## **Improving Reproductive Efficiency Via Pregnancy Determination**

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o make a profit, beef cattle producers must strive for a high calf crop percent and heavy weaning weight, which ultimately means a cow must produce a calf every 12 months. But, data from research and indus-

try herds suggests that one

out of every four or five cows will fail to wean a calf each year. This failure results in a loss of 20 to 25 percent to the producer each year, let alone the additional cost (at least \$350) of carrying over open cows and/or heifers until the next breeding season.

To avoid such losses and remain profitable in the competitive world of beef cattle production, the top goal for any cow-calf operation should be to achieve optimal levels of reproductive performance, and subsequently, high levels of reproductive efficiency.

Low reproduction is one of the greatest inefficiencies facing cow-calf operators. Although many factors influence achieving a high calving percentage, pregnancy determination can be a great way to start.

Pregnancy determination will improve the reproductive efficiency of any cow herd by retaining those cows and heifers that were bred only during the breeding season and culling all open cows and heifers. The method of pregnancy determination employed should be highly accurate.

One method is to observe signs of estrus after the breeding season. The observation method is inexpensive, but it can be time consuming. The more time invested in detecting estrus, the more accurate the results will be.

A second method to determine the pregnancy status of your herd is by rectal palpation. The palpation method is a quick method of determining pregnancy, and it requires very little in the way of equipment (primarily, access to a good working chute with a walk-in gate). However, this method does require extensive training and practice, especially if performed during the very early stages of pregnancy (35 to 60 days).

A third method that can be used is transrectal ultrasonography. Although more expensive than palpation, there are advantages of ultrasonography: the developing embryo can be detected much earlier and more quickly, and the embryonic viability, determined by the presence of a heart beat, can be assessed. Although a highly experienced palpator can identify pregnancies very early (on approximately day 32 or greater of gestation), the palpator can not assess whether that embryo is alive. Ultrasonography also lessens the potential for iatrogenic loss (loss inadvertently due to palpation) of pregnancies early in gestation.

Pregnancy detection offers the producer an earlier chance to make management decisions regarding open cows and heifers and improve reproductive efficiency. Such decisions could lead to a reduction in overhead and feed costs by identifying and culling open cows sooner than normal.  $\ensuremath{\Delta}$ 

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