



Breeding First-Calf Heifers

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The most difficult group of cattle to get bred is first-calf heifers. Most cattlemen achieve fairly high conception rates when breeding virgin heifers; however, getting these heifers bred with their second calf is where many producers have difficulties.

It is very important to leave this group of cattle as a stand-alone group within the herd. These young females are nursing their first calf and still growing so it is very important to supply them with a little more nutrition than the mature cows. In addition, it is important for them to be separate from the mature cows because of dominance issues. These younger first-calf heifers will be timid around the older, boss cows and thus will get less to eat.

Ideally, this group of females would have calved about 30 days before the mature cows in the herd. This will give them an extra month to recover from calving and start cycling so that their second calf will be born at the same time the mature cows are calving the following year.

A strategy that very few producers use but can be an extremely effective tool for this group of females is a 48-hour removal of the calves. Many years ago Professor Wiltbank demonstrated the effectiveness of calf removal for stimulating estrus.

Suckling by the calf inhibits the primary hormone responsible for stimulating estrus, thus by removing the calf for a short period we can stimulate estrus. In cows that have adequate body condition and are on a good plane of nutrition, estrus occurs relatively early after parturition. In first-calf heifers this is usually not the case.

In Dr. Wiltbank's study he split a cow herd in half and one half had bulls introduced under normal conditions (control) and the other half had their calves separated for 48 hours when the bulls were turned in. The separated group had 80% of their calves born in the first 20 days of the calving season while the controls had only 28% born in this timeframe. After 40 days, 91% of the cows in the separated group had calved while it took 120 days for 93% of the control cows to calve. If you assume that most calves will average 2 pounds per day of age that is a huge economic value for getting cows bred earlier in the breeding season.

What about a current example? Here is the data on a group of 29 first-calf heifers that had calved in October and early November. On January 23rd a bull was placed with the cows and the calves were separated and placed in a catch pen with feed and water. On January 25 (48 hours

after separation) the calves were let out of the catch pen and put back with their dams. The cows began calving on November 2nd the following year and all 29 females had calves by December 10th. At breeding most of the females were in body condition score 5 with a couple of them being closer to a 4. During the breeding season they were being fed free-choice hay and about 6 pounds of whole cottonseed per day.

Obviously it makes good sense to administer a blackleg shot and perform any other management strategies that fit during this time while you have the calves penned up. If they have not already had it done the males could be castrated and implanted at this time. The calves should have access to good hay and water in the catch pen and no ill effects on calf performance will be observed. Forty-eight hour calf removal is not appropriate in all situations but for getting a group of first-calf heifers to re-breed with their second calf it may be something to consider.

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