



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.

Bull Inventory and Breeding Program Assessment

Beef cow performance goals are relatively simple - a cow should produce a calf every 12 months, and 90% or more of the cows should calve within a 60-day period. Short, well defined calving seasons are the cornerstone of efficient and economical herd management. Almost without saying, it is widely recognized that uniform groups of calves can be more easily managed for branding, vaccination, castration, weaning, weighing and ultimately for sale. In turn, the cow herd can also be more easily managed. Vaccination programs; especially, when employing modified live viral vaccines; artificial insemination programs, observation of breeding activity at pasture; pregnancy testing; feeding; and assessment of calf performance are most effective with tightly managed calving periods.

Short breeding seasons require highly fertile cattle. Since a breeding bull is responsible for siring 25 to 50 calves his genetic influence on calf quality, and the potential economic risk due to subfertility is far greater than that of an individual cow. Only highly fertile bulls are capable of breeding 25 or more cows in such a short period of time. Beef bull cull rates are much higher than that of cows. Cow cull rates are typically targeted at 10 – 15% whereas, bull cull rates approach 30% in many herds. Reviews of breeding soundness evaluation data report that 10% to 20% of mature bulls will fail each year. Lameness, injury, bad behavior, old age, risk of inbreeding and poor performance are other common reasons for culling. Lackluster breeding performance or an outright inability to breed are not infrequent occurrences affecting an additional 10 to 20% bulls who would otherwise be considered normal. All bulls should be observed when breeding to ensure that problems are identified quickly. For all but the most minor injuries it is best to find a replacement. Lameness due to foot rot, or any other cause can have a profound effect on breeding performance. Not only will he be unable to detect heat and service cows, but research has shown that semen

quality will be unsatisfactory for 6 weeks to 2 months after the onset of the lameness despite timely treatment. Having access to backup bulls is a good plan for any herd which usually means purchasing more bulls than needed.

Tools used for bull selection include 1) eyeballing – physical appearance, presence/ absence of horns, temperament etc.; 2) reputation of the breeder; 3) performance data – birth weight, weaning weight, yearling; indexes; 4) expected progeny differences (EPDs); 5) pedigree/ performance of relatives; 6) breeding soundness evaluation/ scrotal circumference; and 7) price/ purchase incentives. As a veterinarian, I might argue that only some of these tools are important, or that some are more important than others; however, my experience as a cattle producer supports a different conclusion. Everyone of those tools plus any tools that may be developed in the future are useful. The real danger is in only using one or two. Many bull buyers are focused on birth weight and price paying little mind to what they may be sacrificing. For most, bulls represent the only new genetic infusion into their cattle herds. Nature has dictated that a cow can only produce a single calf in a year, yet bulls can sire several; therefore, genetic change is much more efficient through the selection of bulls. If you are interested in exploring a change in your herd, but don't want to make a huge commitment you should consider artificial insemination. With a bit of management, estrus synchronization technology and hiring some technical expertise this can be a cost-effective way to try something new. Kind of like getting the milk without buying the cow! Crossbreeding, for example, is old technology, that is increasingly becoming underutilized yet it is the cheapest, most effective way to improve herd performance.

The bottom line... get comfortable with purchasing bulls. Develop some goals for your herd. Do some shopping around to find what you need to meet your goals. Ask lots of questions.