

## Hay Survey...

In 1998, Extension Service teamed up with the Douglas County Farmer's Co-op and completed a hay survey in the county. Forty-four lots of hay were sampled and sent off for analysis. It was a wet (WET) spring and many folks didn't get their hay put up as early as they wanted. Some balage was bagged as high moisture feed, allowing for earlier cut, better quality hay than if left for dryer haying conditions later in the season. What we found is that there is a large variation in hay quality around the county (Table 1 & 2). Also, some producers had expected better quality hay than what was found and were surprised with the results of the hay analysis. For grass hay, 64% of the hay sampled had a protein content less than 9% and a total digestible nutrient (TDN, that is energy) content of less than 56%, and may not meet the needs of the animals being fed. The point of the story is that you can't guess at what your hay test is, and it may be lower than you think. This can affect your level of production. Testing your hay will allow you to know what your hay quality is and give you a choice on how you feed it. For example, if you had two lots of hay, one testing 6% protein and one testing 10% protein, it would give you the opportunity to feed the better hay to young growing animals or lactating cows or ewes and feed the lower quality hay to older animals or cows and ewes in mid-pregnancy when their nutrient requirements are lower. Even if you don't have different hay to feed to different classes of animals, a hay test can help you decide if and what supplements you need to feed to be at a selected rate of gain or pregnancy rate for your animals. To put this into perspective, I have included information on the nutrient requirements of selected animals (Table 3). Note the differences in nutrient requirements for the different classes of livestock. The time and money it takes to sample and test hay can quickly be recovered in improved knowledge for making choices on using hay in your livestock production system. Call me if you would like more information on testing your hay or balancing a ration for your livestock.

**S.J.F.**

Table 1. Average Nutrient content of Grass/Clover Hay from Douglas County, OR (1998)

Component	Low-protein (5 - 8.9%)	Mid-protein (9 - 11.9%)	High-protein (12 - 16%)
Crude Protein (%)	6.9	9.9	12.5
Acid Detergent Fiber (%)	42	39	37
Neutral Detergent Fiber (%)	66	64	57
Total Digestible Nutrients (%) (Energy)	56	58	60
Percentage of Samples	64%	28%	8%

COMPONENT	ALFALFA-GRASS HAY	ALFALFA HAY
CRUDE PROTEIN(%)	17 - 20	16 - 20
ACID DETERGENT FIBER (%)	31 - 38	34 - 43
NEUTRAL DETERGENT FIBER (%)	43 - 50	41 - 53
TOTAL DIGESTIBLE NUTRIENTS (%) (Energy)	59 - 61	56 - 60

Animal	weight (lb)	gain (lb/day)	protein (%)	TDN (energy; %)
Pregnant yearling heifer	830 lb	1.3	8.6	58.8
Dry pregnant mature cow	1100 lb	0.9	7.8	53.1
Lactating yearling heifer	830	.4	10.9	63.8
Lactating cow	1100	0	9.7	56.6
Pregnant ewe lamb	121	0.35	11.8	63
Pregnant Ewe	154	0.4	10.7	59
Ewe with twins	154	-0.13	15.0	65
Ewe with singles	154	-0.06	13.4	65
Medium-frame steer calves	500	1	9.5	58.5
Medium-frame steer calves	500	3	14.4	85.0

Protein (5.5 - 8.7%) and energy (55 -58% TDN) content of 64% of the 1998 grass hay crop in the county survey did not meet the nutrient requirements for most of the animals listed in this table.