



# Vet Call

► by **Bob Larson**, Kansas State University

## Recordkeeping

*Because cow-calf operations characteristically have high operating costs and deal with fluctuating input and sale prices, ranches typically operate within a narrow profit margin. However, there are great differences between ranches in their overall profitability as defined by the difference between prices received and operating costs. In order to maintain a profitable ranching operation, producers must continually look to improve herd efficiency through increasing the value of animals sold and/or decreasing the cost of production.*

### Systems

The use of records is essential to identify sources of inefficient production so that management changes can be implemented, and then to track the effects of management decisions on production efficiency. In addition, the trend toward “identity preservation” and “process verification” has led to new opportunities for those producers who can document production practices, as well as growth efficiency and carcass quality after cattle leave the ranch.

Veterinarians who work with beef cattle producers often desire records to assist in the assessment of production efficiency, to help in the investigation of disease outbreaks, and as a component of Beef Quality Assurance (BQA). Different veterinarians have preferences for different types of records and recordkeeping systems, but all would agree that having accurate information about the herd has many valuable uses.

Systems for gathering data are numerous and varied. These systems can collect data on either the whole herd or on individual animals. The simplest form of record gathering is head counts for the purpose of keeping accurate inventories. The next level of record gathering is whole-herd data that includes percent calf crop, percent pregnant, average sale (weaning) weights, etc., and this type of record gathering is adequate to get a picture of overall herd performance. The next level of recordkeeping involves individual animal performance records, which provide the best information for identifying problems and possible solutions. However, this type of system requires a greater commitment in time and expense.

### Needs

From a recordkeeping standpoint, the needs of cow-calf ranches differ from other livestock operations such as dairies, feedlots, and swine or poultry operations in that cow-



calf ranches only collect usable information at a few specific times of the year, such as at pregnancy check, weaning, pasture turnout, or times that specific ranches handle their cattle.

This is in contrast to other livestock production systems that hand-deliver feed on a daily basis, measure production on a daily (dairy) or at least weekly or monthly (swine or poultry) basis due to frequent marketing, and tend to have more animals so that treatment for disease is a frequent activity of herd management.

Because of these differences, the relatively low amount and frequency of data collection in cow-calf herds allows ranchers to have very effective recordkeeping systems that are simpler than systems needed by other livestock production systems. In fact, a lot of important information can be captured on the ear tag or freeze brand (year of birth, sire breed, calving order — i.e., calved early or late in calving season) and paper, or relatively simple computer programs can be used to keep and organize ranch production and health records. It is important to gather all the information that you will need to make decisions, but it is not necessary to set up recordkeeping systems that collect information that is not used.

### Reproduction and diseases

One area of recordkeeping that is valuable for cow-calf ranches and their veterinarians is information to measure reproductive efficiency. The information that is needed to identify opportunities for enhanced reproductive efficiency and to help diagnose inefficiency includes accurate estimates of when cows become pregnant and cow characteristics, such as age and breed.

Breeding group information is also needed, such as which bulls were in the breeding pasture, age and breed characteristics of the bulls, the length of the breeding season, and a record of any events such as bull injury that occurred during the breeding season.

Veterinarians can use this information to create graphs that show how many cows become pregnant each 21-day period of the breeding season, and can determine if specific ages, breeds or breeding groups are not as reproductively efficient as the rest of the herd.

When veterinarians investigate disease outbreaks, information about which cattle got sick or died (age of cattle affected), what behavior the rancher saw that caused concern, the date an animal was first identified as sick or dead, and which pasture or lot the sick animals were housed in prior to being identified can all be used to look for patterns in age, location, dam age, or other characteristics that help identify the events that led up to the disease problem. Any information about individual sick cattle or outbreaks of disease should be kept for several years so that if a similar problem reoccurs, accurate information is available.

### Accuracy and efficiency

BQA involves several aspects of cattle management that directly affect the quality of the beef products sold to consumers, as well as the health and welfare of the herd. Accurate documentation of all events that occur to an animal from the time of birth, through all of the production phases and into the slaughterhouse is becoming the expected level of recordkeeping. Whenever a vaccine, dewormer, fly control, antibiotic or other product is administered to cattle, you should record the exact name of the product, the serial number of the product you purchased, the dose that was administered, and how the cattle were treated (i.e., by mouth, in the muscle, under the skin, etc.).

If you are considering a change in your recordkeeping system, it is important to develop a system that collects all the information that you need to make the management decisions that you are targeting, but in the simplest manner that accomplishes your goal. The output of any recordkeeping system should allow you to easily and accurately see the overall productivity of your herd, as well as to use individual performance data to make management changes that improve overall efficiency.

EMAIL: [rlarson@vet.k-state.edu](mailto:rlarson@vet.k-state.edu)

**Editor's Note:** Bob Larson is professor of production medicine at Kansas State University.