

# Profit returned to ranch starts with the Red Angus female

by Rebecca Mettler for *American Red Angus Magazine*

**Profitability starts with the cow. The right cow – chock-full of maternal capabilities and bred for efficiency and longevity – sets the stage for profit returned to the ranch. Red Angus-influenced cows are the profitable answer for many commercial operations and are also utilized in research herds.**



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**Matt Spangler**

Rick Funston, Ph.D., beef cattle reproductive physiologist with the University of Nebraska-Lincoln (UNL), works with the university’s largest cowherd at the Gudmundsen Sand Hills Lab (GSL). The ranch, near Whitman, Neb., runs 700 head of 5/8 Red Angus x 3/8 Simmental cows.

GSL is in Nebraska’s cow country and is an integral part of beef research completed at UNL. The research done at GSL is focused on management options that can create more profitability for beef producers. Extended grazing, fetal programming and low-input, heifer-development studies are a few of the applied projects performed at GSL.

The Sand Hills ranch has become an ideal location to study cattle in a limited resource environment. Funston believes it is important to keep cows in such an environment grazing for most of the production cycle. The herd will graze all but during a period of time close to calving.

“Red Angus has provided a moderate cow that has preformed well in the system,” Funston said.

Funston pointed out that many of the influential breeders within the Red Angus breed are in a limited-resource environment. Influences and circumstances such as environmental conditions tend to shape the type of cow that is produced.



Rick Funston, Ph.D.,  
University of Nebraska-Lincoln



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Research from the Meat Animal Research Center (MARC) in Clay Center, Neb., shows that Red Angus is a bit more conservative in mature size and lower in milk production when compared to other popular breeds.

Matt Spangler, PhD, associate professor/beef genetics extension specialist with UNL, sees that as an advantage when producers are thinking about the maternal component of a breeding program.

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“In seeking lower input females, that tends to lead to lighter mature weights and females that don’t milk as heavy,” Spangler said.

Spangler, whose work focuses on quantitative genetics and developing methods and tools for genomic prediction, points out that there is a maintenance component to milk production. Cows that have a higher genetic propensity for milk production take more inputs, even when dry.

“In my mind, profit drivers are input and output traits,” Spangler said. “Performance can’t be thought of by itself and feed requirements should be considered.”

From the viewpoint of the whole beef system, fertility, growth and carcass merit are major profit drivers, according to Spangler.

“Obviously, first and foremost, is reproduction,” Funston said. “You have to have a live calf before you can worry about anything else.”

Funston said the goal of GSL herd was to produce a cow that was able to maintain her body condition on minimal supplementation while raising a calf, and to uphold a conception percentage rate in the mid-90s. In addition, steer progeny are expected to feed out 100 to 150 pounds heavier than their dams.

### A Red Angus Base

Both Spangler and Funston are proponents of commercial cattlemen implementing a crossbreeding program on their operation.

Funston stated that many large ranches in the area use Red Angus as a base breed for their commercial herds. The breed provides a maternal base to cross with Continental breeds.

“Red Angus offers genetic diversity but as a breed has been production oriented and commercially focused,” Funston said.

The crossbreeding system (Red Angus x Simmental) in place at GSL results in heterosis and breed complementarity, both of which add value to the cowherd and resulting offspring.

“With breed complementarity, the product that the steers produce is grading very well from the Red Angus side and has a high amount of lean meat yield from the Simmental influence,” Funston said.

Maternal heterosis accomplished through crossbreeding can accumulate a 20 to 25 percent advantage in cumulative

weaning weight over a straight-bred commercial cow through increased fertility and longevity. Producing an additional calf over a cow’s lifetime can have a large economic impact on any cattle operation, according to Spangler.

### Calving Ease

“Generally speaking, Red Angus is known as one of the preferred breeds for first-calf heifers,” Spangler said.

Producers that select for Calving Ease Direct (CED) have a large advantage because those sires are known to produce less dystocia when bred to heifers.

Nonetheless, Spangler warns producers away from aggressively selecting for CED sires year after year because CED has a slight negative relationship to Calving Ease Maternal (CEM), or the predicted ability of a given animal’s daughters to calve unassisted at 2 years of age. He recommends producers to look for bulls who are acceptable for those two traits instead of extreme in one or the other.

### Stayability

The ability for females to stay within the herd is very important. The Stayability EPD predicts a bull’s ability to sire daughters that remain in the herd. However, putting emphasis on the Stayability EPD depends on the current level within each individual herd according to Spangler.

“If I have cows leaving the herd at age 3 because they fail to rebreed, I’d say it has a huge economic impact on my herd. On the flipside, if the average female is 10 years old, stayability is less of an emphasis because it’s already present,” Spangler said.

### Keeping Them Calm

Some people think of docility as a convenience trait, one simply useful for safety and handling reasons. However, there is an economic impact as well. According to Spangler, research has shown that more docile animals perform in the feedlot better and have an advantage in carcass merit.

“As feed costs increase and the Choice-Select spread widens, feedlot performance has more of an economic impact,” Spangler said.

### Get the right cow

At the end of the day, a good cow is one that produces a valuable calf year after year and does so as efficiently as possible. Red Angus has proven its ability to work in any environment, even under conditions with limited resources. The bottom line is that Red Angus traits of maternal excellence equate into a more profitable cow. ■