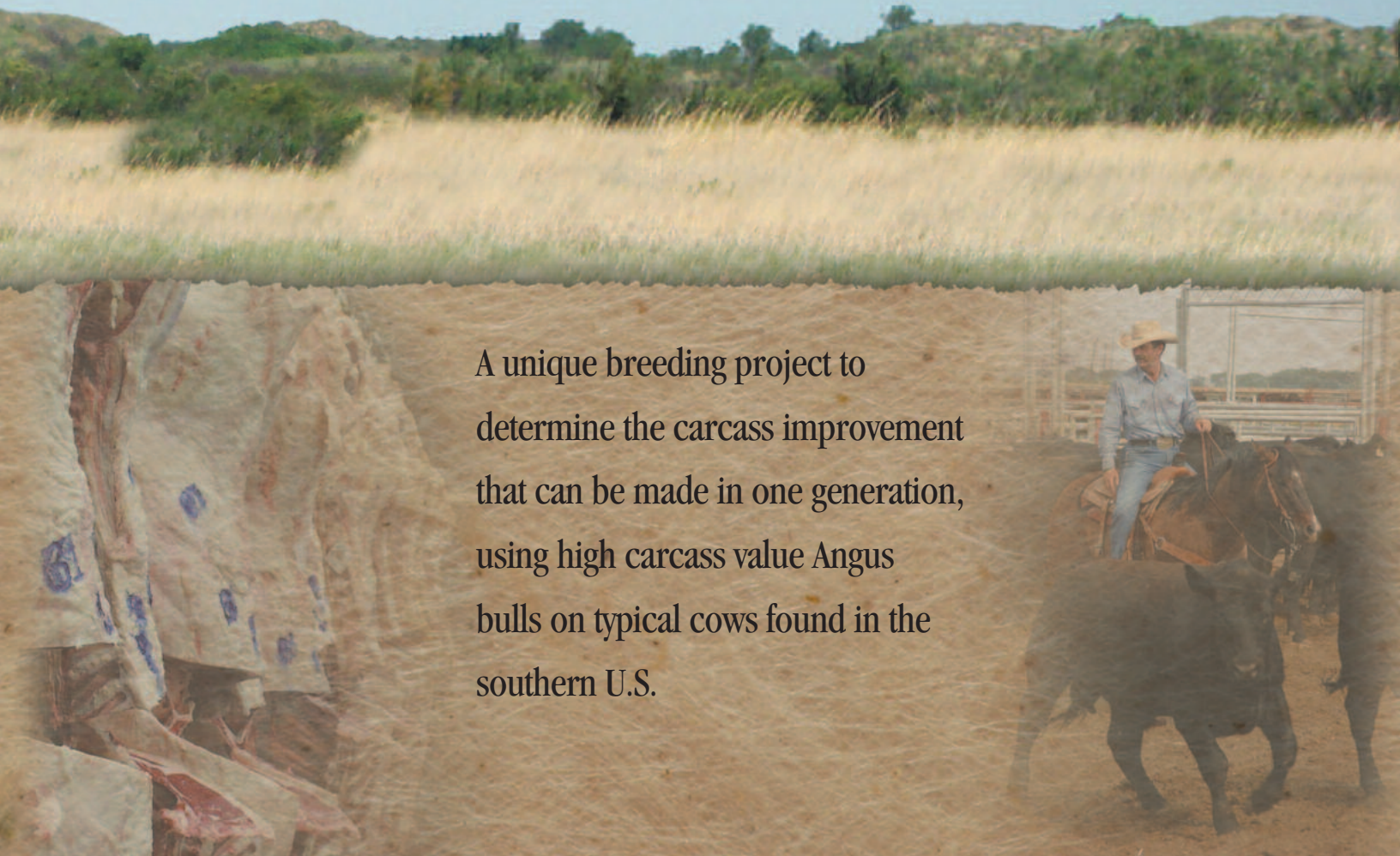# Gardiner Angus Ranch

Southern Carcass Improvement Project

A unique breeding project to determine the carcass improvement that can be made in one generation, using high carcass value Angus bulls on typical cows found in the southern U.S.

PROJECT DESIGN

The research design results from a collaboration between Kansas State University, Virginia Tech and Gardiner Angus Ranch (GAR). The project will focus on twenty-two head of Southern-origin beef cows, representing typical bos indicus-influenced genetics most often found in southern states. The cows, sourced from Georgia, Mississippi and Texas, and relocated to GAR, will serve as the common genetic denominator for the study.

