



Continuing the Conversation

During the Hereford Genetic Summit Sept. 4-5, 2014, Hereford breeders were challenged to embrace technology, focus on the customer, and concentrate on feed efficiency and end product merit to help position the breed to gain more commercial market share. We will “continue the conversation” in upcoming *Hereford World* issues as we discuss with breeders key take-home messages from the conference and as an Association we continue to build a roadmap for improving Herefords’ position in the cattle industry. For a complete summary of the event, visit HerefordGeneticSummit.com or see the October *Hereford World*.

This issue:

Heterosis

Heterosis advantage

Randall Raymond, director of research and veterinary services for Simplot Livestock said at the Hereford Genetic Summit, Sept. 4-6, 2014, said he feels strongly that the Hereford advantage is in maternal heterosis, not direct heterosis. He used heterosis research statistics to prove his point.

“In a cow-calf operation there is a 4.3% increase in pregnancy rate due to maternal heterosis,” Raymond said. “That’s a big deal. The single biggest expense to a commercial cow-calf operation is retention of heifers. Because it costs a lot to make her, and every heifer you keep is a calf you can’t feed or sell at weaning.”

Heterosis also contributes to 4.2 lb. of birth weight, 18 lb. of pre-weaning gain and 35 lb. of carcass weight, Raymond said. Heterosis also contributes 4% less pre-weaning mortality. It also means about 20 lb. more weaning weight just because of heterosis.

“Heterosis makes a difference,” Raymond said. “One of the things we really love about the Hereford breed is the heterosis it brings to our maternal side.” **HW**



Fine-tuned Heterosis

Simplot uses targeted crossbreeding for more efficient cattle.

by **Wes Ishmael**, *BEEF* magazine, beefmagazine.com

A whole new generation can remain hidden within the same old proverbial forest when gazing for too long in the rearview mirror.

Consider this observation from Clyde Reed, an Oklahoma State University Extension beef cattle specialist, back in 1969:

“Every Hereford breeder should be interested in the efficient production of beef, but when you consider that the average breeder has been told repeatedly that they must improve milking ability, weaning weights, yearling weights, feed conversion, birth weights, mature weights, bone size, muscling, marbling, fat thickness and conformation — and when you then throw in heads, hide and hair, along with mellow-yellow color — the picture simply becomes too complicated.”

Reed made that observation at the American Hereford Association’s (AHA) type conference. Craig Huffhines, AHA executive vice president, shared it and other historic insights at the Hereford Genetic Summit (HGS) this year.

Ignore the breed name and that bit about the mellow-yellow color. At first glance, Reed’s statement can appear all too familiar to breeds and breeders of all stripes 45 years hence. Despite the obstinately static nature of cow biology, key differences exist between then and now.

First, the definition of improvement back then meant “more.” More milk. More weaning

and yearling weight. More muscle. More marbling.

That’s still the case for some. For others, led by progressive commercial producers, improvement is defined as optimum production relative to input. Consequently, improved milking ability for some may mean reducing it or simply maintaining current levels. For others, hitting the carcass requirements associated with specific brands means about as much as the raw number of pounds. Rather than focus on cow size, per se, some focus on the myriad aspects of cow efficiency, and then leave it to their environment to sort size.

Another key difference today, compared to 1969 when breed performance reporting and genetic evaluation programs were cutting their teeth, is the growing array of DNA-based tools — including genome-enhanced expected progeny differences — that cattle breeders can use to accurately identify, select and propagate cattle more precisely to achieve goals more consistently.

“We’re constantly, as seedstock producers, honing in, trying to get better, trying to fine-tune this machine,” Huffhines told folks at HGS. “The difference today is that we have technology that’s more reliable, that’s more predictable, and that can eliminate more mistakes.”

Progressive commercial producers continue fine-tuning the machine, too. Randall Raymond, director of research and veterinary services for Simplot Livestock

based in Idaho, was a featured speaker at HGS. As he described the company’s operations, Raymond shared a picture of some crackerjack black baldie heifers bred and grown on Simplot ranches. He explained that Simplot is leveraging the maternal strengths of Angus and Hereford.

“Our goal is for this female to be the base for anything we choose to do in the future,” Raymond said. Simplot breeds its baldie cows to Charolais as a terminal cross.

Raymond said Simplot is 10 years into the project, which he described as targeted crossbreeding. The goals include matching cattle to the environment, maximizing hybrid vigor, producing high-quality carcasses, and improving feed efficiency and versatility.

Simplot’s plan and specific strategy is the point, not the breeds in this specific example.

With the extraordinary profit potential currently enjoyed by cow-calf producers, Huffhines said, “There’s not a better opportunity to assess where we are and where the industry is heading.”

He was talking about the reasoning behind the Hereford summit, but it serves as sound advice for everyone who relies on beef cattle genetics.

That’s the other side of improved selection tools and advanced reproductive technology. You can accelerate the pace of genetic change, both good and bad. **HW**