



# Estimating Winter Hay Needs For Beef Cattle

Prepared by Bill Halfman, Extension Agent, Monroe County  
Adapted from W. Herbert Byrd III, University of Tennessee Agricultural Extension Service

1. Weigh several bales of hay to get an average bale weight:  
( add weights of bales and divide by number of bales)

\_\_\_\_\_ lb

Average Bale Wt: \_\_\_\_\_ lb

2. Count the number of bales available for feed:

X

Number of bales: \_\_\_\_\_

X

Loss Factor\* \_\_\_\_\_

3. Account for Storage and/ or Feeding Loss (see below)

\* Subtract the percentage loss from 1.00 to get the loss factor,  
(i.e. Multiply gross weight by .95 for a 5% loss.)

=

Type of Storage	Percent Loss
Inside on ground.....	5 to 7
Inside on Crushed Stone.....	3 to 5
Outside on ground, Uncovered.....	20 to 35
Outside on ground, Covered.....	15 to 35
Outside on stone, Uncovered.....	13 to 20
Outside on stone, Covered.....	10 to 17
Outside on other base, Covered.....	12 to 20

Total Hay Available: lb

We can normally expect to feed hay for 180 to 210 days for a full winter in Wisconsin.  
Each 100 pounds of body weight equals 0.1 animal unit factors (i.e. 1,100 pound cow factor is 1.1) you can adjust factors for your herd if animals are larger or smaller on average.

4. Animal units to feed:	Class	No. of head	x Days fed	x Factor	=Animal Unit Days
	Bulls	_____	x _____	x 2.00=	_____
	Mature Cows	_____	x _____	x 1.10 =	_____
	Yearling Cattle	_____	x _____	x 0.50 =	_____
	Calves	_____	x _____	x 0.25 =	_____

Total Animal Unit Days:  

5. Daily Hay Allocation/ Animal Unit\*\*

Pounds Hay/ Animal Unit Day:

(\*\* Calculate this from a balanced ration. If a ration is not developed yet, a good estimate for average hay would be 25 to 30 pounds, corn silage would be 50 to 70 pounds. This does not replace the need for determining and using a balanced ration.)

Animal Unit Days

X

Daily Hay Allocation

=

Lbs. Hay Needed

Lbs. Hay Available

-

Lbs Hay Needed

=

Surplus or Shortage