



Dawson Creek Veterinary Clinic

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Heifer Selection and Development

Mike and Zoe recently attended a conference on Bovine Herd Health and there was an excellent presentation on the importance of the selection and development of heifers in your cow herd. This is an area that sometimes doesn't get enough attention, either from your veterinary team or perhaps from you as a producer. I would like to share some of the highlights of proper heifer selection and development with you in this vet advice article. Did you know that producing and developing heifers can be very costly and that it can take as long as 5 or 6 years to generate a positive cash flow from a heifer? This means that if you are going to be spending the money on keeping a heifer, you better be spending it on one that you are going to want to keep in your herd for at least 5 years. There are many things to consider when thinking about replacement heifers. The first thing you need to decide is whether you are going to raise your own replacements (there is less risk of introducing disease to your herd, you know the disposition of these heifers, you know their genetics) or whether you are going to buy your replacements (allows you to introduce new genetics into your herd, you may want to keep using a current herd bull you have, you don't have enough feed to raise your own replacements).

You will also need to decide how many replacements you want or need. You should consider the current market prices, feed prices, and your goals when you make this decision. There should be 2 main reasons to keep or purchase replacement heifers: 1) to improve the quality of your herd and 2) to improve the profitability of your herd. One suggestion made at the seminar was to figure out a dollar value of heifers you want to keep rather than a number of animals. This allows you to factor in calf prices and feed costs and gives you a more predictable cost/year. If you have enough feed, it is an idea to keep 10-50% more heifers than you are planning on breeding so you can evaluate them in the post weaning period.

Once you have decided where you are going to get your replacement heifers from and how many you need, it is time to focus on selecting the right ones. You want to select heifers that are going to be in your herd for a long time so you get a return on investment from them. A good rule of thumb is not to pick any of your extremes – don't pick the biggest or the smallest. There are several critical points where you can evaluate your heifers to select which ones you want to keep: pre-weaning, weaning, pre-breeding, breeding, gestation and calving. Their growth in the post weaning period, will give you a good idea of their efficiency. Veterinarians can do a pre breeding evaluation on your heifers to assist with selecting them. We can evaluate reproductive tracts, pelvic area and assist you in evaluating them structurally. This exam can be done 1-2 months prior to breeding.

Once selected, don't skimp on feed or health care. You want these heifers to be at least 50-65% of their mature body weight at breeding time (if you want a 1200 lb cow, your heifer should be 600-700lbs at breeding). You don't want your heifers underdeveloped but you don't want them too heavy (fat) as this can have negative effects. Be aware of this goal at weaning and throughout the winter – figure out how much they weigh at weaning, what your target weight is at breeding and how much they will need to gain over the winter. Monitor this over the winter so you aren't trying to make a big adjustment a month before you put them out with the bull. Keep an eye on your heifers 2-3 months prior to your breeding season, you should see most of them starting to cycle and this will tell you that you are on target.

Make sure your heifers are healthy. They should be adequately vaccinated – consult your veterinarian about a specific health program. If they get pneumonia, this could result in long term effects and may result in an animal that isn't going to have good longevity in your herd, with a result in you losing money.

It is often recommended that you breed your heifers prior to your cows. When it is feasible for you to do so, it has several benefits. Heifers tend to have slightly lower quality of colostrum than cows so if they calve first on clean uncontaminated calving grounds, their calves will have a slightly lower risk of developing scours, pneumonia and coccidiosis. It also usually means that they are better observed at calving time. You may have noticed that your second calvers tend to be the group that has lower conception rates and may calve later. This is because it often takes heifers longer to recover from calving and start cycling again. Heifers usually take 80-100 days to start cycling after calving, while cows generally take 50-60 days. If they calve earlier, they will have a little bit of extra time to recover and this will help improve conception rates of the second calvers. Some producers also expose the heifers to the bulls for less cycles – this selects for those heifers that are fertile and reproductively sound. A late calving heifer will likely become a late calving cow.

Once your heifers are bred, you can have a veterinarian do pregnancy exams on them so you can cull the open or late heifers from your herd – these animals are not going to give you good return on investment. If possible, you can feed your heifers separately from your cow herd as they may need some additional nutrition to grow and gestate a calf. Your goal is to have your heifers 85% of their mature weight at calving and be in a body condition of 6 out of 9. Also consider vaccinating your heifers with a scour vaccine to boost the antibodies in their colostrum.

Ideally with good selection of both your heifers and your bull, and with adequate growth in your heifers, calving problems will be kept to a minimum. Feed your heifers well after calving and they should be cycling and ready to go when you turn your bulls out.

For more information on bovine health, call the Dawson Creek Veterinary Clinic at 250-782-1080 for more information.