

PRODUCTION AND ECONOMIC OUTCOME OF THE TEXAS BEEF PARTNERSHIP IN EXTENSION PROGRAM (BEEF PEP) IN STUDY HERDS

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A low level of utilization of profitable ranch management practices is one of the most important constraints to the success of Texas cow/calf operations. In 1988, the Texas Agricultural Extension Service conducted a survey on the management practices of 1,850 ranches in 33 south Texas counties.¹ Of the ranchers questioned, 46% had their cows pregnancy tested, 46% had a defined calving season and only 12% used body condition scores of cows to monitor the nutrition status of their herds. A follow up study of 60 of the “more successful” ranchers in that region showed that they implemented modern animal husbandry to a greater extent than the average reported in the first survey.² Over 76% pregnancy tested cows, 75% had defined calving seasons and 53% utilized body condition scores to monitor their nutrition programs. These studies demonstrated that, in south Texas, a positive association exists between adoption of sound management practices and successful ranching operations.

The Texas Beef Partnership in Extension Program (Beef PEP) began in 1996 as an educational program with the goal of improving the profitability and sustainability of beef cow/calf operations in Texas.³ The project was designed to accomplish that goal by increasing the knowledge base of profitable management practices of the 2 main advisors of beef ranchers: county extension agents and local veterinarians. Beef PEP is a partnership between the Texas A&M University College of Veterinary Medicine, the Texas Cooperative Extension Service, private veterinary practitioners and Pfizer Animal Health. It is funded by Pfizer Animal Health and the College of Veterinary Medicine. 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 with an annual seminar for county extension agents and veterinarians followed by multiple continuing education meetings later in the year for cattle producers in the towns of the participants. A study herd phase was started in January 2000 to give the county extension agents and veterinarians experience in applying their new knowledge of profitable herd management practices. In addition, the study herds were developed to demonstrate to other ranchers that the profitability of their ranches could be improved through implementation of profitable ranch management practices.

Study Herd Phase

Opportunities to implement profitable ranch management practices were identified through a ranch management practices questionnaire and observations during herd visits. Attempts were made by veterinarian/county extension agent teams to visit study herds quarterly at key times in

the cow production cycle: onset of calving, onset of breeding, mid-summer and at pregnancy examinations. At each visit, the team recorded health and production parameters, body condition scores of the cows and discussed progress in implementation of management recommendations. Samples of pasture or hay were collected for nutrient analysis and blood or fecal samples were collected from animals to measure mineral status and level of internal parasitism.

The veterinarian/county extension agent teams focused on helping the study herd owners implement 25 specific profitable ranch management practices in 7 management categories: 1) Nutrition, 2) pasture/haying, 3) reproduction, 4) herd health, 5) calf husbandry, 6) calf marketing and 7) accounting/performance records. The management practices recommended by the project were mainly proven procedures demonstrated to be associated with improved profits that were reported in veterinary or animal science literature.⁴⁻¹⁰ In addition, personal knowledge and experience of the project leaders were used in selection of profitable management practices.

The nutrition management category addressed winter supplementation, mineral supplementation, use of body condition scores and hay analysis. The pasture/haying category included use of fertilizer/lime, weed control, soil/grass analysis, forage program and stocking density. The forage program concerned use of small grains, ryegrass or clover for winter grazing, introduction of new grasses into improved pastures and rotational grazing practices. The reproduction category involved breeding soundness examinations of bulls, pregnancy examinations, length of breeding season, use of expected progeny differences (EPD's) in bull selection and the replacement heifer rearing program. The replacement heifer rearing program was divided into heifer selection, nutrition, health practices and selection of low-birth weight EPD bulls to breed heifers. The herd health category was composed of the adult vaccination program, calf vaccination program, adult internal parasite control, nursing calf parasite control and external parasite control. Pfizer Animal Health donated products for the herds' immunization, internal parasite and external parasite control programs. The calf husbandry management category included castration, dehorning and use of growth-promotant hormones. The calf marketing management category was composed of cattle breed and type and method of marketing. The accounting/performance records management category addressed use of software programs that readily capture production and economic data needed for Standardized Performance Analysis of the ranch's production and financial performance.

Annual Standardized Performance Analyses (SPA) were performed at the beginning of the study herd phase to establish baseline levels of ranch production and profits. The results were also used to identify opportunities for improving profitability. SPA analyses were then conducted in the study herds annually to document changes in production and profitability.

Production and Economic Outcome of Beef PEP

Three years of work in 6 study herds has been completed. All the herds have benefited by increasing their production while simultaneously lowering their cost of production statistically significant amounts.

Calf sale prices increased during the project and contributed along with the changes in management to increased profits in the herds. To measure the impact of the project, however, calf sales price changes were neutralized by using the baseline year's sale price for each year of the study. The project accounted for a significant increase in profits or reduction in losses in the combined 6 herds over the 3 years.

Conclusions

Beef PEP is an effective approach to improving the profitability of beef cow/calf operations. The local veterinarian and county agent have great responsibilities in the program. They make up the core team for the study herds and request the help of university specialists as needed. It is expected that through their participation in Beef PEP they will be able to carry out that approach in other herds as part of their daily activities independent of a formal extension project, the multiplier effect.

Beef PEP is primarily funded by a pharmaceutical company in a very ethical manner. A pharmaceutical company that becomes deeply involved in a project like Pfizer Animal Health has with this one can greatly enhance the effectiveness of extension programs. That can be of critical importance in the current climate of budget cuts for the US Cooperative Extension Service. In addition to the study herd owners, Beef PEP will benefit numerous Texas cattle producers well into the future through the effect of higher quality advice that they receive from the county agents and veterinarians that have participated in the project.

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