



Selecting Replacement Heifers

Producers share tips on what's important when selecting females for their breeding programs.

by Heather Smith Thomas

Most producers keep heifer calves as replacements, usually selecting heifers from some of their best cows sired by bulls that pass good maternal traits to daughters. There are many criteria for making final decisions regarding which heifers to keep and which ones to sell, and various breeders have different goals.

Van Newkirks

Joe Van Newkirk, whose family has raised Hereford seedstock near Oshkosh, Neb., for several generations, says that in addition to the minimum expected progeny difference (EPD) standards he sets, he looks for depth of rib and flank (an indication of fleshing ability), structural correctness, a feminine look, and pigment around the eyes and, if possible, on the udder.

Other factors on his list include udder structure, disposition and calving ease — he doesn't keep any heifers that had any problems

at birth. He also prefers to keep heifers from the more fertile older cows that have proven to be the best producers.

A producer doesn't always know what a heifer out of a first-calf heifer will be like, but he has a good idea about the calves from a 10-year-old cow that's always been fertile and has good calves. "You know those heifers should be able to breed quickly and breed back quickly," Van Newkirk says.

When elaborating on this list, he says fleshing ability is very important. Good-doing cattle tend to last longer in the herd and continue to be productive. "They are more fertile, and also tend to be more docile," he adds.

He explains that he selects for females that are wide and deep, with capacity to eat a lot. "Where we live, in the Sandhills, we need a cow that can eat and hold a lot of grass. Our grass is not very strong but we have a lot of it," he explains. "Frame size is also a factor. Today everyone is saying

that cattle should be moderate in size. We've noticed that the taller, horsier cows just don't last. We need a happy medium. Generally a really small cow won't raise the type of bulls that we can sell. They need some extra length, and good depth and spring of rib."

Good udders, milking ability

There are some qualities that are hard to judge on a heifer. "Udder quality and structure on a heifer is hard to judge, at that age. We don't creep feed, but some heifers come off their mothers quite fat, and we look at the udders on the mothers more than we do the heifers," he says. Generally, it's hard to tell from a heifer calf what her udder will really be like until she has her first calf.

Some of the heifers from good-milking dams tend to have too much fat in their developing udders. "Sometimes the daughters don't milk as well as their mothers. There has to be a balance there. A heavy-milking cow will raise good bull calves, but the daughters may not milk as well as she does," he says.

Even though that heifer may never milk as well, because of the fat cells in her udder displacing part of the milk-producing tissue, her daughters may milk well because the genetics for milk production are still there. So milking ability is a trait that often skips a generation. In some herds, that next generation may not be given a chance, however, because that heifer isn't as heavy at weaning as her mother was.

Regarding milking ability, he says that some people have tried to predict this with head measurements, saying the distance from the top of the poll to the muzzle should be about twice the distance between the eyes. "The

theory is that the longer the face or muzzle, the better the milking ability. Maybe they thought that because the Holstein has a longer face, this correlates with milking ability, but I don't think this is a dependable yardstick," he says. Many other factors are involved besides the shape and length of the head.

Femininity, carcass, hair coat

Femininity is important, however. "You can usually tell, from looking at them, which heifers will be more fertile. The good cows usually have a tidy head and neck. They should look like a cow," he says.

"We ultrasound all the yearling heifers for carcass characteristics, and we look at this a little bit — though it's not a make or break thing on whether we'll keep her as a cow. In our business we'll have a good idea about what their mothers and sires are like. I usually make my culling decisions before we ultrasound," he explains.

"Another thing I look at is hair coat. I want a lot of hair, in our climate, where we have severe winters. I sold some bulls to south Texas last spring and most of the time those producers don't want much hair on their cattle. I talked to that buyer recently and he said he singed all the hair off, in early March. Those bulls have done well, and act like they've been in that hot climate their whole life, whereas usually that first year the bulls don't do very well, until they adapt," Van Newkirk says.

"I don't think this is a problem in most regions, however. We do like cattle to have a lot of hair, and it can even be curly hair." It seems like a thick, healthy hair coat correlates with many other good qualities, including fleshing ability.



Cyndi, Joe and Kolby Van Newkirk say their core business is selling Hereford bulls to western high plains cattlemen.

Calving ease and more

Another important factor in heifer selection is calving ease. “I never keep a heifer calf that had any problems being born — such as backward, or a leg back,” Van Newkirk says. No matter the cause, he doesn’t gamble on having any repeat problems.

