



Vertical Integration at Simplot Starts with Charolais

Charolais genetics are a crucial step to creating the perfect feeder calf.

*By Paige Nelson
Photos courtesy of J.R. Simplot Company*

Recognizing the Charolais breed's excellent muscling power, the J.R. Simplot Company, Land and Livestock division, in Grand View, Idaho, has invested in its own Charolais seedstock herd to produce the ideal feeder calf—an animal that is functional, unique and profitable.

Using a systems based research approach, director of research and veterinary services Randall Raymond, DVM, is using Charolais-cross cattle to identify future economically important traits that will set Simplot's cattle apart from the rest. He believes feed efficiency will be the propeller trait because it affects every

segment of the beef cattle industry. Other traits, he says, will be consumer driven such as beef's palatability and health profile, as well as keeping it at a cost point that is attractive to the average consumer.

Irons in the Fire—Seedstock

Simplot Land & Livestock is primarily a cattlefeeding enterprise and is positioned in the top 10 U.S. feedyards for size according to Raymond, with 200,000 head feeding capacity. Most of Raymond's feeder calf research is conducted in the feedlot setting, but investing in its own genetics program has allowed Simplot to make genetic progress in specifically chosen traits.

"We entered the seedstock business to try and improve the feed performance of our cattle," says Raymond. "At the end of the day, we are cattle feeders, and we want to feed profitable cattle." The seedstock program has grown to 450 head. Registered Charolais





bulls are turned out with Simplot's commercial cattle and the registered heifers reenter the breeding herd.

Simplot's 13 commercial Angus/Hereford-cross cow herds are primarily black and black baldies. Raymond says, Charolais sires were chosen because of the many distinguishable traits they bring to the table. He likes Charolais bulls for several reasons:

- Muscle capacity
- Feed efficiency
- Libido
- Longevity

The Charolais-cross calves grow into a feeder calf that fits Simplot's feeding scenario nicely. The cross calves, says Raymond, are:

- Healthy
- Feed efficient
- Rapid growers
- Produce nice carcasses in the packing house
- A unique color (smokey with black noses or strawberry blonde) that indicates Charolais influence, so none are kept for replacements. "We can feed all the Charolais-cross calves as a group and maintain the goals of our maternal herd with the breeds chosen for maternal characteristics that are important to us," Raymond explains.

"[Charolais cattle] don't tend to marble, as well as our Angus or Hereford influenced cattle," he states. "That's one of the challenges of the breed, but it comes with the upside of increased muscle and increased ribeye."

He says marbling is something the company is heavily emphasizing in its seedstock cattle.

Because the Charolais bulls will be used with the smaller framed black baldies, Raymond says he is very particular about calving ease in his bulls.

"Calving ease is a lot easier to find than it used to be. The Charolais breed, I think, has done a very nice job of moderating birth weights and improving calving ease in the last 20 years," he says.

Irons in the Fire—Calf Buy Back

Recently, the seedstock enterprise expanded enough to offer a calf buy back program. Charolais bulls can be purchased or leased, at a set price, by commercial producers. Those bulls' offspring are

then contracted by Simplot to be fed to finish.

"I see that program expanding in the next few years. We're just now getting to the point where we can supply bulls and expand into additional operations," says Raymond.

Irons in the Fire— Commercial Cow-Calf

Simplot's 30,000 commercial mama cows are managed in 15 separate herds and grazed on Idaho rangeland. First- and second-calf heifers are bred to either an Angus or Hereford bull. Third-calf cattle are bred to Charolais bulls. Raymond says he doesn't shy away from large framed bulls on his British-cross cows because he wants performance out of the calves.

"We manage it by making sure they are mature cows before they are exposed to Charolais bulls, and we are pretty particular on calving ease on the Charolais lines," he adds.

The Charolais influence is immediately apparent when the calves are weaned.

"Across the board," says Raymond, "our Charolais-cross calves average 20 pounds heavier (than the British-cross calves) and that will range from 0 to 60 pounds."

Irons in the Fire—Feedyard

All of Simplot's commercial calves and seedstock calves are fed to approximately 1,400 pounds live weight at either the Grand View, Idaho, feedlot or the Pasco, Washington, feedlot post weaning.

