

More Money in the Bank Through Reproduction

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The bottom line for most cow-calf producers is the pounds of calf sold in the fall. Even if you are selling seedstock or retaining ownership, increasing your calf crop will benefit your bottom line. There are 3 main areas to focus on when trying to affect your calf crop, getting cows pregnant, keeping cows pregnant, and keeping calves alive.

As we head into the 2017 calving season, focus can be placed on the last objective. According to the Western Canadian Cow-Calf Survey conducted in 2014/2015, the average death loss in calves reported by western producers was just under 7%. Ideal death loss in calves would be $\leq 4\%$ from 1 day of age to weaning. Disease was the most common cause of death reported, with scours and pneumonia being the most common diseases seen. Prevention of these diseases starts with the cow herd. Ensuring that all cows are fed a diet adequate in energy and protein throughout the winter will keep them at a good body condition and help increase the quality of colostrum that they produce. Remember cattle do not receive any immunity during gestation, so it is critical that the colostrum be of good quality and the calf consumes it soon after birth. Making sure that the calving area is clean and dry and calving in a different area than the cows are housed can also help. Also, changing calving areas throughout the season, so new calves are born on fresh, uncontaminated ground helps decrease the spread of disease. Other control measures, such as scours vaccine to the cows, may be necessary. Speak to your veterinarian to determine what are the best steps to take to decrease calf scours on your farm.

Once we get past calving season, the next hurdle is getting cows pregnant. Body condition of the cows at breeding is one of the most important predictors of fertility in the cow herd. Precalving nutrition is important here, as it is challenging to put sufficient body condition on cows between calving and breeding. Cows that calve at 2.5/5 body condition score (BCS) will come into heat sooner and have a higher pregnancy rate than those that calve at a lower BCS. Even if you put some weight on the thinner cows after calving, they still will not perform as well as their better conditioned counterparts.

One trap many producers fall into is the extended breeding season. The average breeding season reported by western producers was about 92 days. The industry recommended target is 60-75 days, depending on if you breed heifers and cows at the same time or if you begin breeding heifers sooner. Though lengthening your breeding season may help get more cows in calves, it is a vicious cycle and can decrease your revenue when selling calves in the fall. Larger groups of uniform calves will bring more dollars per pound than smaller groups. Thus, the closer in age your calves are at sale, the more money they are likely to bring. Having a long breeding season results in small groups at sale time and decreases your income per calf, even if comparing with other calves in the same weight range. The other problem with a long breeding season is that it can affect the cow's ability to breed the following season. Cows require time after calving to resume cycling. If they are calving late, they will thus breed later the following season as well. Increasing the breeding season to catch these late cows can expand your breeding season a bit each year. Having a compact and planned breeding season year after year will allow you to optimize your revenue from calf sales and keep the breeding program on track.

According to the western survey, only about 60% of producers routinely pregnancy checked their cows. When a cow doesn't calve, it is challenging to determine if the cow did not get pregnant to begin with or aborted if the herd isn't preg checked. Pregnancy checking can also help you determine which cows are open so you do not spend money overwintering them. Calving percentage was reported to be 90% by western producers. With a death loss of 7%, this would leave a net calf crop of 83%. You should target a calf crop (# calves weaned/# cows exposed to the bull the previous year) of $\geq 85\%$.

The other half of the breeding equation is the bull. Making sure bulls have an adequate BCS, are in good health, and performing a breeding soundness exam (BSE) prior to the breeding season will also increase the chance that cows will become pregnant. Only 64% of western producers performed a BSE on their bulls according to the survey. A BSE will help ensure that your bulls are producing adequate quantities of sperm that are of good quality for breeding. Just looking at the bull is not enough. Though the biggest indicator of fertility is testicle size, we have seen many great looking bulls with large testicles that have very few or no functional sperm. Avoiding one bad calf crop due to a bull with poor semen quality can pay for many years of breeding soundness exams. If you are sharing breeding stock between farms, it is also important to make sure that animals are free from venereal diseases such as vibrio and trich.

Once beef cows are pregnant, it is generally pretty easy to keep them pregnant. You can decrease the risk of pregnancy loss in your herd by ensuring that your breeding stock is properly vaccinated against diseases that cause pregnancy loss like BVD, IBR, and leptospirosis, as well as vibrio and trich depending on your herd's risk. Proper nutrition during gestation can also help decrease the risk of pregnancy loss, improve calf birth weights, and ensure the cow has adequate body stores when coming into the subsequent calving and breeding seasons. Speak to your veterinarian to determine what vaccination program and management strategies are most appropriate for your situation.

Though the principles of reproductive efficiency are standard across the cow-calf industry, how exactly we meet targets and what the numbers are in Ontario may be quite different from western producers. How are Ontario producers different? How does Ontario size up compared to our Western counterparts? We would like to know the answers to these questions and you can help us find out! If you would like to be part of the Ontario Cow-Calf 2017 Production Survey, please log on to <https://goo.gl/HLtflG>, email ggreaves@uoguelph.ca, or call 519-824-4120 ext. 58813 and leave your mailing address to have a survey mailed to you. Happy calving!