

Disaster Recovery



Livestock

Cow management strategies to stretch winter hay supplies

Flood damage, excessive moisture at harvest time, and decreased hay yields have left many Iowa beef producers short of forage for the upcoming winter. Additionally, the drought in the Southeast United States and the flooding in the Midwest have placed large premiums on forages available for purchase. Does this mean we just give up and sell out? No, it means Iowa beef producers have to sharpen their wit, management skills, and pencils.

Strategy 1: Decrease feed needs

What do we know about cows that can work to our advantage? First, dry cows need less feed than cows nursing calves. Second, young females require more and better feed than mature cows. Third, cows in moderate to excellent flesh take less feed during winter cold stress than thin cows. Fourth, open cows generate little to no return above their winter feed needs if feed costs are high.

With these facts in mind, the following management options are viable.

Wean the calf crop earlier than normal. Stopping milk production of a cow lowers her feed energy requirements by 20 to 40 percent and her protein needs by 50 to 60 percent. This allows the cow to effectively use the poorest feedstuffs during mid-pregnancy and still maintain body weight and condition. Grazing resources also will be stretched further. In most cases, when calves are weaned early, cows will improve condition score dramatically, thus lowering winter nutritional needs.

Consider splitting your cow herd into two or three age-category groups. Bred heifers, and first- and second-calf heifers need better feed than mature

cows. This year, most producers have more poor-quality feed than average- and above-quality feed. By splitting the herd, the producer can target feed use better and meet the demands more efficiently.

1993 is the year to know for sure whether cows are open or pregnant. With hay in short supply and selling at high premiums, we cannot afford to waste it on nonproductive cows. This year is also a good one to look critically at cows with functional problems and those not raising early born, heavy calves. According to CHAPS records from 1987 through 1990, more than 8 percent of the cows calved after the 63rd day of the calving season, and those calves weighed at least 100 pounds less than calves born in the first 21 days of the calving season.

Strategy 2: Stretch fall grazing

Experience from participants in the Beef Cow Business Record has shown that producers with lower feed costs have longer grazing seasons. It is not uncommon for these producers to have pasture seasons 10 to 15 percent longer and cornstalk grazing seasons 30 to 50 percent longer. These longer seasons add up to significantly lower stored feed needs for winter.

Early weaning already has been discussed in lowering cow feed need. It also can help stretch fall pastures. Once calves reach 400 pounds or more they put considerable pressure on grazed pasture. Thus, by pulling the calves off the cow, fall grazing length should improve.

Cornstalk grazing always makes a cow nutrition program less expensive. In 1993, producers need to work harder at using this resource to its maximum.

IOWA STATE UNIVERSITY
University Extension

Work at Iowa State University has shown either strip grazing or continuous grazing of ½ acre per cow per month to give satisfactory cow performance in comparison to continuously grazing one or two acres per cow-month. Thus, this is a possible strategy to stretch feed resources, **but be ready for bad weather!** ISU also showed large weight losses with this stocking rate when snow hit. So producers must monitor their cornstalk fields carefully and be prepared to move cows when conditions warrant this movement.

Cornstalk grazing in 1993 will need to be monitored carefully. The old rule of thumb is 40- to 60-cow-grazing days per acre when grain yields exceed 100 bushels per acre and each cow is given two acres to graze. Lower yielding corn fields will not deliver as many days per acre. See an accompanying article in this tabloid for further recommendations.

Producers should consider renting additional cornstalk fields and either harvest or graze them. Rental rates of \$5 to \$10 per cow-month are a better alternative to feeding a cow 25 pounds of \$100 per ton hay! With today's modern electric fencing and chargers, one can easily control a herd of cows in remote places. Step-in fiberglass posts with maxishock cable or polywire, works well in controlled cornstalk grazing conditions.

Strategy 3: Control feed waste

Waste not! This has to be the motto for this winter.

There is plenty of old feeding data that points out the advantages of big bale feeders versus feeding bales free-choice. Savings of 20 to 40 percent are not uncommon with bale feeders.

Another feed savings method is using a bale processor and only feeding what the cows require on a daily basis. A few producers using this technique have reported that they cut feed waste by 15 to 25 percent.

Tub grinding and bunk feeding are other options that give the producer excellent flexibility with various feedstuffs. By tub grinding, one can incorporate good quality hays with poor quality hays or corn stover and then fortify the ration with corn or corn silage to meet energy needs better. Additionally, this method normally reduces hay feeding losses from 20 or 25 percent down to 5 percent or less. This method needs to be seriously considered if one is short of forage and needing to purchase large quantities of high-priced hay.

Another benefit of processing low-quality feeds is improved consumption. In the 1970s work at ISU showed consumption on corn stover improved about 15 percent with tub grinding. Coarse stems or

stalks are reduced in size, and become more palatable.

Strategy 4: Harvest non-traditional forages

Corn silage, whether from an immature crop or otherwise, is an excellent feed resource for beef cows. It is high in energy and has excellent palatability. One can incorporate tub-ground hay with corn silage to fortify the ration's protein content and better meet calcium needs of the cow.

Corn stover offers an excellent, low-cost feed resource for beef cattle. Past research and producer experience have shown corn stover to work very well when supplemented with a protein source, and vitamins and minerals. Generally, a ration of corn stover with ⅓ to ½ hay will meet the needs of most cows under non-stressful conditions. When weather turns cold or muddy conditions exist, cows need additional feed energy. Usually corn is the cheapest supplement for energy.

Sorghum-sudangrass silage, if harvested before fully headed, is a good-quality feed, similar to high-quality grass forage. However, once fully headed, protein and digestibility decline to about the same as cornstalks or mature hay. This forage does not work well as hay because dry-down is difficult, and molding and heating commonly occur.

Soybean stover is the poorest quality of the crop residues available to Iowa producers because stems make up the greatest percentage of the yield. Limit soybean stover to ¼ to ⅓ of the dry cow ration, with high-quality hays or silages making up the balance. Stover works well as a feed stretcher, but past research has shown cows on higher amounts lose weight and have the tendency to develop rumen compaction. These problems are prevented by processing the soybean stover and supplementing it with correct amounts of energy and protein.

Oat straw can be used in cow rations as a stretcher of high-quality feed resources. It is recommended that no more than ⅓ to ½ of the ration be oat straw. Experience shows this product works best when tub ground and incorporated into a complete mixed ration.

Prepared by Daryl R. Strohbahn, ISU Extension beef specialist

. . . and justice for all

The Iowa Cooperative Extension Service's programs and policies are consistent with pertinent federal and state laws and regulations on nondiscrimination regarding race, color, national origin, religion, sex, age, and disability.

Cooperative Extension Service, Iowa State University of Science and Technology and the United States Department of Agriculture cooperating. Robert M. Anderson, Jr., director, Ames, Iowa. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.