

Calling All Cattlemen

Producers head back to school for Cattlemen's College.



To kick off the 2006 Cattle Industry Annual Convention and Trade Show, the 13th annual Cattlemen's College® sponsored this year by Pfizer Animal Health, followed through with the convention's theme of "Cowboy Up!" Hosted in Denver, Colo., the day of cowboy education took place Wednesday, Feb. 1.

The 2006 event featured more hands-on learning, with a series of demonstrations on animal identification (ID) and different methods of low-stress cattle handling. Other seminars discussed proper handling and administration of vaccinations and medications; the data collection process and its connection to animal ID; the effects of cattle handling and disposition scoring on cattle performance and carcass quality; contract specifications,

grading and delivery for live cattle and feeder cattle contracts; and Natural Resources Conservation Service (NRCS)

involvement and enrollment opportunities and options.

Attendees also received firsthand experience in the way data travels in an electronic ID system as they were tracked throughout the day by a radio frequency ID (RFID) button on their nametags. An integral part of the exercise was demonstrating the compatibility of different manufacturer's products. RFID buttons, readers and software were provided by AgInfoLink, Allflex USA, Farnam, Temple Tag and Y-Text Corp.

Low-Stress Cattle Handling

Beef producers attending the 2006 Cattlemen's College viewed three live demonstrations of low-stress cattle handling, utilizing common stockmen's tools.

Handling cattle on foot

Common methods of cattle handling — using fear and force — stress animals out of their natural state, which decreases their ability to turn a profit, said career stockman Joel Ham. Using low-stress handling techniques, stockmen can understand their cattle's natural tendencies and work within those boundaries.

Ham explained that cattle have two types of instinctive behavior — behavior based on their desire to survive and behavior based on their desire to maintain a distance from humans. Ham's handling techniques leave the survival instinct dormant and allow him to gradually reduce the animal's "flight zone" by applying and quickly removing pressure to gain the animal's trust.

Ham emphasized that it is not the animal's fault when things aren't going right; everything they do is in reaction to the stockman's actions. Cattlemen must take responsibility for the results they get and ask themselves, "What am I doing to cause those animals to do that?" Each action must be in preparation for what is going to come next, he said.

Most people have misconceptions about cattle based on their experiences. Ham said some of these misconceptions include: Cattle don't like to go through gates, into corrals or chutes, or onto trucks; cattle will

walk the fence when put in a new pasture; freshly weaned calves will get sick after trucking long distances; and the older cows get, the harder they are to handle. Ham said most cattlemen don't consider themselves the cause of these behaviors; however, in most cases, they are responsible.

To handle cattle effectively, stockmen must understand cattle's natural tendencies. Ham described seven of these tendencies:

- ▶ They like to see you.
- ▶ They like to follow other animals.
- ▶ They like to go the direction they are facing.
- ▶ They don't like to be pressured from behind.
- ▶ They like to feel like what they are doing is their choice.
- ▶ They like to go around you rather than have you go around them.
- ▶ They prefer you move in straight lines rather than arcs.

"Work within these boundaries, and the animals will stay in their natural state and will have a tendency to calmly move away from you. Thus, they go where you want them to go," he noted.

"If you violate these natural tendencies, then the survival instinct will come out," Ham said. "When animals feel like they

need to survive is when we lose control."

Ham said a common mistake is to pressure cattle from behind. "This just causes them to turn around and look at you. Then you have their head going the wrong direction, and you have to turn them around again before asking them to move," he said. "You can be behind them; just don't apply pressure from behind."

Cattle should only be asked to do one thing at a time, he advised. First, ask cattle to face in the direction you desire them to move. Once they are all facing the right way, you can pressure them to move as long as you release the pressure as soon as you get results.

A view from horseback

Montana rancher and horsemanship clinician Curt Pate offered tips for working cattle from horseback, while Kansas cattleman Charlie Trayer showed how a lone rider can work cattle gently with the help of well-trained stockdogs.

Both animal experts demonstrated the use of techniques to keep cattle calm and minimize stress that can jeopardize cattle health and performance.

"Some people are better off working from the back of a horse, and some aren't," Pate admitted.

Particularly when working cattle in open country, however, he said he believes

Stockmen offer tips for how to work cattle on foot, on horseback and with stockdogs.

