



Pasture Gazette

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Editor's Corner

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We're still in the drought...

Most of us are still in the same drought situation that Texas has experienced during

most of 2005. Hay is in short supply, and when you can find it, the price is appropriately priced...HIGH! There is little to no standing forage and little to no winter pasture that has survived the climatic conditions observed thus far. Therefore, with some much appreciated prodding from Lee County CEA Billy Gillum, this issue of the *Pasture Gazette* is devoted to providing some options to hay feeding, although some of the strategies may sound extreme. These options may provide some relief to the challenges of feeding our livestock this winter.

Hay, if it can be found, is still the most risk-free winter feeding strategy. This is why a barn-full should always be kept tucked away as a tactical solution to climatic problems such as drought or ice/snow cover days. Using stockpiled forages developed during late summer and early autumn and winter pasture for late winter/spring grazing can reduce the need for hay and save significant amounts of money on winter feeding programs. Then you run into a year like this one and you have no choice but to go to the barn. Or try something more daring. Whatever the case, we wish you luck!

And to each and everyone, I want to wish a very Merry Christmas and the most prosperous of New Years. I especially hope for a wetter year next year...we need it!

Short of Hay?

Jason Cleere, Ph.D. and Jason Banta, Ph.D., Extension Beef Cattle Specialists
College Station and Overton

The winter of 2005-2006 is shaping up to be very challenging for Texas cow-calf producers. Limited rainfall this summer resulted in very limited amounts of hay for feeding this winter and poor pasture conditions. Producers planted winter pastures with the hope of winter grazing, but the moisture continued to be limited this fall. With the holidays upon us, it will

be at least three months before spring arrives with the hope of good rains and spring green-up.

Most producers are currently faced with the question of how to survive this winter

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on the limited amount of hay that is available. A couple of options may be corn and/or alfalfa. A pound of corn (whole or cracked) can replace approximately 2.25 lbs of average quality bermudagrass hay. This may be an economical substitution for hay when supplies are short and prices are high. Dr. Jason Banta, Beef Cattle Specialist, Overton, Texas, developed several diets using corn and/or alfalfa to help stretch forage supplies (Table 1). It is recommended to maintain at least 50% of the ration as hay or a similar roughage source. This level should greatly reduce the risk of feeding high starch feeds and also provide adequate fill to reduce management problems due to hungry cattle. It is also important to gradually increase the amount of corn in the ration in order to prevent potential digestive problems.

"Be sure to evaluate the body condition of the cattle on a regular basis during the feeding period."

These examples do not guarantee performance of cattle. Actual performance may be higher or lower depending on the given situation and diets should be adjusted according to actual performance. Be sure to evaluate the body condition of

the cattle on a regular basis during the feeding period. The costs associated with each diet should be carefully considered prior to making a management decision. These expenses include feed ingredient costs as well as any additional labor or equipment costs. These examples only represent a small fraction of the options available to producers; all options should be considered before deciding on the best strategy for a particular operation.



Figure 1. Example Diets

Ingredients:

Average Quality Bermuda Hay: 10% CP; 50% TDN

Alfalfa Hay: 13% CP; 56% TDN

Cracked Corn: 9.8% CP; 90% TDN

Cottonseed Meal: 46.1% CP; 75% TDN

Cow description:

1200 lb cow, BCS 5

Late Gestation Examples	
Maintenance	bermudagrass hay: 15 lbs cracked corn: 5 lbs cottonseed meal: 0.25 lbs
Maintenance	alfalfa: 15 lbs cracked corn: 3 lbs
100 days to gain 1 BCS	alfalfa: 26 lbs
100 days to gain 1 BCS	alfalfa: 16 lbs cracked corn: 5.5 lbs
Peak Lactation Examples (2 months post-calving)	
93 d to lose 1 BCS	bermudagrass hay: 16 lbs cracked corn: 5.5 lbs cottonseed meal: 1 lbs
143 days to lose 1 BCS	alfalfa: 28.5 lbs
200 d to lose 1 BCS	alfalfa: 20 lbs cracked corn: 5 lbs

Late Season Establishment of Cool-Season Annual Forages

Larry Redmon, Professor and State Forage Specialist, College Station

The year 2005 has been extremely dry for much of the state. Not only is there little stockpiled (standing) forage for fall and early winter grazing, there is a shortage of hay and the prices are appropriately higher. Due to the shortage of forage, some producers have inquired about how late they may plant a winter annual and still produce some usable forage for late winter/early spring grazing. Small grains, other than spring-planted oats should probably not be considered this late in the season. Ryegrass, however, could be an option, although the caveat remains: **THIS IS EXTREMELY LATE TO ESTABLISH RYEGRASS OR ANY OTHER WINTER FORAGE!** Bear in mind that during this time of year, reduced sunlight and temperatures will decrease the amount of forage that can be produced by spring compared to a typical early/mid autumn planting schedule.

