Pregnant Finn ewe “Maddie” eating mixed orchardgrass and alfalfa hay. Lambs inside start crowding prolific ewes’ digestive organs in late pregnancy, raising the importance of concentrated feeds in the diet.

Feeding Finnsheep
(And Other Mothers Of Multiples)

BY MARY O’MALLEY

Feeding sheep consumes a considerable amount of a shepherd’s thought, time and money:

“Am I feeding too much or too little?”

“Is this hay any good?”

“Why did those ewes knock over that feeder?”

And other questions eat at us.

For those raising Finnsheep, concerns about nutrition multiply with the anticipated multiple births characteristic of the Finnsheep ewe.

Nutritionally sound ewes are more likely to give birth to viable, healthy lambs and resist various diseases. Feeding your flock is more than providing good quality food; it challenges your creativity to manage and modify the physical surroundings of your sheep so each one gets optimum nutrition.

Hay

Sheep are herbivores, designed to meet their nutritional needs from plants. Few sheep have access to year round fresh pasture and foliage, so it’s necessary to provide hay. Alfalfa hay is considered superior hay because of its high vitamin A and protein content; however, shepherds will need to feed what’s available to them and what they can afford, which may be alfalfa or orchardgrass, or a combination of alfalfa or clover and other hay grasses, like fescue, brome, timothy or Bermuda. A second or third cutting of hay will be more nutrient-dense than a first cutting because the hay is growing at a slower rate.

According to Maryland Cooperative Extension Fact Sheet No. 644, hay is evaluated on five factors:

• Maturity
• Leafiness
• Color
• Odor and condition, and
• Presence of foreign material.

Maturity refers to the plant’s stage of development when it’s harvested. The ratio of leaves-to-stems is the “leafiness” of the hay and indicates a higher level of digestible nutrition. In addition, “stemmy” hay results in a lot of waste on the ground! The ideal hay bale smells sweet and fresh, and makes you think of summer.

Green is naturally identified as a preferred color. But while some sun bleaching will change the hay to light golden yellow, this can still be fed. Straw-colored or brown hay indicates low carotene (vitamin A) content. Dark brown or black hay suggests rain or heavy dew damage. Opening musty smelling dark hay is discouraging; the mold has consumed valuable nutrients and nobody wants it!

Foreign materials include harmful weeds, as well as non-edibles like Styrofoam cups, plastic bottles and wire. Evaluating your hay for protein and nutrient content can help you determine what feedstuffs to offer your sheep, particularly during gestation and lactation. Your local extension office can suggest where you might have your hay evaluated.

Concentrates & Body Condition

Shepherds are advised to offer pregnant ewes supplemental grain during late gestation because even the finest quality hay cannot provide the amount of energy and protein necessary for the developing fetal lambs. In addition, there’s limited space in the abdomen for digesting sufficient quantities of hay as the lambs come to term. Grains such as corn and barley, as well as premixed rations, are “nutrient-dense” and can provide your pregnant Finnsheep ewes the additional necessary energy and protein.

Assessing the body condition of your ewes prior to breeding and throughout gestation can assist you in determining the need for supplementation. Body scoring is subjective and for wooled sheep, like Finns, involves feeling the bones of the loin, spine and rib to determine the level of fat deposits.

Finn ewe, Fuschian and her quads. Giving birth to quads taxes a ewe’s constitution, but not as heavily as raising them. Adding concentrates to ewe rations by mid-gestation helps with udder development and the ewe’s ability to nourish her lambs unassisted. Still, a supplemental bottle may be necessary if any lambs lag behind in weight gain.

For comparison, make a fist and run the fingers of your other hand over the knuckles. That is not what you want to feel; a backbone that feels like the sharp bones of the knuckles and depressions between sheep!
Flatten your hand and run the fingers of your other hand over the knuckles and bones of your hand: Hopefully that's more padded. The two following web page links—one from Virginia Tech and the other from Susan Schoenian's Sheep 201—explain body condition scoring in more depth:

* [www.apsc.vt.edu/extension/sheep/programs/shepherds-symposium/2012/12_symposium_greiner_bcs.pdf](http://www.apsc.vt.edu/extension/sheep/programs/shepherds-symposium/2012/12_symposium_greiner_bcs.pdf)
* [www.sheep101.info/201/feedingewes.html](http://www.sheep101.info/201/feedingewes.html)

### Feeding Time

There are several computer programs available to assist shepherds in determining what to feed their ewes. The shepherd enters pertinent information such as the age, weight, physiological state and performance of the ewe. A comprehensive assessment of ration-balancing software for sheep can be found online at: [www.sheepandgoat.com/articles/rationbalancing.html](http://www.sheepandgoat.com/articles/rationbalancing.html).

Dr. Dan Morrical of Iowa State University, speaking at the Nutrition Workshop for the Maryland Sheep Breeders Assn. in October 2013, noted that the placenta (the organ for nourishing the fetal lambs) develops during mid-gestation.

