PRODUCTION BASICS FOR DIRECT MARKETING GOATS

by Kelley Yates

amb and goat meat sold in the United States is categorized as either in the Traditional or Non-traditional market sectors. Goat meat is mostly sold as Non-traditional as this encompasses the ethnic market, as well as freezer meats, Farmers' Markets and roadside stands. Therefore, goat meat is sold to meet ethnic holidays like Easter, Ramadan, and Cinco De Mayo, or is sold directly to consumers by the producer.

Most of all the goats in Kentucky are sold for the ethnic market. The ethnic market is generally looking for lighter weight kids in the 40-60lb/head weight range. The kids do not have to be disbudded or castrated. Reaching customers in the ethnic market is fairly easy as our state's graded sales reach this market quickly and efficiently. To find the dates of the next sales, review the "Upcoming Dates" on the KGPA or KSWPA pages of this issue or look in the 2021 KY Sheep and Goat Management Calendar.

Production of meat goats for markets like freezer meat, Farmers' Markets, and/ or roadside stands, will look very different than the production of kids for the ethnic market.

First, if you want to sell freezer meat either from your farm or from a Farmer's Market, you are going to want to slaughter the goats at their mature size. What does mature size mean? Mature size is the weight in which the animal has produced the highest amount of muscle and the least amount of fat. Why is this important? When you take your animals to the processing plant, you are going to first pay a flat slaughter fee. The slaughter fee is determined by the processing facility, thus I have seen a range of prices from \$50-\$150. Then, you will pay for packaging and labelling on top of the slaughter fee. So, let's look at Figure 1 to see the impact.

Clearly, processing a heavier weight animal makes the cost of slaughter per pound less expensive. So, if you are going to sell a pound of goat burger for \$10/lb, your profit margin would automatically have to take into account the \$5.56/lb or \$2.42/lb cost of slaughter. For those of you who are selling direct to consumer, a helpful calculator to determine the price for

Figure 1: Determining the Cost of Slaughter/Pound of Meat

Pound of live animal			Cost of Slaughter/ head	Cost of Slaughter/ Pound
60lbs	45%	27lbs	\$150	\$5.56/lb
120lb	52%	62lbs	\$150	\$2.42/lb

Figure 2: Nutrient Requirements for Weanling Kids at a Moderate Growth Rate WEANLING - Moderate Growth, .4-.6 lbs. per day

Pounds of daily dry matter needed by weight	% Protein	% TDN	Examples of diets that meet requirements
45-65 lbs – 2.0-3.0 lbs. per day	14.5-16%	75-80%	High quality grass or medium quality legume hay or pasture
65-90 lbs – 3.0-3.5 lbs. per day	13.5-15%	75-80%	supplemented with a 15% to 16% protein concentrate mix.

Figure 3: Percentage of Nutrient Available in a Variety of Feedstuffs

Feedstuff	% Dry Matter	% Protein	% TDN
Fescue pasture (not mature)	22%	12%	70%
Fescue Pasture, stockpiled (Nov. – Dec.)	49%	15%	65%
Fescue hay (not mature)	90%	11%	54%
Alfalfa hay (mid-bloom)	91%	18%	58%
Orchardgrass hay	89%	13%	65%
Shelled Corn	88%	10%	88%
Soybean Meal (44%)	89%	50%	84%
Soybean Hulls	91%	12%	80%
Distillers Grain (dried w/ solubles)	89%	30%	88%

your product can be found at https://www.kysheepandgoat.org/economics.

Secondly, to get goats to a heavier weight, you will need to feed a concentrate (grain) to meet the nutrient requirements necessary to reach a mature weight. The key to remember, high quality feeds (forage and supplement) + Balanced diet with many nutrients = Maximum Profit Potential. Figure 2 shows the nutrient requirements for a weanling goat at a moderate growth

rate of .4-.6lbs of gain per day.

Notice the chart says, "High quality grass or medium quality legume hay or pasture supplemented with a 15% to 16% protein concentrate mix." For a 65-90lb kid to gain 3-3.5lbs per day, they need 13.5-15% protein and 75-80% TDN (total digestible nutrients)

Figure 3 shows the percentage of dry matter, protein and TDN in a variety of feedstuffs. Notice that fescue pasture (not

mature) only has 12% protein and 70% TDN. Based on the nutrient requirements for the 65-90lb kid, the fescue pasture does not provide the protein or TDN necessary to get a gain of 3-3.5lb/day. In fact, fescue pasture doesn't even provide enough nutrients for 2-3lbs/day gains in a 45-65lb kid. Even kids on alfalfa hay (mid-bloom) will not be able to get enough TDN to meet their requirements.

Therefore, you need to provide concentrate in the form of grains to provide a balanced ration that meets the nutrient requirements. "Whether grazed or barn fed, goats should be supplemented with a concentrate feed when either the forage that they are grazing or the hay that they are fed do not contain the necessary nutrients to cover their nutritional requirements," Nutritional Feeding of Meat Goats, NC State Extension, https://content.ces.ncsu. edu/nutritional-feeding-management-ofmeat-goats.

The University of Maryland Small Ruminant Program conducted the "Pen vs. Pasture Research Study" and found that 3 out of 4 years, the pen fed kids had an advantage over the pasture fed kids as far

as higher carcass weights, higher dressing percentages, higher ribeye area, higher leg circumferences, and lower to no parasite problems. You can view the summaries of these studies at https://www.sheepandgoat. com/articles.

Does this mean you can't finish your kids on pasture alone? Maybe not. A study called "Finishing Lambs and Goat Kids on Pasture," shows that through highly intensive grazing operations, a finished weight can be obtained in under 1 year of age. However, the kids must graze a large variety of forages and be managed very closely to reach a mature weight. You can download a copy of the study at https:// naldc.nal.usda.gov/download/42329/PDF

The main point is that the kids need a balanced ration. Rations that are too high in energy (high quality forages) will cause excess energy to be stored as fat around the internal organs. Rations that are too high in protein (grain supplementation) will expel the excess protein in the urine. Rations too low in protein will result in lower digestion rates and lower feed intake.

Lastly, whether you provide only pasture or combine with concentrates, you still need to provide fresh, clean water and mineral free choice. Also, if you are providing a concentrate, make sure the calcium: phosphorus ratio is 2:1 to 4:1 to prevent urinary calculi.

In summary, the production method used to create kids for direct to consumer markets will depend on your customer. If you are targeting an ethnic market, you will produce lighter weight kids in the 40-60lb weight range. If you are targeting direct to consumer sales like freezer meat, Farmers' Markets, or roadside stands, you will want to produce a heavier weight kid, which will most likely require supplementation of a concentrate.

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