Improving Youth Livestock Programs Through Innovative Evaluation Techniques

Situation
The livestock project is considered to be the “bread and butter” of the FFA and 4-H programs in many states. While traditional livestock-centered FFA & 4-H programs have been instrumental in bringing these two youth development programs to where they are today, will they take agricultural education into the future?

Youth livestock shows can be an effective teaching tool for youth development as well as for agriculturists of the future. However, if these programs focus on exhibition of the visually most perfect animal on the final day of the project, unethical fitting and showing practices can become pervasive.

Educational methods employed by FFA and 4-H can either be responsive to future needs and technological advancements or risk becoming obsolete.

Response
Use of Ultrasound Technology

The use of ultrasound technology to identify carcass characteristics of junior livestock show market animals has been aggressively implemented at fairs throughout Idaho. Educational workshops help participants understand what ultrasound measurements mean and how they apply to market animal industry standards. Animals are scanned at the fair and youth receive information on their animal at the time of scanning. The information is available for the judges to use at their discretion. Youth are rewarded for raising animals that fit industry standards. Each year youth and leaders look forward to this data collection to determine how well their animals compare to industry standards.

Use of the Systems Approach of Livestock Evaluation

The Systems Approach of Livestock Evaluation uses a scorecard to provide youth livestock producers a learning experience emphasizing all aspects of production. It is used to evaluate the total project rather than just the live animal as it appears on show day. When project success is based entirely on the visual evaluation of the animal on show day, traditional livestock shows can (unintentionally or intentionally) promote the physical manipulation of animals to meet that visual ideal. The Systems Approach rewards youth for their learning and effort for the entire year. If we teach FFA and 4-H members proper selection, care, and nutrition, we should reward them for their successes in those areas.

Based on industry standards, the Systems Approach scorecard is used to assign points in several categories in order to determine a composite score. Members can excel in one, two, or all three areas on the scorecard and be successful without “winning” in the visual evaluation class.
The survey of County Extension programs in Idaho revealed 62% of county 4-H programs use real-time ultrasound technology in the evaluation or educational processes at county fairs. The survey also indicated 69% of county fairs in Idaho used the Systems Approach of Livestock Evaluation at youth livestock shows. This survey goes on to show that over 85% of counties in Idaho use at least one of the educational methods described in this study.

Ultrasound data have been collected on the market steers at the Eastern Idaho State Fair from 1995 through 1999. The percentage of steers grading choice, as identified with ultrasound, in 1995 was 23 percent and the average yield grade was 2.8. Percentage of steers grading choice in 1999 was 43 percent with an average yield grade of 2.1.

Buyers of project animals at youth livestock shows are beginning to use ultrasound data to help them identify animals with more muscle and less fat. Using the data from the animals has not increased the value of the animal. It has however, helped these consumers determine which animals to purchase and put into their freezers. The number of individuals buying these animals for personal consumption has increased 22 percent since the introduction of ultrasound.

Over a 10 year period, the Gooding County Fair in Idaho recorded improvement in the quality of the animals shown at the county fair. Improvements were directly attributed to implementation of the Systems Approach. In the first year of utilizing the Systems Approach in 1984, market steer carcass weights averaged 685 pounds, average yield grade was 2.01, average daily gain was 2.21, and 18% of carcasses graded choice. After 10 years of steady improvement in animal quality, the average carcass weight was 751 pounds, average yield grade was 2.60, average daily gain was 3.66, and 88% of carcasses graded choice.

The adoption of these two progressive educational methods and the potential educational opportunities they provide continues to expand across the state of Idaho. The authors conclude that these two educational approaches are sound and effective in enhancing the educational value of youth livestock programs.

These two educational approaches may appear to focus excessive attention on the animal and on the “real world” of animal agriculture. While it is true that the quality of the livestock exhibited by youth under these evaluation techniques has increase, the purpose of this animal-centered and “real world” focus is to keep the youth livestock program on a valid track. This “on track” approach also provides many opportunities to measure the success of the youth who exhibit animals while enhancing the educational scope of the FFA and 4-H programs.

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