Underfeeding of ewes at this time can result in a smaller placenta, leading to reduced birth weights. In my own flock of Finnsheep, there have been deliveries where one or two lamb(s) in a set of twins or quintuplets is significantly smaller than the siblings. I took Dr. Morrical’s information to heart and separated my purebred Finns from my crossbreds two months after introducing the ram.

These ewes were fed 3/4 pound of grain per head each day, in addition to hay. The feed ration was gradually increased during the last six weeks of gestation.

The results at lambing were gratifying. In general, all the birth weights were higher. Most notable were the weights of Kelly's quintuplets: Four of the lambs weighed five pounds and one weighed four and a half pounds. In addition, the ewe has fed them all on her own.

Supplementing during mid-gestation differs from the usual rule-of-thumb recommendation to begin two weeks before delivery if singles are expected; four weeks before delivery if twins are expected and four to six weeks before delivery for "triplets-plus." At six weeks prior to delivery, I reunited my pregnant ewes and began gradually increasing the grain supplementation so each ewe received one pound for each lamb expected with a maximum of three pounds per ewe.

Offering grain supplementation alone doesn’t guarantee each ewe will ingest the ideal amount for optimum fetal growth and development. Some ewes have a reputation for being “picky.”

One ewe (not a gentle Finn), swings her head from side to side at the feeder to dissuade other ewes from eating at that feeder. It can be advantageous to separate your flock at feeding time to allow sheep with greater need (and/or timid temperaments) to eat without stress. High-producing Finns could be separated from crossbreds and/or other breeds.

Or, feed your pregnant Finnsheep a second feeding away from the crossbreds.

#### Vitamins & Minerals

Sheep need minerals and vitamins to grow and maintain optimum health. The necessary macro minerals include calcium, phosphorus, potassium, magnesium, sulfur, sodium and chloride (salt). They also need trace amounts of minerals like cobalt, iodine, manganese, selenium, iron and zinc. Copper is the trickiest of the trace minerals. Copper is necessary for iron metabolism, synthesis of elastin and collagen as well as proper functioning of the nervous and immune systems. However, copper can accumulate in the liver over time, be released suddenly and cause liver failure. Affected sheep will become lethargic and anemic, then jaundiced. Sadly, death will follow. For this reason, many producers choose to provide their sheep with minerals and vitamins specifically formulated for sheep—minerals formulated for other livestock are likely to contain copper levels considered too high for sheep.

Like people, sheep manufacture vitamin D from exposure to sunshine. The micro-flora in the sheep rumen manufacture the necessary B-vitamins. Fresh forage provides sheep with the essentials for making vitamins E and A, which can be stored. Because of the variability in forage quality and in levels of sunshine in housed sheep, vitamins A, E and D are the ones most likely to be included in a mineral supplement with added vitamins.

Salt is a component of most mineral mixes. Early in our shepherding experience I couldn’t understand why the sheep seemed to consume so little mineral. I had provided both a salt block and loose minerals, not realizing that sheep don’t naturally consume the necessary amount of minerals on their own. So salt is added to the mineral mix to entice them. Once I removed the salt block, consumption of vital minerals increased.

### Water

Water is an essential nutrient for all living organisms because all basic metabolic functions require water. The amount of water sheep require varies with age, size, production status and environment. We have stock tanks in each of the pastures that the sheep are rotated through. The needs of the stock tank change with the season. In the winter, a stock tank heater prevents the water from freezing and maintains the temperature between 40° and 65° Fahrenheit. In the summer, algae buildup can be a problem. Though I’ve read about using barley straw, zinc sulfate and even goldfish to control algae in the stock tank, I just periodically dump the tank (using the water in the garden if it is a dry spell), scrub it out and add fresh water. The Maryland Small Ruminant Page [www.sheepandgoat.com/water.html](http://www.sheepandgoat.com/water.html) has a number of links to articles on sheep and water.

New spring grass is particularly rich in protein and moisture to boost milk output, but energy supplements like grain are extra-beneficial to ewes of prolific breeding, to maintain milk energy levels (ewe milk has high fat content). Electric netting lets O’Malley’s Finns graze the front lawn, for a May treat.

### Summing Up

Sheep require adequate water, food and minerals to reach their optimal potential.

Finnsheep, and other mothers of multiples, benefit from additional nutrient dense food (grain) earlier in gestation than some other breeds of sheep.

Adjusting management practices like feeding pregnant Finn ewes separately and earlier than your other sheep can result in higher birth weights of lambs.

More information about purebred Finnsheep can be found at [www.finn-sheep.org](http://www.finn-sheep.org), the website of The Finnsheep Breeders Association.

Mary O’Malley raises purebred registered Finnsheep and crossbred Finns, with the help of her husband and children, in Silver Spring, Maryland.