

# BENEFITS OF USING SANTA GERTRUDIS IN CROSSBREEDING STRATEGIES

By Matthew Garcia, M.S., MBA, Ph.D., Beef Cattle Specialist, Utah State University

I can remember that when the Utah State University (USU) and Santa Gertrudis Breeders International (SGBI) project was first proposed, I was a little hesitant to conduct a crossbreeding/heterosis project in northern Utah with a *Bos indicus*-influenced breed. However, when I sat down and began to critically evaluate what could be achieved by conducting this type of breeding, I became very excited. The two major objectives I had with the project were: 1) to provide data and scientific evidence that the Santa Gertrudis breed could help with some major production issues we were facing in the Intermountain West; and 2) reintroduce producers to the extreme benefits of hybrid vigor.

Obviously, there were some issues that needed to be addressed, primarily using a *Bos indicus*-influenced breed in a part of the country that had very harsh winters. However, when I critically evaluated this issue, I honestly believed the rewards vastly outweighed the risks as the crossbred offspring would only be 19 percent Brahman, and the fullblood bulls would only be breeding during the summer months. Furthermore, I saw this collaboration as an opportunity to address some major issues that beef producers routinely brought to my attention.

The two major issues that had been repeated countless times when I was interacting with beef producers from the Intermountain West were: 1) why are my cows being culled earlier; and 2) why does it seem like we are seeing more incidences of brisket disease/high-altitude disease? These two issues have a major financial and production impact on producers if cows are not in the herd long enough to be profitable, and replacements or bulls are dying before they have a chance to become productive and incorporate their genetics into the herd.

This is where my excitement originated with the potential of using the Santa Gertrudis breed. Santa Gertrudis had not only transformed itself, but the breed had become extremely

data driven, making them highly desirable in any crossbreeding system, and this data provided evidence of how they could be optimal in a crossbreeding system. However, in all honesty, the real excitement was because I honestly believed the breed had the potential to address those two major issues while still increasing performance and profitability of Intermountain West beef herds.

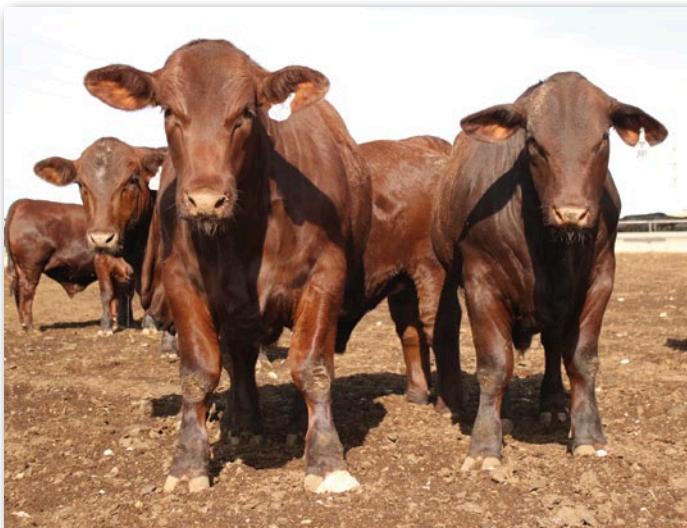
The first trait I felt the heterosis project would help address was brisket disease or high-altitude disease. Brisket disease is an altitude-induced disease in which animals, when transported or managed at high elevation, essentially experience extreme edema and then heart failure. Historically, producers would see this disorder only at elevations higher than 7,000 feet. However, we were starting to see susceptible animals at much lower elevations.

My initial thought was, with the expansion of Certified Angus Beef since the 1990s, we may have unknowingly incorporated susceptibility into our herds and, with the increased use of artificial insemination (AI), we may have accelerated it. Please understand that this is not a knock at the Angus breed; it is a very productive breed in numerous environments. However, over the years, we have incorporated genetics (via natural service or AI) that were developed at much lower elevations.

Many people will ask, "Why use the Santa Gertrudis breed when it was developed in south Texas?" There were two main reasons Santa Gertrudis was so desirable to address the high-altitude issue. The first is the fact that we know *Bos taurus* breeds are susceptible and there is virtually no evidence or documentation that *Bos indicus* animals have been affected with brisket disease. Since purebred Santa Gertrudis animals are three-eighths Brahman, this made them desirable. The second reason is that by crossbreeding Santa Gertrudis bulls on our cow herd, we may be able to incorporate resistance to brisket disease while still having crossbred cattle that are only 19 percent Brahman. Those cattle would be production-system compatible with our cold winters, limited forage resources and high altitude.

