

HETEROSIS AND SOUND SCIENCE

By Dan Rieder

Hybrid vigor, obtained through a unique three-way cross, and staying current on the latest in scientific developments, combine to keep a Montana commercial operation in the black.

John Grande, (rhymes with candy) operator/manager of the family-owned Grande Ranch Company of Lennep, Montana (population: “less than a dozen.”) depends heavily on two key management factors.

“Number one, we put a lot of emphasis on our three way crossbreeding program. There is just no way that we can afford to pass up the benefits of heterosis,” he said emphatically. “Secondly, we attempt to take advantage of the opportunities now available through the tremendous advancements in the world of animal science.”



“We run a little strong on Angus genetics because we use calving-ease Angus bulls to clean up our heifers, regardless of their breeding,” he said. “One problem with the three way cross can be a lack of consistency and uniformity and that is why I understand people going to composites. We try to minimize the inconsistency between breeds by selecting for the same type and same traits in all breeds.”

Applying Science

Grande, who graduated in 1985 with an Ag Business degree from Montana State University, served four years on the Montana Stockgrowers Association board of directors and one year on the National Cattlemen’s Beef Association (NCBA) board.

“Through my involvement, I’ve met some outstanding people and made some great contacts, many of which have enabled us to be a part of some exciting developments,” he said.

Grande served on the steering committee for the checkoff-funded Carcass Merit Project, which involved 15 different breeds and was coordinated by NCBA. “We produced some of the cattle for that project, drawing blood for DNA samples, shipping it and helping with logistics. The American Simmental Association (ASA) played a big part in that program, with Drs. Jerry Lipsey (ASA CEO), John Pollak (Cornell University), and Michael Dikeman (Kansas State University) coming up with the original idea. Although ASA has published some tenderness EPDs from these results, further research in the genomics area including some using the DNA samples from carcass merit project cattle is ongoing.”

The Grandes have utilized many of the new techniques associated with AI, including MGA Lutalyse protocol, CIDRS and a shot of GNRH. Through two heat cycles, they have been consistently successful at settling 55 to 65% on first



The Grande Ranch, nestled in the foothills of Central Montana’s Castle Mountains.

Establishing A Three-Way Cross

“Like most of the outfits in this area, my family ran Herefords until the 1960s when Angus bulls were introduced to create baldies,” Grande explained. “Eventually, we came to a point where our base was mostly Angus. So, in 1994, we introduced South Devon genetics, primarily because of their strong carcass characteristics. We knew they were good on marbling. We also liked the South Devon temperament, and realized they would add some muscle and growth over our mostly straight Angus.”

Grande’s Angus-South Devon cross was successful over a period of several years, but he felt there was room for improvement. That’s when he made the decision to bring a third breed into the rotation.

“We wanted a little more heterosis and a little more muscle. At the same time, we wanted a breed that we could still use as a maternal cross. In 2000, we added Simmental to our mix,” he said.

The Grande breeding program is straightforward. All Angus-sired females are bred to South Devon bulls. Likewise, all South Devon-sired females are bred to Simmental bulls; and all Simmental-sired females are mated with Angus bulls. Then, the process starts all over again the following year. “We think we get marbling from the Angus and South Devon, while the Simmental brings growth and muscle to the table,” he said.

The calculated use of artificial insemination, coupled with colored ear tags and freeze branding, has been invaluable in maintaining breed integrity and identification.

service AI and 90 to 95% in 45 days. Grande's brother-in-law, David Myers, works for TransOva, based in nearby Bozeman. "He does most of our breeding, and that's a great resource for us," he said.

Retained ownership is another concept embraced by Grande. "Retained ownership has paid off for us over the years. We pretty much follow a set pattern—weaning in October, a complete set of vaccinations, growing them out on cake and grass here on the ranch, and then shipping to a feedlot," he continued. "When they're ready, we sell to Excel, Swift, IBP or whoever. Occasionally, we'll even work with the packers on a grid or on forward contracting. We ultrasound for purposes of sorting our feeder cattle."

