Marketing cattle based on individual value requires that you manage them according to their individual potential. That belief has led Warren Weibert through a series of innovations at Decatur County Feedyard, Oberlin, Kan.

The feedyard focuses on retained-ownership customers, and Mr. Weibert says he wants to improve ranchers' long-term profitability and also supply them with the information they need to make strategic genetic decisions back at the ranch.

Back in 1994, Decatur County was one of the first feedyard to incorporate the Electronic Cattle Management (ECM) system, designed by Micro Chemical Company, now known as Micro Beef Technologies. The system uses electronic identification, along with Micro Beef's Accu-Trac software to objectively sort cattle based on a wide range of physical and economic measures.

The feedyard added 94 pens during 1999, bringing its total one-time capacity to near 45,000 head. Along with the new pens, the feedyard added a high-capacity processing facility that brings the ECM concept to a new level. The entire system, designed with the assistance of Micro Beef Technologies and animal-handling expert Temple Grandin, takes full advantage of current technology for measuring the performance and potential of every animal and making individual management decisions.

Calves received into the ECM program begin with a 120-day shipping window, Mr. Weibert explains. At re-implant time, the system
splits the pen into two, 60-day marketing groups. Later the feedyard conducts a final “date sort” identifying the week each animal will ship. The feedyard commingles cattle from different owners into groups based on projected shipping dates and uniform quality. Customers receive checks every time any of their cattle, from one head up, go to the packer.

Three conditions “trigger” the ship dates: cattle getting too fat, too heavy or too expensive to feed. Cattle convert feed less efficiently as they reach heavier weights and physiological maturity. The computer is able to calculate the date at which feeding a particular animal is no longer cost effective. “We want every animal’s last day in the feedyard to be a profitable one,” Mr. Weibert says. The goal is to continue feeding each animal as long as improvements in its carcass value, in terms of weight and grade, exceed the incremental cost of gain, while avoiding marketing animals that exceed industry specifications for weight or fat.

The system produces results for Decatur County Feedyard and its customers. During 1999, 99.74 percent of the ECM cattle marketed from the feedyard met Yield Grade 3 or better, and 99.38 percent met industry carcass-weight specifications. In terms of quality grade, 57 percent grade Choice or better and more than 97 percent grade Select or better. Outliers, including heavyweights, lightweights, dark cutters and Standard carcasses total 3.87 percent, compared with an industry average of 9.71 percent.

Sorting and commingling cattle, some believe, creates stress that can hurt performance and carcass quality. Under some conditions that probably is true, but the ECM system at Decatur County is designed to minimize stress and Mr. Weibert says he has seen no evidence of behavioral problems. The incidence of bullers, for example, averages much lower in ECM pens compared with conventional pens that are not commingled. Dark cutters are another indicator of stress, and cattle marketed through the ECM system have produced only .31 percent dark-cutting carcasses, less than a quarter of the industry average of 1.5 percent.

The system, Mr. Weibert says, improves the retained-ownership customer’s profit.

1. The new, state-of-the-art processing facility at Decatur County Feedyard, Oberlin, Kan., uses two parallel systems, each with five Silencer chutes performing specific functions. The system features automation, efficiency, low stress handling, quiet operation and objective, computerized sorting options for individual cattle management and marketing. The feedyard crew can process and sort 100 cattle per hour through one set of chutes, or 185 per hour using both systems simultaneously.

2. Snakes leading up to the processing stations have white side panels and black rubber blinds that keep cattle from seeing crew members. The design encourages cattle to move forward quietly with very little encouragement.

3. After the computer signals the initial holding station to release an animal, it passes through a video-imaging station, which uses side and overhead video cameras to record the animal’s height, width and length.

4. The next station includes scales and an electronic identification tag reader. The computer identifies the animal and adds its current weight and dimensions to its individual records.
potential in several ways. Individual management in the feedyard produces an average $15 per head performance advantage over group management. Timely marketing on a value-based grid system adds another $5 to $10 per head advantage. The greatest potential for higher profits is back at the ranch, Mr. Weibert notes, where genetic improvements based on individual performance and carcass data can bring another $50 per head profit.

By John Maday

5. At station number four, a crew technician uses an ultrasound reader to measure backfat thickness for each animal. The computer automatically adds this information to the animal’s individual records. Next, cattle advance to a final squeeze chute where the feedyard crew performs conventional processing duties such as vaccinating and implanting.

6. A lighted panel above the final station keeps the crew apprised of each animal’s progress through the system and alerts them to problems or delays at any of the five stations.

7. Based on weight, performance, body dimensions, backfat and economic projections, the computer system calculates an ideal shipping date for each animal. As each animal leaves the processing barn, the system automatically selects and opens one of six gates to sort cattle into the appropriate holding pens.

Learn more about Micro Beef Technologies’ ACCU-TRAC® Electronic Cattle Management System.

Visit microbeef.com or contact Mark Shaw 800-858-4330