

Harvesting Heterosis & Health Builds Profitable Genetic Package, Useful End Products

Healthy, predictable Charolais-influenced calves are the product of this Wyoming family's crossbreeding enterprise.

By Kim Holt

In southeast Wyoming near the Nebraska border is Pine Bluffs, the home of Lerwick Brothers, LLC. This third- and fourth-generation father-and-sons diversified farming and ranching operation has been using Charolais sires on crossbred females since the 1970s, in order to harvest heterosis in their terminal crossbreeding program.

This family's cattle operation, overseen by Jim Lerwick and his daughter-in-law, Diane Lerwick, strives to do a lot of things right in order to enhance the value of their calf products. In fact, Ler-

wick Bros. was the American-International Charolais Association's nomination for the 2007 Beef Improvement Federation's commercial producer award.

The Lerwick's goal is to produce a differentiated product which incorporates the profit potential of the beef chain based on customers' desires and willingness to pay.

Leaving not many stones unturned, this family addresses the performance potential of the weaned calf they sell or retain ownership on by investing in potential growth and profit.

Computerized herd and business records and reports help the Lerwicks assess the economic advantages of their crossbreeding program. In doing so, their records have indicated that Charolais sires on Angus and black baldie cows return from \$70 to \$100 more in the life cycle of the calf than do straight-bred cows, about half prior to weaning and half after, Jim says.

They've retained ownership on a portion of their cattle for more than 20 years and, last year, they partnered on their lighter weight steers and heifers fed at Steve Scholz's Lincoln County Feedyard near Stapleton, Neb.

Their willingness to partner was a practice that Scholz appreci-

ates. When producers show confidence in their breeding program, it "greatly" increases a buyer's confidence in a set of cattle, he says.

The Lerwick's smokey calves worked well for Lincoln County, even in light of the record-setting snowy, wet weather encountered last winter, with steer calves posting nearly a \$220 per head profit (see Table A). Scholz returned this past Au-



Lerwick grandkids participate in a short "cattle drive" this summer, setting a group of cows in a rotational grazing pasture. Jim Lerwick is pictured second from left with granddaughters.

Yield “Drives the Bus”

“High-yielding cattle – that’s what we strive for. That’s what brings home the money in our checkbook,” states Steve Scholz, owner of Lincoln County Feedyard, LLC, Stapleton, Neb. “We feed a lot of crossbred cattle. I feel that heterosis is the free lunch you can’t pass up.”

Scholz, who worked as a feedyard nutritional consultant to the industry for seven years, continues, “Ideally we like to feed a half Continental, half British steer or heifer.”

Lincoln County does feed other cattle, but “I prefer the Charolais-Angus cross if I can,” he says. “We just look for cattle that have a lot of go and gas to them. Seems like that’s about the only way we can get the yield.”

Located just north of North Platte, this feeder will place the majority of cattle on feed in fall and usually harvest between the

first of May and middle of June, so they’re fed in the thick of winter.

“The ruggedness of the half Continental, half British cattle – they take the winter; they’re predictable, going back to yield, because that’s a huge driver.” He adds, “We get enough quality grade in the cattle to maintain good packer relations.

“Most of these cattle are going to grade 60 to 75% Choice. If we can fall in that range, my buyer is happy. I can get cattle sold to anybody. But we get yields anywhere from 64.5 to 66.3%. And with a lot of the British cattle we struggle to get over 64%.”

He explains, “Yield is such a different driver. When you’re selling cattle at \$80 live, and now the market is at a \$1.00, that 2% difference in yield magnifies itself into a much bigger number at today’s prices than what it did two or three years ago.”

In spring Scholz markets high-yielding cattle, including Charolais-crosses produced by Lerwick Bros., through special arrangement to Tyson on a dressed basis. He describes his packer buyer as “very particular. If I don’t have those types of cattle, I can’t sell to him. So it obviously works for them also.”

