Beef Briefs

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THE CHANGING NEEDS OF THE BEEF COW

I recently had the opportunity to evaluate some rations for a cow-calf unit that was using several sources of forage in the feeding program.

The changing nutritional requirements of the beef cow during the year and during their lifetime again became apparent as I tried too match the feed available to the needs of the cows.

As a typical example, one hay sample was analyzed with the following results:

- Dry matter content was 87.6 percent
- Crude protein was 10.2 percent
- Total digestible nutrients (TDN) was 51.6 percent
- Calcium was .59 percent
- Phosphorus was .27 percent.

This represents the usual grass/legume hay that many producers would be using for winter forage. The question to answer is: How do I use this feed to meet the needs of the cow herd?

The first consideration is the dry matter content. Dry matter intake will average 21, 22, 23, 20, and 21 pounds per head daily, respectively, for mid-pregnancy, late pregnancy, and lactating mature cows, and bred heifers and lactating 2-year-old heifers of average size.

With the dry matter content of this feed, this means the manager must offer about an average of 25 pounds of the hay per head daily.

Further, if the hay has been stored outside, an additional 15 pounds per head daily must be added.

Finally, recent research here at Penn State has shown us the typical round bale feeder will result in losses of about 15 percent for each bale fed.

To sum it up, a 1,000-pound bale of this hay stored outside and fed in the typical round feeder would feed 21 cows for a day (or 32 head for a bale stored inside).

The next thing most people would consider is the protein value. The fact is, this hay (at the prescribed level of intake) will provide all of the protein needed for all classes of cows in the herd. As usual, protein is not the limiting factor in forage nutrition of beef cows.

What is a limiting factor is energy. There is only one class of cows in which the energy needs will be met with this hay — dry, mature cows in early to mid-pregnancy. Bred heifers and lactating cows and heifers will need additional energy.

For the bred heifers, the supplemental energy would be the equivalent of 1½ pounds of corn daily, a pound for the mature cows with calves, and 2½ pounds for the 2-year-olds with calves.

Failure to provide this additional energy will have two results. First, the potential milk production will suffer. This could be as high as a half of the potential milk production in the young cows. That kind of reduction could easily reduce weaning weights by 25 percent.

Secondly, the young cattle that are still growing will lose condition. Failure to rebreed or an extension of the time needed to start cycling for the next breeding season will result in younger, lighter calves — or no calves at all — next year.

"Typical" hay, silage, or haylage will seldom fit the needs of all classes of beef cows. A good ration evaluation will certainly head off some problems for the rest of the winter.

BVD Warning

Extension veterinarian Dr. Tom Drake recently related a problem with abortions that has been observed in the Penn State animal diagnostic lab.

His observation is that the cause may be bovine virus diarrhea (BVD). Drake pointed out that one possible cause is the use of killed vaccines in fall vaccination programs.

It is known the modified live version of the BVD vaccine can result in abortion when administered to pregnant animals. For this reason, many of the vaccine combinations available contain a killed BVD portion.

However, the development of a titer against the disease may not be as effective with the killed product. The recommendation from Drake was for producers to consider using the modified live vaccine in unbred replacement heifers, and then use the vaccine combinations with the killed product as the annual booster.

PFB Supports USDA Efforts

READING (Berks Co.) — A state farm leader said that his organization supports efforts to organize and streamline U.S. Department of Agriculture services to farmers under a single agency.

This message was delivered by Keith W. Eckel, president of the Pennsylvania Farm Bureau (PFB), in testimony presented Monday at a hearing of the department operations and nutrition subcommittee of the U.S. House Agriculture Committee.

PFB is a membership organization with 23,000-plus family members in the commonwealth. It is affiliated with the American Farm Bureau Federation (AFBF), which is the largest general farm organization in the U.S. Eckel serves on the AFBF Board of Directors and its executive committee.

"Providing service to farmers in the most efficient, cost-effective manner must be the primary goal for USDA reorganization," the Clarks Summit tomato grower told the committee.

Presently there is a proposal to place major government agencies dealing with farmers under a single entity called the farm service agency.

He did express strong fear that agriculture was taking big cuts in budget, and urged the same type of evaluation and reorganization of other government agencies. Federal spending in agriculture has been cut by nearly two-thirds since 1986, which is reduction of about 9 percent annually.

Eckel said that the proposal has appeal to farmers because it could eliminate red tape, and provide better communications with the farmer and between individual agencies. The proposed farm service agency, according to the Farm Bureau official, should include the Agricultural Stabilization and Conservation (ASCS), the Farmers' Home Administration (FmHA), the Federal Crop Insurance Corporation (FCIC), and the Soil Conservation Service (SCS).

"Merging these agencies will not eliminate the need for the specialized technical resources now provided by SCS," he testified. Technical advisors to carry out sound conservation practices should continue to be a high priority. "Local farmer input and direction" should be maintained, the farm leader told the committee, through a restructured committee approach.

"It's important," Eckel said, "that the committees are made up exclusively of farmers elected by their peers," to maintain the farmer confidence. The farm organization opposed a committee composed of elected and appointed members because it would reduce farmer input.

He further recommended that the county committee system remain in any reorganization plan, when a farm service agency covers more than one county.

He urged USDA to custom design a plan for farm service agency offices rather than use a "one size fits all" approach. Plans for locating these offices should be flexible enough to fit with local and regional conditions.

Pennsylvania farms average 154 acres, he explained. "Most are animal intensive resulting in commodity program payments that are relatively small. Our hilly terrain requires conservation plans that are more complex to design and implement."

He urged USDA to take these, and other factors, into consideration when locating farm service agency offices.

In other recommendations, he suggested that the Agriculture Extension Service should remain closely involved with research and the land grant university system; that USDA should establish a division to handle appeals to settle disagreements, and that Farm Bureau would oppose any transfer of current USDA functions to other federal agencies.

New Conservationist Appointed

West Chester (Chester Co.) — Christopher Leister started work with the Chester County Conservation District on January 10. Prior to coming on board, Leister worked for three years as an environmental technician with the Montgomery County Conservation District, so erosion and sedimentation control is nothing new to him.

Leister has a bachelor's in environmental planning/geography from Bloomsburg University in Columbia County. He was born and raised in Ambler, Montgomery County, and lives in Oaks, Montgomery County with his wife and daughter.

Leister will be carrying out the erosion and sediment control program for the northeast portion of Chester County.

Leister was a member of the Marine Corps Reserve and served at the rank of sergeant in an artillery unit. During the Gulf War, he was stationed in Okinawa, Japan. He was discharged from the Marines in May 1993.