

## Estimating Forage Needs for the Beef Herd

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Beef producers need to be sure that they have enough hay to supply the needs of their animals throughout the winter. Before the winter feeding starts every producer should make an estimate of available hay supplies and hay requirements. If feed supplies are short, then additional feed needs to be secured immediately or animals should be culled. To determine if the hay supply matches the projected requirements, the thumb rules presented below can be used.

### **Assess Forage Needs.**

- A. Estimate hay available. It is best to base your estimation on average weights of several bales.
- B. Large-package bales stored outside may have substantial losses during storage and feeding. Adjust your estimate accordingly.
- C. Calculate the number of animal units. Base the number of animal units on the following system:
  - a. Mature cow or bull = 1 unit
  - b. Yearling cattle =  $\frac{1}{2}$  unit
  - c. Calves =  $\frac{1}{4}$  unit
- D. Figure your need to feed for 100-120 days in the winter in Tennessee (use the lower figure if substantial amounts of stockpiled forage are available; use a higher figure if drought or other conditions cause winter feeding to start earlier in the fall).

- E. Figure each animal unit will eat 20 lbs. of hay or 50 lbs. of silage, assuming average to good quality hay or silage.

**Example:** Calculate the estimated hay needs for the following herd: 25 cows, 10 backgrounding steers, 10 replacement heifers, 4 calves and 1 bull. Use the units defined above.

$$25 \text{ cows} \times 1 = 25$$

$$10 \text{ backgrounding steers} \times \frac{1}{2} = 5$$

$$10 \text{ replacement heifers} \times \frac{1}{2} = 5$$

$$4 \text{ calves} \times \frac{1}{4} = 1$$

$$1 \text{ bull} \times 1 = 1$$

$$\text{Total} = 37 \text{ animal units}$$

Multiply animal units x days x amount of forage per day:

Assume that each unit will require 20 lbs of hay and animals will be fed for 120 days. Multiply animal units x days x 20 lbs. In this example the calculations are 37 animal units x 120 days x 20 lbs. of hay/day = 88,800 lbs. Dividing this by 2000 lbs (1 ton) the requirement is 44.4 tons of hay.

If it is apparent that feed supplies will be inadequate, the producer should begin securing additional feed before the cost rises near the end of the feeding season. Culling some animals may be another option.

For additional information on assessing the hay needs for your beef operation, contact the local Extension office.