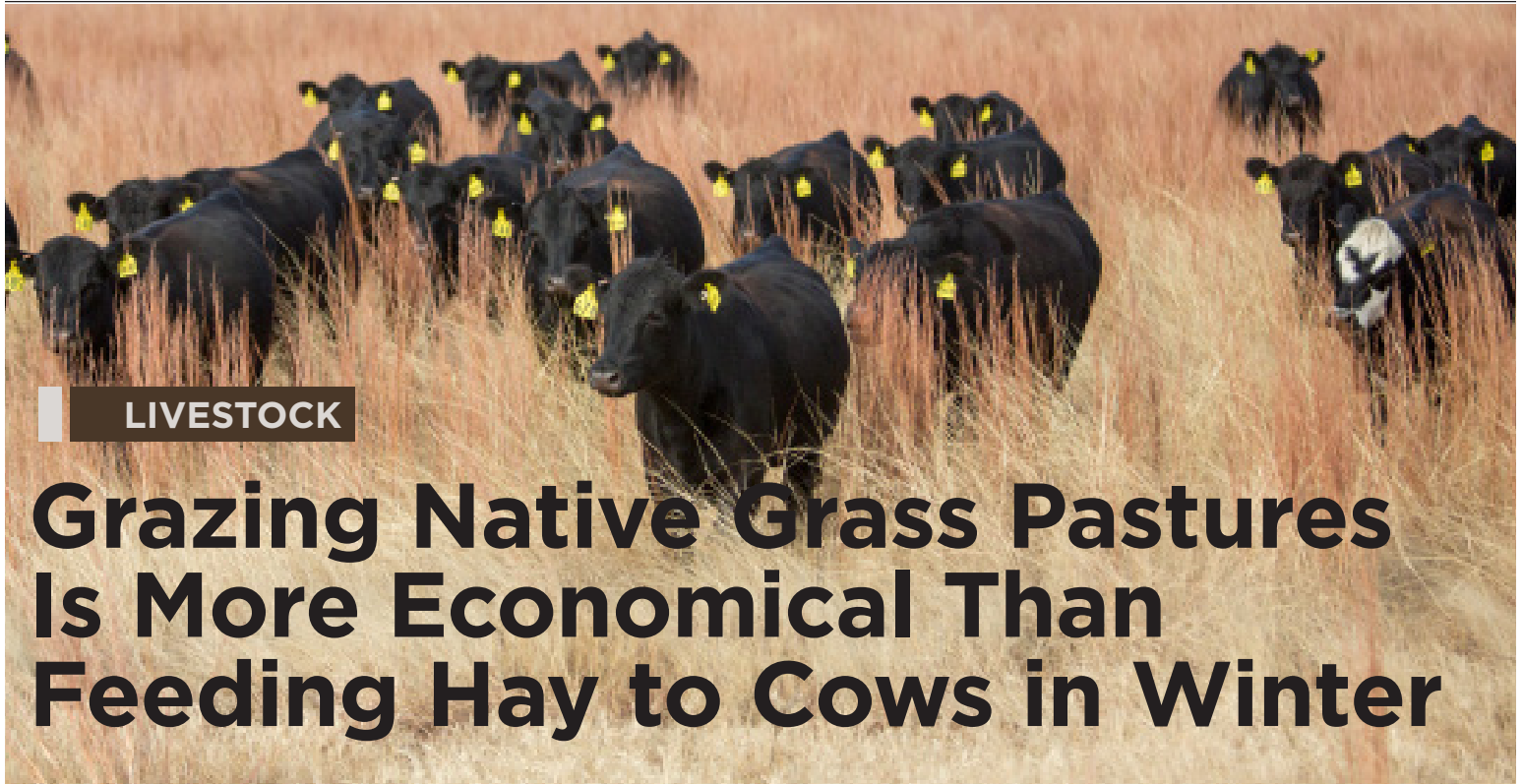


NOBLE NEWS & VIEWS



LIVESTOCK

Grazing Native Grass Pastures Is More Economical Than Feeding Hay to Cows in Winter

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It is typically reported that cow winter supplementation accounts for 40 to 60% of the total annual cost of maintaining a cow, but that cost depends greatly on

whether hay is being supplemented in lieu of dormant standing forage for the cow. When you can supply standing forage in the form of native grass pasture instead of a bale of hay, the total winter feed cost will be dramatically reduced.

