## INFO SHEET Veterinary Services

## United States Department of Agriculture Animal and Plant Health Inspection Service May 1998

## Record Keeping in Beef Cow-Calf Operations

United States beef producers have seen tremendous increases in the productivity of the beef cow. Some of this increase has been a result of applying new "technologies" to the cow herd.

Management techniques such as cross breeding, genetic improvement, growth promoting implants, and nutritional manipulation have been quickly adopted to improve beef production. Additional technologies to further improve beef production efficiency, such as sexed semen, embryo transfer, and cloning, are still years away from being effective for the commercial cow-calf producer.

The scientific age has given way to the information age, and the cow-calf producer must adapt. Producers must take advantage of the present and continually improve existing production systems. One key is to develop a record keeping system to track the production process to determine economic efficiency.

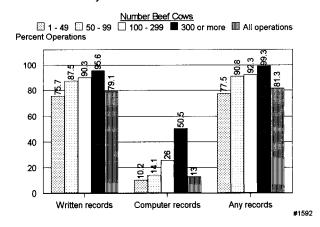
The USDA's National Animal Health Monitoring System (NAHMS) collected data on record keeping systems. Phase one of the NAHMS Beef '97 Study included 2,713 producers from 23 of the leading cow-calf states<sup>1</sup>. This study represented 85.7 percent of U.S. beef cows on hand January 1, 1997 and 77.6 percent of U.S. operations with beef cows. Phase two of the study focused specifically on herds that had five or more beef cows and included 66.3 percent of all operations with beef cows and 85.0 percent of all beef cows in the U.S.

A record keeping system allows the producer to measure production processes for better overall management. To assess how well a management modification works, all areas of the operation need to be monitored. For example, weaning weight can be increased by purchasing a bull with high expected progeny difference (EPD) for weaning weight. However, if the operation experiences increased calving difficulties and lower pregnancy rates, the venture probably wasn't profitable. Producers must record all events before and after the modification in order to determine the full effect.

According to the Beef '97 phase one, 81.3 percent of operations had a record keeping system of some form (Figure 1). Larger operations (300 or more beef cows) were more likely to have used a record keeping system (99.3 percent) and also a computer (50.5 percent). Use of records and computers may become more of a necessity as herd size increases as analysis of production records for larger herds without a computer can be very difficult.

To gain the most information, a record keeping system should include financial and natural resource parameters as well as production and health data. These records allow the producer to evaluate how production, profitability, and the carrying capacity of the operation are interrelated. For example, a cost cutting strategy

Figure 1 Percent of Operations by Record-keeping
Systems Used and Herd Size



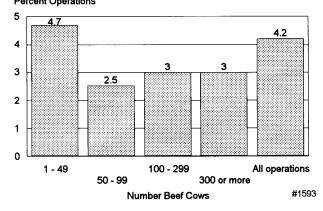
<sup>&</sup>lt;sup>1</sup> Alabama, Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Virginia, and Wyoming.

that decreases harvested feed use may decrease calf production and harm the pasture ecosystem. The only way to recognize some of these interactions is to have consecutive measurements for comparison.

Standardized Performance Analysis (SPA) was developed through the National Cattleman's Beef Association to calculate financial and productivity parameters for cow-calf producers. The standard format allows comparisons between individual operations and across years to identify where improvements may be necessary. Phase two of the Beef '97 Study showed that only 4.2 percent of operations used SPA (Figure 2). Operations with 1 to 49 beef cows were slightly more inclined to use SPA techniques than larger operations.

Figure 2

Percent of Operations that Used SPA to Determine Profitability of Producing Beef Calves by Herd Size Percent Operations



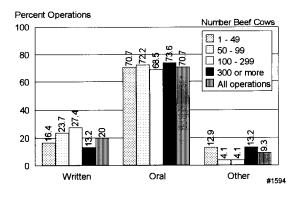
Besides measuring parameters to improve production efficiency, records allow information to be transferred throughout the industry. Quality assurance has been a buzz word in the industry recently. Today's consumers are demanding high product quality and service from manufacturers. For beef producers to provide a quality assurance program, information must be transferred from the producer to the consumer and then back to the producer. A record keeping system allows this information to be more easily transferred. Also, records provide written documentation to a world that no longer functions on someone's word or handshake.

Health programs are another example of where records can assist producers in transferring information. Many producers have a good health program established for their ranch. However, this information is not transferred when calves are sold, and the calves are assumed to be susceptible to disease. According to the Beef '97 phase two study, medium-sized operations

Figure 3

Percent of Operations by Method Health Information Was

Transferred by Herd Size



were more likely to provide written documentation than other herd sizes, while large operations relied on oral communication (Figure 3). If producers want to be compensated for their management practices, they need to convey this information to the buyer.

The key to developing a good record keeping system is identifying what parameters need to be collected. Producers should tailor their record keeping system for their specific needs. Collection of irrelevant data can prevent meaningful evaluation and may not be cost effective. Collection of too few data may not identify problem areas and could be costly. Any record keeping system requires time and commitment. Data must be gathered on a consistent basis so meaningful comparisons can be made. The data must then be evaluated so that sound management decisions can be made.

Comparing production responses with profitability changes allows the producer to better control management of the operation. Transfer of data on the genetics and health program will allow producers to be compensated for their efforts. As profit margins become tighter, producers will need to manage all aspects of their operation. A good record keeping system is the first step toward better management.

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