Implementation of industry-oriented animal welfare and quality assurance assessment tools in commercial cattle feeding operations

T. Rooney Barnhardt, *BS*[1]; **D. U. Thomson**, *DVM, PhD*[1]; **S. P. Terrell**, *DVM*[1]; **D. J. Rezac**, *MS*[1]; **D. Frese**, *DVM*[1]; **C. D. Reinhardt**, *MS, PhD*[2]

[1]*Department of Clinical Sciences, Kansas State University College of Veterinary Medicine, Manhattan, KS 66506*
[2]*Department of Animal Sciences and Industry, Kansas State University College of Agriculture, Manhattan, KS 66506*

Introduction

Consumer interest in production agriculture continues to prompt the beef industry to develop tools to increase the accountability of management practices. The purpose of this study was to implement an industry-driven assessment tool, which with the documentation of current practices within the commercial cattle feeding industry, could be used to establish benchmarks for animal health, welfare, and food safety. An assessment tool developed by veterinarians, animal scientists, and production specialists was used to objectively evaluate key areas of beef cattle production including but not limited to animal handling, antimicrobial residue avoidance, cattle comfort, and food safety in feedyards.

Materials and Methods

The National Beef Quality Assurance (BQA) Feedyard Assessment was used to assess each of 56 commercial Kansas cattle feedyards that volunteered to participate in the study. For discussion and evaluation, the feedyard assessment was divided into three segments (cattle handling, pens, and best management practice [BMP] documentation). The assessements took 1 day and were scheduled at the management's convenience. All assessments were conducted by a veterinarian or Kansas State University personnel who were trained in BQA. The assessment of each feedyard included: 1) Observation of animal handling practices for 100 cattle undergoing routine processing. The assessor scored and recorded BQA cattle handling criteria for each animal, including whether an electric prod was used, and the frequency of falling, tripping, vocalization, jumping, running, and miscatching. 2) Ten pens were assessed. For each pen, the animal stocking density was recorded and a score was assigned for extent of mud in the pen and water tank and feed bunk maintenance. 3) Documentation of BMPs in 18 categories was recorded and discussed with management. Categories included protocols that outlined specific management for drug residue avoidance and withdrawal compliance, employee training, pen maintenance, euthanasia, handling of non-ambulatory cattle, animal health, biosecurity, disposal of carcasses, medication storage and use, disposition of broken needles, medicated feeds, feed quality, cattle processing, cattle shipping, emergency action plan, feed delivery, feeding of non-ruminant protein supplements, and veterinary-client-patient relationship.

Results

Mean one-time capacity of the 56 participating feedyards was 35,455 animals (range, 3,000 to 135,000 animals), and the feedyards provided feed and care for 1,985,500 cattle on feed, which is 84% of all cattle on feed in Kansas. The participating feedyards scored satisfactory in both animal handling and pen observations. Documentation of BMPs was the portion of the assessment in which most feedyards were lacking; only 19 of 56 (33.9%) of the study feedyards were able to produce documented BMPs for all 18 requested subcategories. Only 11 study feedyards had acceptable observations in all 3 subcategories (cattle handling, pens, and documentation of BMPs).

Significance

Results indicated that the assessment used allowed for documentation of which practices of beef feedlot cattle care exceeded an objective standard and which practices were deficit and warranted improvement. Additionally, the findings of this study suggested that the assessment could be successfully implanted in the commercial cattle feeding industry. Deficits in the area of BMP documentation were identified on many of the participating feedyards, especially feedyards with small capacity. Many of the managers of the small feedyards commented that a diversified business model prevented them from spending the time and resources it took to develop BMPs. In summary, a high percentage of the participating Kansas feedyards had satisfactory assessments, and those that did not had easily identified and correctable deficiencies.