

WEB CONTENT DISPLAY
June 15, 2012

SUBSTITUTING FEED FOR PASTURE FOR COWS

I am writing this column and something strange is hitting the house, a good rain. With our pastures dried up it is causing area cow/calf producers to think about forage inventory. Usually there has not been interest to replace pasture with another feed during the spring/summer while cows are grazing pastures. We just need some salt and minerals/vitamins. Rightfully so because the nutrient quality of cool- and warm-season pastures, in most cases, are high enough to meet the energy and protein needs of lactating cows. But this year our brome shut down and pastures have been too dry.

When drought occurs, the feeds used as the substitute for pasture must not have a negative effect on forage digestion because part of the diet is forage from the pasture. Harvested forages such as alfalfa, grass hay and summer annuals could be used in a grazing situation to replace grazed forage and not have a negative impact on the total digestibility of the diet. The challenge using harvested forages to replace pasture is that harvested forages are usually expensive, especially in drought conditions. A second challenge is to get cows to eat the harvest forage instead of vegetative grass in the pasture. Cows likely won't consider eating the harvested forage until grass in the pasture is depleted. If there is daily access to a loafing area that the cattle could be gathered and fed the harvested forage before turning them out to pasture, then consumption may be possible. This practice would take labor and fuel in addition to the feed and equipment to deliver the feed.

Grains, such as corn, are not a good choice, even if they were cheap as a feed substitute for cows grazing pasture. Data suggest that grains have a negative associative effect on forage digestion. Grains are high in starch and feeds that are high in starch tend to lower the pH of the rumen and make it an acid environment which promotes an increase in microbes that digest grains not forages. The consequence of this is a decrease in forage digestibility.

UNL has researched mixtures of wet distillers grains mixed with low quality hay or crop residue in an attempt to replace grazed forage, without removing the cattle from the pasture. Corn distillers byproducts are very palatable and mixing them with low quality forage or crop residues has been shown to increase consumption of low quality roughage and, when fed to cows grazing pasture, will replace pasture consumed. The amount of the pasture replacement has been variable.

In one study, cow/calf pairs grazed pasture and received either 50:50, 40:60, or 30:70 WDGS:wheat straw supplementation at 50 percent of the estimated dry matter intake. The 30:70 WDGS:wheat straw treatment almost replaced grazed forage on a 1:1 basis. As the amount of WDGS increased in the supplement, the amount of replaced grazed forage decreased.

For producers with crop residues in close proximity to their cattle, the 30:70 WDGS:residue combination may be a viable option to reduce grazed forage intake. Studies indicate that a blend of 30:70 WDGS:roughage appears to be the optimum blend to get the most forage replacement. Using this combination of byproduct:forage, producers could plan that for every dry matter pound



of the combination fed, between 0.5 to 1.0 pounds of forage in a pasture on a dry matter basis could be replaced. Now if we could only get that price a little lower on distillers, that would help.

More information on responding to drought for beef producers can be found at beef.unl.edu.

Randy Pryor, Extension Educator
University of Nebraska-Lincoln Extension in Saline County
306 West 3rd Street, Wilber, NE 68465

Phone (402) 821-2151 • Fax (402) 821-3398 • e-mail: randy.pryor@unl.edu