With this caveat in mind and being aware of the risk associated with late plantings, annual ryegrass may provide an alternative to hay, plant by-products, or concentrate supplements. Ryegrass seed is relatively inexpensive compared to the seed costs of small grains. Under ideal conditions (mild winter, adequate moisture), late planted ryegrass if planted at 30 lbs. of seed/A and fertilized with 100 lbs. of N fertilizer per acre could yield 2,500 lbs. of dry matter (DM) per acre. If a 75% utilization of the ryegrass is used in the calculations, the cost per pound of forage produced would be as follows:

30 lbs. ryegrass seed @ \$0.50/lb. =	\$15/A
100 lbs. N fertilizer @ \$0.40/lb. =	\$40/A
Light disking @ \$10/A	\$10/A
TOTAL COSTS	\$65/A

$$2,500 \text{ lbs. DM} \times 75\% \text{ utilization} = 1,875 \text{ lbs. DM/A}$$

$$\$65 \text{ cost/A} \div 1,875 \text{ lbs DM/A} = \$0.035 \text{ per lb. of forage DM}$$

If purchased hay is costing \$50-55/bale (assume a 1,000-lb. bale), then the cost per pound of hay DM would be:

$$1,000\text{-lb round bale} \times 80\% \text{ (20\% lost to waste)} = 800 \text{ lbs. DM}$$

$$\$ 50 \div 800\text{-lb. round bale} = \$0.06 \text{ per lb. of forage.}$$

Thus, again, under ideal circumstances, late planted ryegrass could offer some economic relief cattle producers from March through late April into early May. If you attempt to establish ryegrass, it is suggested that you lightly disk the field prior to broadcasting the seed.

Also note, if your soil pH is less than 5.5, there will be limited ryegrass production.

As an alternative to ryegrass, one of the forage legumes might be

considered. Again, **THIS IS DEFINITELY NOT THE APPROPRIATE TIME TO PLANT**, but given good growing conditions, legumes might be expected to provide somewhat less DM production than ryegrass, but at a reduced cost since no N fertilizer is

required. Soil pH, P, and K must be adequate to ensure a maximum amount of DM production under the extreme circumstances. Using 'Armadillo' burr medic as example, the numbers might be as follows:



“This is extremely late to establish ryegrass or any other winter forage

10 lbs. burr medic seed @ \$2.50/lb.
= \$ 25/A

Light disking @ \$10/acre = \$10/A

Broadcast application @ \$7.50/A =
\$ 7.50/A

TOTAL COSTS \$ 42.50/A

1,500 lbs. DM x 75% utilization =
1,125 lbs. DM/A

\$42.50 cost/A ÷ 1,125 lbs. DM/A =
\$0.04 per lb. of forage DM

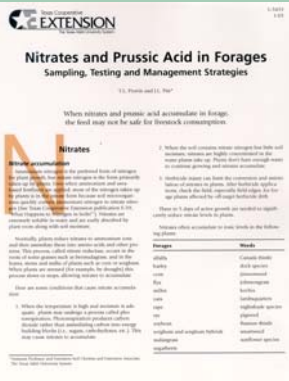
Again, spring-planted oat that is drilled
into a short sod could provide good grazing

during the spring months, thus reducing
the amount of hay required to get the
livestock through the winter and to spring
green-up of the warm-season perennial
grasses.

Please note again that attempting to
establish cool-season annual forages this
time of year is a risky procedure and one
that is not typically recommended by
professionals. Given the lack of moisture
this year and the subsequent lack of warm-
season grass production and lack of winter
pasture development thus far, some
producers may wish to attempt a late-
season establishment of cool-season
annual forages to provide the necessary
forage for their livestock.



Remarks



Due to the extremely dry growing conditions in Texas this year, producers should be aware of the potential for nitrate accumulation to the point of being toxic in plants belonging to the genus Sorghum (grain sorghum, forage sorghum, sorghum-sudan hybrids, johnsongrass) and other warm-season annual forages such as the millets. A quick and simple test kit is available to producers to test their forage prior to baling and additional information

is available from the publication "Nitrate and Prussic Acid in Forages, L-5433. This publication may be found at <http://forages.tamu.edu>, click on the button marked "Publications" and then click on "Nitrate and Prussic Acid".