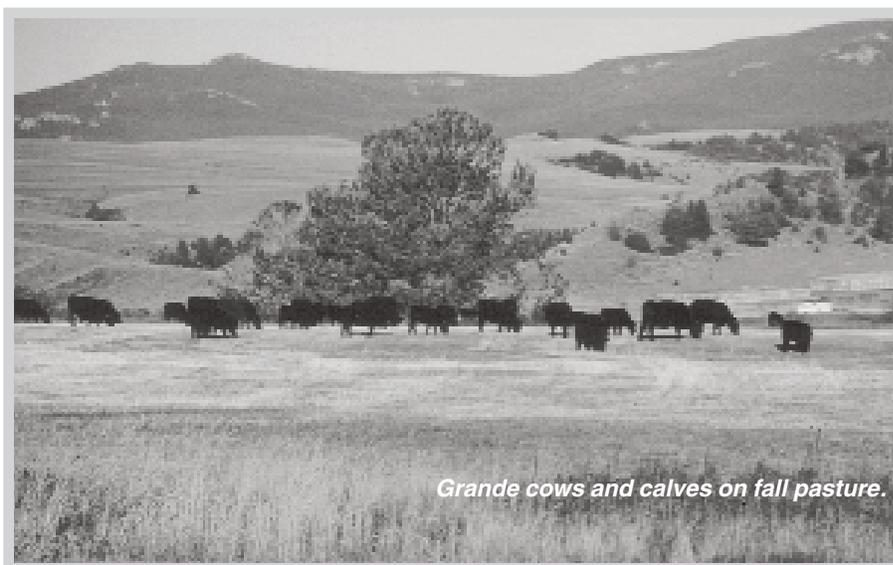
A Family Enterprise

The Grande Ranch was established in 1877, when John's great grandfather, M.T. Grande, homesteaded on the banks of the Musselshell River in the heart of central Montana's prime grassland. "That original portion of the ranch is operated by a cousin of mine," John said. "My branch of the family has been at this spot since 1914 and I'm the fourth generation here."

The region was first settled by sheep ranchers. "When M.T. homesteaded, it was all sheep. Eventually, they began to phase in cattle, mostly Herefords, and the large bands of sheep were pretty well gone by the 1950s," Grande said.

Located in the southern foothills of the historic and picturesque Castle Mountains in central Montana, the Grande operation is remote, 35 miles from the nearest high school, and nearly as far from the closest grocery store.

"I attended the one-room school in Lennep until my older sister graduated from eighth grade. Then, my parents, Andy and Joyce, rented a house in White Sulphur Springs, the county seat, and we lived there during the school year," he said.



"My parents are basically retired, splitting time between the ranch and Bozeman, where they can be near my sisters and their five grandkids," he explained. "Dad stays well informed about what's going on with the cattle."

John's two sisters are Mary Karen Grande who lives at Wilsall, about halfway between the ranch and Bozeman, and Lynda Myers, who resides in Bozeman. "Since they live a fair distance away, they're not involved in the day-to-day operation, but they do have ownership in the ranch, and I put them to work occasionally," he said. "I hire one full-time and one part time employee."

Grande annually calves out about 450 females, with another 80 to 90 replacement heifers waiting to be incorporated into the herd. "We run on 8,000 acres of deeded land, a half section of state land and a US Forest Service allotment of 400 animal unit months (AUMs). We're in an expansion mode right now," he added.

A cleanup bull battery includes several Simmentals purchased from Gateway Simmental of Lewistown.

Because they're near the headwaters of the Musselshell River, they have a good water right, enabling them to produce 900 to 1,000 tons of hay, enough to help withstand Montana's often-rigorous winters. The feeding season usually runs from mid-December through April and early May.

"The three-breed rotation is our most unique characteristic and at the same time, our most useful tool," Grande summarized. "We focus on utilizing heterosis on a herd of cows that suit our environment, and with an eye on developing that ideal end product."



One of Grande's Simmental cows and her Angus-sired calf.

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