

# South Dakota Rancher®

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## Supplementing Protein on Low Quality Forages

As the growing season winds down for this year, many ranchers will be extending the grazing season on corn stalks, winter range, and other stockpiled forages. Although extended grazing is a cheap and flexible way to feed cattle in the winter, it typically involves forages that are low in feed quality.

Low quality feeds are ideal to winter mature, spring calving cows on because the nutrient requirements of the cow at this time of year are fairly low and will remain low until the third trimester of gestation (about 75 days before calving).

Maintaining body condition on cows over the winter on low quality feeds however, is a concern. A mature cow needs about 9% crude protein in her diet to sustain adequate intake levels and maintain body condition. Even though forages like corn stalks and winter range can supply appropriate amounts of crude protein in early fall and/or winter, their protein content drops off quickly after all of the “candy” has been picked through.

Supplementing crude protein after two to three weeks will probably be necessary to maintain adequate crude protein in the cow’s diet. Supplementation levels should start out at about a half pound per day and increase over time to keep pace with declining forage quality.

Supplemental protein can come from a lot of different sources but cost of the product and delivery will likely play a large role in determining the appropriate source of protein in individual situations. Comparing the cost of raw product of a protein source can be a little misleading so

comparing products based on the cost per pound of crude protein will usually give you a better handle on how much bang you are getting for your buck.

In this example, several common sources of supplemental crude protein are compared on a cost per pound of crude protein basis.

Product	%CP	\$/T	\$/ lb. CP
Alfalfa (Cost)	18%	\$50	\$0.14
Alfalfa (Market)	18%	\$150	\$0.42
Distillers Grains	28%	\$142	\$0.25
Soybean Meal	50%	\$290	\$0.29
Cottonseed Meal	41%	\$250	\$0.31
Protein Cake	20%	\$225	\$0.56
Protein Lick Tubs	20%	\$592	\$1.48

From this example two lots of alfalfa are compared. One lot at a cost value, or the cost of producing it yourself and one at market value; if you had to go and buy it on the open market. Homegrown alfalfa is a cheap source of supplemental crude protein, however, handling and delivery may be restrictive for some.

Although distillers grains and the two meals come with substantial sticker shock on a ton basis, they are actually pretty cost effective on a cost per pound of crude protein basis.

Cake is probably the most common source

of protein supplementation, especially on winter range, primarily for its convenience of delivery. However, this convenience does come at a cost compared to other protein sources. Protein lick tubs also are valued based on convenience, so make sure the delivery method savings justify the cost of the product.

Extended grazing is a cheap way to winter cows, but keep it cheap by selecting the protein supplements that are right for you.

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