

# **REVIEW OF THE GEORGIA HEIFER EVALUATION AND REPRODUCTIVE DEVELOPMENT (HERD) PROGRAM**

J. D. DUGGIN

## **SUMMARY**

The Department of Animal and Dairy Sciences along with its fellow sponsors within the University System and the Georgia Cattlemen's Association provide a valuable service to the Georgia beef industry by developing beef replacement females that meet industry wide standards through the Heifer Evaluation and Reproductive Development (HERD) program held at both Tifton and Calhoun Georgia. This program is an industry outreach and educational tool that further enhances the efficiency and quality of the Georgia beef industry. During the 2013-2014 HERD program, 256 heifers were evaluated over a 5 month period for each site. There were a total of 178 head marketed through the Tifton and Calhoun HERD auction sales. The combined offering appraised for \$408,300.

## **INTRODUCTION**

The HERD program has finished its 15<sup>th</sup> and 14<sup>th</sup> years at Tifton and Calhoun, respectively. The program is a service to Georgia cattlemen and allows producers of various sizes and segments of the industry to consign beef heifers for evaluation of reproductive efficiency and overall performance. Animal health protocols are also strictly adhered to encourage proper immunity. These protocols are based on modern accepted beef management practices making the program an excellent educational tool for Georgia's cow/calf producers. The 2012 Farm Gate Value for Beef was 537.7 million dollars and was ranked 5<sup>th</sup> among Georgia's Farm Gate values.

Yearling heifers 10-12 months of age are delivered to one of the program facilities on the defined date having already been vaccinated and acclimated to bunk feeding. The consignments consist of both registered heifers representing multiple breeds and commercial heifers. Over the 5 month duration the heifers are evaluated for a number of reproductive and performance traits. Heifers that meet the protocol standards set forth by the HERD Team are eligible for sale. This includes a minimum of 140cm<sup>2</sup> for pelvic area, reproductive tract score of 2 or higher (1-5 scale), and a disposition score of 3 or lower (1-5 scale).

All heifers that were maintained through the program were artificially inseminated using a timed estrus synchronization protocol and were subsequently pasture exposed to a bull(s) for 52 days for Tifton and 45 days for Calhoun. Those entries that were determined not bred (open) by a University of Georgia veterinarian were removed from the sale offering. Consignors also have the opportunity to retain females in their own

herds at the completion of the program as a bred or open heifer if she did not conceive during the evaluation. Both retained and sold females will further enhance the genetic base within the state of Georgia and surrounding states.

## RESULTS AND DISCUSSION

The HERD program has developed over 200 quality females during the 2013-2014 year. The 2014 value for these replacement is valued at approximately \$450,000. This number is an estimate because it is not completely known which heifers that went home were retained as replacements once leaving the program. More confidently, we know that program entries selling via HERD auctions at both Tifton and Calhoun accounted for \$408,300 (Table 1). The HERD program's use of artificial insemination adds further value to the state's beef industry by bringing in quality genetics. A.I. conception rates were 46.5% and 56% for Tifton and Calhoun, respectively.

Table 1

<b>HERD Program Impact Summary</b>				
<b>Program</b>	<b>Heifers</b>	<b>Tifton</b>	<b>Calhoun</b>	<b>Combined</b>
	<b>Initial Entries</b>	<b>133</b>	<b>157</b>	<b>290</b>
	<b>Not Sold*</b>	53	59	112
<b>Sale Summary</b>	<b>AI Conception</b>	50	66	116
	<b>Natural Service</b>	30	32	62
	<b>Entries Sold</b>	80	98	178
	<b>Average</b>	\$2,413	\$2,197	\$2,294
	<b>Totaled</b>	\$193,000	\$215,300	\$408,300

\*Heifers retained by consignor or not sale eligible

The future economic impact on Georgia is difficult to estimate. Evaluating these females for current and potential reproductive soundness will save producers large amounts of inputs by removing those females that are poorer herd replacement candidates. Heifers that meet the program's protocols should incur fewer problems during future conceptions and parturitions compared to those that did not meet the protocol standards.

Table 2

<b>HERD Entries Not Meeting Protocol Standards</b>			
<b>Criteria</b>	<b>Tifton</b>	<b>Calhoun</b>	<b>Combined</b>
<b>&lt;140 cm<sup>2</sup> Pelvic Area</b>	3	13	16
<b>&lt;2 RTMS</b>	0	4	4
<b>Low PA and Low RTMS</b>	2	4	6
<b>Chronic Morbidity</b>	1	1	2

Docility or temperament is also evaluated 3 times over the course of the program. This subjective score ranges from 1 to 5. Scores of 1 are evaluated as gentle and scores of 5 are

easily excitable and dangerous. Since this score is subjective, high variability can occur between score persons on each evaluation and between working environments such as the processing environment for that particular day. Tifton reported 1 entry being removed for docility. Calhoun had 10 removed for docility at the discretion of the consignors. Those removed at Calhoun received scores of 4 on the 1-5 scale during the 2<sup>nd</sup> evaluation. Those same heifers received scores of 2 on the initial delivery day. The consignors of these cattle felt their cattle were acceptable after reading the reports. Table 3 is a summary of the disposition scores for the whole program. It should be noted that these numbers are highly subjective but generally give a good indication of temperament.

Table 3

<b>HERD Average Docility Score</b>		
<b>Work Day</b>	<b>Tifton</b>	<b>Calhoun</b>
<b>Report 1</b>	1.8	1.0
<b>Report 2</b>	1.1	1.5
<b>Report 4</b>	1.3	1.3 <sup>a</sup>

a. 10 heifers already removed

The HERD Program continues to educate consignors and aid UGA Extension in extension programming. The annual HERD meeting is held each summer in central Georgia. The meeting reviews the year's previous outcomes and evaluates the coming year's protocols and calendar dates. The 2014 HERD meeting is scheduled for July 30<sup>th</sup> at the Georgia Farm Bureau.