

Winter “Feed” for Cattle:

- **Minimum Height Winter Forage Should be Before Grazing:**
- **How Much Hay do I Need This Winter?**

Is Grazing Ready for Cattle?

A hard question to answer is, “...when should I turn my cattle in on my grazing ...?” The cattle in the picture are standing in a sacrifice area beside winter grazing, but, turning out too early may not be a good idea.



One way to help make the decision is to use a ruler to measure the height of your grazing to estimate the available forage. Use the height of the growth to determine when to let the cattle in to eat. Don't hesitate to use sacrifice pastures & feed hay (maybe with some additional supplement) to allow your grazing time to get to where it needs to be.



Here are some good thoughts from former UGA Extension forage specialist, Dr. Dennis Handcock. Deciding when to let the cattle in is really where the “art” of grazing comes in. In general, the earlier one starts grazing, the more damage will be done to the growth potential of the forage. It is a function of the growth curve. In that early stage (lag phase), when growth is slow or just beginning to get going good, grazing can essentially stop growth or slow it to a crawl. It is like a bank account with some principal in it. The more principal one has, the more growth in the account one will get. The growth rate is like compounding interest. Grass grows grass. Take away principal (grass), and the amount of growth will decrease.

So, that’s enough professor talk... Practically speaking, you really shouldn’t start grazing until there is at least 1800-2500 lbs of DM/acre. Some species like oats, may require you to wait a little later, as they can be slow growing if the weather gets cold.

Minimum Height Winter Forage Should be Before Grazing:

- For Rye, that would be about 5-6 inches.
- For Ryegrass, at least 6 inches.
- For Oats, at least 6-8 inches.

The ideal would be to only graze it a little... removing just what it's average growth rate is and maintaining at least 1500-1800 lbs DM/acre. This is why I am a **BIG fan of "responsible" grazing** (I.E. rotational/limit grazing).

Remember... don't be too quick to graze. Grazing too early can cost you more in the long run. Cattle should be removed when 50% of plant height has been removed in order to maintain "enough grass to grow grass". If you start robbing those reserves (when grazing down to 3 inches or less) then you start impacting the growth of that plant.



Example of Over- Grazed Winter Grazing: Grass less than 3 inches.

How Much Hay? Calculating Winter Hay Needs:

I have seen a lot of different ways to calculate winter hay needs. You might guess that I'd say the first step is simple, send a forage sample in to a certified lab to determine the forage quality!

The cost of a forage analysis is minimal and the lab does the math for you!

The quality of the forage will be a big part determining the amount of hay needed during the winter feeding period. The example below shows a good way to determine your hay needs.



A producer has 50 mature brood cows at 1,200 lbs., 2 bulls at 2,000 lbs and 10 weaned replacement heifers at 500 lbs.

If we assume these animals must consume 2.5% of their bodyweight per day (forage analysis calculates a consumption rate based on quality that you substitute for the 2.5%):

Brood Cows will require 1500 lbs./day (= 1200 lbs X 2.5 lbs of DM/100lb of b.w. X 50 brood cows)

Bulls will require 100 lbs./day (= 2000 lbs X 2.5 lbs of DM/100lb of b.w. X 2 Bulls)

Yearling Heifers will require 125 lbs./day (= 500 lbs X 2.5 lbs of DM/100lb of b.w. X 10 Heifers)

So, daily hay required would be 1725 lbs. of dry hay (that is at 0% moisture or on a dry matter basis). The calculation of 1725 lbs. of forage is on a dry matter basis. This means that if we bale the hay or receive hay at 85% Dry Matter (DM), 15 % is

water and we do not account for that during feeding. So, a 1,000 lb. bale at 85% DM, would be 850 lbs. on a dry matter basis.

To continue on the calculation we need to estimate our feeding period. For this example we will say a producer needs to feed 120 days. So, if we multiply this number by our daily requirement we get an estimation of 120 days X 1725 lbs. = 207,000 lbs. of DM. If we assume the producer has 85% DM hay, then the as fed total would be approximately 244,000 lbs.

To account for storage loss and feeding loss (assuming barn stored and fed with a hay ring), we can conservatively add another 15% to the “as fed” total and get a total of 280,600 lbs.

In this situation, for this moderate size herd, we need roughly 280 – 1,000 lb. round rolls of hay.

Now, depending on where the producer’s brood cows are in their calving season during the winter feeding period will determine if further supplementation is needed.

So, you need to be thinking about your current hay inventory and start calculating hay needs for the winter feeding period. Consider whether your winter grazing will be enough or if an additional supplement will be required. A little planning may be far more cost effective than getting caught short of hay.

For more information on winter feeding & forage management, contact Peyton Sapp at the Burke County Extension office (706)554-2119.