



Raising Shorthorn Beef

Albaugh Ranch utilizes line-breeding to document their Native Shorthorn genetics and produce an outstanding beef product

by Debbie Hoge • photos by Kathy Lofthouse

Purebred cattle breeders have never doubted the importance of documenting genetic value and measuring performance. These concepts are the essential ingredients behind raising and marketing registered seedstock. Albaugh Ranch, Fallon, Nev., has taken this concept a step further by not only raising registered Shorthorn cattle, but guaranteeing and documenting the purity of their Native Shorthorn cattle.

Norris Albaugh, along with his wife, Suzanne, and children Helen, Wilhelmina and Waldo, are continuing the semi-closed herd established by his grandparents. His parents, Ron and LaVern Albaugh, are still involved. Their cattle are true descendants of the first cattle registered to J.E. Albaugh & Sons. Since the 1950's, the herd was known as Frosty Acres. Then in 1999, the extended family ranching operation was split into its current configuration. Even though family members and ranch names have changed, the Albaugh's desire and dedication have not wavered. Today, they are still dedicated to producing high quality, performance oriented cattle meeting the needs of the commercial cattle industry.

The Albaugh program can probably best be summed up by three basic components - Native Bred, balance, and performance - in the pasture and on the plate. The herd is dual registered with

the American Shorthorn Association (ASA) and the American Milking Shorthorn Society (AMSS) and is also one of very few herds qualifying for the "N" designation. This refers to the AMSS Native Bred Program. The herd book for Shorthorn cattle in the United States was split in 1949. The Milking Shorthorn group focused on Shorthorn cattle as a dual-purpose breed, while the Shorthorn breed focuses specifically on beef production. Although at the time both sides had closed herd books, over the years both associations have allowed for some outside blood to be used. Some breeders in both organizations wished to maintain as close to 100 percent Shorthorn blood as possible. For this, AMSS created the Native Bred Program which would identify and document Shorthorn cattle which trace to the original US herd book or to Coates Herd Book One. Today, only 500 animals in the US are known to qualify for the coveted "N" designation.

The Albaugh Ranch Native Purebred Shorthorn herd can mostly be traced back to the 1820's. This semi-closed herd has been line-bred for many years. "To get consistency, you need to do line-breeding," Norris comments. "If you take two outcrosses, you will not get a consistent product." Only four outside, Native bulls have been used in the Albaugh program in the last 15 years. The bulls have come from Haumont Shorthorns in Broken Bow, Neb., and J-J Shorthorns, also from Fallon, Nev.

Albaugh believes line-breeding accomplishes many relevant points. "By line-breeding, we have been able to keep our genetics strong and consistent," Norris notes. With this in mind, Shorthorn cattle in the Albaugh program are expected to excel in all areas of production, including beef carcass characteristics, milk, sound udders and teats, calm disposition, structural soundness, rumen capacity, performance, moderate frame size, calving ease and producing a calf every year. Line-breeding, for Albaugh, has created a more balanced animal which will meet all of these criteria.

Structural soundness can encompass a wide range of characteristics and even his bulls that are two to 10 years old are expected to breed 40 cows. "They will breed 75-80 percent in 21 days," Norris explains adding bulls have good feet, no long nails, nor be post legged or sickle hocked and easy fleshing. "Bulls must stay in good condition on the same feed resources," Norris states. "This keeps the semen quality up to get cows bred. If bulls are not sound and capable, you are not going to have the cows calve as they should."

Just as in the commercial industry, performance equates to profit. "Cows must wean a calf that is profitable,"

Norris says. "If you put \$200 in and get \$200 out, what is the point? It is better to put \$200 in and get \$500. If you don't make a profit, there is no performance."

"You want a balanced animal," Norris states. "The more balanced the more productive and the lower out of pocket inputs you have to spend." Albaugh Ranch is managed under commercial ranching conditions. The cattle must be able to not only survive, but thrive on the forages available. The Albaugh cattle are not fed grain, but salt and mineral mix is provided. The cattle for slaughter as forage finished beef are fed some molasses to keep the rate of gain high which ensures gourmet quality beef. "A balanced animal will stay in good shape with the forages available and without costly inputs," adding that poor animals mean higher vet costs, more opens, and more inputs to buy.

In addition, females are expected to be a moderated sized, four or five frame cow weighing 1,000 to 1,150 pounds in working condition. Norris believes a moderated sized cow is a more efficient producer and will produce a calf which will grow well and then quickly rebreed.

Ease of calving is another important trait. This is important for both the calf and the mother. "The correct birth weight for ease of calving and healthy calves and the mothers is between 65 and 85 pounds or about seven percent or less of the dam's weight," Norris

states. In 2007, the Albaugh herd had an actual average birth weight of 69.8 pounds on heifers and 74.3 pounds on bull calves.

Linear measurements have become the latest trend in the industry, but is quickly positioning itself as a useful practice. With the help of Bovine Genetic Engineering consultant Gerald Fry, Albaugh has another tool in his possession to determine if an animal is balanced. When you have a balanced animal, everything falls into place.

