



CASE STUDY 3: Total Mixed Rations at Roos Dairy Goats

Jan and Jony Roos' farm started in 2008 with a goal of 450 dairy goats. Since then, it has blossomed into a farm with 1,700 lactating does, with weaned young stock at other locations. Obviously something is going right at Roos Dairy Goats in Brownsville, Ontario.

On the Roos' farm, the does are fed a fresh batch of total mixed ration (TMR) daily. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) defines a TMR as a blend of forages, commodities and supplements designed to meet specific nutrient requirements, ensuring that each bite of feed is complete and nutritionally balanced.

Jan states that his reasons for choosing this feeding program were varied: "I had previous experience with TMRs, and we talked to a couple of producers who were using this program. They liked the style better, and I like the goats' body condition better." He also likes being able to off-set feed costs by incorporating on-farm produced crops into his feed and that, if necessary, feed formulations were easy to change if the herd was having production fluctuations.

Every morning Jan mixes corn silage, baleage, wet beet pulp, loose mineral, high moisture corn and a bale of alfalfa, chopped straw and European grass mixture. Each component is weighed into the feed mixer and mixed for a specific amount of time to avoid separation. To do this, they require a mixer that can effectively mix the feed for the entire herd. This type of feeding program also requires the producer to have ample storage facilities for inputs, and if a distribution cart is not included in the mixer, a method of offering the feed to the animals.

For forage components, the Roos' use feed bunks (or 'horizontal silos'). Jan and Jony have created a system to keep their forages fresh – a main concern for the quality of their feed. The farm has two bunks for corn silage; the main storage bunk holds 300 tonnes of corn silage, which is used every day to fill the mixer. The second silage bunk holds 800 tonnes, and is used only to refill the 300 tn bunk. The fewer times the producer disturbs the packed silage, the less likely it is to have mold growth. Jan and Jony also use baleage, which involves wrapping each individual bale of hay so it can be stored outside.

Growing from 450 to 1,700 lactating dairy goats meant the Roos' barns needed to be re-vamped and additions made. "When we were making plans to expand, we had to make considerations to make the barns easily accessible for the feeding program," explains Jan. "To continue to expand, we are now considering the limits of our feed storage capacity." All of their forages are brought in by their custom worker, who happens to be Jan's brother, Bert Roos. Once the forages are brought up to the bunk, they get packed down with a heavy pay-loader, keeping the feed fresh and reducing mold growth.

Jan suggests forage quality is one of the key elements for this program to be successful. By reducing the number of times the forage is exposed to air, Jan is able to keep it fresh. He also suggests that with a herd size of less than 200 milking does, the capital investment and freshness of forages may become a challenge. Furthermore, for producers that are just starting up, Jan urges them to work with a herd nutritionist who has worked with goats before. Why? “Because goats aren’t cows: they’re goats. Simple as that.”

This case study is part of a series detailing different feed options in Ontario’s goat industry.

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