

## DO YOU HAVE ENOUGH HAY FOR YOUR GOATS FOR WINTER? *By Jackie Nix*

Late summer is a good time to evaluate your feed needs for the coming winter. If you have not already evaluated your winter feed supplies vs your goat requirements and developed a plan of action, now is the time. If requirements exceed supplies, additional feed must be acquired or goat numbers must be reduced.

A quick and dirty way to estimate feed requirements is on the basis of animal units. Assuming that a mature meat doe weighs 125 lbs. This is equal to one-eighth of an animal unit. Therefore, eight adult does equal one animal unit. Yearling goats that are not grain-fed may weigh from 50-80 lbs. and are equal to roughly one-half that figure (14 yearlings would roughly equal one animal unit) and roughly 40 kids are equal to one animal unit. Each animal unit will require approximately 50 pounds of hay per day, assuming average to good quality hay. With low quality feeds, goats will eat more, up to a point, to try to compensate. When referring to average to good quality hay, I mean over 10% crude protein and over 55% TDN (A forage analysis will tell you the quality of your hay.)

For example, a herd of 35 adult does, 1 buck, 10 replacement doelings and 16 kids with a feeding period of 100 days (roughly 3 months) will require the following:

35 does x 1/7 animal unit	=	5.00 animal units
1 buck x 1/7 animal unit	=	0.14 animal units
10 doelings x 1/14 animal unit	=	0.71 animal units
16 kids x 1/40 animal unit	=	0.40 animal units
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TOTAL	=	6.25 animal units

6.25 animal units x 50 lbs hay per day x 100 days = 31,250 lbs or 15.6 tons or 625 square bales (50 lbs each.)

Next you need to take into account the estimated amount of waste. Each feeding system is unique. A very efficient feeding system may allow as little as 10% waste while inefficient systems may be over 50% wastage. Use of a hay feeder that prevents goats from laying in the hay and keeps the hay reasonable above the ground should result in 10-20% waste (remember that no system can be 100% efficient).

In this estimate let's assume that our feeding system results in 15% waste. Our herd would require 719 square bales ((625 x 0.15) + 625= 718.75) to sustain them through a 100 day feeding period. This is the amount of hay that you would need to buy in real life.

You may also estimate hay needs by the percentage method. Estimate that your animals will eat roughly 4-5% of their body weight in hay per day (as fed). This is the most accurate method because it requires knowledge of the average size of your goats. For example, a 200 lb Boer doe will eat roughly 8 lbs. to 10 lbs. per day. A herd of 25 will require 200 to 250 lbs. of hay per day of 10 to 12.5 tons of hay to sustain them through a 100-day feeding period (before waste). Taking waste into account (assuming 15% waste), you would need at least 11.5 to 14.4 tons of hay.

Now that you have estimated your feed requirements, you need to evaluate your feed supply. It is best to do this by multiplying the average weight of your hay bales by the total number of bales. The average square bale weighs about 50 lbs. And the average round bale weighs about 500 lbs. However, it is important to remember that outside bales can sustain substantial losses. If bales appear moldy or otherwise spoiled, you must take losses into account when estimating your feed supply.

Using animal units or percentage to estimate feed requirements is just a quick tool. To be more accurate, you need to consider dry matter content as well as exact nutritional requirements for the size of animal and stage of production. Also, feed supply is more accurately estimated if you conduct forage analysis to determine the exact nutrient content of your hay. See your local feed dealer or Extension agent for more information about hay analysis.

Remember that it is more vital than ever to provide a complete mineral supplement for goats during the winter months. Mineral needs are increased due to pregnancy or lactation at this time and goats are more likely to be deficient in minerals such as phosphorus, selenium and copper. Sweetlix 16.8 Meat Maker mineral for goats provides 100% of the trace mineral requirements for meat goats in a highly palatable loose mineral. The Sweetlix Meat Maker 20% Goat Black or the Sweetlix Meat Maker Roughage Balancer Tub provides supplemental protein in addition to 100% of a goat's trace mineral requirements in a convenient, weather-resistant, 33.3 lb. pressed block. Sweetlix Caprine Magnum-Milk is a 1:1 Ca to P free choice mineral designed specifically for lactating dairy does on a legume based diet. Any of these products should be offered free choice as the sole source of salt and minerals.

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