

Hobby Farms® – Table 1

Hay Quality	Percent of Total						
	Acid Detergent Fiber (ADF)	Straight Grass CP	Straight Grass TDN	Grass-Legume Mix CP	Grass-Legume Mix TDN	Straight Legume CP	Straight Legume TDN
¹ Excellent	<30	>11	>64	>16	>64	>21	>64
¹ Very good	31 to 35	8 to 10	60 to 64	13 to 15	60 to 64	18 to 20	62 to 64
¹ Good	36 to 40	7 to 8	57 to 60	12 to 13	59 to 62	16 to 18	60 to 62
¹ OK for maintenance	41 to 42	5 to 7	55 to 57	9 to 12	57 to 59	14 to 16	56 to 60
¹ Poor, should be avoided	43 to 45	4 to 5	54 to 55	7 to 9	54 to 55	12 to 14	54 to 56
¹ Mulch and bedding only	>46	<4	<54	<7	<54	<12	<54
Key: < is less than, > is greater than; CP (crude protein), TDN (total digestible nutrients)							

Read “Get Great Hay” by Carol Ekarius in March/April 2009 *Hobby Farms* for more information.

Hobby Farms® – Table 2

Animal Type	Ideal Type of Hay to Feed	with CP in the range of (as %)	and ADF in the range of (as %)
Dairy Ruminants, Early Lactation	Excellent grass/legume, or excellent straight legume with free choice excellent straight grass for added roughage	17 to 21	<30
Dairy Ruminants, Later Lactation	Excellent to very good hay. If feeding straight legume, supply free choice excellent straight grass for roughage.	15 to 18	30 to 34
Dairy Ruminants, Dry	Good grass/legume during dry period. Add straight legumes or an alternated protein source as pregnancy advances.	11 to 13	35 to 48
Nondairy Ruminants, Lactating	Very good grass/legume in early lactation, good in late lactation.	9 to 11	35 to 38
Nondairy Ruminants, Dry	Good grass hay is the best choice. Add some good grass/legume shortly before breeding season begins. Increase grass/legume portion as pregnancy proceeds.	7 to 10	38 to 42
Nondairy Ruminants, Growing	Good to very good grass/legume.	11 to 15	31 to 34
Mature Horse, Maintenance	Very good grass hay, or an OK grass/legume mix. Some alfalfa cubes or alternate protein source may be added in small quantities, particularly during harsh weather.	8 to 9	34 to 37
Pregnant Mares	Very good to excellent grass hay, with alfalfa cubes or another protein source to supplement protein	10 to 11	30 to 34
Lactating Mares	Very good to excellent grass/legume hay with alfalfa cubes or another protein source to supplement protein.	11 to 13	<30 to 34
Growing Horses	Excellent grass hay or very good grass legume.	10 to 14	<30 to 32
KEY: CP (crude protein), ADF (acid detergent fiber); < is less than, > is greater than			

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Hobby Farms® – Hay Analysis Charts

NOTES:

- 1 Table 1 shows some average values of various classes of hay.
- 1 Table 2 shows some demand values for different production classes of livestock.
- 1 Animals at work (breeding, lactating, growing, hard-ridden horses, etc.) always require more calories and better quality feed (higher CP, lower ADF) than animals that are at maintenance (dry beef cattle or mature pet horses that receive little or no riding, for example). But even animals in similar production stages can have various needs, depending on age and body condition score.
- 1 The CP varies depending not only by type of hay, but also by when it is harvested, and in the case of grass, if it was adequately fertilized. For example, perfectly harvested alfalfa in the late-bud stage of maturity can contain up to 25 percent CP. Grasses, if fertilized properly and harvested in the vegetative stage of maturity, can reach 20 percent CP.
- 1 **Important:** When feeding straight legume hay, absolute care must be taken to balance each ration for calcium to phosphorous ratio. Improper ratios can cause skeletal disorders, urinary calculi and other health problems that can be deadly.