



MAXIMIZED DAIRY PRODUCTION

BY COST CONTAINMENT

Rocky Creek Dairy feeds at least 2,750 cows a day to produce a milking herd that averages 96 lbs. of milk a day, peaking to 130 lbs. after three milkings a day. That's a lot of grain and silage loaded by two Kawasaki-KCM 70 Series loaders.

"I was only 5 when our family moved to what was a worn out dairy in 1992," says Paul Shelton, son of Ben and Mimi Shelton, developers of the now, quite large Rocky Creek Dairy. "And we milked about 250 Holstein cows a day. As an ever-improving Veterinarian, my dad is intrigued with how ever-improving nutrition and herd management can produce an ever-better dairy operation."

"Now, we're at 1,250 cows a day and we're farming around 2,000 acres so that we're able to provide all of our forage and much of our small grain feed," Shelton continues. "Our main source of feed is corn silage. That makes up 50% of our ration. So, we have 700 acres of early corn and 500 acres of later corn. If we have good yields, several hundred acres of the corn will be left for shelling for ground corn, but most is put into silage pits."

The dairy has an older 70 Kawasaki-KCM loader and a one-year-old 70Z7 both with quick coupler and high lift boom. The older is equipped with a 4.5 cu. yd. bucket and a custom scraper they use for chopping off

The dairy burns through \$2 million a year in feed to maintain 1,250 high production cows milking 365 days a year.

sections of silage. The newer has onboard scales, ride control, quick coupler, high lift boom arms and a 6.0 cu. yd. bucket plus another custom scraper.

IT TAKES A LOT MORE

To have an average milking herd of 1,250, there is a cycle of milk production started with a cow having a calf once a year. After weaning, as the cow's lactation continues, she moves into the milking herd, where she stays until she becomes pregnant. At a

point in her pregnancy that it is appropriate for her to simply prepare for calving, she's put 'on vacation.'

Most milk cows are good for five or six years of this cycle and then culled from the milk herd.

The resulting weaned calves are mostly nurtured and kept as replacement heifers to go through the same cycles as their mothers. Excess calves are sold.

No cow in the universe gets as much attention and care as a dairy cow. All rations are carefully monitored and adjusted to maintain appropriate levels of nutrition, minerals and vitamins. Operation cleanliness is carefully tested.

"The North Carolina regulations state that each tanker trailer be tested for cleanliness of the raw milk it contains. The state limit is a 750,000 somatic cell count. Our co-op has a target of 250,000 and we have goal of maintaining our record of 100,000 or below," notes Shelton. "That may not mean a lot to some, but we're pretty proud of that."

But to maintain their average of 1,250 prime milking cows, 11 herd groups are managed. "I like to think that we manage growing, maturing animals, almost like kids, moving from youngsters through various cycles of life," says Shelton. "There is one wave after another that we must carefully nurture and manage."

And manage they must. The multiple waves must click off like clockwork. "Our repro man is one of the best!" exults Shelton. "All of our cows are artificially inseminated on exact schedules."

FEEDING STARTS AT 4:30 AM

"We start by having made a pre-mix all day, every day, that is based on multiple grains and supplements loaded into our feed trucks by our Kawasaki's that have the ability to mix the ration. We then dump out the ration in our commodity barn so that we can start each day with a pre-made load and then always stay ahead of the trucks for the rest of the day," says Shelton.



Silage is 50% of the ration and all is moved with two 70 Series loaders.



Thad Gaither, Field Manager, Paul Shelton, Feeding Manager.



The 70Z7 loader is a perfect choice in high dust environments because the Cummins EGR System, with its exclusive compact catalyst, provides a simple flow-through method of removing particulate matter. It does not regen and does not require a DPF.

The 70Z7 is used almost exclusively to make the feed. "As we load the same feed trucks for actual feedings, we add a significant amount of silage which is mixed immediately and then discharged within the confinement buildings.

"We bought our first Kawasaki-KCM 70 a few years ago as a trial," notes Shelton. "It was our first effort to move from more standard Ag loaders to an articulated, bigger loader."

And right away, they saw it could improve their efficiency. First, they were able break away and load silage faster and better. Their old loader didn't have the power and weight to cleanly break off chunks without ripping and damaging the self-sealed silage. The heft of their first Kawasaki-KCM 70 allowed a heavy scraper attachment, which allowed the operator to chop off chunks from the top down. And, the quick connect then allowed a fast switch to their bucket for loading into a waiting dump truck.

Second, the heft and bucket capacity of the loader provided faster speeds as they retrieved ingredients for their feed making.

"We're preparing feed nearly all day," notes Shelton. Before we went to the Kawasaki-KCM loader, we had open cabs. Happily,



Accurate measurement and minimal spillage are of utmost importance by feathering the bucket with a very careful hand keeps the dairy from wasting feed.

with the pressurized cabs, our problems from allergies and colds have dramatically dropped. And, the Kawasaki-KCM loaders are clearly made for constant use. We're operating our newest loader 10-12 hours a day, seven days a week.

WE LIKE THE HYDRAULICS

"There will be \$2 million in feed that goes through the bucket of our 70Z7 every year," says Shelton. "If you put too much grain into a load, that's calories that the cows don't need. It's wasted. And, any feed

spilled on the way to the feed truck is costing you money."

The dairy business is all about containing costs and maximizing production because it's a low margin business.

"I will say that one thing that's very nice about the Kawasaki-KCM loader is the hydraulics. We have a weight scale in the cab and ration formulas taped to the side window. You know, so many pounds of this, so many pounds of that. And the loader allows you to neatly feather the bucket while the engine is at idle so that you can be pretty precise in getting just the right amount of ingredient poured in."

The dairy has found the available ride control option of great value.

"The Kawasaki-KCM ride suspension has definitely lowered our spillage. Our nutrition consultants have really bragged about our low shrink; that we don't spill much," notes Shelton.

The company is running their primary 70Z7 around 2,000 hours a year with great results.

Rocky Creek Dairy is serviced by May Equipment, Lexington, North Carolina.



The customized shaver attachment keeps the silage pit sealed.