The second trait we honestly felt could be addressed while still increasing performance was cow longevity. Many producers I interact with continually asked why their cows were being culled much sooner. Once again, not trying to take digs at any other breeds, but many *Bos taurus* breeds had a major focus on increasing cow size, calf weaning weights and subsequently increasing milk production. While these selection strategies met market demands and made these breeds more competitive, it wasn't necessarily a good strategy for Intermountain West producers.

The scientific fact is that if you have bigger cows with bigger milk potential, you better have the forage resources to meet those requirements. Sadly, what many of our producers were probably dealing with was genetics that didn't match



CONTINUED ON PAGE 25 ▶

## CROSSBREEDING STRATEGIES

CONTINUED FROM PAGE 24

production resources, so cows were being culled much sooner because the nutritional requirements to maintain them and raise a calf were too high for the production system they were expected to perform in.

Santa Gertrudis provided a unique opportunity to address the longevity issue. First, it has been well documented how Brahman-influenced animals and animals with high levels of retained hybrid vigor have increased longevity in more challenging environments. However, we still had to be careful when choosing bulls to crossbreed our cows to. Being that the Santa Gertrudis breed had become very data driven, we were able to identify animals with moderate mature size, great carcass traits and lower levels of milk potential, while still improving performance for growth and efficiency.

To date, we are entering our fourth year of collaboration with SGBI. While the two major objectives of this study are very long term, we are still generating data and promoting the project to our producers. The third group of calves is on a growth implant/feedlot performance/carcass quality study. However, due to the reintroduction of the benefits of heterosis and the favorable data we have produced to this point, we have seen a number of beef producers in Utah incorporating Santa Gertrudis genetics into their herds. With the success we have enjoyed to this point, we are very excited and confident that our long-term objectives addressing brisket disease and cow longevity will be achieved.

**Editor's note:** For more information or in-depth conversation, please contact Matthew Garcia at [matthew.garcia@usu.edu](mailto:matthew.garcia@usu.edu) or (435) 797-2144. 

## SAVE THE DATE!

JUNE 19-26, 2021



Plans are underway for the 2021 National Junior Santa Gertrudis Show. Join us June 19-26, 2021, in Texarkana, Ark. for the largest junior event of the year!

More information regarding the schedule and registration will be released in future issues of **Santa Gertrudis USA** and at [santagertrudis.com](http://santagertrudis.com).

For the latest information, please follow the Facebook page!

**GERTS**  
WILL BE THERE FOR YOU

# Savannah River Cattlemen Sale

Saturday, February 27, 2021, 11:00am

Hephzibah Agriculture Center  
4345 Peach Orchard Road  
Hephzibah, GA 30815

Selling registered and commercial purebred Santa Gertrudis and Santa Gertrudis influence cattle to include Bos Indicus-type cattle. Bos Indicus breeds include Brangus, Red Brangus, Braford, Beefmaster, and Brahman.

For more information, check out our Facebook page: Savannah River Cattlemen Sale



### CONTACTS

#### Sale Manager

Emily Colley  
706-306-3507  
[sarahemilycolley22@gmail.com](mailto:sarahemilycolley22@gmail.com)

Dan Davis, Sale Committee  
404-909-0340

#### Chris Swygert, Sale Committee

803-223-3417  
Charles Johnson, Sale Committee  
478-299-1216  
Myron Colley, Sale Committee  
706-306-3506

### INTRODUCING

# TRAILBLAZING IN AGRICULTURE

A **BluePrintMedia** podcast highlighting industry innovators.

**JOIN US** on our journey to chronicle the stories of agriculture's many trailblazers!

### EPISODE #4:

#### Hard Work and Persistence Pay Off



Featuring Kathryn Hefte, Rancher, Hefte Ranch, and Chairman, SGBI Performance Committee. Available on [www.blueprintma.com](http://www.blueprintma.com) and wherever you listen to podcasts.



**BluePrint Media**

MEDIA BY DESIGN

(970) 498-9306

[www.blueprintma.com](http://www.blueprintma.com)

[info@blueprintma.com](mailto:info@blueprintma.com)

- Inbound, Outbound and Content Marketing
- Website Development
- Publications
- Social Media Management
- and more!