RSVP to for Wednesday night's dinner and meeting to [mquinn@ads.msstate.edu](mailto:mquinn@ads.msstate.edu) or 662-325-3516 .  
Dr. Trent Smith will present an update on his research on hair shedding that was

*“Gender-sorted semen is here to stay, said John Hall, adding that fertility will improve as sorting damage decreases, synchronization protocols are more adapted and bull selection for gender-selected semen is more established.”*

## Sexed Semen: How It's Produced and How to Use it Effectively

by Kasey Brown, associate editor  
STILLWATER, Okla. (Oct. 9, 2014) — “Sexed semen is a technology whose time has come in the beef industry; however, producers need to understand the risks and limitations,” said John Hall, superintendent of the Nancy M. Cummings Center at the University of Idaho. He spoke to more than 210 attendees of the 2014 Applied Reproductive Strategies in Beef Cattle (ARSBC) symposium hosted in Stillwater, Okla., Oct. 8-9.

Gender-selected semen is gaining popularity and use in the beef industry, with more bulls with gender-selected semen becoming available through bull studs. Pregnancy rates with gender-selected semen, on average, are about 15%-20% lower than those bred by conventional semen. However, there are some factors affecting pregnancy rates, including the timing of insemination and the bull's effect on sorting semen.

Breeding with gender-selected semen after detected estrus has showed the best results in several studies, he shared, though fixed-time artificial insemination (FTAI) is feasible.

Hall reported that there is a 20%-35% reduction in transferable embryos when using gender-selected semen. However, even though fewer embryos are obtained with gender-sorted semen compared to conventional semen, the embryos are 90% of the desired gender. Therefore, fewer recipients are needed and fewer animals of the undesired gender are produced.

Another option is called reverse sorting. This sorts previously frozen semen by gender, which can allow production of gender-selected semen from bulls no longer producing semen. He said it is generally used for in vitro fertilization (IVF).

The most exciting use for gender-selected semen, Hall said, is to produce maternal

lines to be mated to terminal lines, a practice which is limited in beef cattle compared to other meat animals. Producing maternal lines by means of replacement heifers would be quicker and use fewer resources with use of gender-selected semen. This could also produce higher-quality females without producing subpar steers in the process.

Gender ratios could also shift with use of gender-selected semen given the desires of the operation. Seedstock applications include using Y-sorted semen for bull production, and X-sorted semen for replacement heifer production or enhancing female lines.

Commercial operations can use it to create a marketing advantage by producing more steers for a uniform trailer load and to meet specific customer needs. He shared data that showed three loads of similar-quality cattle, two all-steer loads and a mixed load. The heifers were discounted in the mixed load, and the steers were also discounted for being in a mixed load. The all-steer loads earned \$5,180 and \$6,746 more than the mixed load.

In this case study, Hall noted that the mixed-load cattleman already used AI, and the additional cost of using gender-selected semen would add \$2,000-\$3,000, which would still be accounted for in additional profits.

He concluded that sexed semen is here to stay, and fertility will improve as sorting damage decreases, synchronization protocols are more adopted and bull selection for gender-selected semen is more established. Applications continue to improve.

This article is reprinted with permission from [www.appliedreprostrategies.com](http://www.appliedreprostrategies.com), the Angus Journal's online coverage site of the 2014 Applied Reproductive Strategies Conference.

## Start Planning for 2015 BCIA Sale Consignments

The 2015 MBCIA sale will once again be held in cooperation with the Hinds Community College Bull Test Sale. The Sale will be held on March 5, 2015 at 12:00 noon at the Hinds Community College Sales Facility in

Raymond, Mississippi. Consignments are due by January 20. Sale information is posted on the BCIA website at: [msucare.com/livestock/beef/mbcia/bcia\\_bullsale.html](http://msucare.com/livestock/beef/mbcia/bcia_bullsale.html)



The Hinds Community College Sale Facility. Consignments for the Spring 2015 sale are due by January 20.

## Economically Relevant Trait Selection

Consider when to use EPDs for indicator traits vs. EPDs for economically relevant traits.

by Kasey Brown, associate editor, Angus Journal® LINCOLN, Neb. (June 19, 2014) —

“There has been a lot of time, money and effort invested in collecting data on economically relevant traits (ERTs), but not as much effort in how to use those data. That’s something we need to talk about,” said Bruce Golden, department head and professor of the Dairy Science Department at California Polytechnic State University–San Luis Obispo. He spoke to the joint meeting of the Advancements in Selection Decisions and Advancements in Producer Applications committees at the 2014 Beef Improvement Federation (BIF) Annual Meeting & Research Symposium in Lincoln, Neb., June 18-21.

Expected progeny differences (EPDs) are just parameters in the decision-making process in the beef industry, he said. However, they depend upon submitted data, so they are not complete. He recounted some of the history of performance records and EPDs. With the advancement of technology and trait data collection, the sire summary of the future could be huge. With too many options, though, breeding decisions don’t get easier.

