



Ridin' Herd

► by **Rick Rasby**, Extension beef specialist, University of Nebraska

Summer pasture is tight

I'm a firm believer that cows and pasture go together. There's not a neater picture than a cow in belly-deep grass with her calf at her side. One of the unique characteristics of cattle is they have the ability to convert forage to protein. Budgets for the cow-calf enterprise indicate spring and summer pasture — once considered the most inexpensive time to feed a cow herd — has become a more and more expensive feed resource. This year, it seems pasture is hard to find. This may be due to the drought that occurred last year in states that are considered "big" cow states. What are some of the alternatives for producers to consider as land and pasture costs continue to rise?

Pasture costs

Each year Bruce Johnson conducts a survey of Nebraska farmers, ranchers and landowners titled the "Nebraska Farm Real Estate Market Development Survey." He categorized this information into eight districts. The majority of the Sandhills of Nebraska are located in the "North" district. The average 2011 rental rate for pastureland in the "North" district on a per cow-calf unit per month basis was \$34 (<http://bit.ly/zWdQAU>; a cow-calf unit is 1.2-1.3 AUMs).

For comparison, in 1986 the average pasture rental rate for the "North" district was \$10.50 per cow-calf unit per month. A grazing season is about 5.5 months. Using the 2011 grass costs, that calculates to \$184 per pair for the season.

Johnson does not have the numbers compiled yet for 2012, but there is no way that the numbers in 2012 will be less than those reported in 2011.

Supplementation on pasture

There has been very little interest to supplement beef cows during the spring/summer while grazing pastures, other than supplementing cows with salt and minerals/vitamins. Rightfully so, because the nutrient quality of cool- and warm-season pastures, in most cases, is high enough to meet the energy and protein needs of lactating cows. Also, for producers to supplement cows on pasture, they must have the labor and equipment to deliver the supplement, it must be cost-effective, and there must be feeds available that don't have a negative effect on forage digestion.

The thought process of supplementing cows grazing pasture would be to replace (substitute) some of the forage/pasture intake with an economical supplement that doesn't

have a negative effect on forage digestion. If this could be done, stocking rate could be increased on the pasture resource, which would spread pasture costs over more cows, or the available pasture could be "stretched" and used for a longer period of time.

One theory is the rumen has a certain capacity, and, once filled, cattle will stop eating. So, part of the rumen would be filled with supplement and the other part with pasture. In addition, this management strategy cannot have a detrimental effect on pasture longevity and sustainability.

Substituting feed

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 effect on the diet. The rumen microbes that digest the harvested forage also digest the grazed forage.

The key in the use of harvested forages in a grazing situation is to get the cattle to consume the harvested forage. Likely, in a "free choice" situation, where cattle have access to both harvested forage and pasture, they will choose the pasture. Common sense says not until the pasture was limiting would cows begin eating the harvested forage.

This may have a detrimental effect on the health and longevity of the pasture if stocking rate were increased, assuming harvested forage would replace pasture from the start. If there was daily access to a loafing area that the cattle could be gathered and fed the harvested forage, then consumption of the harvested forage 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 are cheap, and corn sure isn't cheap now — as a supplement in a grazing

situation. Most 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. The consequence of this is a decrease in forage digestibility.

Previously, we have discussed in this column grain byproducts from the ethanol industry. Data suggests byproducts included in forage diet invoke no known negative associative effect on the forage portion of the diet. Researchers at Nebraska have and continue to investigate substituting distillers' grains for forage. The price of distillers' grains is less in the summer compared to other times of the year.

A five-year study evaluated performance of steer calves grazing smooth brome grass pastures and were supplemented daily with distillers' dried grains with solubles (DDGS) at 0.6% of BW for an average of 158 days. For each 1 lb. of DDGS supplement, it replaced approximately 1 lb. of forage intake (<http://bit.ly/A0zs6f>).

In another study, cow-calf pairs grazing smooth brome grass pasture were not supplemented or supplemented a 35:65 Synergy:straw mixture. Synergy is a byproduct that is 60% modified distillers' grains and 40% wet corn gluten. Grazed forage intake was replaced about 50% with supplementation with no differences in cow performance (<http://bit.ly/y34meo>).

Drylotting beef cows

Drylotting beef cows is not a new concept for beef producers. The advantages can include:

- It requires less investment in land.
- It is an option if pastures for grazing are not available or are very expensive.
- Small cow-calf operators can increase their cow numbers without buying additional land.
- Diets can more closely meet the cow's nutrient needs as they change throughout the production cycle.
- Drought is not a concern.
- It's easier to gather and treat animals that are ill or injured, and easier to implement an artificial insemination program.
- Calves are accustomed to eating out of a bunk, so at weaning they are already "bunk broke."

Some disadvantages are more labor and equipment are needed; cows are under closer supervision; herd health program needs to be well-designed and implemented; and, if cows are naturally mated in a drylot, calves need access to a place that they can get away from the riding activity.

There are many ways to go about designing diets for pairs in a drylot. With the price of feeds today, “cheap” feeds are a challenge to find. These diets, to be economical, will likely need to include baled crop residues and grain byproducts. We have designed diets for cows in a drylot using crop residues and grain byproducts and the cattle

have maintained or gained body weight. When using grain byproducts, the cows could be limit-fed and still have their nutrient requirements met. For more information, download the PDF at <http://bit.ly/A6chYR> or visit the website <http://beef.unl.edu/web/beef/Limit200903>.

Final thoughts

Pairs on grass in the summer is my vision of managing cows. Finding pasture for cows this spring/summer might be a challenge. Supplementing lactating cows on grass or a combination of grazing and drylotting may be management alternatives. These

management considerations are more difficult to use in extensive range areas.



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Editor's Note: “Ridin’ Herd” is a monthly column written by Rick Rasby, professor of animal science at the University of Nebraska. The column focuses on beef nutrition and its effects on performance and profitability.