Managing Young Cows for Optimum Reproductive Performance

Calving season is underway for some producers and will start this month for many more. Today, the most common reproductive problem that both purebred and commercial beef producers encounter is getting first calf heifers and 3 year olds rebred.

For first calf heifers and maybe three year old too, calving and lactation occur at a time when they are still growing themselves. These are major stressors that, if ignored, can lead to a lowered body condition score (BCS), delayed breeding or a smaller calf. This situation is made worse if the heifers need to compete with older, more aggressive cows for feed.

One of the challenges is providing a high quality diet to young cows after calving. In many situations, the energy needs are not met and the young female loses weight and body condition from the time of calving to the start of the breeding season. First calf heifers and also three year olds post calving need to consume a diet that is at least 62% TDN and 10 to 11% crude protein, depending on level of milk production. This higher quality diet is needed both pre and post calving because young cows cannot eat as much as mature cows. Their intake is less so they need more nutrients in each bite of feed.

Two and three year old cows may require 70 to 90 days to recover from calving and overcome a negative energy balance before they begin having regular estrous cycles and can be rebred. This interval from calving until re-initiation of estrous cycles is often referred to as their postpartum interval. This postpartum interval can be influenced by the body condition of the young cow at calving, her milk production, nutritional diet pre and post calving, and her genetic potential for growth. When genetic potential of the female is out of synch with its production environment, delayed reproduction is one of the first signs.

Calving difficulty is probably the single greatest factor that dictates whether females resume their estrous cycle after birth and become pregnant the following breeding season. It very important not to let young cows have a prolonged labor. Heifers receiving assistance early in Stage II 9 (hooves visible) returned to estrus earlier in the post calving period and had higher pregnancy rates than heifers which received help later in Stage II.

Methods to improve the rebreeding performance of young beef cows:

- Develop first calf heifers to calve at 85% of mature weight
- Manage heifers to conceive early in a short breeding season
- Calve heifers 3-4 weeks before mature cows
- Provide a high quality diet during the last 50 days of gestation and throughout the calving season - meet energy needs, separate young cows from mature cows
- Young cows calving in body condition score of 6 – provide adequate pre calving diet

- Provide early calving assistance when help is needed
- Utilize 48 hour calf removal to stimulate estrus in thin young cows
- Breed young cows to calving ease bulls
- Consider early weaning for young cows

Management questions to consider:
Do I know the mature weight of my young cows?
Do I hit my target weights of 65% at breeding and 85% at calving of mature weight?
Do I breed my heifers in a short breeding season?
Do I calve my heifers 3-4 weeks before the mature cows?
Do my young cows calve in body condition score of 6?
Do I separate young cows from mature cows?
Do I feed young cows a higher quality diet post calving?
Do I give timely calving assistance if needed to young cows?
Do I use calving ease bulls on my young cows?

Additional resources:

- UNL Beef website: beef.unl.edu
- UNL BeefWatch (monthly e-newsletter that you can subscribe to): http://newsroom.unl.edu/announce/beef
- UNL BeefWatch Podcasts (these are more intimate chats with some of the authors of the BeefWatch articles, you can also subscribe or download them): http://beef.unl.edu/beefwatch-podcast

~~Additional resources:~~

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