



BEEF CATTLE TIME

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Feed Troughs Will Be Needed to “Stretch Hay”

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Feed troughs will be needed for cow-calf producers who are planning to “stretch” their hay supply this winter with corn or concentrate feeding. However, most Tennessee cow-calf producers do not have adequate “trough space” to get the job done.

When serving as a “hay stretcher,” corn or other concentrate feeds will need to be “limit fed.” This requires trough space for all the animals to eat at the same time.

Table 1 presents trough space requirements for various classes of cattle when limit-fed. Mature beef cows will require troughs 24-30 inches of length and 18-30 inches in width.

Producers should apply the measurements in Table 1 to determine their trough needs. For example, with a 27-cow herd, seven troughs 10 feet long and 30 inches wide would be needed to provide feed for the cows.

Following are some management suggestions for limit-feeding cattle with troughs.

- Group the cattle according to size and age. By dividing into groups, each can be fed a ration that meets its requirements. It will also overcome the larger cattle dominating at the feed troughs and preventing the

- younger and weaker animals from obtaining feed.
- Start by feeding hay in the troughs, which would introduce the cattle to the troughs. This will be a new experience for cows in most herds.
- Once the cattle have adjusted to coming to the troughs, the grain or concentrate can be gradually introduced by spreading on top of the hay and the hay reduced to 0.5 to 1.0 percent of the cattle’s body weight. For a 1,000 lb.-mature cow, this would be 5 to 10 lb. of hay per day, depending on the volume of hay desired to be “stretched.”
- Generally, the “rule of thumb” in replacing hay with corn is 1.0 lb. of corn equals 2.0 lb. of hay. Do not completely eliminate the hay. Cows will need a minimum of 5.0 lb. of hay per day. Cows being fed 5.0 lb. of hay per day would need 10.0 lb. of corn, and those being fed 10 lb. should be fed 7.0 lb. of corn. Other concentrates (either farm-mixed or commercial) can also work well with adjustments for nutrient content.
- To ensure that timid cows receive their feed, consider placing troughs at a distance from each other. Move troughs as needed to minimize mud problems.

Adequate trough space will be needed to “stretch” the winter feed supply, resulting in an efficient and economical feeding program and ensuring performance. Producers should plan ahead to either construct or purchase feed troughs.

Table 1. Trough Space Requirements for Various Classes of Cattle

Classes of Cattle	Length	Width	Feed from Both Sides Width	Height at Throat
Cows	24-30”	18-30”	48”	24”
Yearlings	18-24”	18”	48”	18”
Calves (350-500 lb.)	18”	18”	48”	18”
Bulls	30”	30”	36-40”	30”

Ensminger, 1992. Stockman’s Handbook. Interstate Publisher, Seventh Edition

Evaluate Pastures This Fall

*Gary Bates, Professor, Plant Sciences
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The dry conditions and overgrazing that occurred this past summer has hurt a lot of the tall fescue stands. The primary objective should be to get through the winter with the cattle in good shape. Tall fescue pastures may be thin, but drilling small grains will help increase forage availability. But next spring, after the small grain is dead, the pastures will still be thin. At some point they will have to be improved so that their full yield potential can be realized. Following are steps to get pastures back into shape.

1. **Soil test to determine lime and fertilizer requirements.** To produce large amounts of forage, it is important to provide adequate soil fertility. High fertilizer prices and poor growing conditions may have caused many producers to let fertilizer and lime applications slide over the last year. Be sure to soil test this fall, and fertilize and lime according to soil test results. This is one of the basics for pasture production.
2. **Apply herbicides for weed control.** Research has shown that many broadleaf weeds can be controlled with a winter application of 2,4-D. Thin tall fescue stands will probably have increased weed pressure, due to open spots available for the weeds to germinate. In late November and December, wait for three days of warm weather (60 degrees F) and apply 2,4-D for weed control. This winter application will allow for clover seeding in February.
3. **Determine if tall fescue needs to be reseeded.** Most stands of tall fescue have probably been thinned to the point that more seed needs to be added. But you don't know that for sure. Walk across these fields in October and see how many plants are left. If more than 70 percent of the ground is covered with a tall fescue leaf, no seeding will need to be done. If 50 percent is covered, then plan on adding tall fescue seed to the field next fall. If only 30-40 percent of the ground is covered, then you may need to kill the field and totally replant.
4. **Add clover in mid-February.** If the stands are at least 50 percent, plan on adding red and white clover to the field in February. Seeding rates are two pounds per acre of white, and four pounds per acre of red. The white and red mixture will provide more yield and a longer growing season than either clover alone. These can be broadcasted over the top of the ground.

