EWE NUTRITION AND MANAGEMENT; DO'S AND DON'TS

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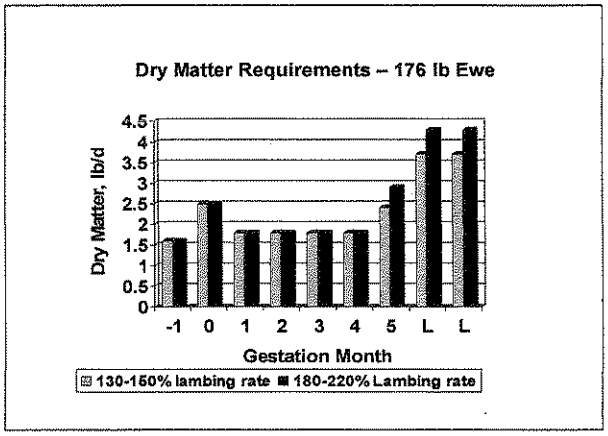
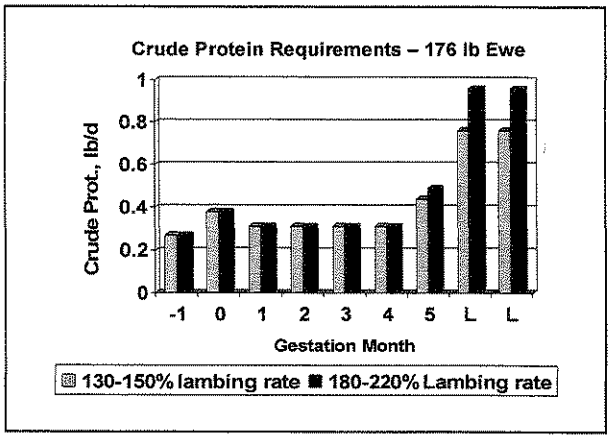
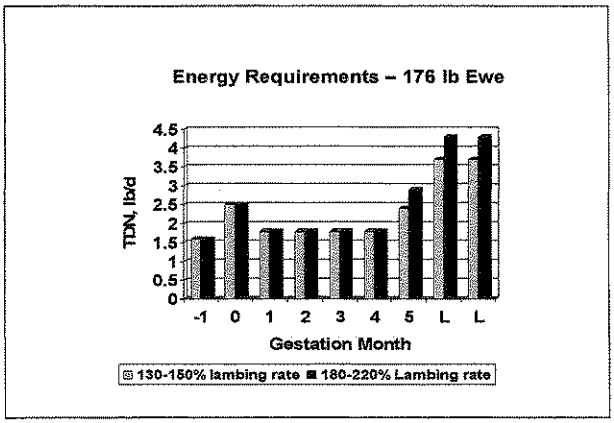
Ewe nutrition and management play critical roles in both the performance and profitability of a sheep enterprise. Incorrect assumptions or errors can negatively impact ewe and lamb performance while overcompensation with supplements can reduce the chance of profitability. The following is offered as recommendations to prevent either occurrence.

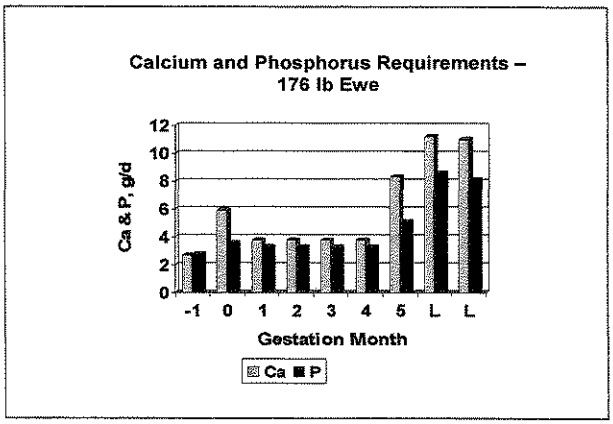
The fundamental issue of ewe nutrition is well documented and it is important to begin with the basics. The following figures document ewe requirements for dry matter, crude protein, TDN and calcium and phosphorus by month of gestation and lactation. It is essential to be aware of the ewe's nutrient requirements as you map out a strategy to meet them. Research and experience have demonstrated that underfeeding is false economy and can lead to reduced lambing rate, low birth weight, poor lamb vigor and reduced milk production. On the other hand, being too quick to supplement can result in fat ewes and thin wallets.

- Do make a proactive strategy of meeting ewe nutrient needs
  - Matching forage resources to ewe needs
  - Group as possible by nutrient need (age, TOB)









Grazed or stored forages are the foundation of any ewe nutrition program. Table 1 provides supplementation recommendations related to the TDN and crude protein content of hay. Spring lambing flocks can take advantage of new pasture growth which is very digestible and high in protein. Generally, this will meet the nutrient needs of ewes nursing singles. Ewes nursing twins will respond to low levels (1-1.5lb/d) of energy supplementation.

