



SHEEP SHEET

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“ ‘The third time he asked, ‘Do you love me? - then feed my sheep’ “

- John 21:17

SELF HARVESTERS!

Feeding management of sheep is both a science and an art! I remember many years ago as an apprentice shepherd in my youth, a shepherd mentor said, “Lyle, good shepherds are more important than electric augers and self-feeders!” Experience over the years has taught me that statement is certainly true. Obviously, one of the primary advantages of raising sheep, is that they are what I refer to as **‘self harvesters’**, or in other words, they need not be fed high fossil fuel input produced feedstuffs, i.e. hay, silage, pellets, bulk or bagged rations, etc. Another fellow sheep producer friend in Nevada refers to sheep as **‘nature’s scavengers’**. Depending upon one’s perspective and semantics, the answer should be consistent, that sheep are one of this globe’s oldest **‘recycling agents’**. However, that doesn’t imply that we feed them garbage. As shepherds we should provide them with a **‘balanced diet, and year around’**. I refer to this practice as **‘life-cycle nutritional management’**.

LIFE CYCLE FEEDING:

Successful sheep production depends on proper management of the **‘biological cycle’** or the **‘life-cycle’** of the ewe flock to attain production stability and good flock health. Feeding programs must be managed to coincide with the ewe’s biological needs. The biological or life- cycle of the ewe is fixed and well defined. Average length of **gestation or pregnancy is 148 days** (depending on breed).

Feeding the Pregnant Ewe

Sheepdex N-2

The biological or life-cycle of the ewe can be divided into 5 definite periods*:

Period 1	First 15 weeks of gestation 105 days
Period II	Last 6 weeks of gestation 42 days
Period III	First 8 weeks of lactation 56 days
Period IV	Last 8 weeks of lactation 56 days
Period V	Post-weaning period 106 days
	<hr/> Total 365 days

(* If not on an accelerated lambing program.)

The biological and chronological cycle of the ewe are important to sheep producers. The nutritional requirements of the ewe correspond to their biological cycle, and a thorough understanding of the cycle will allow sheep producers to develop a sound feeding management program for his/her flock.

For this article, I only want to focus on general considerations of the ewe during gestation.

THE FIRST 3 MONTHS OF GESTATION:

This period is the time when the feed of the pregnant ewe *may* be restricted with the least likelihood of serious consequences. However, we know very little about the effects of serious under-nutrition on such things as failure of implantation of the fertilized egg or early death of the growing embryo during this stage.

The pregnant ewe is less able to act as a buffer against the periods of feed shortages that occur through the winter than are dry or open sheep. However, there is an optimal level for the condition of the ewe in mid-pregnancy. High body condition at this time means that it is more difficult to satisfy

the ewe's feed requirement at late pregnancy. It may lead to problems at lambing time due to large lambs. There are indications that excessive fatness or body condition will lead to the production of small lambs, as also can poor feeding. This optimal level of condition, this happy medium will vary, depending on winter weather conditions and range (or pasture) growth characteristics. This certainly varies according to region. The condition of the ewe at mid-gestation is largely determined by her condition prior to mating.

THE LAST 2 MONTHS OF GESTATION:

This is the critical period. It is during this time that the foundation of good health is laid in both the ewe and the lamb. **These facts cannot be overstressed. Poor feeding at this time leads to:**

1. **Low birth weights in lambs.**
2. **Low fat reserves in lambs, leading to more losses after birth.**
3. **Low wool production from these lambs as adults.**
4. **Shortened gestation period.**
5. **Increased chances of ewes getting pregnancy toxemia (pregnancy paralysis or ketosis).**
6. **Ewes slower to come into lactation (milk) and production of less milk during their lactation.**
7. **Production of "tender" fleeces in the ewes, and possibly even a complete "break".**

It is during this time that the unborn lamb makes most of their growth. This growth, increasing the space that the uterus occupies, restricts the space available for the rumen and intestines in the abdomen of the ewe. This means that the ewe may not be able to eat large quantities of a bulky feed during the latter stages of gestation. Instead they require some density in their diet, or energy supplementation.

The last 6 weeks of gestation are very important for the ewes with twins, and the last 4 weeks for the ewes with single lambs. If energy (carbohydrates and fats) of the ewes and the lambs are not met from the feed, the ewe must increase her feed intake or draw on her body reserves (body condition). If high quality feed is not available to such a ewe, she is unable to increase her intake of low-quality feed and she begins to draw on her own body protein (tissue) to make up the deficiencies. Such a ewe is

malnourished.

It is important to realize that under-nutrition in the ewe in late pregnancy is somewhat relative. A diet providing just enough energy for the ewe in medium condition will be inadequate for the ewe in fat condition. Also, a diet just adequate for a ewe carrying only one lamb is completely inadequate for a ewe bearing twins or triplets.

In assessing the status of a pregnant ewe it is important to realize that **body condition** means more than **body weight**. Further, the important criterion of the nutritional state of the ewe is whether condition is being gained or lost. Two principles emerge from these considerations:

1. Ewes should be fed so that their **body condition** improves steadily or is at least maintained during the last 2 months of gestation.
2. Ewes may not be able to eat large quantities of bulky feed during the later stages of gestation; therefore, at this time, they require feeds or a ration with a sufficiently **high nutritive (energy) or calorically dense** supplemental diet.

Every undernourished ewe is therefore a potential case of pregnancy toxemia. Feed them well in late pregnancy. A publication that every serious sheep producer should have in their library is the following: *Nutrient Requirements of Sheep, sixth revised edition, 1985, National Academy of Science, National Research Council, published by the National Academy Press, 2101 Constitution Ave, NW, Wash., D.C. 20418.* The price is very nominal.

In conclusion, I remember well what an old Basque shepherd told me in my younger years and it applies here. It goes like this....."If you take care of your ewes, they will take care of you!"

For more information or questions about sheep nutrition, contact your local county Cooperative Extension Agent, or feel free to call the Navajo Sheep Project office.

For more information write The Navajo Sheep Project, Inc. PO Box 4454, Logan, UT 84323-4454. The Navajo Sheep Project is a registered non-profit Utah corporation.