"Grand View is probably one of the best locations in the country to feed cattle," says Raymond. The desert region gets 6-8 inches of precipitation per year and has a long growing season. The temperature mostly ranges from 21 degrees Fahrenheit to 91 degrees Fahrenheit without much humidity.

"Pasco is right next door to the Tyson packing plant, which adds a tremendous advantage to moving fat cattle to harvest, without any trucking costs," he explains.

Both feedyards use potato by-products, alfalfa and some version of processed corn or another carbohydrate in the ration.

Simplot offers a custom feeding program for outside beef producers. Ranchers are given their choice of retained ownership, partnering 50/50 with Simplot on the cattle or selling their calves to the feedyard based on the fat cattle market.

Thanks to Simplot's awesome investment in the GrowSafe Feed Intake and Behavior Monitoring System (900 head capacity), Raymond can conduct research on an individual basis. The GrowSafe system is an individual feeding system. It uses radio frequency identification ear tags and feed bunks set on scales to capture feed intake, time in the bunk, bite size and several bunk behavior traits.

The GrowSafe system is a useful tool for seedstock selection. Simplot sends its own seedstock cattle through GrowSafe, as well as their customers' Angus and Hereford seedstock and commercial calves. Raymond says Simplot's sire selection is heavily influenced by the feed intake data GrowSafe gathers.

In using GrowSafe, Raymond has found that feed intake is heritable and is using the trait as a selection tool in the seedstock program.

"There are sire lines that are more efficient than others. It's something that is heritable, and as we select for it, we can make improvement," he adds.

Irons in the Fire—Research

Simplot conducts its own proprietary research and research for other private sectors of the beef industry, says Raymond. He explains that Simplot's own commercial cow-calf ranches maintain ownership through the feeding process, which enables Raymond to "track those calves by ranch origin all the way to the packing house."

Tracking an animal from its home ranch and understanding its seedstock genetics coupled with GrowSafe data gives Raymond a more accurate view of the entire production system. This is something in which pharmaceutical companies, feed additive companies, seedstock customers, breed associations and artificial insemination companies are highly interested.

Simplot's proprietary research is used to differentiate the business from competitors, to test new management strategies or to try the latest technology, says Raymond, and is based on "pilot" studies conducted by universities.

"The advantage that we have on our operation is we have a lot of cows," says Raymond. "We can do some projects with a lot of power, with a lot of numbers. We go try that (research) out in 'the real world' to see if we can still pick up enough differences to make economically sound decisions in a real production environment."

Customer Service

Because Simplot's main enterprise is feeding cattle to finish, a by-product of all the research, says Raymond, is that if something works it's incorporated in the system to be used on all feeder cattle—Simplot cattle and its customers' cattle.

Simplot has designated its entire beef system for producing a better feeder calf and it encourages its feeder calf customers to follow suit. By offering help and management suggestions and solutions, Simplot is helping customers produce ideal feeder calves, as well.

Raymond clarifies, "We really try and encourage cattlemen to feed some of their own cattle, even if they only feed a portion of them. It's important for cattlemen to have an interest in making genetic decisions and improving their cow herd long term, to understand how those cattle truly perform.

"In a lot of cases we work with [outside beef producers and repeat cattlemen] closely to modify their vaccine or their mineral programs to try and maximize the chances of success for the cattle in the feedyard. We work pretty closely and try to advise on an individual basis.

"We have some key people that work with those customers to help them understand what's happening with their cattle. They give them timely feedback on health and performance and how those cattle are really doing. As we go through that process year after year we develop some indication of how those cattle are going to perform and can do a better job of predicting next year's performance.

"We know they've performed this way for the past five years. What could we do to take them to the next level," Raymond illustrates.

Raymond says Simplot will use the gathered information to help beef producers make financial decisions, as well. Those financial decision suggestions may include sale timing and using the futures market to manage risk.

By vertically integrating, Raymond uses a systems based approach to cattle management. He is working with Simplot employees and outside beef producers, as well as state-of-the-art technology, to create the most profitable feeder calf. In the Simplot system the perfect feeder calf begins with a versatile, moderate, English breed cow and a high quality Charolais bull.

