



MANAGEMENT

# Vet Call

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## Role of the veterinarian in cow-calf profitability

*The business of calf production on U.S. ranches is rewarding, but challenging economically. Veterinarians provide three types of service that help ranchers meet their economic goals. The first is to enhance reproductive and growth efficiency. The second is to help control costs through nutrition and input-cost counseling, and the third is to protect the herd from biologic and economic losses due to disease and injury.*

### Reproductive efficiency

The income side of cow-calf ranches is driven by reproductive efficiency. This is often measured by calculating the pounds (or value) of calves sold divided by the number of cows exposed for breeding. To achieve most herds' economic goals, a high percentage of cows exposed to bulls need to become pregnant and maintain that pregnancy through to giving birth to a live calf.

In most situations, 90%-95% of cows

exposed for a 60- to 90-day breeding season should be pregnant at the time the herd is in the chute for preg-checking. In order to achieve this high reproductive success rate, nearly all the replacement heifers and cows need to be cycling by the start of the breeding season.

In order for mature cows to be cycling at the start of the breeding season, they need to have calved in the first 30 days of the calving season in good body condition. Heifers take longer to resume fertile cycles after their first

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calf than mature cows; therefore, in order to assure that first-calf heifers are cycling at the start of their second breeding season, they need to calve ahead of the mature cows in good body condition.

Because cycling cows can only become pregnant if they are mated to fertile bulls, doing breeding soundness examinations in the weeks leading up to the breeding season

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ensures that infertile bulls are not counted on to get cows pregnant in the breeding pastures.

Calf weight at weaning is greatly influenced by age at weaning. Calves born early in the calving season weigh more and, therefore, are worth more dollars than calves that are born later in the calving season. Typically, calves grow about 2 pounds (lb.) per day from birth to weaning, and even though a price slide favors lighter calves, the price difference does not compensate for the lost income per cow that older, heavier calves return. To ensure older calves, strategies must be employed that result in cows becoming pregnant early in the breeding season.

Veterinarians can assist producers attain high reproductive productivity by monitoring mature-cow body condition at several key times in the year, particularly in mid- to late gestation and from a few weeks before the start of the calving season through the next breeding season.

Veterinarians can also provide advice and services to monitor heifer selection and development from weaning through breeding by monitoring body weight, body condition, skeletal size and reproductive-tract maturity.

Routine and thorough breeding soundness examinations of bulls are also an essential veterinary service to assist producers in achieving high reproductive efficiency and hence, meet herd economic goals.

### **Nutritional and input-cost counseling**

The cost side of the cow-calf business ledger is controlled by optimizing grazing forage use, supplementation plans and input purchases. While other expertise is often necessary to optimize grazing management, veterinarians can utilize data collected throughout the year to evaluate the appropriateness of the herd's stocking density and cow maintenance requirements as determined by genetic selection for mature size, growth and milking ability.

Veterinary data that provides information about the appropriateness of the current genetic selection and grazing management strategies include body condition scores, percentage of cows exposed to bulls that are pregnant, and the amount of supplemental feed needed to maintain current body condition scores.

In most areas of the United States, forage is dormant for at least a portion of the year and is not likely to provide all the nutrients needed to attain adequate reproductive efficiency. Therefore, grazing must be supplemented using cost-effective strategies. Monitoring forage production and cow body condition throughout the year prevents cows

from becoming so thin that they require substantial amounts of supplemental feed to regain lost body weight.

When additional protein or energy is needed to supplement available grazing forage, veterinarians can help identify inexpensive supplementation plans that consider feedstuff cost, as well as delivery cost. Besides grazing and supplemental feed expense advice, veterinarians can also provide valuable information about the need for and the amount and type of mineral supplements, dewormers, fly control products and other animal-health supplies to ensure that these products and services return more than they cost.

### **Protection against health risks**

The final area of veterinary advice and services that affect a rancher's bottom line is the need to provide reasonable protection against health risks. Calftooth diseases such as blackleg, scours and summer pneumonia can result in high treatment costs, reduced growth and death loss. These risks are controlled through a combination of sanitation, biosecurity, vaccination and effective treatments.

Abortion-causing diseases and diseases or injuries that affect bull health, and the bull's ability to get a high percentage of the herd pregnant in a controlled breeding season, can be devastating to the reproductive efficiency and economic health of a cow-calf operation. Veterinarians can help to optimize the use of vaccines, testing and quarantine of herd additions, and provide management strategies to limit exposure of the breeding herd to infectious disease, toxins, parasites and physical dangers.

The economic bottom line in cow-calf production is to have an overall herd-management plan that results in high reproductive efficiency; grazing management that optimizes utilization of available forage; strategic use of supplemental protein and energy to maintain optimal reproductive performance; and a health plan that reduces the risk of common and devastating losses due to infectious disease, toxins, parasites and injuries.

Your local veterinarian can be a valuable member of your herd-management team with numerous areas of expertise and experience to help you increase income, control costs and avoid risks, thereby helping reach your economic goals.



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