



BEEF BRIEF

Understanding Cattle Pregnancy Diagnosis and the Options Available

Reproductive success is a key driver of profitability for cow-calf producers. Monitoring reproduction allows producers to make informed management decisions that directly impact their bottom line.

Many producers check for pregnancy after the breeding season to identify open (nonpregnant) females or late-bred animals. Knowing the pregnancy status of the herd helps guide culling decisions and management priorities moving forward. Still, pregnancy testing remains underutilized—only about 20% of producers currently use it in their operations.

Pregnancy checks typically occur in late summer or early fall for spring-calving systems that are common in Wyoming.

Pregnancies can be detected as early as 30–40 days after breeding, though early-stage accuracy can vary depending on the method used. Checking 60 days post-breeding allows for detection across multiple cycles. Ideally, around 65% of females should conceive during the first cycle in a healthy beef herd.

Common Pregnancy Detection Methods

There are three main methods of pregnancy detection in cattle: **rectal palpation**, **ultrasonography**, and **blood testing**. Each has advantages and limitations, with costs generally ranging from \$3 to \$15 per head.

Rectal Palpation

Rectal palpation is the traditional method for pregnancy diagnosis. Because a thin tissue layer separates the rectum from the reproductive tract, experienced technicians can manually detect pregnancies with minimal risk to the fetus.

A skilled practitioner can detect pregnancies as early as 35 days, though accuracy improves significantly after 55 days. This method also allows for on-the-spot confirmation and evaluation of the reproductive organs, including identification of infections, cysts, or abnormalities. Cattle must be restrained, but the procedure is quick and cost-effective.

Ultrasonography

Ultrasound has become increasingly popular in recent years. It allows for pregnancy detection as early as 30 days post-breeding and provides additional insights, such as fetal age, sex (from 55–60 days), and the presence of twins. This information can help with planning calving dates and identifying highly fertile females.

However, ultrasound equipment is costly, and its effective use requires training and skill. As a result, most producers rely on veterinarians or trained professionals. Among the three options, ultrasound is typically the most expensive.

Blood Testing

Blood tests are highly accurate when collection and handling protocols are followed correctly. They can detect pregnancy as early as 28–32 days post-breeding. Some tests offer rapid results (within 30 minutes), while others may take several days. This method does not require specialized equipment or highly trained technicians, although cattle must still be restrained for sample collection. A major limitation is that cows need at least 75 days after calving to clear pregnancy hormones from their system—testing earlier can result in false positives. Blood tests also do not provide information about fetal age or expected calving dates.

Considerations

Pregnancy is still fragile during the first 60 days, regardless of the detection method used.

Embryonic loss can occur, so it's important to minimize stress during early gestation.

Work closely with a licensed veterinarian to choose the best detection method and timing based on your operation's goals. Some producers have invested in equipment and training to conduct their own testing and monitor herd fertility in-house. Regardless of the approach, prioritizing pregnancy detection can significantly improve the profitability and management efficiency of cow-calf operations.



Table 1. Comparison of Cattle Pregnancy Detection Methods

Method	Detection Timing	Key Advantages	Limitations	Cost range*
Rectal Palpation	~35 Days (more accurate after 55)	Quick, lower cost; immediate; can detect repro. issues	requires skilled technician; cattle must be restrained	\$3-8/head
Ultrasonography	~30 days+	Identifies fetal age, sex (55-60 days), twins; supports calving management	Expensive equipment, requires trained operator	\$10-15/head
Blood Testing	28-32 days (not until 75 days after last calf)	Highly accurate; minimal equipment; some rapid results	Cannot determine fetal age; risk of false positives if too soon post-calving	\$4-7/head
<i>*Costs vary by region, herd size and service provider</i>				

This brief was created by UWyo Extension Beef Team, 2025-5

Author:

Chance Marshall, Fremont County Agriculture and Natural Resources Extension Educator

Shelby Rosasco, University of Wyoming beef Extension Specialist

Edited by:

UW Beef Extension Team

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