



# Heterosis and Breed Complementary Equal Profitable Production



By John Ford, Santa Gertrudis Breeders International Executive Director

Much of the crossbreeding advantage comes from heterosis and cattlemen understand the value heterosis provides to a cow-calf operation. However, not all heterosis is created equal, greater effects of heterosis occur when the breeds crossed are more different in their genetic makeup. The amount of benefit from crossbreeding depends partially on the genetic diversity of the breeds being crossed. Simply put, while there are genomic differences between breeds, in some instances there is not enough differences to generate heterosis.

With the emergence of tools like as DNA markers, it is now possible to gauge the degree of genetic similarity between breeds. Utilizing 50K genomic data, Dr. Larry Kuehn of the Meat Animal Research Center (USDA MARC) estimated the genetic distances between breeds and the project resulted in a diagram that maps the relationship between breeds. The branching and length of

the branch represent the level of genetic difference between various breed groups.

The diagram shows Santa Gertrudis is a breed that maximizes heterosis in a commercial operation. For example, the variance between the Hereford and Santa Gertrudis breeds indicates a high level of heterosis and the results can easily be seen in the performance of the popular Santa Gertrudis X Hereford female. **BUT** heterosis is not the whole story. Breed complementarity must also be considered. All breeds display superiority in some of the economically important traits, but no one breed can claim excellence in all traits. Breed complementarity helps match the genetic potential for economically important traits such as growth rate and carcass composition with climate, feed resources and market preferences. Simply put, breed complementarity means that the strengths of one breed can complement or mask the weaknesses of

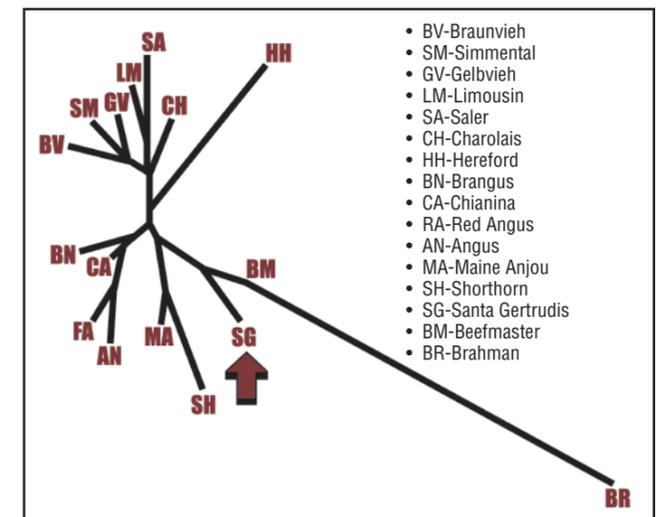
another breed. The many strengths of the Santa Gertrudis breed make it a sound choice for cow-calf producers focused on fertility, growth and carcass quality.

Santa Gertrudis are known for their exceptional maternal traits; they are fertile and give birth to calves that are small at birth, eliminating most calving difficulties. The females are also known for their strong mothering instincts. Under normal management and with adequate nutrition, Santa Gertrudis females will breed at 12-14 months of age and produce their first calf as a 2-year-old in the most challenging of environmental conditions. The breed is one of the few that combines essential maternal and profitable carcass traits in one genetic package.

Santa Gertrudis calves are exceptional feeders that gain rapidly and efficiently. As part of the 2018 SGBI Steer Feedout, purebred Santa Gertrudis steers representing 25 different sire groups were fed at AzTx Feeders, Hereford, Texas, through the winter and spring and harvested at the Tyson beef plant in Amarillo, Texas, on June 29, 2018. The Santa Gertrudis cattle graded 96 percent Choice, with 51 percent hitting the Premium Choice mark. The steers' average USDA Yield Grade was 2.98 with 50 percent of the carcasses scoring Yield Grade 1s and 2s. The ribeye area (REA) average was 14 square inches, and the cattle gained 3.51 pounds per day during the feeding period. This data is backed by industry information collected and released in 2017 on 3,800 head. It showed Santa Gertrudis steers grading 70.9 percent Prime and

Choice, surpassing the plant average of 62.3 percent Choice by 8.6 percent. This information is valid and is proof that Santa Gertrudis feeders efficiently hit endpoint targets, producing a profitable animal for all beef industry members.

Few, if any, breed provides the economic advantage of Santa Gertrudis. Cattlemen utilizing the Santa Gertrudis genetic package benefit from the combination of heterosis and breed complementarity resulting in a profitable genetic package capable of performing at the highest level in all production environments. **SANTA GERTRUDIS are DATA DRIVEN and PROFIT PROVEN.**



## Join us at these upcoming events and view our cattle...



### February 12th-San Antonio Livestock Show, San Antonio, Texas

We will be selling two pens of five first calf heifers. These are females from our Star 5 program and are 24-26 months old. They will sell with 60 day old Angus sired calves at side and the females will be ready to breed back to the bull of the buyer's choice. These two pens are the same quality of the pens that won the event in 2015 and 2016. This sale is recognized by cattlemen as the source for the highest quality of replacement females, so you can buy 'em with confidence.

