Beef Split Sessions

COW-CALF

Moderator: Tom Hairgrove

Veterinary Consulting Opportunities Utilizing the Beef PEP Approach

Steven E. Wikse, DVM, Diplomate ACVP; Patricia S. Holland, DVM, MS Large Animal Medicine and Surgery Texas A&M University, College Station, TX 77843-4475

Abstract

Veterinarian/county extension agent teams of the Texas Beef Partnership in Extension Program supported by faculty members from Texas A&M University provided consultation services to six beef cow/calf study herds that substantially improved their profitability by reducing the cost of producing a hundredweight of calf. There were six steps to the process: 1) select a herd with a high potential to improve profits, 2) identify opportunities for changes in ranch management practices that will result in improved profitability, 3) develop a ranch management plan, 4) implement the ranch management plan, 5) monitor production and economic outcomes and 6) revise and update the herd plan. Standardized Performance Analysis (SPA) of the study herds' production levels and economic outcomes was involved in nearly every step and was the foundation of the project. The knowledge base of veterinary practitioners on beef herd health and production coupled with their ongoing contact and high rapport with producers make them the best choice for leadership of successful consultation teams for beef cow/calf operations.

Introduction

The beef cow/calf industry of the United States has a very low level of profitability. Standardized Performance Analyses (SPA) completed from 1991 to 2001 revealed that 384 beef herds in the Southwest had a 0.29% average annual return on assets (ROA).² A similar study utilizing SPA conducted from 1991 to 1999 showed that 148 cow-calf enterprises in the Northern Great Plains had an average annual ROA of 3.10%.¹ Within these two groups of herds, however, there were groups of high-profit herds with ROA's that would be

respected in any industry. The challenge for us as veterinary practitioners is: What can we do to help our clients develop their herds into highly profitable beef cow/calf operations?

The Texas Beef Partnership in Extension Program

The Texas Beef Partnership in Extension Program (PEP) is a partnership between the Texas A&M University College of Veterinary Medicine, the Texas Cooperative Extension Service, Pfizer Animal Health, Texas veterinary practitioners and Texas beef cow/calf producers.⁵ The purpose of Beef PEP is to improve the profitability and sustainability of beef cow/calf operations in Texas. The project was designed to accomplish that goal by increasing the knowledge base of profitable ranch management practices of the two main advisors of beef ranchers: their veterinarians and county extension agents. In addition, the project fosters cooperation between veterinarians, county extension agents and Texas A&M University beef cattle specialists. Funding for Beef PEP is provided by the College of Veterinary Medicine and Pfizer Animal Health. Pfizer Animal Health also provides veterinary faculty for Beef PEP seminars, veterinary consultation to study herds and cattle health products to study herds.

The project began in 1996 as an educational program for county extension agents, local veterinarians and beef cow/calf producers. For the initial four years, a day and a half continuing education seminar was held in August for pairs of county extension agents and veterinarians on a specific beef production topic such as reproduction or nutrition. This was followed in the fall or winter by meetings lasting a whole day for beef cattle producers on the same topics in the towns of the county agent/veterinarian pairs. Each county agent and vet-

SEPTEMBER, 2003 73

erinarian enhanced their knowledge base by giving a presentation at those local meetings.

In 2000, a study herd phase was added to Beef PEP to give county extension agent/veterinarian teams an opportunity for practical application of their new knowledge to increase the profitability of selected commercial beef cow/calf operations. Through regular herd visits complemented by support from Texas A&M University specialists, the teams collected data, identified opportunities to economically improve production, recommended management changes and helped implement recommendations. The basic goal was to reduce the production cost per hundredweight of calf within the study herds. SPA was performed to record baseline levels of performance and document improvements in productivity and profitability.³

An Approach to Improving Profitability of Beef Cow/Calf Operations

There are six steps to the Beef PEP approach to successful beef herd consultation:

- 1) Select a herd with high potential to improve profits.
- 2) Identify opportunities for changes in ranch management practices that will result in improved profitability.
- 3) Develop a ranch management plan.
- 4) Implement the ranch management plan.
- 5) Monitor production and economic outcomes.
- 6) Revise and update the herd plan.

1) Select a herd with high potential to improve profits.

Only herds with good potential to improve profits should be selected for beef herd consultation. They must have an owner genuinely committed to improving profits and a level of profitability with room for improvement. Selection of a herd whose owner has a very high priority on improving profits by making ranch management changes is critical to the success of beef herd consultation. Degree of commitment of herd owners to improve profits can be evaluated through questionnaires that explore their priorities and by personal interviews. Our experience indicates that the most success in improvement of profits will occur in herds whose owners are solely or largely dependent on herd profits for their livelihoods.

SPA will indicate where the herd is on the profitability scale. The SPA report card will rank the herd compared to others in its state or region into quartiles for various measures of production and profit. This will help indicate the potential for improvement in net income per cow. The larger the herd, the less improvement in net income per cow is needed to result in substantial improvements in herd profitability. The po-

tential increase in herd profits must be enough to give the owner an adequate return on investment of consultation fees. Only operations with a moderate to high amount of room for improvement in profitability should be selected for beef herd consultation.

2) Identify opportunities for changes in ranch management practices that will result in improved profitability.