WINTER HAY SUBSTITUTION COMES AT A COST

For many producers, it is not uncommon to incur four or five months of hay feeding during the winter. When fed average-quality forage, a 1,200-pound cow will consume about 2.5% of her body weight daily. That equates to 900 pounds of forage monthly, roughly equivalent to the weight of the average bale of hay. This does not include hay wasted in storage or

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TABLE 1. TOTAL COST AND TOTAL AMOUNTS OF FEED REQUIRED TO MEET COW NUTRITIONAL REQUIREMENT BY MONTH

SCENARIO 1

Native Grass and 14% Byproduct (\$210/ton)

Month	lbs/day	\$/day	\$/month
Nov.	1.3	.14	4.10
Dec.	1.9	.20	6.18
Jan.	6.2	.65	20.18
Feb.	7.7	.81	22.64
March	10	1.05	32.55
Total feed cost, \$/head			\$85.65
Total cost, \$/head			\$85.65
Total feed, lbs/head			817

SCENARIO 2

Native Grass and 20% Cubes (\$250/ton)

Month	lbs/day	\$/day	\$/month
Nov.	.9	.11	3.38
Dec.	1.3	.16	5.04
Jan.	4.5	.56	17.44
Feb.	5.5	.69	19.25
March	7.2	.90	27.90
Total feed cost, \$/head			\$73.00
Total cost, \$/head			\$73.00
Total feed, lbs/head			585

SCENARIO 3

Native Grass and 38% Cubes (\$350/ton)

Month	lbs/day	\$/day	\$/month
Nov.	.5	.09	2.63
Dec.	.7	.12	3.80
Jan.	2.4	.42	13.02
Feb.	3.6	.63	17.64
March	5.7	1.00	30.92
Total feed cost, \$/head			\$68.01
Total cost, \$/head			\$68.01
Total feed, lbs/head			389

SCENARIO 4

Hay and 20% Cubes (\$250/ton)

Month	lbs/day	\$/day	\$/month
Nov.	.9	.11	3.38
Dec.	1.1	.14	4.26
Jan.	1.7	.21	6.59
Feb.	3	.38	10.50
March	5	.63	19.38
Total feed cost, \$/head			\$44.10
Total cost, \$/head			\$224-269
Total feed, lbs/head			354



during feeding. Thus, four to five bales of hay could be required per cow for the winter feeding period.

At a typical cost of \$45 per bale, the cost of winter hay substitution alone accounts for \$180 (for four months) to \$225 (for five months) per cow. Add to this the cost of additional feed supplementation, if the hay is not high enough quality to meet the cow's nutritional requirements. If using average quality hay [8% crude protein (CP) and 50% total digestible nutrients (TDN)], feeding 20% protein range cubes (\$250 per ton) as a supplement would add \$46 to the per-cow feed costs. The total winter feeding cost if using hay, therefore, would likely range between \$224 and \$269 per cow (Table 1).

However, there are other options of maintaining a cow through the winter that are more cost-effective. Using native grass (NG) as a stockpiled, standing hay crop is one of the most cost-effective methods of overwintering the cow herd.

COMPARING WINTER SUPPLEMENTATION PROGRAMS FOR SPRING-CALVING COWS

Using a few basic assumptions for the quality of the native grass pasture, we can start to build a winter supplementation program for spring-calving cows. The first assumption is that mid-March will be the average calving date for the herd. The second assumption is

the forage quantity is not limited, but quality will diminish from 5 to 4% CP and 55 to 49% TDN during the winter.

Table 1 demonstrates that all supplemental feed costs while grazing winter-dormant native grass pastures are well below the \$224 to \$269 total cost of feeding hay plus supplementation. Additionally, feeding scenarios 1 through 3 demonstrate that the most economical feed on a cost-per-ton basis is not always the right feed to purchase. In this case, scenario 3 has the highest cost per ton of feed but will deliver the most economical annual winter feeding cost on a per-head basis.

Knowing when the average of the cow herd will calve can help you determine the supplementation strategy that best fits your operation. Thus a well-defined, concise calving season helps to improve profitability by reducing winter feeding costs.

Remember, cows don't necessarily care about quality (percentage of CP or TDN) of the feed as much as they do the total physical amount of feed that they receive. Nutritional requirements can be met with lower amounts of more nutrient-dense feeds. Many times, the cow is most limited by energy, so it is also important to know the TDN content of the feed. This is a question that will have to be asked since the feed tag does not give enough information to effectively determine energy content. 🐮

WE WILL COMPARE FOUR DIFFERENT FEEDING SCENARIOS:

1

Native grass and by-product feed (\$210 per ton, 14.4% CP, 74.4% TDN)

2

Native grass and 20% range cubes (\$250 per ton, 20% CP, 74% TDN)

3

Native grass and 38% range cubes (\$350 per ton, 38% CP, 70% TDN)

4

Hay feeding plus supplementation (hay quality 8% CP, 50% TDN, supplement with 20% range cubes).