Spending a little time this fall evaluating the stand and weed pressure in your pastures and hayfields can help evaluate the practices that will need to be applied over the next year. The summer drought may have hurt the hayfields and pastures on your farm, but they can be

brought back into production with a little effort. For additional information on pasture production, contact your local UT Extension agent.

What to Do If an Animal Dies This Winter

*Clyde Lane, Jr., Professor,
Animal Science and Beef Cattle Specialist*

What should I do if an animal dies this winter? What can be done to reduce the possibility of losing an additional animal?

It is important that a veterinarian be consulted to determine the exact cause of death. The diagnosis can be used to develop a strategy to prevent additional losses. The problem is that it will take some time to get a diagnosis. In the interim, additional losses may occur if something in the forage is the problem.

If there is a remote possibility that the cause of death is poisoning, then the animals should be removed from the current source of feed. This past summer, there were fields harvested for hay that contained a variety of toxic plants. In addition, forages harvested from heavily fertilized fields are unable to be effectively used due to the high nitrate levels remaining in the forage. Sudan-sorghums and bermudagrass are examples. High nitrate levels have also been found in corn stalks. Keep animals away from these suspect feeds until a definitive diagnosis is confirmed.

The advantage to this approach is obvious; however, if the animal's death was from another cause, then being on the safe side did not hurt. The whole idea is to minimize the number of deaths that may occur.

Forage Testing – Needed More Than Ever This Year

*Clyde Lane, Jr., Professor,
Animal Science and Beef Cattle Specialist*

Forage testing is needed more than ever this year. That is, if you want to develop an effective and economical winter feeding program for your cow herd.

In a year when forage supplies are very limited, it is essential that forages be tested so the proper amount of supplement can be fed. Many producers have found it necessary to purchase hay from sources where hay has not been previously purchased. With little known about the hay, it is essential that a sample be tested to determine nutrient content.

This winter, most producers are trying to keep the winter feed bill as low as possible. This is where the forage test fits. The analysis can be used to develop the most economical ration. In situations where grains are being substituted for hay, knowing the nutritive content

of the forage can save lots of dollars.

Most Extension agents have or have access to a forage-testing tube. Using a forage-testing tube allows a better sample to be secured. Just pulling a handful of hay out of a bale is not going to be a representative sample. Be sure to submit information about the animals to be fed, so balanced rations along with the chemical analyses can be returned to you. If you think that nitrates may be a problem in the forage, ask for the nitrate test also.

For more information and assistance with forage testing, contact your local UT Extension agent.

Carefully Evaluate Your Beef Cattle Mineral Program

*Clyde Lane, Jr. - Professor,
Animal Science and Beef Cattle Specialist*

Producers should take a close look at the minerals they will be feeding their animals this winter. Minerals are fed to supplement the feeds, thus meeting the nutritional needs of the animals.

This year, producers are using feeds that are different than the ones normally fed. For example, many producers are using byproduct or co-product feeds. Feeds such as distillers feeds and corn gluten have an unusual mineral content. These feeds are usually high in sulfur, which can tie up some of the micro-minerals. In addition, these feeds usually have a high phosphorus and low calcium content. The mineral that has been previously used will not correct this imbalance. A mineral that is higher in calcium and higher in micro-minerals will need to be used. It is advisable to work with your mineral dealer to select the best supplement to match your feeding program.

