



Ridin' Herd

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

Costs continue to rise

This past winter has been tough on a lot of cow-calf producers. Some say we finally had a winter like we used to have. The moisture was nice, but conditions got rough when a number of folks were calving.

Higher breakevens expected

Feed costs this year will be higher than in previous years because the drought of 2006 reduced harvested forage supplies, which resulted in higher costs for purchased forages. Also, cornstalks and stockpiled winter range were less available this winter due to ice and snow cover in many areas where beef cows reside. These feed resources help reduce feed costs in the cow-calf enterprise during the winter.

Breakeven prices will be higher this year due to higher feed costs and fewer pounds of calf weaned per cow exposed to produce the calf crop that will be weaned this fall. The greater calf losses were a result of the winter conditions during calving. I don't anticipate weaning weights to be much different than in years past. Remember, the denominator in the calculation of breakeven price is pounds of calf weaned per cow exposed. What is concerning to me is the continual increase in pasture costs.

Pasture costs

Each year, Bruce Johnson conducts a survey of Nebraska farmers, ranchers and landowners. The survey is titled the "Nebraska Farm Real Estate Market Development Survey." Results are printed in the *Husker Economics* publication and usually come out in late March. Visit the University of Nebraska Agriculture Economics web site at www.agecon.unl.edu to view survey results. Once you get there, click on "Husker Economics."

Bruce categorizes his information into eight districts. I chose the North district because that is where the majority of the Sandhills of Nebraska are located. The average rental rate for pastureland in the North district on an AUM (animal unit month) basis reported for 2006 was \$29.60 (see Fig. 1). That was a 3.1% increase compared to 2005.

If you were to compare it to 1986, the cost was \$11.30 per AUM. That's an increase of

162%. In the Nebraska Sandhills area, a typical grazing season is 5.5 months, but for easy figuring, I'll use six months. Six months of grazing in 1986 at \$11.30 per AUM would calculate to \$67.80 for a 1,000-pound (lb.) cow. To estimate for a 1,200-lb. cow, multiply by 1.2, so summer grazing costs for a 1,200-lb. cow would be \$81.36.

Using the 2006 numbers, summer grazing costs totaled \$213.12 per 1,200-lb. cow for producers in 2006 who rented grass.

Summer vs. winter feed costs

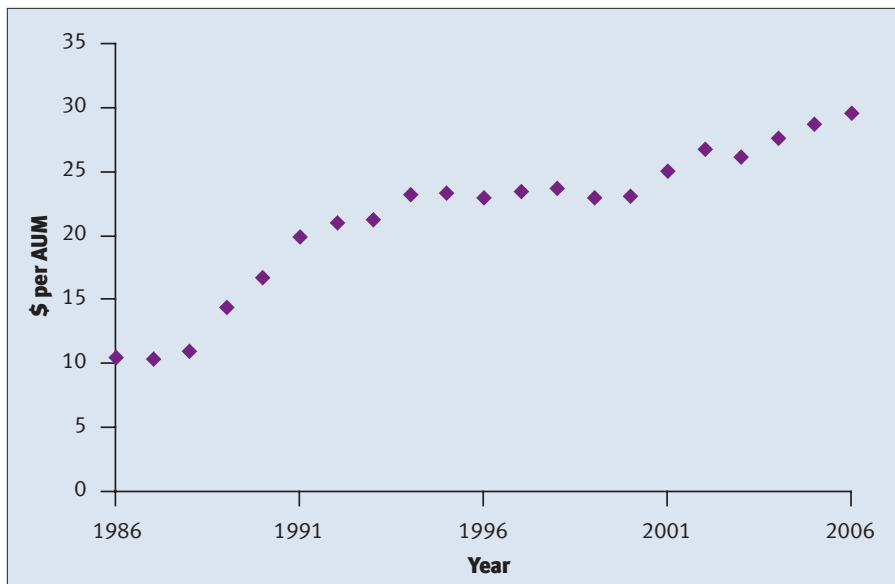
If I use the six-month grazing cost calculated in the above paragraph, and if I calculate mineral costs at 4¢ per head per day, total feed costs calculate to \$220.32 (\$7.20 for salt and mineral) per cow for the grazing season. If the cows are charged \$6.00 per head to deliver the salt and mineral, that calculates to \$226.32 per 1,200-lb. cow, or \$1.24 per head per day (using 183 days of grazing).

If the producer has access to cornstalk residue as part of the winter feeding program, winter feed costs might figure somewhat like the following for a producer in Nebraska:

- cornstalk grazing for 106 days at 25¢ per cow per day for a cost of \$26.50 per cow;
- 77 days of hay and alfalfa in combination at \$75 per ton (\$70 per ton for grass hay and \$80 per ton for alfalfa) and 2,425 lb. per 1,200-lb. cow (the 2,425 lb. per cow includes a 5% feeding loss), calculating to \$90.94 per cow;
- energy supplement (cost 8¢ per lb.) for 40 days fed at 3 lb. per head per day for a total cost of \$9.60 per cow;
- salt and mineral at 4¢ per cow per day (183 days) for a total cost of \$7.32 per cow; and
- delivery cost of the ration at \$15 per ton would compute to \$19.16 per cow.

The total winter feed cost calculates to \$153.52 per cow, or 84¢ per day per 1,200-lb. cow (using a 183-day winter period). I assumed no transportation costs for the cows going to pasture or for cows grazing

Fig. 1: Northern Nebraska cash rental rates for pasture (\$ per AUM, 1986-2006)



Source: Bruce Johnson, University of Nebraska, *Husker Economics*.

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cornstalks. You can use your local feed and pasture costs and do the calculations.

Programs that substitute feed for 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 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.

One theory is the rumen has a certain capacity and, once filled, cattle will stop eating. So part of the rumen will be filled with a supplemental feed and the other part with forage from the pasture.

In addition, this management strategy shouldn't have a detrimental effect on pasture longevity and sustainability.

Researchers at the University of Nebraska have conducted studies looking at substituting distillers' grains for forage in a grazing situation. Distillers' grains were chosen because they have no negative effect

on forage digestibility. In these trials, animals were supplemented while grazing vegetative grass pastures.

The results indicated performance was either maintained or enhanced in groups supplemented with distillers' grains. For each 1 lb. of distillers' grain fed on a dry-matter (DM) basis, 0.4-0.6 lb. of grass on a DM basis was replaced. Distillers' grains have about twice the energy content of vegetative grass, so, in theory, 1 lb. of distillers' on a DM basis should have replaced 2 lb. of grass on a DM basis.

I guess the cows didn't read the research protocol. What I think happens when using distillers' grains as a substitute for grass is

that both are highly digestible and, once in the rumen, are digested quickly, the nutrients are removed from the feeds and then excreted. The cows then don't experience major difference in rumen fill, so they continue to eat.

Final thought

The reason for the discussion is that summer feed costs in the past were considered the cheapest time to feed a cow, and winter feed costs were always considered the most expensive time period to run a cow. Is that the case now? In addition, the cow-calf industry has experienced some of the most profitable times ever. I don't know what

weaned calf prices will be in the fall; I'm not into the crystal-ball thing. What I do think is that cow-calf producers will need to continue to explore avenues to keep costs — especially feed costs — low and herds productive.



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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.