

The Range Cattle Research and Education Center (RCREC) was established in 1941 to conduct research on the productivity of beef cattle enterprises located in the unique subtropical region of southern Florida (27° 25' north longitude and 81° 55' west latitude at an elevation of 26 m). This region of the United States is home to a large number of cattle ranches and holds the distinction of having the greatest number of beef cattle ranches with > 2,500 cows. The research programs of the RCREC are focused on subtropical beef production systems that maximize the efficiency of forage utilization for beef production.

The Ona White Angus is a distinct beef cattle phenotype that was developed at the RCREC. It is the result of a genetic coloration anomaly that is currently not fully understood. There was no artificial genetic modification of the breed. The initial foundation cows resulted from a long-term beef cattle breeding project lead by F. M. Peacock, a professor of genetics at the University of Florida. That study focused on productivity traits of purebreds and crossbreds from three breeds – black Angus, Charolais, and Brahman. In the early 1990's, this cowherd was transitioned to a new study aimed at evaluating reproductive efficiencies when bred to Simbrah bulls. Heifers from these matings were retained in the herd, therefore introducing genetics from a fourth breed – Simmental. In 1999, this cowherd moved onto a third project and was mated to black Angus and black Brangus bulls. In 2002, we began to recognize a small, but significant number of white calves in the herd. We began isolating these heifer calves and breeding them to black Angus bulls. Over the following 12 years, we were able to identify and increase the number of individual cows that were responsible for passing this white-color trait onto their offspring. From these cows, we formed the Foundation herd for the creation of the Ona White Angus genotype.



Ona White Angus Research Results

The white phenotype, combined with a predominantly black Angus genotype, provides significant advantages to beef cattle producers in subtropical and tropical regions of the World. In a 2008 publication of the American Society of Agricultural and Biological Engineers (ASABE. 51(6):2167), sweating rate differences among black Angus heifers and Ona White Angus heifers were reported. In that study, the Ona White Angus heifers exhibited an 83% greater sweating rate when compared to the black Angus heifers, which were derived from a black Angus herd that had been reared in Florida for several generations. These data were collected during the summer with solar loads exceeding 700 W/m² and the temperature/humidity index exceeding 82°F. In another study, we examined the vaginal temperatures of black Angus versus Ona White Angus over 5 consecutive summer days. All heifers were contained together in a pasture without access to shade. In this study, average peak vaginal temperatures were 1.1° C greater in the black Angus versus Ona White Angus.

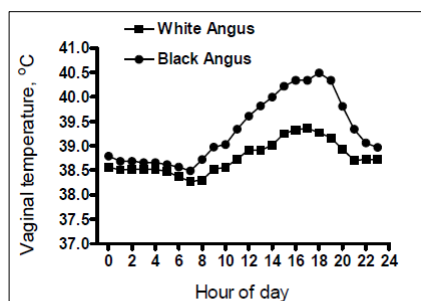


Figure 1. Influence of hair coat color on vaginal temperature of pre-weaned Angus heifer calves.

These data suggest a greater ability for the Ona White Angus to cool themselves during instances of heat and humidity pressure. As a result, we have detected a significant decrease in the amount of daylight hours that the Ona White Angus expended seeking shade compared to black Angus contemporaries.

Current Herd

When we initially began to isolate the Foundation cows and grow their numbers, our progress was slow. When bred to black Angus bulls, these Foundation cows would give birth to white calves about 50% of the time. Those offspring (50% black Angus) were then bred back to black Angus bulls. They would subsequently give birth to white calves (75% black Angus) at about the same frequency as the Foundation cows.

In September 2015, the Ona White Angus herd consisted of 68 mature cows, 13 yearling heifers, and 7 bulls. Among these, 45 are 75% black Angus or greater. Adult females are calving from October through December. All females with 75% black Angus genetics or greater, were bred to selected Ona White Angus bulls. Cows with less than 75% black Angus genetics were bred to purebred black Angus bulls.



As a new beef cattle breed, we feel that the Ona White Angus can provide significant value to beef production enterprises in the tropical and subtropical regions of the World, particularly in crossbreeding programs involving white phenotype cows, such as Nelore and Brahman. These crossbred offspring have to the potential to possess reproductive and carcass advantages of the Angus, while retaining the environmental adaptation and longevity of the Zebu. To move to the next step, we feel that this project will require significant investment in reproductive technologies, particularly embryo transfer. To best achieve this outcome, the project would be best served by transferring it to a new owner with the desire and resources to invest in it's future.



Sale Offering

The Ona White Angus herd will be sold by Producers Cattle Auction on January 21, 2016. This will be a public auction and available to interested buyers via internet. The entire herd will be sold in a single auction to a single buyer(s) with a minimum reserve of \$700,000. All Ona White Angus animals, including non-waned calves at their side, will be transferred to the buyer. No live animals, semen, or embryos will be retained. Buyers must be registered with Producers Cattle Auction. Buyer registration form and information is available at

<http://www.producerscattleauctions.com/> or by phone at 251-633-9306. For questions regarding the internet sale process and policies, please contact Todd Clemons at Okeechobee Livestock Market, 863-763-3127. After the sale, and depending upon the needs and interests of the buyer, the herd can remain at the UF/IFAS Range Cattle Research and Education Center through a negotiated management/research contract. Information on the cattle and pending sale is updated as it becomes available: <http://rcrec-ona.ifas.ufl.edu/>

Cattle Viewing

There will be two additional opportunities to view the cattle after the field day on October 22. The herd may be viewed anytime between the hours of 1:00 PM and 4:00 PM EST on Friday, November 20 and Tuesday, December 8.

