Thanksgiving Choices: Weighing the Options for Winter Feeding

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Do you ever have that feeling when you have your family Thanksgiving get together that there are just too many options? You can't pick just one side dish – you want to sample them all. The same idea applies when we are thinking about winter supplementation systems in our cattle operations. We have a lot of different options in terms of providing supplemental nutrients to our herds during this time of year, and we can try a combination of approaches to reduce our winter feed bill.

Option # 1) The Mashed Potatoes – Hay and Supplement

The mashed potatoes -- they are the staple side dish for most Thanksgiving dinners. A recent survey at a series of extension meetings in Alabama has indicated that most cattlemen feed hay around 90 to 150 days per year, making it a staple practice in most operations. Growing, harvesting, and feeding hay is expensive, and in order to make the most of this option, we must consider ways to use hay as efficiently as possible. The new *Forage Livestock Quotes and Concepts book* states that some people pay for a hay barn that they never built. That is because dry matter and nutrient losses are significant when forage is stored outside. Decreasing storage loss makes feeding hay more efficient from the start. Secondly, know the quality of what you are feeding. A forage test will provide the needed information to develop a supplementation plan for the winter. By knowing the amount of total digestible nutrients (TDN) and crude protein (CP) in your hay, we can accurately determine if hay alone will meet the nutrient requirements of your cow herd. You might be surprised and not need to purchase a supplement at all!

Table 1 illustrates how quality of hay determines the need for supplementation. If additional supplementation is needed, consider the cost per pound of nutrients when purchasing feed. In addition, reducing waste is critical when feeding hay – use a ring, cradle, or trailer to decrease losses.

Table 1. Matching animal nutrient requirements with hay quality.

			4-wk Coastal bermudagrass hay† (62% TDN, 10% CP)	8-wk Coastal bermudagrass hay (54% TDN, 8% CP)	
Stage of Production	TDN Required (% in diet needed per day)	CP Required (% in diet needed per day)	Supplement Needed?		
Dry Pregnant	48	7	No	No	
Peak Lactation (0 to 90 days after calving)	60	12	Yes	Yes	

Late Lactation	55	9	No	Yes

Option # 2) The Mashed Potatoes and Gravy: Cool-season annuals and hay + supplement

Cool-season annual forages can be used to extend the grazing season and reduce the number of days needed to provide hay and supplement. Studies in southeastern Alabama have shown that overseeding bermudagrass with cool-season annuals can provide an additional two to three months of grazing per year (Hoveland, 1986). Also, in fall-calving systems, cool-season annuals become available at the time when a growing calf (with high nutrient requirements) is learning to graze and can begin to use this high quality forage. By planting cool-season annuals, the need to use stored feeds can be reduced. In Table 2, although establishing winter annuals is an investment, the use of this high quality forage to reduce the number of hay feeding days decreased the overall cost to winter a brood cow by \$40 per head compared to feeding hay and supplement all winter. They add a little something extra to the mix, just like the gravy on the potatoes.

Option # 3) The Turkey and Dressing: Stockpiled forage and cool-season annuals, with minimal hay and supplement

In many ways, forages are the "turkey and dressing" of any beef nutrition program, and we want to use them the most we can. Certainly weather and other factors may require the use of some stored feeds, but there are many forage management strategies that allow us to extend the grazing season well into the fall forage gap. Stockpiling, or the practice of allowing forage to accumulate for later use, is one way to "save" some forage for early winter feeding. The use of stockpiled bermudagrass followed by grazing of cool-season annuals can significantly reduce winter feed inputs. Table 2 shows us that stockpiling an improved hybrid bermudagrass, such as Tifton 85, can reduce the need to feed as much hay during the winter months. A recent study in Headland, AL showed that fall-calving cows maintain good body condition and production when wintered on stockpiled Tifton 85 bermudagrass. With this in mind, the difference between the Mashed Potatoes and the Turkey and Dressing is around \$158 per brood cow per year in savings.

Table 2 shows the estimated costs to carry a brood cow through the winter using hay and supplement in a fall-calving system (Oct. 1 to Dec. 31). This uses an estimate of 25 pounds of hay per day, plus some additional supplement, for a 1,100 lb brood cow. This budget uses conservative input estimates and average production costs should be estimated more closely for your operation.

Table 2. Advantage/Disadvantage of Using Stockpiled and Winter Annual Grazing to Replace Hay

and Supplement in a Fall Calving System (Oct. 1 - Dec. 31).

and Supplement in a rain Salving System (Sec. 1 Sec. 51).							
	The Mashed Potatoes‡	Mashed Potatoes and Gravy*	Turkey and Dressing	Difference	Difference Mashed Potatoes vs. Turkey and Dressing		
	135 days Hay & Supplement	Winter Annuals, Hay, and Supplement	Stockpiled Grazing, Winter Annuals, and Minimal Hay	Mashed Potatoes vs. Adding Gravy			
	Dollars per brood cow						
Stockpiled grazing†	\$0	\$0	\$40	\$0	\$40		
Winter annuals	\$0	\$125	\$125	\$125	\$125		
Hay	\$245	\$151	\$32	\$94	\$213		
Supplement‡	\$110	\$39	\$0	\$71	\$110		
Mineral	\$30	\$30	\$30	\$0	\$0		
Dollars per brood cow per year	\$385	\$345	\$227	\$40	\$158		

[†]Assumes use of Tifton 85 bermudagrass (Holland et al., 2014); 1 acre per cow

As you know everyone's winter feeding program, like their Thanksgiving plate, looks a little difference based on their choices. Regarding your choices for a winter feeding program, it is important to consider each input cost carefully in order to make the most profitable decisions. What winter feeding choices will you make this winter?

[‡]Uses soybean hulls at 8 lbs/hd/d peak lactation, and 5 lb/hd/d late lactation

^{*}Uses soybean hulls at 8 lbs/hd/d peak lactation (60 days) and then winter grazing (0.5 acres per cow) as a supplement thereafter

^{***}This article is the third in a series on Management Systems for Changing Seasons. For more information, visit www.alabamabeefsystems.com. For regional beef cattle updates, check out www.secattleadvisor.com.