



First-Calf Heifers Can Benefit from a Little TLC

by **Aerica Bjurstrom**, University of Wisconsin Extension Kewaunee County ag agent

Calving season will soon be in full swing in many beef herds, and with that comes a list of challenges to manage. One challenge you can head off at the pass is managing your first-calf heifers. First-calf heifers require special management strategies to help them wean a bigger calf, breed back sooner and improve

their chances of staying in your herd longer.

While calving can often be a major stressor on your heifers, more subtle stress may take its toll on them. Two-year-olds calve at approximately 85% of their mature weight. A first-calf heifer's entire first lactation requires her to continue growing, go through the

stress of calving, produce milk and raise a calf all while being at the bottom of the pecking order in the herd. Monitoring body condition score (BCS) in first-calf heifers is critical to their success. Ideally you would like to keep your heifers at a BCS of 5-6. Animals with excess body condition (greater than 7) have lower reproductive performance. Here are some strategies to keeping first-calf heifers in ideal condition:

- Graze first-calf heifers and mature cows separately. Put them with three-year-olds or virgin replacement heifers.
- Always give heifers the best quality pasture available.
- Supplement first-calf heifers with grains (energy) like corn, corn silage or barley before they lose body condition.
- Wean calves off heifers at 5-6 months of age.
- If heifers are thin at calving, calves may need to be weaned extra early.
- Keep a high quality complete mineral available for them.
- Use strategic deworming programs for young cows.
- Control external parasites.

While you can typically expect your heifers to begin cycling after calving, BCS is the most important factor as to when they will begin cycling. Body condition score is generally a reflection of nutritional management. However, disease and parasites can contribute to lower body condition scores even if apparent nutrient requirements are met. Managing a strong herd-health program is a key part to a successful reproduction plan.

The late gestation and early lactation period of a two-year-

old heifer greatly affects her reproduction for years to come. Thin heifers don't breed back quickly, if at all. If one rebreeds late, it will take several years to get her back on track with the rest of the herd. The plane of nutrition during the last 50 to 60 days before calving has a significant effect on calving interval. In addition, feeding a balanced diet during late gestation will decrease calving difficulty. Heifers that experience significant calving difficulty often take longer to begin cycling. Heifers fed diets deficient in energy or protein the last trimester experience higher instances of calving difficulty, breed back later in the breeding season, have increased calf sickness and wean smaller calves.

An additional management strategy that may give your heifers a better start is to calve them three to four weeks before your cows calve. This practice can be implemented for the next breeding season. The special time devoted to only heifers will allow you to focus on potential calving issues and to recruit extra help at that time, if needed. If you choose to manage heifers separately, it is important to remember calving early means pasture will likely not be available when needed, so additional nutrients will need to be supplemented. Also, nutrient requirements are higher for first-calf heifers than mature cows. Breeding heifers early will not be an effective strategy unless nutrition is managed properly.

Careful management of first-calf heifers will benefit you in the long run. Closely monitoring BCS and supplementing nutrition will help your heifers raise healthy calves and breed back to stay in your herd for years to come. **HW**

Feeding first-calf females after calving

by **Rick Rasby**, University of Nebraska beef specialist

Calving season has either started or is just around the corner. Although first-calvers represent your future brood cows, they require more labor and higher quality feeds, and they reward your efforts by weaning the lightest group of calves in the herd. This situation is temporary because, if we've done our homework with due diligence, they will reward us by being productive cows for a long time.

One of the challenges is providing a high-quality diet to these females after calving. In many situations, the energy needs are not met and the first-calf female loses weight and body condition from the time of calving to the start of the breeding season.

The pounds of protein or energy needed by the first-calf female compared to a mature cow at the same stage of gestation or lactation are not all that different. However, the percent of the diet that needs to be protein or energy between these two groups of females is different.

The difference exists because of the amount of feed/forage that they can eat. The mature cow can eat more feed compared to the younger female.

For this reason, beginning at least three weeks before calving, first-calvers need to be managed and fed separately from the mature cows. Research conducted at the University of Nebraska reported in the 2004 Nebraska Beef Report indicates that a first-calf heifer within three weeks of calving experiences a 17% decrease in daily feed intake. These data further illustrate the need to separate first-calf heifers from mature cows beginning at least three weeks before the start of the calving season and illustrate that nutrient density of the diet has to be high because intake is restricted. Intake is reestablished to more "normal" levels by about one week postcalving.

First-calf females postcalving need to consume a diet that is at least 62% TDN (total digestible nutrients) and 10 to 11% crude protein, depending on their level of milk production. Feeding meadow hay that tests 58% TDN and 12% crude protein, prairie hay that tests 54% TDN and 6.5% crude protein, bromegrass hay that is 58% TDN and 11% crude protein or early-bloom alfalfa that is 60% TDN and 20% crude protein will not meet the first-calf female's energy (TDN) needs, whether feeding individually or in a combination of feeds. Some of these forages will not meet their protein needs. A high-energy feed needs to be supplemented. Corn, distillers' grains, gluten feed, 20% cube or silage may be good choices. Make sure the protein requirement is met, especially when corn or silage is fed.

In ranch situations, the supplement may be fed on the ground instead of in bunks. Depending on the quality of the hay and the energy content of the supplement, it may take two to three pounds per head per day to meet requirements. Likely there is minimal waste when feeding an energy cube/cake or whole shelled corn. When supplementing wet and dry distillers' grains on the ground, it is hard to visually find any left on the ground.

A young beef female poses challenges, but she is the future of your cow herd. Don't short her after calving, especially don't skimp on the energy. She has enough challenges between calving and the beginning of the breeding season. Don't overfeed her, but give her an opportunity to be a productive part of the herd. **HW**

Editor's Note: More information can be found at beef.unl.edu.