### March 6th and 7th-Houston Livestock Show and Rodeo, Houston, Texas

We will be at this prestigious event and will be attending the various Santa Gertrudis activities. We'd love to meet up with you and visit about the breed, our program, your program and of course our Star 5 females.

### March 21st-Santa Gertrudis Bluebonnet Classic, Lavaca County Exposition Center, Hallettsville, Texas

We will be consigning open and bred heifers to this long-standing event. We will be happy to visit with you about our consignments and/or mail you a catalog, just give us a call or email us.

**WINTER • 2020**

3148 CR 229 Schulenburg, Texas 78956



**Mateo 7238**

- Top 1% for REA and Marbling
- Top 2% for Weaning Weight
- Top 10% for Yearling Weight

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THE CATTLE OF CORPORRON ACRES AND PINNACLE CATTLE CO., LLC ARE KNOWN FOR THEIR EFFICIENCY, FERTILITY AND THE EXTRA PROFITS FROM THEIR REMARKABLE ABILITY TO EXCEL IN GAIN.

**CORPORRON ACRES**

Jim Corporron  
3148 County Road 229 • Schulenburg, Texas 78956  
979-562-2405 • Cell 979-561-7185 • Email: jim@corpacres.com

**PINNACLE CATTLE CO., LLC**

Rodney & Barbara Corporron  
528 County Road 223 • Schulenburg, Texas 78956  
713-724-1263

[www.Corporronacres-pinnaclecattle.com](http://www.Corporronacres-pinnaclecattle.com)

**Jesse Mendel**

Manager  
979-561-7103

**Tommy Brandenberger**

Ranch Consultant  
361-772-7790

**Brad Wright**

Ranch Hand Analytics  
Genetic Consultant  
979-219-4599



**Ranch headquarters conveniently located 5 miles south of I-10 on Hwy 77 at Schulenburg, Texas**

*Get to know us*

Corporron Acres-Pinnacle Cattle Co. is the joint effort of Jim Corporron, my son Rodney and his wife, Barbara and their son, Connor. Registered Santa Gertrudis and Star 5 Females make up our programs.

I'm the patriarch (Jim) and I started his operation more than four decades ago. Today the combined herds continue to build upon the use of ultrasound, DNA testing, extensive EPD analysis, artificial insemination and embryo transfer.

Our family was attracted to the breed because of their low maintenance, efficiency, fertility, extra profits from gainability and their adaptability. We market our registered genetics through select sales, including the Tri-Star and Bluebonnet Classic, as well as private treaty.

Our Star 5 division has attained national recognition, winning the San Antonio Commercial Female Sale Grand Champion honor twice, and consistently placing in the top of their division. Our program combines Santa Gertrudis females with strong EPD Hereford bulls and then these females are bred to low birthweight, high EPD Angus bulls and sold as breds or pairs. Our Star 5's are in strong demand and have made their way into herds in several states and on a repeat basis.

To learn more about our operation visit our website, [www.corporronacres-pinnaclecattle.com](http://www.corporronacres-pinnaclecattle.com) or better yet come see us.



Jim Corporron

**Brandenberger joins our management team**

Corporron Acres and Pinnacle Cattle Company has announced that Tommy Brandenberger has joined the management team for the family operations in the position of ranch consultant.



Tommy Brandenberger

Brandenberger brings a lifetime of knowledge and experience in the beef industry, as well as a valuable skill set in nutrition, production practices, reproduction, genetic selection and mating, marketing, health and forage production.

He and his wife, Susan currently own and operate 96 Cattle Company, a commercial cow/calf operation in Hallettsville, Texas, Brandenberger has a valued resume that includes a degree in animal science from Texas A&M University, where he also competed on the livestock judging team, nine years managing the high-profile Cuarenta Ranch Beefmaster seedstock program at Muldoon, Texas and he was also manager of the Umphry Beefmaster operation in Brackettville, Texas. In 1991, he joined Migl Feed and Grain in Hallettsville, Texas and would eventually become the manager of the operation.

While at Migl, Brandenberger learned many agricultural business aspects, oversaw the retail end of the feed and fertilizer store and worked daily with area ranchers, as well as tending to his own operation. In 2015, he and Susan decided to commit their time, energy and expertise to expanding their own operation.

"I've known and worked with the Corporrons for many years, so I'm delighted to be a part of their team and share in their progression as leaders in the purebred and commercial cattle business," said Brandenberger.

"We are excited to add Tommy and his strong cattle industry resume to our registered and commercial programs. We feel his experience, knowledge, reputation within the industry and high character will position us to produce cattle suited for increased potential and profit for us and our customers," described Corporron.