

Cows, Grass and Business

Farm overview of Grazeland Dairy, Inc.

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Our dairy farm is a seasonally calved, milking herd on a rented farm in the beautiful Shenandoah Valley of Virginia. The farm consists of 175 acres of rolling land with a 140 cow milking herd. Cows are outside year-round. In the dog-days of summer we let the cows into some wooded areas, this is our “naturally ventilated, tree-stall barn.”

During the winter the cows are dry, and also have access to the woods. It is simply 175 acres of grass and a milking parlor. Corn silage, hay and all grain is purchased. This allows the most profitable and efficient use of our limited land resources. Since it is a rented farm, a long-term lease was negotiated in light of improvements to farm infrastructure. E.g. milking equipment installed in a barn, water lines, fencing and lane improvements.

Paddock Layout

The majority of my paddocks are 5-6 acres in size. Paddock size is important as you want to allow flexibility to manage the changes in grass growth throughout the season, but don't want it so large as to sacrifice regrowth due to backgrazing. Two or three days and then the cows are off is a good rule. Quicker is better.

Fresh grass after every milking is a must, cows don't like leftovers either. We accomplish this by moving a breakwire in the paddock at every milking. This breakwire is my key tool in feed allocation. The paddock can be viewed as a pie, when the cows are milking a lot and eating a lot or the grass is thinner, give them a bigger piece of the pie. In general it is better to err on the side of too much rather than too little. The cows will let you know in the bulk tank when you make a mistake. This is a grazier's report card, and you learn quickly.

Plenty of clean, close water is crucial. We have hydrants within 300-500 ft of any point in the paddock. I use portable 150 gallon troughs, and place at least two, generally more, in each paddock as the cows are rotated. Where flow rate is slower due to distance and hills, I have 300 gallon troughs placed permanently in the paddocks as well as the portable 150 gallon troughs.

Seasonal herd management

Calving starts in late February and ends in April. We try to calve as early as possible for three reasons. First, we want to begin breeding before it gets hot. Late February calving allows us to start breeding by mid-May. Secondly, the cows peak of lactation corresponds better with peak grass quality. By late spring most grasses are maturing and quality suffers. Finally, fresh cows are in a negative energy balance and have a depressed appetite for the first few weeks, it doesn't take much stored forage to feed them and then their appetite is in full swing when the spring flush comes.

I have used both natural breeding and AI. This spring I plan to do a timed AI breeding based on the Ovsynch protocol, followed by clean up bulls. Getting cows bred back is of first and foremost importance with a seasonal herd. Cows are dewormed at breeding time, and again in the fall. Cows due outside of the March/April calving window are sold in late fall as lactating cows to other dairy farms. The herd is dried off a couple days before Christmas

Forages

Pastures consist of 25 acres BG-34 perennial ryegrass/clover/alfalfa, 50 acres of Matua/alfalfa, 50 acres Alfalfa/orchardgrass, and 25 acres Alfalfa/Clover. The remainder is a permanent pasture, winter feeding, sacrifice area. Soils are limed to a minimum pH of 6.5. Poultry litter is used for additional N on the matua and ryegrass. The perennial ryegrass paddocks are managed for the ryegrass, everything else is managed for the alfalfa. Alfalfa is the base of our forage system. Cows are fed poloxolene as an additive to the parlor pellet to prevent bloat. Boron is applied annually. Soil tests are taken every two years.

Irrigating Pasture?

Irrigation is a key aspect to the forage management on this farm. We have a hard hose traveler with 1250 ft of 4" hose. Aluminum pipe is laid permanently along fence rows, and we can irrigate all the paddocks on the farm. Irrigation is used for two reasons. First, it allows continued grass growth during droughty conditions. Secondly and just as important, it allows consistent grass growth. Our experience is that grass harvested by dairy cows is a high profit crop well worthy of irrigation.

Feeding Supplements

Cows are fed an average of 12-14lbs/day of a grain pellet in the parlor. This along with grass supports an 18,000+ lactation. Quantity of grain fed corresponds with amount of milk produced. Early lactation cows, peaking at 90+ lbs, will receive as much as 16-18 lbs, late lactation will be 8-10 lbs/cow/day. During early or mid lactation, if supplemental forage is needed, 160+RFV Alfalfa hay is fed. Late lactation when grass growth stops cows are self-fed corn silage out of Silage bags, and baleage from bale feeders. During their dry period cows continue to self-feed corn silage. Close-up cows are fed 50% Timothy hay/ 50% corn silage to help transition their rumen away from fermented forages. The goal of our feeding program is to keep as much body condition on the cows as possible.

Replacements

Calves are raised in groups of 6-8 on barrel feeders utilizing the surplus of fresh cow milk in the spring. They are given access to pasture after 2-3 weeks, then weaned onto pasture and grain around 6 weeks. Until last fall I have had my older heifers raised off the farm by custom growers. This year I will be grazing my yearling heifers behind the milking herd to do a better job of cleaning up my pastures. If this goes according to plan we will have 140 head of dairy cows and 140 head of replacements grazing roughly 140-150 acres.

Grazing = Happy Cows

The goal of Grazeland Dairy, Inc. is to produce as much quality milk as cheaply as possible. Rotational grazing allows us to do this, while maintaining healthy, happy cows and a nice work environment. The bottom line is 'when the cows are happy, we are happy.'