The 22 females will alternately be flushed and bred to (1) proven Angus bulls with excellent growth and carcass traits, and (2) Southern sires representing 9 different breeds with varying percentages of bos indicus influence. The calves resulting from the Angus sires X Southern cows will be identified as the test group. Calves resulting from the Southern sires X Southern cows mating will be identified as the control group.

Igenity® will compile DNA genetic profiles on the 22 embryo donors, all sires and the resulting 50-60 calves from each of the two groups. Calves will be born in the spring of 2010 and placed on feed at Triangle H Feedyard, Garden City, Kan., early in 2011. The calves will be harvested at 15-16 months of age at National Beef. Complete feedlot performance and carcass data will be collected on both groups, enabling a direct comparison of how the two groups performed under industry-typical management through the feedlot and onto the packer's rail.

The actual feedlot and carcass data will be compared to sire EPDs, ultrasound and DNA profiles to determine the optimum thresholds necessary to make significant carcass improvement in one generation in a particular population of beef cattle.

BENEFITING THE INDUSTRY

The first National Beef Quality Audit conducted in 1991 identified enormous inconsistencies and carcass quality deficiencies within the beef industry. Subsequent revisions to the NBQA have provided the industry with quality benchmarks that have been used to improve the end product going into the meat case.

The Southern Carcass Improvement Project addresses the beef industry's long-standing need for higher quality grades and better overall carcass traits in Southern U.S. packing plants. For example, during the week ending 2-14-09, the percentage of carcasses harvested in Kansas grading Prime and Choice fell 13% lower than cattle processed in Nebraska. Cattle harvested in Texas during the same week fell 27% lower than cattle processed in Nebraska (See Table 1). These differences are typical of the problem seen with lower grades in Southern plants- a situation that has shown no improvement for many years.

PERCENT CHOICE & PRIME CARCASSES*		
Nebraska	Kansas	Texas
75.36%	61.93%	48.46%

*Source: USDA, 2/14/09

Table 1

Using 2008 carcass pricing data from U.S. Premium Beef, the average value difference between a USDA Standard grade carcass and a USDA Select carcass equates to approximately $80 per head. USDA quality grade data reports 9% (or 3,420,000 head of approximately 38,000,000 head harvested in 2008) were ungraded or USDA Standard. The quality deficiency on this 9% of the industry's beef inventory represents more than $273,000,000. The difference between USDA Select and low Choice adds another $56.16 per head to the equation. When combining the difference between USDA Standard and Select to low Choice, the disparity increases to more than $465,000,000 (See Table 2).

2008 USPB AVERAGE CARCASS VALUE DIFFERENCES*		
USDA Standard	USDA Select	USDA Low Choice
$1,065.72/hd	$1,145.73/hd	$1,199.89/hd
-$80/hd		-$54/hd

*Source: U.S. Premium Beef

Table 2

The quality disparities typical of Southern-influenced cattle represent a tremendous lost opportunity for the beef industry. Since Choice beef almost always sells at a substantial premium to lower beef grades, higher quality grades mean greater total

(continued)

revenue benefiting all segments of the beef industry. Lower grades result in fewer dollars in wholesale beef sales, leaving fewer dollars available to be passed back to cattle producers and feeders.

Gardiner Angus Ranch has worked for many years to create high-value genetics that can significantly improve average cattle, and even below average cattle, in one generation. Those genetics are being put to the test to determine how much feedlot and carcass advantage can be gained through the use of high-accuracy GAR sires.

Gardiner Angus Ranch is using their experience in beef cattle breeding, with state-of-the-art technology and data management, to produce Angus cattle that make documented contributions to the beef industry.

Periodic reports and updates will be released via all media outlets throughout the project and available at www.gardinerangus.com.

Since 1885

The Brand of Quality in Quantity

Don't just buy a breed.
BUY A BRAND.

GARDINER
ANGUS RANCH

1182 CR Y • Ashland, KS 67831
Office (620) 635-2156 • Fax (620) 635-2871
Henry (620) 635-2932
Mark (c) (620) 635-5095, (h) (620) 635-2760
Greg (620) 635-2752 • Garth (620) 635-2361
email: gar@ucom.net • www.gardinerangus.com

Founding member of U.S. Premium Beef, LLC.