

ohn Goodwin of Orange, Va., preconditions 130 Angus-sired calves from his herd and custom backgrounds another 460 to 500 Angus-based calves for eight other members of the Central Virginia Cattlemen's Association (CVCA.)

The calves are commingled and sold in uniform loads [100-pound (lb.) spreads] in CVCA's annual August sale. In 2009, CVCA members sold 4,149 preconditioned calves in commingled sales for an average premium of \$7.05 per hundredweight (cwt.) over weekly state graded sales. CVCA holds its largest sale in early August and a second sale later in the year.

Goodwin and other CVCA members

know that getting calves weaned and started on feed is key to running profitable commingled sales.

The 30-45 days after a calf is weaned is a stressful period and sets the stage for profitable feedout or a productive life as a replacement female.

To meet the needs of the calves, Goodwin works with nutritionist Bob James of Virginia Tech. James has a primary background as an Extension dairy nutritionist and continued helping Goodwin calculate his beef ration when he switched from dairying to beef production.

► Above: John Goodwin gives his weaned calves free-choice long-stem grass hay and introduces a total mixed ration calculated by a nutritionist.

"When you work with beef animals, the issue is commingling. John has a healthy feeding setup, and he's able to deliver a nutritionally consistent total mixed ration (TMR)," James says.

From grass to grain

After calves are separated from cows, the nutritionist suggests offering plenty of highquality long-stem grass hay. Of the alternatives, long-stem hay is closest to grass the calves have been eating in pastures.

"I offer all the free-choice hay the calves want and introduce the silage-based ration as quickly as I can," Goodwin says.

For the first few days, James recommends slowly increasing the TMR fed with the grass hay. He sets up the TMR so the calves will gain 2.5 lb. per day when they reach full feed. Goodwin's TMR includes dried distillers' grain, soybean meal, a mineral-and-vitamin mix, and barley silage.

"If there's anything I do differently, it's set up a ration that's a little higher in protein. John's TMR is 14.5% protein for 500-weight calves," James says. "Depending on the quality of hay, I believe higher protein levels are warranted as they probably foster a little better tissue growth in young animals. If grass hay is harvested past its peak maturity, a 13% protein concentrate isn't adequate."

Quality control

If producers have bulk storage facilities, commodities, such as distillers' grains, can be good feed values, according to the nutritionist. However, one of the problems with commodities is quality control.

"I've seen varying levels of nutrients and some mycotoxins in commodities," James says. "You should have a known source for commodities and send samples from each

truckload to be tested by a laboratory."

Orange County, Va., Extension agent Steve Hopkins serves as advisor to the CVCA and assists with the commingled sale.

Most of the producers wean calves on their farms for two weeks and then deliver the animals to Goodwin's preconditioning facility. Some of the producers feed their calves on their farm until sale day. Most of these producers feed calves 13%-14% pelleted feed at 1% of body weight with supplemental hay or pasture, Hopkins reports.

VCA sales feature calves that are vaccinated, preconditioned, equipped with electronic ID tags and age- and sourceverified. Marketing thousands of commingled cattle in group sales helps



CVCA members attract buyers from Illinois, Iowa, Kansas, Pennsylvania and Virginia.

"We average premiums of \$5 to \$10 per hundredweight over stockyard sales that week, and we've had loads earn premiums of \$12 per hundredweight," Goodwin says.

Practical suggestions

Based on 25 years of experience, Middle Tennessee State Director of Agriscience Warren Gill has several practical suggestions for weaning and feeding calves:

- When first separated from cows, calves spend most of their time bawling and walking fencelines. Locate feedbunks and water tanks perpendicular to the fenceline of the weaning lot so the calves bump into the troughs and discover their feed and water. If feedbunks are located in the center of the lot, it may take days for calves to locate them.
- Good, quality grass hay is the feed that most closely resembles the calves' previous nutritional environment. Most calves will nibble grass hay soon after weaning. Make sure the hay is free of mold, excessive weeds and harvested at its peak of nutritional maturity. Fluff the hay over the top of the bunk so calves will investigate and start eating the feed. Grass hay should be fed at 0.5%-1.0% of body weight and top-dressed with a balanced concentrate.
- Don't start feeding large round bales in the weaning lot. Unlimited access to big bales keeps some calves from eating concentrate from the feedbunk. After calves are consuming concentrate well, it's acceptable to feed hay in large bales or give the calves access to good, quality pasture after they eat their concentrate ration.
- Concentrate feed should be 13.5%-14.5% crude protein from natural sources and be 70%-75% total digestible nutrients (TDN.) Feed concentrate and hay daily and if possible two or more times per day. Calves are drawn to the bunk each time hay is fluffed and concentrate is fed. Daily feeding also provides a good opportunity to observe calves for health problems.

"I shoot for 14% to 14.5% protein in supplements," Gill says.

Monitor feed intake as an indication of animal health and quality of the feed. During the first few days, sprinkle the concentrate at 0.25%-0.5% (dry-matter basis) of body weight. Calves shouldn't appear overly hungry, but they should clean up each feeding prior to new feed. Clean out any leftover stale feed before adding new concentrate.



Goodwin's feeding facility offers adequate bunk space and a healthy environment.

Provide free-choice salt and a highquality mineral supplement. Creepfeeding 30 days before weaning helps calves adapt to feedbunks when they are separated from their mothers.

Distillers' grains sweep Midwest

Due to the growth of ethanol plants, there's been an explosion in the availability of distillers' grains in the Midwest. As a result, rations have changed.

"In our country, distillers' grain now makes up 25% to 35% of the ration, but it substitutes for grain and has less starch because the starch is removed in the ethanol process. As a result of lower starch levels, acidosis is less of a concern with distillers' grain," says Iowa Beef Specialist Dan Loy.

Calves usually accept a dry grain mix at first, but will adapt to high-moisture feeds, including silage over one to two weeks. In the past, Iowa State University (ISU) researchers have successfully started calves on many different feedstuffs, including corn gluten feed, soyhulls, corn silage, green chop and haylage. In 10 years of feed trials at the ISU Rhodes Research Farm, researchers have learned:

- Corn gluten feed adds energy and protein without contributing starch.
- ► Soyhulls add fiber but not roughage.
- ► Whole corn and alfalfa is an acceptable starting ration.

Although distillers' grain is readily available, the commodity is not always the most cost-effective choice. At times, corn gluten feed and other commodities can serve as cost-effective alternatives.

Iowa Extension Beef Specialist Joe Sellers reports that producers use a lot of coproduct feeds in his area. Soyhull pellets and corn gluten pellets are also popular feeds. Largescale producers can reduce costs by using wet distillers' grain and wet corn gluten if they have storage facilities, feeding equipment and enough cattle to use the wet products quickly.

Joe and his brother Tom are feeding a ration made up of 40% soyhull pellets, 40% corn gluten pellets, and distillers' grain with a premix containing Rumensin® to their fallborn calves. They give the animals 7 lb. per head daily plus alfalfa/brome hay.

"That's been a pretty economical ration, and the calves are gaining 2.0 to 2.25 pounds per day," Sellers says.