Beef PEP used two methods to identify changes in ranch management practices that would lead to increased profits in its study herds: SPA of the herds and an evaluation of baseline management practices. Key production measures included in the SPA report card that are helpful in recognition of opportunities for improvement include pregnancy rate, calf crop percentage, average weaning weight and pounds weaned per exposed female. Key economic measures included in the SPA report card include capital investment per cow, grazing cost per cow, raised and purchased feed cost per cow, annual cow cost, cost of producing a hundred pounds of calf, net income per cow and return on investment. These production and economic measures will point to areas in need of improvement that will lead to closer evaluation of management practices that influence them. For example, if the annual cow cost is excessive, details of expenditures and depreciation must be evaluated and an attempt made to identify excessive expenses. If a herd is in the bottom quartile in pregnancy rate, management practices that affect the known risk factors for low pregnancy rates such as cow body condition, bull fertility, reproductive pathogens and mineral status must be carefully examined.

The animal husbandry and veterinary literature contain recommendations on ranch management practices that have been proven to be associated with favorable health, productivity and profitability in beef cow/calf operations. Evaluation of the degree of use of these profitable management practices by a herd should be done at the onset of herd consultation to document baseline levels of management, and to identify changes in management that will lead to increased profits. Information on ranch management practices can be gleaned from observations during herd visits and completion of a questionnaire by the herd owner similar to the Texas A&M University Ranch Management Questionnaire.⁴

3) Develop a ranch management plan.

The ranch management plan should provide written details of management practice changes recommended to increase profits. Much of the ranch management plan was communicated verbally in Beef PEP study herds during ranch visits made by the veterinarian/county agent teams and beef specialists from Texas A&M University in the implementation phase.

4) Implement the ranch management plan.

Attempts were made by Beef PEP study herd teams to carry out herd visits to help in implementation of the ranch management plan at key times in the cow production cycle: onset of calving, onset of breeding, midsummer and at pregnancy examinations. At each visit, the team recorded health and production parameters. body condition scored the cows and discussed progress in implementation of previous management recommendations. Beef PEP developed herd visit report sheets in triplicate that had spaces for body condition score of the cows, pasture conditions, nutrition practices, reproduction practices, disease losses, ranch activities since the last visit and recommendations on management practices to be carried out in the next three months. The herd visit reports were designed to provide a herd owner written feedback before leaving the ranch on how things were going and should go in the future. These reports were utilized in some, but not all Beef PEP study herds. Other activities at herd visits included collection of samples of pasture or hay for nutrient analysis and collection of blood or fecal samples for evaluation of mineral status and level of internal parasitism.

5) Monitor production and economic outcomes.

The annual SPA report is the foundation of monitoring outcomes of herd consultation in production and economic measures. A major meeting with the herd owner should follow completion of SPA each year. Ongoing monitoring of herd progress can be accomplished through quarterly herd visits and herd visit reports. Management practice utilization can be scored annually to document increased use of profitable management practices.

6) Revise and update the herd plan.

Revision of the herd plan is a natural process during the course of providing consultation to improve a beef herd's profitability. Fine-tuning of initial management recommendations and the addition of new ones as new opportunities for increasing profits are identified will occur as time goes on. The herd plan should be dynamic, changing to allow implementation of new profitable management and disease control practices as they become available.

Conclusions

The six-step approach to beef herd consultation was successful in the Beef PEP project. Many owners of herds with low profitability and even their veterinarians do not believe that their profits could be increased

enough to pay for consultation services. There are many factors that bear on that question. The top three of the six herds that participated in Beef PEP had improvements in profits far greater than the private sector would have charged them for consultative services.

Standardized Performance Analysis was the foundation of the project. It measured the baselines in production and profits in the study herds and recorded the changes that resulted from project activities. Wiltbank has stated that the main reason beef cow/calf producers have a low degree of utilization of new technology is that they are unsure of its economic outcome. 6 SPA data showed the owners of the herds in this project the positive economic impact of utilization of multiple new management practices. It also allowed improvements in profits due to Beef PEP activities to be separated from other causes of changes in profitability in the study herds. The report card that the herd owners received comparing their production and economic outcomes to other herds in the Southwest was a tremendous motivator for improvement.

The veterinary practitioner is the logical choice for leadership of consultation teams for beef cow/calf operations. These activities could result in increased income for rural veterinarians. Projects like Beef PEP need to be developed in states with large beef cattle populations to nurture and support veterinarians who are consultation team leaders. Reductions in Cooperative Extension Service funding has resulted in limited support for that type of project. Beef PEP's partnership with a pharmaceutical company has overcome that obstacle and developed a successful project that could serve as an educational model for ensuring the sustainability of cow/calf operations and their veterinarians.

References

- 1. Dunn BH: Factors affecting profitability of the cow-calf enterprise, $Proc\ Amer\ Assoc\ Bov\ Pract\ Conf\ 35:\ 45-49,\ 2002.$
- 2. McGrann JM: Cow-calf business management production and financial data and analysis, in *Proc. Texas A&M University 48th Annual Beef Cattle Short Course*, August 5-7, 2002; IV-1 IV-13.
- 3. National Cattlemen's Beef Association (NCBA) National Integrated Resource Management Coordinating Committee Cow-Calf Financial Analysis Subcommittee. NCA-IRM Standardized Performance Analysis: Guidelines for Production and Financial Performance Analysis for Cow-Calf Producers, Department of Agricultural Economics, Texas Cooperative Extension, Texas A&M University, August 1991.
- 4. Toombs RE, Wikse SE, Field RW, et al: Collecting a herd database to evaluate management and production of a beef cattle ranch. Vet Med 87:600-606, 1992.
- 5. Wikse SE, Paschal JC, Herd DB, et al: The Texas Beef Partnership in Extension Program (Beef PEP): An innovative approach to increase the profitability of cow/calf operations, in *Proceedings XX World Buiatrics Congress* 1998, pp 147-151.
- 6. Wiltbank JN: Changes in the beef cattle industry through application of scientific knowledge. So Afric J Anim Sci 16:105-112, 1986.

SEPTEMBER, 2003 75