CONTINUED ON PAGE 280

Low-Stress Cattle Handling CONTINUED

riders have an advantage. Riders are able to see all of the cattle being worked, and they have the ability to move smoothly to more favorable positions. They can see where they need to be and get there easily, provided they have adequate horsemanship skills and are suitably mounted.

“It’s always going to work better if they have a horse that can relax when needed, but still be ready to move forward, backward or to the side — a horse that can settle and be quiet, instead of jiggling along and disturbing the cattle.”

According to Pate, no-fuss cattle handling requires an understanding of a cow’s breaking point — an invisible spot behind its shoulder. When a rider approaches the cow in front of that point, the animal stops or turns back. Approaching to the rear of the breaking point causes the cow to move forward. Successful handling comes when a rider knows how to position the horse with respect to the breaking point to prompt a desired response from the cow.

Similarly, a herd of cattle has a breaking point near the middle of the group. By working in front of the herd’s breaking point, or behind it, a rider can direct the movement of the entire group.

Pate warned against riding directly behind cattle if the rider wants to maintain the ability to control direction and speed of movement. Instead, he recommended working slightly to the side and approaching at a flat angle when pressure is needed to maintain motion.

Doggone easy

Trayer is an accomplished horseman, too, but is best known for raising, training and using stockdogs. Mounted on a horse and using three experienced dogs, Trayer demonstrated how to move cattle quietly, pen them in a corral and load several head into a trailer. The latter feat was accomplished while the trailer was parked along a fence and without the benefit of a loading alley or any type of additional help.

Trayer said even cows with calves at side can be handled effectively with dogs. Ideally, cows should be “dog-broke” while they are dry, so they will be accustomed to being



PHOTOS BY TROY SMITH

►Riders are able to see all of the cattle being worked, and they have the ability to move smoothly to more favorable positions, said horseman Curt Pate.

worked with dogs by the time they have calves.

He also stressed the importance of using well-trained dogs and not pups or dogs with too little experience for the job at hand.

— by Meghan Soderstrom and Troy Smith



►Charlie Trayer demonstrated how to load several head into a trailer parked along a fence with the assistance of his stockdogs.



Temperament Affects Profitability

Darrell Busby, Iowa State University, shared research gleaned through studying the Tri-County Steer Carcass Futurity (TCSCF).

The goal of the TCSCF, Busby noted, is to figure out which steers are the most profitable. And, there are differences. During the last five years, 24,315 steers and heifers have been entered into the TCSCF from producers in 12 states. In 2004-2005, with 3,132 steers, the top one-third of the cattle earned a profit of \$225.26, while the lowest one-third lost \$46.46.

Cattle disposition and handling can have a huge effect on cattle performance and carcass quality, Busby said.

“What is disposition? It’s a measure of how tame and docile cattle are,” Busby explained. “How does disposition affect health? Excitable animals compromise their own safety.”

Using a scoring system developed by the Beef Improvement Federation (BIF), TCSCF cattle are scored on a scale of 1 to 6:

- 1. Docile.** No tail ringing, no elevated respiration.
- 2. Restless.** Slight tail ringing, slight elevated respiration, but calm down quickly.

- 3. Nervous.** More movement, rapid entry and exit, but calm down quickly.
- 4. Flighty.** Jumpy cattle, run instead of walking, warily watch those around them.
- 5. Aggressive.** Struggle, run into gates and walls, hold heads up.
- 6. Very aggressive or “killers.”** Same as 5, but will attack humans.

Cattle are scored three to four times: as they go on test (after letting cattle get accustomed to surroundings), at time of implant and at harvest.

Busby said many conclusions can be drawn from TCSCF disposition information. “Feed efficiencies are poorer on the aggressive calves,” he said. While morbidity rates are higher on docile calves (scores 1 and 2; perhaps because aggressive calves don’t show depression, and they hide illness), mortality was almost twice as high in aggressive calves (scores 5 and 6) compared to docile calves.

More excitable cattle were also less tender

and tended more toward being borderline dark cutters. TCSCF data showed that wild cattle shrunk 23.5 pounds (lb.) vs. only 1.3 lb. for docile cattle. Compared to docile cattle, feedlot gain was reduced by 8.2% in aggressive cattle, Busby said. And, the number of cattle grading USDA Choice or higher was reduced by 15.9%.

Genetic selection and proper handling are the keys to improving cattle temperament, Busby said. With a heritability factor of 0.40, “selection will improve temperament,” he noted.