Fry has been linear measuring for the Albaughs for the last four years. They have now measured all the bulls and the entire cow herd. In a few years, they will also measure and cull all of their animals on linear measuring, not just the bulls. Linear measuring allows the breeder to know how the animals will develop and perform at a year of age. "Measuring allows us to match the strength of bulls and the weaknesses of cows to get a balanced offspring," Norris adds. Measurements taken include rump length, body length, top line, rump width, shoulder width, heart girth, flank, rump height and testicles. Looking at these numbers, they can quickly recognize when cattle are unbalanced. "For example, a 16 inch rump and an 13.5 inch shoulder, we will not get a good doing, easy fleshing, outstanding animal." Norris explains unbalanced cattle are simply less healthy. "We strive to have cattle make a profit by keeping input costs low."

Right: The Albaughs, Norris, Suzanne, and children Helen, Wilhelmina and Waldo, along with Norris' parents, LaVern and Ron, are dedicated to producing documented Native Shorthorn genetics. Below: AR Kora 111J x is a July '05 daughter J Bar J Duke 114. Kora is one of their test heifers which will calve at 32 months of age.





Right: AR Commander 123H x is one of the Albaugh's herd bulls. He is a half brother X half sister mating with Lilac M Commander 95 x as his grandsire on both sides of his pedigree. He was purchased from Haumont Shorthorns, Broken Bow, Neb.

Linear measurements are basically correlations between two measurements of the animal. Although there are many measurements and comparisons, Fry notes he always begins with three main correlations. The first relates to the rump and shoulder. "The shoulder should be two inches wider than the length of the rump," Gerald states. "If it is not, this bull will be fragile and high maintenance. Males are about masculinity and shoulders represent the ruggedness of the bull."

The second key correlation is the rump width compared to the bull's height. "The rump should be between 44-50 percent as wide as his height," Gerald comments. "For example, if a bull is 50 inches tall, then his rump should be 24-25 inches wide."

Finally, Fry measures the heart girth. The circumference of the heart girth should be equal to or greater than the length of the animal. "Every one inch smaller than the length represents a 37 pound loss of red meat," Gerald notes. "And each 1 inch greater than the length will add 37 pounds of red meat."

The Albaughs are strong believers in ruthless culling to have a true breeding program. Unbalanced animals are quickly culled from the Albaugh herd. In this program, since 1946, if a cow

doesn't breed, she sells. "We practice very tough culling to eliminate problems and ensure we are not duplicating or enhancing problems," Norris states adding breeders should not be afraid to clean up a cow line or sell an entire cow family. "Dad noticed a number of cattle that were bloating on alfalfa. All of the cattle were tracing back to one cow line. We elected to cull the entire cow family. We still have occasional problems with bloat, but they are not all tracing to one family."

"We also found that one year three-quarters of our scour problems were tracing to two sires," Norris adds. These two bulls and all of their daughters were also culled. This is why Albaugh Ranch has their own genetic defect policy.

"We focus on what will work for our commercial buyers," Norris notes. "No program or cattle are perfect, but if you want to breed F1 females and feed out steers, our cattle work." The Albaughs have good data over many years to back up their cattle, their program and their success. "We strive to keep our genetics strong and consistent," Norris states.

The Albaughs run about 200 head of cattle, including 150 purebred Shorthorns and 50-60 head of commercial cows. "Most of our commercial cows are better than 50 percent Shorthorn influ-

ence," Norris says. The cow herd is run on about 400 irrigated acres. "We only get three to four inches of precipitation a year. So, we have very little non-irrigated land. We can flood irrigate the whole place in 48 hours."

"We have an average of 90-92 percent conception rate," Norris states adding Shorthorn females readily rebreed. "In 2004, we sold some of our commercial cows and only kept those with the Shorthorn phenotype," Norris comments. "So, after breeding that season, we didn't cull the opens. Instead, we kept the Shorthorn females and bred them to calve in the summer. Two years later, they are back to April calving."

Evidencing the quality and usefulness of the Albaugh cow herd is the fact that high percentage of the cows are 10+ years old. "Most of our cow's teats are one and half to two inches long in the spring and not as big as my thumb," Norris notes. "If she has to be milked, she does no good and she has to go to town."

Albaugh is also testing another breeding concept introduced by Gerald Fry. He advocates calving heifers at three years of age. "We kept some of the younger heifers from that summer calving group to calve at 30 months," Norris says. "This is a compromise between Dad and I." The reasoning behind calving later is to allow the females to be more physically and physiologically mature. Although you may be giving up a year of production now, the cows are believed to last three to four years longer. In addition, calving is not as hard on the cows and she is better able to stay in good condition.

Ultrasounding and utilizing carcass data have also been important tools for developing the Albaugh herd. They are also using Gerald Fry's ultrasounding skills to ensure their cattle will produce gourmet tender beef. When ultrasounding, Fry looks at the texture or striations of the meat, the thickness of the connective tissue and the seam fat. "The flatter the texture of the meat, the more tender it will be," Fry states adding the same is true for the connective tissue and seam fat. The smaller the amounts, the more tender the product.