- Do forage test stored hay
- Do maximize grazed forages while minimizing hay needs
- Do consider lambing season in view of quality pasture

Table 1. Forage Quality and Supplementation (176 lb ewe)[1]

Forage Analysis									
CP % of DM	TDN % of DM	Early[2] Gestation		Late[3] Gestation		Early[4] Lactation		Late[5] Lactation	
		Lbs SBM	Lbs Corn	Lbs SBM	Lbs Corn	Lbs SBM	Lbs Corn	Lbs SBM	Lbs Corn
11.2 & over	56 & over	-	-	-	.75	.5	2.5	.3	1.5
9.5 - 11.1	56 & over	-	-	.15	.75	.8	2.5	.45	1.5
	53 - 56	-	-	.15	.85	.8	2.7	.45	1.65
	50 - 53	-	-	.15	1.0	.8	2.9	.45	1.80
8.2 - 9.5	54 - 56	-	-	.25	.8	1.0	2.5	.55	1.5
	51 - 54	-	.2	.25	1.0	1.0	2.75	.55	1.75
	50 & under	-	.4	.25	1.2	1.0	3.0	.55	2.0
7.3 - 8.2	53 – 55	.1	-	.4	.8	1.1	2.5	.6	1.5
	51 – 53	.1	.2	.4	1.0	1.1	2.75	.6	1.75
	50 & under	.1	.4	.4	1.2	1.1	3.0	.6	2.0
Under 7.3	Under 48	.2 - .3	.5 – 1.0	.4 - .5	1 -1.5	1.2 -1.5	2.5 -3.5	.7 - .8	2.0 -3.0

[1] Recommendations are made on basis of 44 % soybean meal and ground shelled corn. Other supplements can be used to deliver the same amount of energy and protein.

[2] Dry ewes in the first 15 weeks

[3] Last 4 weeks of pregnancy (200% lambing rate expected)

[4] First 6-8 weeks of lactation suckling twins

[5] Last 4-6 weeks suckling twins

** Note 1.5lbs of corn gluten feed can replace 1.0 lb corn and .5 lb soybean meal

- Do monitor body condition of the ewe to determine if your nutrition program is on target.

Stage of Production	Suggested Body Condition Score
Maintenance	2
Breeding	3
Early Gestation	2+
Late Gestation	3
Lambing	3+
Weaning	2

- Do manage pregnant ewe lambs differently
  - Manage and feed the ewe lambs separately from the older ewes
  - Ewe lambs should be fed to gain 35 to 40 pounds during gestation.
  - Feed for growth as well as pregnancy. Be especially careful not to shortchange them on energy during late pregnancy.
  - Remember her calcium and phosphorous requirements are higher than an older ewe. A free-choice mineral supplement containing calcium, phosphorous, and a trace-mineralized salt should be made available.
  - Feed high quality feedstuffs to the ewe lambs. Avoid low quality roughage.

- Don't underfeed during gestation
  - Short periods of nutrient restriction or longer periods of mild nutrient restriction during early gestation can reduce placenta growth and ultimately limit lamb birth weight.
  - In late pregnancy the ewe's requirements for energy and protein increase rapidly, especially during the final few weeks of pregnancy. Approximately 70% of the fetal growth occurs during the final six weeks. The difference in a ewe's weight between a single fetus and twin fetuses over this short period can be over 6.5 pounds. Although a ewe will generally be drawing on some body reserves during this time, her tissue weight loss should be more than offset by the increase in weight of the fetus or fetuses plus the uterine fluid weight. As a general rule, a satisfactory level of feeding in late pregnancy should result in a body weight increase over the final eight weeks of about 10% in single-bearing ewes and 18% in ewes carrying twins. A 150 pound ewe carrying twins should increase her body weight by 27 pounds.
  - Nutrient restriction during last third of gestation can also reduce colostrum quality and quantity. Coupled with the impact on birth weight, late gestation is critical to lamb vigor and survival.
  - The timing of late gestation supplementation is impacted by fetus number-
    5-6 weeks pre-lambing for ewes carrying triplets
    3-4 weeks pre-lambing for ewes carrying twins
    1-2 weeks pre-lambing ewes carrying singles

- Do feed supplemental energy as needed to avoid pregnancy disease

- Don't neglect Se and Vitamin E supplementation
  - Selenium and Vitamin E are both critical micro nutrients for lamb survival. Se can be added to sheep feeds at .3 ppm (2.0 ppm is toxic). Selenium crosses the

placenta so newborn lamb Se status is a reflection of their dam's. Vitamin E does not cross the placenta, so the only source for newborns is ewe's milk or injection. Vitamin E is not toxic so feeding 50-100 IU per day is recommended.

- Don't increase feed level to ewes while in the lambing pen

- Don't use cattle mineral mixes or trace mineral salt. Copper levels are too high and are toxic to sheep.

- Do stop supplementation of the flock 7-14 d before weaning. 48 hr feed and 24 hr water removal at weaning is effective in drying ewes up and reducing mastitis.