Angus Foundation Research Project

Name of project: Improvement for beef cow biological efficiency, University of Illinois (UI) and North Carolina State University (NCSU)

Status: In-progress

Timeline: 2010 to 2015

Angus Foundation funding: $350,000

Objective: To characterize the variation in efficiency of feed utilization of Angus females and to identify optimal methods of improving the biological efficiency of beef production using a multi-disciplinary approach.

Results, if any: No results are available at this time, as the five-year project has only been in place a short time. However, to date, UI and NCSU have collected post-weaning performance, ultrasound and intake data on approximately 1,000 females of different ages, from first lactation heifers to 5-year-old cows. The two universities are compiling all data collected using a joint database to summarize findings. Additional outcomes may include estimating any phenotypic and genetic correlations that could assist in selection.

Application: The expected outcomes of this project are tools that AAA members may implement to improve the efficiency of nutrient utilization of Angus females. This will lead to a competitive advantage for the Angus breed and a reduction in the nutrient requirements to produce a pound of beef by their customers.

Breeders will potentially have better guidelines on:

- Selecting bulls that will produce daughters with more superior nutrient utilization; and
- Identifying developing heifers that will use nutrients more efficiently as brood cows.

Note: This project is a continuation of efficiency research done at UI and NCSU that was also supported by the Angus Foundation.