Producers Focus on Herd

K-State cow-calf specialist provides strategies to choose an appropriate herd sire.

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Spring breeding season has arrived, and many cattle producers are likely thinking about selecting their next herd sire. This one decision could affect their profitability drastically, and with the stress of calving season, it is easy to get lost in sire information and make an investment that could be detrimental to the bottom line.

Bob Weaber, associate professor of beef breeding and genetics at Kansas State University (K-State), said it is important for cattle producers to think about their operation's breeding objective and goals. Producers need to evaluate their current herd performance and consider where they are performing adequately, as well as areas of needed improvement.

Preparation before purchase

Like most things, preparation is crucial to bull buying. Weaber, a K-State Research and Extension cow-calf specialist, recommends that producers think about their

marketing end point and put selection pressure on those areas. If marketing or maintaining replacement heifers, for example, bulls with strong maternal predictors would be desired. In this case, producers should focus on expected progeny differences (EPDs) such as calving ease, milk and cow energy value. If marketing calves at weaning, growth EPDs should be the focus. If marketing calves on a grid, bulls with desired carcass predictors are the best choice. In addition to the end-point focus, Weaber encourages producers to write down their immediate and long-term goals. Focusing on herd rebuilding, resource limitations and retaining replacement heifers might need to be thought out. Choosing between cross- and straight-breeding should also be part of the selection process. "I encourage producers, if they are thinking of or are in a crossbreeding system, to develop a planned system,"

Weaber said. "Don't make a decision on short notice. You'll pay for that for a number of years."

"The decisions we make buying bulls will have a lasting impact on our cow herd until at least 2025," he continued. "The first-born daughters of bulls will grow a couple of years and be in production likely six, seven or eight calving cycles."

If planning to attend a bull sale, make sure to get a sale book as soon as possible, Weaber said. Use percentile tables and breed averages while going through the sale book, and find animals that excel in the traits identified through the breeding objective.

"If buying Angus bulls, for example, search online for 'Angus percentile table' and that will be a useful tool to evaluate how close to average or extreme an individual bull is for a particular trait within the population," Weaber said.

He recommends that producers make a list of suitable bulls that is about three times longer than the number of bulls needed. This is helpful in case bulls of interest sell for a price that is out of budget.

Live inspection important

With list in hand, producers can use days leading up to sale day to inspect and sort through the bulls in person.

"If you can go a week or week and a half early, you'll have more leisure

Use genetic predictors carefully for herd rebuilding

With cow herd rebuilding still in progress in the United States, K-State Research and Extension cow-calf specialist Bob Weaber offers advice on selecting herd sires to make the most valuable replacement daughters.

Calving ease is one of the most important genetic traits for producers to consider.

"As producers, one of the things we need to focus on is how to minimize dystocia," Weaber said. "An effective way do that is use of calving ease EPDs (expected progeny differences)."

Two kinds of calving ease EPDs exist, he said, calving ease direct and calving ease maternal. Calving ease direct (CED) is based on the percent of unassisted calves born from a particular sire when mated to first-calf heifers; the CED EPD

is desired when breeding virgin heifers to decrease dystocia events. Calving ease maternal (CEM) is

based on the percent of unassisted calves born to daughters of a particular bull; therefore, it is how easy a sire's daughters calve.

"It is important as we build replacement heifers that we put some emphasis on the maternal calving

ease component for the long term," Weaber said. "Unfortunately, in beef cattle calving ease direct

and calving ease maternal have a negative genetic association. If we select only on calving ease direct

over time and don't put any If we select only on pressure on calving ease direct over maternal calving ease, maternal time and don't put calving ease will get progressively any pressure on worse over maternal calving ease, time."

Seedstock producers are putting upward pressure on both traits, Weaber said, "so now we can find a good

number of bulls in the market that have desirable calving ease direct and calving ease maternal EPDs."

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Bob Weaber

One of the challenges in making bull selections is that producers often have to sort through dozens of EPDs. Selection indexes are designed around a specific end point to help guide producers. Weaber said producers should pick the selection index that most closely matches their breeding, production and marketing scenario.

For example, producers who sell calves at weaning might use the weaned calf value (\$W) index when buying an Angus bull. Beef value (\$B) describes value through the feedlot and carcass phase of production.

If producers want to raise their own replacement females, however, using a selection index becomes trickier, Weaber said. Some breeds have an all-purpose index that considers both maternal

Sire Selection

time going through the bulls, talking with the seedstock vendors about their program and maybe go look at cows if you're thinking of buying a bull to make replacement heifers," Weaber said. "Try to get a feel for how that cow herd is managed. I encourage you to find one that mimics your own nutrition and management strategy."

Bull buying is a significant investment for producers, and Weaber said no one knows the bulls better than the seller. He suggests that producers take the opportunity to get recommendations from that person. Local extension agents could also provide assistance in matching a producer's goals to bulls available for purchase.

When examining bulls on the list previously ranked on performance data, focus heavily on structure, he said. Foot and leg structure of bulls is crucial to their longevity in the herd. Also, updated data will likely be available on sale day. It is important to make sure all bulls on the list still meet your requirements.

"Once you've gone through the phenotypic evaluation and knocked off bulls that don't fit for either body condition or feet and leg structure, find the sale order," Weaber said. "Often, the sale order is indicative of which bulls the seedstock vendor thinks are the most valuable. Take your list of bulls and the sale order, and make a new list. Put them in priority order based on your evaluation reflective of the order you would purchase them in one

and terminal traits, but it puts more emphasis on maternal traits compared to other indexes. Be sure not to use a terminal index to select sires of replacement females, as the terminal index places no selection emphasis on maternal traits.

Weaber also said producers should limit their use of other EPDs when using a selection index.
Using both could contaminate the decision by over- or underweighting the economically important traits.
Using additional EPDs in addition to using a selection index also dramatically reduces the efficiency of your selection through decreased selection pressure on the index.

"Let the index drive you, because it applies the appropriate amount of economic weight to each of the EPDs that influence value to the end point," he said.

column. Next to that, reorder the list in sale order."

If a bull is at the top of the list for priority

and sale order, the producer should consider bidding aggressively on him, he said. On the other hand, if a lower-priority bull sells early, the producer should consider buying him only if he is at the right price. If that bull sells out of budget, the producer can let him pass and consider others on the list.

More information about beef breeding and genetics and bull-buying strategies can be found on the K-State Department of Animal Sciences and Industry website (http://www.asi.k-state.edu/species/beef/research-and-extension/breeding-and-genetics.html).

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