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## Culling Open Cows Adds Profit

Dr Bob Larson, Kansas State University gives three reasons why cow calf producers should preg-check and cull open cows. Having high reproductive efficiency in a beef herd is one of the most important characteristics of profitable cow-calf operations. High reproductive efficiency is described as having a high percentage of cows pregnant in a controlled breeding season of 90 days or less (preferably 70 days or less), with most cows becoming pregnant in the first 21 days of the breeding season and almost all cows becoming pregnant in the first 42 days of the breeding season. It is preg-check time for fall calving herds.

Feed costs are reduced by identifying open cows and being able to make feeding and marketing decisions to optimize economic return. In addition the sale value of calves born in the first third of the breeding season is significantly better than later calves.

By estimating fetal age (something that blood tests of pregnancy status cannot do), veterinarians can develop differentiate the main causes of reproductive inefficiency: failure to conceive, early embryonic loss, abortion, and bull problems.

Only one fifth of cow/calf producers have their cows checked for pregnancy although the benefits easily outweigh the cost. There is a clear competitive advantage for producers. An examination will typically average \$5 per head but carrying an open cow to the next breeding season is several hundred dollars in hay and pasture. Generally speaking the earlier you can know which cows need culling, the better marketing opportunity there is for those animals.

Pregnancy examinations can be accomplished by several different methods including rectal palpation, ultrasound or a blood test. Rectal palpation performed by an experienced veterinarian can estimate the approximate stage of pregnancy and can be detected 35-40 days after breeding. Veterinarians use the art of palpation of fetal membranes, position of the uterus, size of the cotyledons and size/strength of pulse in the uterine arteries to determine pregnancy status and length of gestation. Disadvantages to palpation are few and often exaggerated. Rough handling of the fetus or membranes early in gestation has been associated with abortion but it is difficult to differentiate these from the “normal” amount of expected embryonic loss.

Ultrasound can detect pregnancy earlier than palpation (around day 27 in the hands of a skilled operator) but is more expensive-largely due to the cost of the equipment. It can provide more detailed information such as viability of the fetus, presence of twins and sex of the calf and it is considered extremely accurate. Both ultrasound and palpation provide immediate answers so cows can be sorted from the chute without handling multiple times.

A blood test is commercially available that detects a protein produced by the placenta which is detectable in serum. Heifers and cows can be tested at 30 days or later after breeding but a cow must be at least 90 days post calving due to residual protein from the previous pregnancy. The blood must be drawn and sent to a participating laboratory for results so cows would need to be sorted at a later date after results were reported.

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