Lincoln County will turn 18,000 head this year of both custom and purchased cattle. He describes an ideal set of cattle as 66.2% yield, 72-73% Choice, 85% Yield Grade 1s and 2s. “That’s an ideal set; you don’t get them any better than that.”

Scholz says they concentrate mainly on ranch-direct calves at Lincoln County for their predictability and yield. “A calf will out-yield a traditional yearling or a back-grounded animal by quite a bit.” He reassures, “Yield drives the bus.”

gust to buy the big end of Lerwick calves sold on Torrington Livestock Market’s Cattle Country Video. Another Nebraska feeder did the same. Last year both feedlots had bought Lerwick calves for the first time.

At a base weight of 725 pounds (lbs.) and a late September arrival date, Scholz knows these cattle will be ready to convert and gain once they hit Lincoln County feedbunks. History shows these cattle will gain around 3 pounds (lbs.) a day from birth and harvest at 14 months of age, while hitting the historically favorable April market, one of two Lerwick targets.

The Lerwicks have worked hard on their health program and Scholz appreciates the “minimal health trouble” he experiences with their calves, as much as their higher-yielding genetics.

Jim explains, “In the cattle production system, your cattle are only as good as your weakest link – genetics, health, management, feed stuffs – all those things. We do everything we can with preventative medicine so that we don’t have to treat calves.” He adds, “Health management may not be quite as important as genetic management, but it’s really, really close.”

A coordinated effort

The Lerwicks have crossbred cattle since the first Hereford bulls were used on Jim’s grandpa’s milking Shorthorns. Today, the majority of Lerwick cows are black-baldie. Until about 2008, they bred about 20% of their herd for Hereford-Angus replacements and 80% for Charolais-black-baldie terminal-crosses.

They had also purchased replacements, says Jim, but weren’t satisfied with the numbers they could find or the consistency of quality.

That was until two years ago when Jim met John Francis from Cheyenne, Wyo., who is now the Lerwick’s dedicated supplier of Red Angus-Hereford F1 replacement females.

John and Jim have established what Jim refers to as a “coordination” between the two of them and Montana’s 5L Red Angus. John

buys all Red Angus replacement females from 5L, a breeder John and Jim sought out together to fit the Francis herd’s genetic base and Lerwick’s terminal-cross objective. John breeds these replacements to selected Hereford bulls, currently from the Wyoming herds of Ned and Jan Ward near Sheridan and the Berry’s at Cheyenne.

Jim explains, “What this allows us to do is get the females consistent because of constancy of the Red Angus replacements coming from one herd.” Limiting Hereford genetics to artificial insemination or from limited sources also lends to consistency from a smaller gene pool.

“The idea is that most of the heifers will be half sisters. We’re not quite there yet,” Jim says, but “once we have the consistency of the heifer, then we can select within the Charolais pool.”

He says that consistency is one of their major goals, but it’s also a factor the beef industry needs to embrace if it’s going to compete with other protein sources.

“One of our weaknesses is our ability to compete with pork and chicken in cost of production and consistency of product,” Jim states. “We try to make an animal that is all things to all people.”

As one reviews the chicken and pork model, he points out the productivity of the female is tremendously enhanced by the consistency of the genetic package. Then the terminal cross in pork and chicken is very controlled with characteristics that don’t necessarily belong in the female.

Jim adds, “By simply ignoring the 15 to 20% advantage of heterosis in the cow herd, we’re giving pork and chicken an advantage.”

The value of Charolais

By employing English genetics to capitalize on maternal heterosis, the Lerwicks add pounds and performance on the sire side through Charolais.

Jim says they’re “pretty selective” when choosing bulls for their program. “We believe the bull and purchased semen expenditures are a poor place to cut costs. We think we need to buy in the top 10-

15% of a bull supplier’s offering to get the genetic package we need to perform.”

They don’t use a dedicated bull supplier yet, but it’s something that will likely be considered.

Jim cites these as reason why they’ve stayed with Charolais: “For availability, consistency of genetics, our relationship with Charolais breeders, and our knowledge base of what Charolais has done in our system. But more importantly, what our buyers are telling us about the genetic combination. They know what Charolais cattle out of English-bred cows will do.