“We pelvic measure heifers as yearlings, at the same time we ultrasound,” he explains. “We use that data as another selection tool. We’ve done this for about 15 years, and now we rarely cull anything on pelvic area unless there’s one that’s glaringly small. After doing it this long, our cow herd all has bigger pelvises, but we still check them because it’s handy.”

Heifers with bigger pelvises might be bred AI (artificial insemination) to a bull that sires larger calves. It gives a little more option on the bulls that could be used on these heifers.

“We usually keep about 90 to 100 heifers, and we might pluck off a few of them after the ultrasound and pelvic measurement. The first cut involves the list of criteria I mentioned, and we also use pedigrees a lot,” Van Newkirk says. Disposition is one of the criteria he uses, and he says it’s becoming even more important today. “Most of the people raising cattle are getting older and want cattle that are easy to handle,” he says. One advantage in the Hereford breed is that on average they tend to have an easy-going temperament.

Structural correctness and foot shape/conformation is also important, especially if cattle need to travel a lot. “We want them up on their toes rather than walking on their dewclaws. Cattle with poor foot and leg structure won’t hold up. We want some spring to the hind leg; post-legged cattle have more problems. We also want a cow to be wide in the pins. This comes back to pelvic measurement. The

distance between the pins when you look at a cow from behind can be an indication of calving ease,” he explains.

Eye appeal is one more thing he considers. Usually the ones that fit his criteria look good. Proper structure and balance and optimum functionality generally come in a package that is pleasing to look at.

Ehlkes

Mark and Della Ehlke raise registered Herefords and a few Angus near Townsend, Mont. The couple look at structural characteristics as well as all the production history available on the cow families when making replacement heifer selection decisions.

“We also ultrasound the heifers as yearlings, and that helps us predict whether they will be able to stay in the herd,” explains Mark Ehlke. “We make our final selections just prior to breeding season. I’d say we have already determined 85 to 90% of our selections and there are a few more that will sort themselves out with the ultrasound.”

Other selection criteria are based on milk and udder quality. “There are other criteria we weigh just as heavily — such as whether the heifer’s mother milked well, or if she is out of a line with adequate milk,” Ehlke explains. “Udder structure is also important, along with disposition. With Herefords we already have an advantage on disposition and it’s almost a given, but in the commercial black Angus if there are any that are outside of what we call pretty docile, we won’t keep that animal.”

In Mark’s experience, disposition is an inherited trait. “With the small number

of Angus cattle we have, we’ve found that if we aren’t careful in bull selection, there are some lines that have poorer temperament. Especially on the registered cattle, we’ve been very diligent in our records. We are getting enough accuracy built up in our cow herd that the offspring are pretty close to where they should be,” he explains.

Selection process begins at birth

“Every once in awhile, for whatever reason (maybe traits skipping a generation), you’ll have one that proves you wrong, but mainly we have a pretty good idea about which heifer calves will make replacements, shortly after they are born,” Ehlke says. The earliest decisions are made at that time, and branding is another opportunity to double check how they are coming along.

“We usually don’t have very many surprises when it comes to weaning time. Then, by doing the ultrasound on both the bulls and heifers, through the years that data compiles within the cow herd, from the cows that are out working — doing a good job for us — so our breeding is true to those numbers. We go back on the cow records several generations — to the granddam or even farther, so we are looking at the pedigree both top and bottom on the registered cattle,” Ehlke explains.

Importance of milk

“I certainly do not select against milk,” Ehlke adds. “There is a certain segment of producers on the commercial side of Hereford cattle, that think we are maybe getting too much milk in the cows, but our ranch environment



Mark and Della Ehlke say their breeding philosophy is to focus on the female.

will support a heavy milking cow.” If the cows breed back and do a good job, and fit their environment, that’s what counts.

“The environmental adaptation is quite interesting,” Ehlke says. “Now and then we buy a female in a production sale, and usually those cattle take awhile to adapt to a different environment.”

Every ranch is different in its environment and management. There are many interwoven factors that make each place unique, and the ideal cow is one that is well suited to each producer’s own environment, he adds.

Every breeder has his/her own specific goals in selecting female replacements, and these goals often vary a little depending on the ranch environment, priorities for cow herd traits, and what the customers purchasing seedstock out of that herd might want.

It’s important for producers to set breeding program goals and select females to meet those goals just like the Van Newkirk and Ehlke families do each year. **HW**