However, when it comes to cattle handling, “handlers are a bigger factor than the equipment,” he cautioned. “Patience is something that’s very critical.”

He said producers should design facilities for handling cattle effectively by reducing sound, sharp shadows and distractions. Ultimately, Busby emphasized, learning more about cattle and their habits and instincts can reduce injuries and offer benefits.

— by Brooke Byrd

Feed efficiencies are poorer and mortality rates are higher for aggressive calves compared to more docile calves.

Weaning Strategies

By definition, strategies are plans of action. South Dakota rancher Connee Quinn said many options exist for planning calf weaning strategies. However, Quinn said tradition prevents many cow-calf producers from developing the best course of action for their operations.

Quinn and Pfizer Animal Health veterinarian Dale Groteleuschen urged ranchers to consider options for two key elements of a successful weaning program: timing and management.

Quinn said timing of weaning may be broken down into three general categories. While weaning traditionally occurs when calves are 6 to 7 months of age, alternatives

include early weaning, at 2 to 3 months of age, or weaning when calves are 4 to 5 months old. Departure from tradition might be justified when drought or other reasons force reductions in stocking rates.

“Weaning earlier may be most beneficial to producers who retain ownership of their calves,” Quinn said. “Weaning calves earlier can allow a dramatic recovery of cow body condition, but research shows that the calves can achieve increased carcass quality.”

Quinn said management should encompass anything producers do to enhance performance. Often, however, some of the things managers do or fail to do will interfere with performance. Too often, she

said, weaning practices create nutritional or stress-related interference.

Groteleuschen said the health-related consequences of stress have been the subject of unprecedented discussion in recent years. Stress induces increased secretion of cortisol, which is antagonistic to an animal’s immune response.

“Weaning is an artificial event creating health interference and increased susceptibility to disease, with BRD (bovine respiratory disease) presenting the greatest risk,” Groteleuschen said.

Along with implementation of a proper vaccination program, he and Quinn urged

CONTINUED ON PAGE 282

Weaning Strategies CONTINUED

producers to consider practices to reduce stress. They recommended fenceline weaning as least stressful. If that is not possible, they recommended producers wean calves far enough away from their

dams so they cannot see or hear each other. Groteleuschen also called commingling of calves from different herds, or even from different pastures, a practice that increases stress and exposure to disease pathogens.

He and Quinn recommended weaning calves at home, for at least 45 days prior to sale or feedlot placement, as part of a successful weaning strategy.

— by Troy Smith

Chute-side Manners

“Doing *nearly* everything right with a vaccination program can cause you some real problems,” said Texas A&M University’s Ron Gill during the session on proper vaccination strategies.

Many people want to blame nutrition, stress or the vaccine for immunity problems at the feedlot, Gill said. However, most vaccine failures are caused by mishandling products prior to use.

The Extension livestock specialist shared tips for proper care and use of vaccines. He outlined criteria for effective vaccination:

- ▶ Determine target pathogens.
- ▶ Select the most effective vaccine.
- ▶ Prevent exposure of vaccine to heat and light.
- ▶ Use only sterile needles and syringes.
- ▶ Draw from a bottle with a sterile needle.
- ▶ Use quality syringes.
- ▶ Inspect and maintain all working components.
- ▶ Administer proper dose.
- ▶ Use proper needle size.
- ▶ Administer through recommended route [intramuscular (IM) or subcutaneous (sub-Q)].
- ▶ Administer in recommended site (the neck, especially for IM injections).
- ▶ Change needles often to reduce tissue irritation.
- ▶ Always follow label directions.

▶ Boost all vaccines when the label requires it.

Never, Gill said, leave vaccines in direct sunlight or ultraviolet (UV) light. Never leave vaccines unrefrigerated. Never place a used needle in a bottle of vaccine, and never place a vaccine in the hip or upper round. Never fail to read the directions before starting, and never assume anything; always check.

— by Shauna Rose Hermel



▶ Gill showed how holes could be cut into a Styrofoam box to provide a resting place for syringes to protect the vaccine from extreme temperatures and UV light while they are not in use.



▶ Ron Gill demonstrates proper handling of vaccines during the Cattlemen’s College.

PHOTOS BY SHAUNA ROSE HERMEL

Using Data Feedback Effectively

Data is only useful if the interpretation considers all inputs, said Ben Brophy, manager of value-added alliances for Cargill Cattle Feeders LLC, at the animal ID breakout session.