“I think that’s where the Charolais has a jump on what I consider to be other excellent terminal sire packages.” He adds, “The industry hasn’t integrated Angus into Charolais so we still maintain our maximum hybrid vigor.”

When selecting sires, the Lerwicks look for a big spread between birth and yearling weight; they want to pass that growth advantage onto the feedyard and utilize it themselves should they retain ownership based on desirable market conditions.

Jim adds, “We’re capable of running a little larger-framed cow because of our feedstuffs, so we don’t worry about buying the smallest birth-weight bull. I’d say we buy moderate to large Charolais.”

Enhancing value

The Lerwicks have kept cow-herd information for more than 20 years. They’ve taken individual weights on calves at preconditioning for 15 years, and have incorporated feed performance and carcass data as available.

Jim credits his daughter-in-law, Diane, as “the brains” of their beef program through her record keeping and analysis. Since she’s been on board the last seven years, they’ve been able to concentrate on an-

alyzing data pertaining to genetic selection and health programs. He says this digestion of information is a “critical part” of any operation.

The last 10 to 15 years, they’ve also placed more focus on marketing and began utilizing industry-available tools. Jim points out, “In marketing, you don’t produce something and ask people to buy it. Instead, find out what people want and figure out a way to produce it.”

One tool they’ve used successfully is age and source verification with electronic identification. Jim says this has added another \$25 to \$34 per head to their end value of cattle.

He points out, “On a \$1.01 market last year, between the age and source premiums and yield, we picked up \$3.50 to \$5 per pound above the actual bid market – which is pretty big. That’s \$54 bucks per head on a 1,300-lb. steer.”

In the near future, Lerwick calves will be further differentiated in color, reflecting a more honey color versus smokey gray. But they will still reflect the desirability of Charolais-influenced genetics and a program built around the cornerstones of crossbreeding, quality genetics, herd health practices and diligent record keeping.

Scholz says the color doesn’t matter. “Actually some of the best cattle are probably going to be the Charolais-Red Angus cross,” he says, adding, that it seems like there is a little more heterosis in that gene pool. The Lerwick cattle will still be predictable nonetheless.

And a predictable health program and predictable genetics “goes a long way towards making us happy,” Scholz reminds.

From a producer perspective, Jim summarizes, “It comes back to harvesting the heterosis, harvesting health, harvesting feedstuffs and balancing rations.” Strong links like these help assure profitable genetic packages and useful end products.

Table A
Lerwick’s Data from Lincoln Co. Feedyard
(majority smokey Charolais)

Date Harvested	Number	In Wt. (lbs.)	Out Wt. (lbs.)	Days on Feed	ADG (lbs.)	Conversion DM Basis (lbs.)	COG per/lb. Gain	Profit/Hd. (\$)
May '10	99 Heifers	555	1,190	217	2.96	6.27	0.705	\$200.14
May '10	95 Steers	627	1,233	220	2.84	6.47	0.721	\$219.57

Lerwick Bros. retained partial interest in their 2009 lighter steers and lighter heifers fed at Lincoln County Feedyard LLC, Stapleton, Neb. Owner Steve Scholz says he wouldn’t necessarily brag about the conversions and gain of these cattle, but considering the weather they were fed in, they did pretty well. It was some of the worst and wettest on record, and it started early. He said it actually snowed the day they received Lerwick calves the end of September. “We received 37 inches of snow the middle of October (25 inches in one storm), and another 5 inches of rain. We couldn’t get rid of it. When Jim came in March, we barely got to see his cattle with a four-wheel drive utility vehicle. It was that bad.” He says he’ll take dust any day over mud.

In 2009, the big end of the Lerwick steers sold to Highland Feeders, Inc., in Albion, Neb.

Jim Lerwick says one of the wettest winters on record shows in the conversions and gain. But these cattle still yielded 64.5% even though the cattle were “green.” This contributed to the \$4 premium over cash bids the day of sale and to profitability for this feeder.