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Managing Young Cows

It might be that more frequent checks of first calf heifers getting ready to calve at the farm has me thinking about management of those young breeding females. It could be follow-up to the heifer development meeting hosted earlier in the year. Or it might be the fact that I've recently become involved with an upcoming field day on raising and breeding the best dairy heifers happening in the District this April. Whatever the reason, heifers are again on my mind to write about.

It's long been recognized that reproduction is often the main limiting factor relative to production efficiency of any livestock operation. The most common reproductive problem that cattle producers encounter is getting first-calf heifers rebred. This is as important now as ever, as net present value of putting replacement heifers into the operation is running somewhere around \$1800 per head. Producers simply can't afford to lose a female at an early stage of her reproductive life, before she recovers her development cost, estimated to be around five weaned calves.

Following are some strategies to improve the reproductive performance of young cows through additional inputs, management and selection to reduce nutrient requirements of cows:

- Match the cows to the environment. The genetic potential of the female must be in synch with the production environment. Keep in mind it's essentially impossible to avoid a negative energy balance in young cows that are growing and raising a growing calf.
- Manage the young cows appropriately, possibly separate from the rest of the cow herd. Calving heifers earliest in the calving season allows for longer postpartum interval. This comes with the caveat of having good nutrition the further away from green grass they are at calving.
- Develop heifers to 65% of mature weight at breeding. Be honest with yourself on what your cows weigh and manage accordingly. Research has indicated that heifer development to a lower mature body weight percentage, even 55%, can be successful with the right genetics.
- Synchronize heifers to conceive early during a short breeding season. This is a benefit whether bull breeding or using AI. Keeping the breeding season short, means no more than 60 days, with some heifer programs going much shorter, such as 28-30 days.
- Artificially inseminate heifers with semen from high accuracy, calving ease proven sires. The next best thing is using the highest accuracy calving ease sire you can buy as a breeding bull. Not all "calving ease" bulls are created equally, so do your homework and choose wisely.
- Provide additional energy during the last 50 days of gestation so that heifers calve at a minimum body condition score (BCS) of 5. Research suggests that a BCS 6 may be the ideal target for younger cows, both from a rebreeding and calf health standpoint.
- Provide early calving assistance when intervention is needed. After a heifer has spent 1.5 hours in stage 2 labor (hooves visible), every 30-minute delay in aiding in delivery, results in an additional six days of postpartum interval, according to some research.
- Deliver the best feed resources available after calving to young cows. Providing ionophores to cows after calving has been proven to shorten postpartum interval in cows by an average of 18 days, at a minimal increase in feed cost, provided adequate energy is available.
- Consider early weaning if reasonably priced feed is available. Early weaning holds more promise for improving reproductive efficiency in first-calf heifers than probably all other methods combined. This is mostly due to the nutrient demands on the young female in maintenance, growth and lactation. Studies show that calves weaned as early as 40 days can have comparable growth rates of suckled calves.