Data generated from a national animal

ID system may have useful applications with Cargill’s Quality System Assessment (QSA) program to gain export approval to Japan, Brophy said. Cargill’s QSA focuses predominantly on verifying animal source and age, but Brophy said producers can

generate other useful data, too.

He encouraged attendees not to be intimidated by QSA program requirements, because “it’s largely a function of simply documenting what you are already doing. ... Don’t let the terms ‘processes’ and



'procedures' overcomplicate the matter. It just means explain what records you keep to verify the source and age of your cattle."

Source and age data can do more than just help producers export product to Japan, he said; recordkeeping can improve their business if producers also track performance information.

Although a national animal ID system must first focus on disease traceability, it must also have capabilities for data retrieval and use by producers, Brophy said. He then quickly added that producers

must know what to do with the data that is generated.

Producers can use the performance data to help make management and marketing decisions, he said, but only if they consider all factors that influence the data. "Interpretation of data is critical to glean correct conclusions," he emphasized.

Brophy said the effects of genetics, health and environmental factors all influence cattle performance — and thus performance data — before they arrive at the feedlot and once they are there.

He emphasized that "far more powerful conclusions can be drawn by comparing data subgroups than by using individual carcass data to cull cows in a commercial operation." He said sire group is one of the most important data subgroups that should be looked at.

— by Meghan Soderstrom

Making the Grade

During the talk on live-cattle and feeder-cattle contracts, John VanDyke and Phil McFall from the U.S. Department of Agriculture (USDA) Agricultural Marketing Service (AMS) Livestock & Grain Market News (LGMN) and Paul Peterson from the Chicago Mercantile Exchange (CME) gave a video demonstration of cattle that meet contract specifications, grading and delivery for feeder cattle and live-cattle contracts.

The speakers shared a report on the CME Feeder Cattle Index, which is based

on sample transactions in certain cattle weight/frame score categories. They also discussed procedures for actual live grading, including observing the load as a whole unit; presenting steers for individual grading in groups of two to five head; checking individual animals' weights if necessary; weighing the load less than one hour after grading; accepting, penning or sealing the load; or, if rejected, returning it to the deliverer. Speakers also explained that grading results are called into the CME throughout the day.

The biggest problems encountered during this process, they said, were lack of cattle, steers weighing more than 1,400 lb., animals not being sorted at the feedlot prior to shipment, delivery of cattle at specified points after 9 a.m., and the deliverer's failure to read the CME specifications.

For more information on the LGMN, visit www.ams.usda.gov/LSMNpubs/.

— by Brooke Byrd

Tools You Can Use

The Natural Resources Conservation Service (NRCS) offers several different tools and programs producers can use to succeed, said speakers Jim Oltjen, University of California-Davis, and Dennis Thompson, Arnold Norman and Charles Stanley, all with NRCS.

Oltjen began by discussing the Integrated Resource Management (IRM) Natural Resource Desk Record, available through the National Cattlemen's Beef Association (NCBA). An example of the public and private sectors collaborating, the Desk Record was created by a group of range and pasture management specialists, animal science specialists and producers throughout the U.S. The Desk Record, the speakers said, can help producers in their application and monitoring process

for such programs as the Environmental Quality Incentives Program (EQIP) and the Conservation Security Program.

Oltjen detailed the developmental history of the Natural Resource Desk Record, then discussed its purpose. Thompson spoke about natural resource monitoring, and Thompson and Norman both discussed selecting levels. As a demonstration of tools producers can use for inventory and monitoring, Stanley offered the Grazing and Spatial Analysis Tool (GSAT), while Norman talked about "Nutbal Pro."

The purpose of the record is to provide a tool with which producers can measure and monitor soil, vegetation and water condition. To be able to properly manage these resources, the manual says, good

information is required. According to the Desk Record, it allows producers to collect "baseline environmental data and establish a natural resource monitoring system" for grazing lands.

Divided into five sections, the manual is intended to give cattlemen a user-friendly, step-by-step process for creating a monitoring system for natural resources. The "Getting Started" section helps producers set goals, collect inventory information and choose monitoring methods. The "Level One," "Level Two" and "Level Three" sections provide sheets to record data collected throughout the monitoring process. Finally, the manual gives producers a resource to determine the costs of monitoring natural resources.

— by Brooke Byrd