Impact of Drought and Higher Corn Prices Will Linger

Emmit L. Rawls, Professor, Agricultural Economics

The impact of this year's drought will linger far beyond 2007. Some of that impact will be negative and has already been felt by many Tennessee beef producers. Other impacts will be positive, at least for those still in the beef business.

While we may not like to hear it, we have probably been a bit spoiled as far as rainfall, forage production and management for many years. We have been able to have ample grass, extra hay, enough to waste some with little or no storage or cover. Others have plugged a few gullies with leftover hay that sat at the edge of the field. Many producers have not had to purchase feed or forage. This year we have been faced with extreme drought. In mid-September, the Tennessee Crop

Reporting Service indicated that 86 percent of pastures were in poor to very poor condition. Early hay was short and late hay has been nearly non-existent. Most herds have been culled heavy and several liquidated.

Hay growers have benefited from the situation in many cases. While large round bales have been traded for \$15 per roll in the past, prices for shipped-in round bales have been five times that when the freight is paid. Large square bales are coming, but many are finding them to be a challenge to handle, if not downright dangerous. They do seem to represent the most economical hay package to bring in if one is buying shipped-in hay. Hay extenders sold by feed suppliers and use of commodities can help stretch the available hay.

There will probably be another rush of cows to market near fall frost, as the full realization of the meager hay supply takes place. Depending on the length of this drought, with some predicting it could last longer, keeping foundation breeding stock that can be used to rebuild the herd should be considered. If the cows are just run-of-the-mill, prices generally are stronger after the first of the year. However, don't forget the weight side of the equation. The cows need to hold their weight or add weight, which will probably mean use of some purchased feeds.

Longer term, the lack of nutrition will likely affect calf weights and survivability. It will likely also affect conception rates next spring unless supplemental feeding takes place. Much of the Southeast has been affected by drought conditions in 2006 and 2007. The Southeast has about 25 percent of the nation's cow herd. In 2006, the Southern Plains were impacted by drought, but they had a great grazing season this year. That area has received several shipments of replacement cows and bred heifers from Tennessee this summer. This drought, combined with the one in 2006, will extend the length of this cattle cycle or any significant buildup in cow numbers soon. The next cattle inventory report in January is expected to show a reduction in the cow herd of close to 1 percent, despite excellent grazing conditions in much of the country. With a smaller herd, prices for feeder cattle should remain strong despite higher feed costs. Any expansion of export markets should further boost prices for fed cattle and feeder cattle.

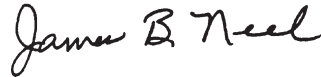
The rise in grain prices last fall was devastating to feeder cattle prices. In mid-September, corn prices are still about \$1.10 above year-ago levels. So, fall prices are not expected to rise sharply and may even decline during the harvest period reaching to about November. Producers should consider buying or at least contracting to buy feed needed during that period, as competition between soybeans and corn will likely heat up. Markets will put forth the effort to get the acres needed to meet anticipated demand for those crops. There has been a spread of 75 cents to \$1 between the price of corn in the Corn Belt versus the Southern Plains.

There is a gradual trend of increasing numbers of cattle on feed in the Corn Belt versus the Southern Plains. There are several feedlots for sale in the Southern Plains and greater feedlot utilization (percent fill) in the Corn Belt.

As a result of higher grain prices, feedlots are demanding heavier feeder cattle versus calves. For example the spread between 400- to 500-pound M-1 steers and 700- to 800-pound steers was \$21 per hundred a year ago, but was only \$14 per hundred in mid-September. This change in the price rollback or buy-sell margin will favor two aspects of production. The stocker/backgrounder will incur less price risk on purchased calves. In addition, the cow-calf operator will have more incentive or less risk from retaining ownership from the calf to the yearling stage of

production. It could also put more pressure on pasture availability, especially leased pasture, as backgrounders bid it away from cow-calf operators.

An ending thought: We have had a very tough year, but prices have held up amazingly well, considering the drought, and corn prices are \$1 higher than last year. Ample grass elsewhere and \$90 + fed cattle have allowed prices to hold up despite extremely large receipts at markets.



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Beef Cattle Time

From:

Leader/Agent

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