



Biography:

Dr. Colin Palmer is an Associate Professor of Theriogenology (Animal Reproduction) at the Western College of Veterinary Medicine. Originally from Nova Scotia, Dr. Palmer worked in mixed practices in Ontario and British Columbia and has owned/operated a practice in Saskatchewan. Dr. Palmer along with his wife Kim and children Lauren, Emily and Carter run a herd of purebred Red Angus cattle under the KC Cattle Co. name.

A Breeder's... Veterinary Perspective

Challenging the Pregnancy Checking is a Good Thing Paradigm

In the fall of 2016, I published an article about pregnancy checking beef cows (Pregnancy Checking - Sooner is Better than Later!) where I encouraged producers to find open and late calving cows and to remove them from their herds. I even went so far as to claim it was the right thing to do. Does pregnancy checking always make sense? Could it be more profitable to keep those cows and sell them later? Do you need to preg check? I am sure most of you would assume that a vet would recommend getting your cows pregnancy checked? Well, how about another perspective ...

In an article titled: The economics of pregnancy checking submitted by the Beef Cattle Research Council (BCRC) [Reference # 1], published in the October 18, 2017 edition of Canadian Cattlemen the notion that pregnancy checking is always the right thing to do is challenged. According to these authors, cull cow market prices, feed and other costs, pregnancy checking costs and the type of management system all must be considered when deciding to preg check or not. The cull cow market is a dynamic one. Although we are seeing some very nice positive gains in the weaned calf price and likely good pricing for backgrounded and fed cattle into 2018 the cull cow market has been in steady decline for a few months now. Seasonal declines from what I call the spring hamburger prices into the fall are typically in the 16% to 33% range with the 5-year average sitting around 15% [1]. Once past the late fall run price increases heading into spring usually average 27%; however the range is quite large at 14% to 55% [1]. When numbers based on these multi-year averages are placed in a model, with a per head pregnancy checking fee in the range of \$4.35, there is reportedly an economic advantage in most circumstances to skipping the fall preg checking and simply culling the obvious open cows in the spring [1]. However, this may not always be the case.

The model, Economics of Pregnancy Testing Beef Cattle, can be accessed through the BCRC website at www.beefresearch.ca. Go to the bottom of the page to the Resources Tab and scroll down and select Decision Making Tools. There is a Basic Model and an Advanced Model. The Basic Model only requires your herd size, type of management system, your calving month, the fall month when you would preg check and the price in that month. All of the other variables are fixed. The Advanced Model enables the producer to enter more data from their herd including daily costs per head, expected daily gain for the cull cows, open percentage, length of the feeding period, and per head pregnancy checking cost. The Advanced Model is intended to enable the producer: "to more accurately calculate the net gain or loss of preg-checking." As you change scenarios make sure you click on each box or the calculation won't be updated. Also, even in the advanced model the sell price of cows is established for you based on the fall price. There is no way to manipulate this price. In one scenario I tried from October to April, a typical fall round up until you might realize that that cow won't calve, the price increased 26%. What if the price increase is modest or nonexistent? Another concern is that while you can choose the calving month the default cull month will be the same. In other words, if you calve in April the program will have you selling your culls in April. Right away a cowboy is going to have a problem with this since most calve over at least 2 months. If you choose not to preg check, it is often hard to identify an open cow by visual assessment in the same month she was due

to calve. In fact, it is darn near impossible to eyeball a fat cow in late spring and decide whether she is going to calve or not. I guess that is why the slaughter trade has an abundance of near term fetal calves in the spring.

The model does show that preg checking can pay in some circumstances. For example, if the fall to spring price increase is really good and you have the ability to put some serious pounds on those cows by feeding them separately either in a drylot or other higher feed energy scenario than it will be profitable to preg check and feed the open cows separately. Putting excess condition on all of your pregnant cows is an inefficient use of resources so that is why it is good to avoid doing that. Producers feeding cows baled hay either processed, in bale feeders or placed out in bale grazing scenarios cannot expect to achieve much more than a 0.5 lb per day gain with decent quality hay so you will definitely have to consider how long you are willing to feed them too. In almost any scenario, if the cull cow prices stay the same or changed only slightly preg checking and culling the open cows is probably the best decision; however, with the calculator it has a built in 27% increase in price that can't be changed. Somewhat surprisingly one can vary the cost of preg checking, but the price of culls differential is fixed! The cost of preg checking is the cheapest input in the whole model! If the cost of preg checking varied by 50% its effect on the model would essentially be 1 day of feeding!! Hmm, time to build my own spreadsheet.

Producers should always consider their costs of production carefully - feed, bedding, overhead. Including wastage, you can probably plan on one 1200 - 1400 round bale per cow per month in a hay-based feeding system. If you have to buy additional hay as I do at \$0.05 per pound this year that will be \$60 to \$70 per month in feed costs alone ... more than \$2.00 per day. And I haven't included trucking! Also, without pregnancy checking you will need to determine when you will decide that those few cows are not going to calve, or if you will spend money to have them preg checked!

The average non-pregnant rate in western Canada is just under 8% [1]. If your herd performs better than this then you typically have very few open cows; therefore, it may be harder to justify the expense for pregnancy checking. On the other hand, pregnancy checking is often a way to diagnose a fertility issue. If you have long breeding seasons and subsequently long calving seasons and you would like to change that - identifying and selling late calving cows or others that don't fit is probably a good idea. Another benefit that may be lost is that preg checking also provides an opportunity to assess body condition, administer vaccines and to apply topical anti-parasitic products and arguably, most importantly, establish a legal veterinary-client-patient relationship.

In closing, the model should be more aptly named The Economics of Identifying and Managing Open Cows. Pregnancy checking costs are cheaper than a vaccination program plus pour-on parasitacides, or even the poorest mineral program. Preg checking should be viewed as a herd management tool not an input. Does it pay? From a practical point of view, I am not sure you can identify and manage those open cows without preg checking!