"The more I learn about the Shorthorn cattle, the more I like them," Fry admits. "And Norris' herd still as remnants of the Milking Shorthorns. Although they haven't specifically selected for these traits, they are still there because they have the original genetics intact. No one selects for butter fat anymore. This is too bad because the higher the butter fat the higher the intramuscular fat and the better the texture of the meat."

In February, Fry ultrasounded the Albaugh cattle and commented he should

not be seeing such a high level of intramuscular fat due to the body condition of the cows. Norris explains, "He stated the first cold night should have used that up. He contributed it to good selection over many years, but not specifically selecting for only this."

Their achievement in producing quality meat has been evidenced many times. For many years, the Albaugh Family had a unique progeny testing program. A group of calves from a particular sire would be fed for rate of gain and then compared to the offspring of another sire. After the test period, the cattle were slaughtered and carcass data was obtained from the Federal Carcass Data Service. Any sire whose progeny did not measure up was immediately discarded. Their success was documented by the president of Snowy Butte Foods, Inc., Klamath Falls, Ore. He wrote, "these lots were extraordinary from both the carcass conformation standpoint, as well as the cut-out yield and grade...In this day of health-conscious consumers and the raging war on fat and cholesterol, we demand Choice Yield Grade 1 and 2 carcasses. Other Shorthorn cattle have fallen well short of 80% yield grade 1 and 2 carcasses; yours were a pleasant surprise." Yield grade category can be directly linked to their hard work in developing cattle which perform well on grass. "Yield grade is affected by the length of time cattle are fed on grain," Norris explains. "The longer on grain, the lower the yield grade."

While Albaugh sells a significant amount of commercial bred females and pairs to commercial producers and a few select bulls, his main cash crop is selling steers. The Albaughs sell their steers to grass based finishers. This gives their product a distinct advantage in regard to quality and nutritional value. "When a consumer buys beef, they want tenderness, excellent flavor, consistent quality

and nutritional value," Norris comments explaining if a consumer buys a steak from 10 different animals they want to see the same quality in each one. "Our product fits a wide range of values that should be common in the industry."

Steers are kept in the Albaugh program until yearling age and then sold to grass finishers. In the past, the Albaugh steers have stayed on the Pacific Coast. This year, the steers are heading to southeast Kansas along the Oklahoma border. The buyers are a grass finisher who plans to market the meat directly. They wanted gourmet quality and tenderness, although Norris couldn't guarantee this. The buyers were associates of Gerald Fry and past ASA executive secretary Ron Bolze.

One piece of data Albaugh has is the results of a grass finishing trial in California. The test, conducted by Long Meadow Ranch, set out to examine the average daily gain on high quality grass and legumes and to explore the taste, yield and nutritional value of the resulting beef. The cattle included in the study were 10 Highland steers (30 months old), one 18 month old Highland/Angus steer, nine 18 month old Native Shorthorn steers and a 24 month old Native Shorthorn steer. The 18 month old Shorthorn steers excelled in the gaining phase of the test, posting a 2.37 ADG.

Fatty acid analysis (Omega 6:3 ratio and CLA content) was completed at the University of Utah. The results indicated that grass fed beef results in better rates for both values. In this test, the Native Shorthorns posted Omega 6:3 ratios of 1.23 and 1.25, with the ideal ratio being less than 4 to 1. Typical grain fed beef and milk is often as high as 14:1. The CLA (conjugated linoleic acid) samples from the beef in the test ranged from 6.1-9.2 mg/gram of fat. This is almost double the average grain

fed beef CLA values of 3.5-4 mg CLA/gram of fat. These results emphasize the nutritional value of grass fed beef.

The final portion of the trial was a taste testing at two, upscale, premier restaurants. Again, the Shorthorn beef performed well. At *Chez Panisse*, the beef which was most enjoyed by the chefs was the 24 month old Shorthorn steer. The 18 month old Shorthorn steer and the Highland/Angus steer, also 18 months old, tied for winning rights at the other restaurant, *ACME Chop House*. The end results show that Shorthorn beef is a very high quality product and that trained palates of chefs enjoy a richer, more robust product (older animals). The average consumer though prefers a younger product with a milder, yet very beefy flavor. Meats from the trial were ordered for use on the *Chez Panisse* menu.

Albaugh found the trial to be very beneficial and highly recommends being involved in this type of program. "Being in the project was valuable," Norris says. "We got information on some specific values and we were very happy with the way our Shorthorn cattle performed."

"Remember, if you breed for extremes or select for only one trait, it will not work," Norris states. "You will get a better animal if breeding for a balanced animal." A balanced, quality Shorthorn will always be the focus of Albaugh Ranch. And Norris Albaugh is continuing his family's 'quest for outstanding performance to meet the needs of the commercial cattle producer, while giving the beef consumer a superior eating experience'. Isn't that what it's all about?

Editor's Note: For more information on the Albaugh's Native Shorthorn cattle, you can contact Norris and Suzanne at 5909 Tarzyn Rd., Fallon, Nev. 89406 or call 775-423-3361.