That’s why ERTs have importance as selection tools. He illustrated two categories of traits, ERTs and indicator traits. ERTs are traits that directly affect profitability by being associated with cost or the income stream. Indicator traits have a genetic correlation to ERTs and can be used in analyses to increase the accuracy of ERT EPDs.

However, using the EPDs of indicator traits rather than ERT EPDs in selection decisions actually decreases the accuracy of that decision, and thus decreases the likelihood of making a good decision. Indicator traits are only part of the equation.

Not all traits are straightforward as being an ERT or indicator trait. Weaning weight can be either, depending on the situation. It is an ERT if you sell calves at weaning. If you sell calves as yearlings, the weaning weight EPD

is an indicator trait. This is why indexes are helpful, explained Golden.

Should indicator traits be measured? Of course, he answered, but should they be published? For instance, the birth weight EPD is mostly an indicator trait for calving ease. On the other hand, he asked if indicator traits are not published, then will cattlemen continue to submit the data if they think indicator traits are less valuable?

He proposed only publishing EPDs that are used in any type of Partial Budget Decision Analysis, which predicts the financial impact of incremental changes in revenue and costs from alternative decisions.

Sire summaries have gotten better, Golden asserted. Enhancements include selection indexes, more fertility EPDs, elimination of ultrasound EPDs, and working toward a feed consumption EPD.

He likened decision analysis tools to the book and movie Moneyball. They can take the bias out of the decision and narrow the options down to the important traits. In the age of genomic data, decisions are complex and expensive. New models and methods allow new things, he added.

He concluded by recommending investment in production-level simulation models, both for producers and breeders. He added that what ERTs are produced completely depend on the models.

The 2014 BIF Annual Meeting & Research Symposium was hosted by the University of Nebraska–Lincoln, the U.S. Meat Animal Research Center and the Nebraska Cattlemen June 18-21 in Lincoln, Neb. The Angus Journal and LiveAuctions.tv provide comprehensive online coverage of the event at [www.BIFconference.com](http://www.BIFconference.com).

This article is reprinted with permission from [www.BIFconference.com](http://www.BIFconference.com), the Angus Journal's online coverage site of the 2014 Beef Improvement Federation Research Symposium and Annual Meeting.

*“ERTs are traits that directly affect profitability by being associated with cost or the income stream.*

*Indicator traits have a genetic correlation to ERTs and can be used in analyses to increase the accuracy of ERT EPDs.”*



Bruce Golden, department head and professor of the Dairy Science Department at California Polytechnic State University–San Luis Obispo.

*Mississippi Beef Cattle Improvement Association—Productivity and Quality*

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*Brandi Karisch*



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

**MISSISSIPPI** **Membership Application**

**BCIA**  
BEEF CATTLE IMPROVEMENT ASSOCIATION

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:*

**DID YOU KNOW?**

USDA's Foreign Ag Service released 2015 projections for global meat production and trade a couple of weeks ago. Projections show a **decrease in world beef production of 1.4%** next year. Brazil, the world's second largest producer of beef behind the U.S., is expected to increase beef production by 3.0% next year, with an **expected U.S. production decline of 2.3%**. <http://www.cattlettradercenter.com/>

**Mississippi Forage and Grassland Conference this Month**

The Mississippi Forage and Grassland Conference is set to be held at the North MS Research and Extension Center in Verona later this month.

**Conference Schedule**

- Friday, November 14, 2014
- 8:00 – 8:30 Registration / Visit Exhibits
- 8:30 – 9:00 Business Meeting (Elections)
- 8:45 – 9:15 Welcome and introductions
- 9:15 – 10:00 Dr. Joe Bouton – Sustainability of Grazing Systems (Univ. of GA)
- 10:00 – 10:15 Mr. Tom Heard – NRCS EQUIP Programs (USDA-NRCS)
- 10:15 – 10:30 Break / Visit Exhibits
- 10:30 – 11:15 Dr. Pat Keyser – Grazing Management of Native Grasses (Univ. of TN)
- 11:15 – 12:00 Mr. Robert Wimbish – Soil Health (USDA-NRCS)
- 12:00 – 1:30 Lunch, Award Program, Adjourn

**Other Activities**

- Product & Services in the Exhibit Area • Poster Presentations • Hay Contest • Mississippi Grasslander Award • Award Lunch • Networking Opportunities

This event is sponsored by the Mississippi Forage and Grassland Council, Mississippi State University Forage Extension Program, Grazing Lands Coalition Initiative, Soil and Water Conservation Commission and Mississippi Cattlemen's Association.

**Conference Registration**

Call, email, or go to website for registration information and form at  
 Mississippi Forage & Grassland Council : <http://www.mississippifgc.org>  
 Email: [info@mississippifgc.org](mailto:info@mississippifgc.org)  
 Phone: (662) 325- 2311 or contact your local County Extension Office.