



Dairy Herd Forage Needs Worksheet

Group		(A) Number of Animals	(B) BW, lbs.	(C) Forage DMI,% BW	(D) Daily Forage DMI, lbs./cow (B*C/100)	(E) Days in Period	(F) Total Forage DM, lbs./cow (D*E)	(G) Total Forage DM, Tons/cow (F/2000)	(H) Feeding Loss, %	(I) Adjusted Forage DM/ tons/cow ((100+H)*G)/100	(J) Group Forage DM, tons (A*I)
Milking											
Dry											
Calves	< 2 months										
Heifers	2 – 12 months										
Heifers	>12 months										
Total											

Notes:

- Guidelines for forage dry matter intake as % of body weight
 - o Milking cows = 1.5 – 2.5%
 - o Dry cows = 1.2 – 1.7%
 - o Heifers = 1.0 – 2%
- Feeding loss – This needs to be reported to increase the quantity of forage required due to feeding losses. Values of 5 – 10% are reasonable.
- Calves < 2 months of age are usually fed little or no forage. However, they should be counted as a specific group and the number recorded rather than including them in the group < 12 months of age.
- Sample calculations are on the back of this worksheet.
- **This table does not account for forage storage losses prior to feeding.**

Sample Calculations:

- a. 1,400 lb. dairy cow
 - b. Forage feeding rate is 2% of body weight
 - c. 100 cows in the group
 - d. Planning period is 365 days
 - e. Feeding loss = 5%
-
1. Daily forage dry matter intake/cow = $(1,400 * 2)/100 = 28$ lbs.
 2. Total forage DMI/cow for the total period = $28 * 365 = 10,220$ lbs. forage DM
 3. Total forage DM/ tons/cow for the total period = $10,220/2,000 = 5.11$ tons of forage DM
 4. Tons of forage DM needed adjusted for feeding loss =
 - i. $100 + 5 = 105$
 - ii. $105 * 5.11 = 536.55$
 - iii. $536.55/100 = 5.3655$
 5. Group forage DM needs = $5.3655 * 100 = 536.55$ tons of forage DM for the 365 day planning period

Source:

Dr. L. E. Chase - Department of Animal Science, Cornell University lec7@cornell.edu

John Conway – PRO-DAIRY jfc6@cornell.edu

Paul Cerosaletti – CCE-Delaware County pec6@cornell.edu

David Balbian – CCE- Central New York Dairy and Field Crops Team drb23@cornell.edu