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Rebuilding the Cowherd

Earlier in February, we had an excellent producer meeting focused on the general theme of rebuilding the national cowherd with a plan. Not only did we discuss looking at the replacement female herself, but also using risk management tools like Livestock Risk Protection (LRP), Hedging and Pasture Rangeland and Forage (PRF) insurance to provide financial protection. The risk management aspects could have an article dedicated to each topic, and likely will be down the road. Today my focus will be to share some key points to consider in heifer development discussed at the meeting.

There are factors that are outside of our control, such as input cost, markets and weather, but many factors can be controlled with management. This includes breeding/calving dates, length of breeding/calving season, genetics, nutrition, reproductive technologies, timing of buying/selling and herd health protocols. Focusing on benchmarks for production and the things that we can control with management will have lasting impact on the next generation cow herd and economics of the operation.

What are some of the benchmarks for the breeding female? Two terms come to mind, longevity and stayability. Longevity is the length of productive life, or the time that a producing cow remains in the herd. Stayability is similar and defined as the ability of a female to remain in the herd past the point in time where she recovers the cost of development. To optimize reproductive performance, a cow needs to calve by the time she is 24 months of age and maintain a 365-calving interval, with a live calf each year. To do this, she must have a calf and rebred within 82 days, which generally means two heat cycles at best. Once she has the calf and is rebred, she then needs to wean a calf that grows and performs. All of this while staying in a body condition score around 5, on minimal feed inputs.

There has been a plethora of research showing that those heifers who are born early in the calving season are more likely to reach puberty sooner, calve early themselves and offer more total pounds of weaned calf over her lifetime. Think of it in these terms, for every one day of age older a calf is at weaning generally translates into 1.7 to 2.4 more pounds, when growth potential is similar. To this point, look at your calving records to see if you reach this mark: 76% of calves born by Day 21, 87% by Day 42 and remainder born by Day 63. Work done by Funston in Nebraska shows that it takes the profit of 2 early calving cows to make up for 1 late calving cow.

Developing heifers is not a cheap venture, nor is purchasing bred heifers or pairs. Mousel et al... showed that it takes 5 to 6 calves to recover the developmental and production costs of heifers in the average cow herd. It stands to reason then that if a female is culled from the herd before this point, this increases the average development cost and doesn't contribute to the profitability and/or sustainability of the operation. This is partly why Stability EPDs have been implemented by many breed associations and operations who retain females need to keep that EPD in mind when selecting breeding animals. When investing in the replacement female, finding the one with best chance of meeting the above benchmarks should be the goal. It goes without saying, but recordkeeping and data is key to this!

This is by no means the complete discussion from the meeting, but hits on a few take home considerations. Economics is for sure a big factor in all of this as well and fortunately we've got a tremendous resource in AgManager.info to help with these contemplations. Two useful decision tools are the KSU-Beef Replacements and KSU-Detailed Cow Calf Budget tools. Both are Excel spreadsheets that allow you to input your production numbers and estimate things such as Net Present Value or the amount you can afford to pay for a replacement female. Good luck working through all the decisions that need to be made in heifer development and cowherd growth or rejuvenation.