Pregnancy testing in beef cattle is a useful management tool that producers can use to determine the pregnancy status of breeding females. Pregnancy determination will identify candidates for culling since those who fail to produce a calf are unable to offset the production costs of maintaining a non-productive cow.

Timely detection and marketing of non-pregnant or “open” cows has positive impacts on ranch profitability. As an example, income from selling open and other cull cows represents 15 to 20 percent of all cattle sales in most commercial cow-calf operations. Pregnancy testing is also an advantageous tool that producers can use to optimize heifer management, such as determining the success of artificial insemination (A.I.) programs shortly after breeding has concluded.

Pregnancy testing can be most profitable when used at two different times during the year. The first would be a minimum of 28 days (dependent upon method used) after the breeding season ends. The second would be when calves are weaned and before gestational feeding programs begin. Pregnancy testing at this time would assure that only cows that are carrying a calf would be fed until calving.

Pregnancy detection at these key times offers these advantages:

1. It gives early warning of breeding trouble, such as infertility in males, problem breeders in females, and can alert producers to the possibility of disease; particularly trichomoniasis, in the herd (see fact sheet 659).
2. It makes it possible to rebreed or sell non-pregnant females.
3. It allows for separation and grouping of females as pregnant and non-pregnant, which provides opportunity for proper management regarding nutrition, health, late calving cows, and culling.
4. It gives an operator the opportunity to use his/her facilities effectively year round, particularly at calving time.
5. It makes it possible to guarantee pregnancy status of females that are for sale.

Several different methods exist to determine pregnancy status. Pregnancy detection can and is most often conducted by trained veterinarians and technicians. In addition, many pregnancy detection methods are relatively easy to learn and can be utilized by producers. As new technologies emerge for pregnancy diagnosis in cattle, ranching input costs continue to rise, and, as the number of large animal veterinarians decreases, more producers are pregnancy checking their own cows.

In most states, however, pregnancy diagnosis for a fee or of cattle owned by others is restricted to licensed veterinarians or veterinary technicians. In some states, people can work in cooperation with a licensed veterinarian to conduct pregnancy detection for other people’s cows. It is important to know the laws of your state regarding these practices.

Pregnancy detection methods, which are described in detail, include rectal palpation, ultrasound, and biochemical tests.

**Rectal Palpation**

Pregnancy is routinely detected in cows by inserting the hand into the rectum and palpating through the rectal and uterine walls for fetal membranes, the amniotic vesicle, and/or cotyledons within the uterus. Training for pregnancy detection by rectal palpation involves taking a course on pregnancy diagnosis or working with an experienced palpator. Palpation generally requires practicing on several hundred animals to become proficient in determining pregnancy status and in detecting other reproductive health conditions that might exist.