

DROUIN SOUTH DAIRY FARMER TREVOR MILLS INSTALLS ROBOTIC TECHNOLOGY

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Robot at work: Trevor Mills with his Australian-first three-box robot Mione system.

Picture: Greg Scullin

Source: WeeklyTimesNow

THERE was no time to pop champagne corks when Trevor Mills cranked up his new robotic dairy at the start of the month.

“We were straight into it, straight from the old and into the new,” said Trevor, who farms with wife Annemarie.

“We may have a rest eventually. But the whole reason we’ve invested in the new dairy is to keep us on the farm. There’s no way we could stay here if we didn’t, as the workload in the old dairy was - becoming too great.

“It now gives our two children a chance for a future on the farm.”

The robotic dairy is a three-box robot Mione system from GEA Technologies, the first of its kind installed in Australia and the first to be installed on a pasture-based dairy anywhere, at a cost, including labour, of about \$750,000.

The dairy is the latest in a long line of improvements Trevor has made to the 150-herd, 122ha property at Drouin South, which his father bought in the 1950s and which he took over in 1997.

He said when he first managed the farm, his first task was to put an aerial map of the farm on the computer, “not an easy job back then”.

“There were lots of issues. There was a creek that ran through it, the main water supply, which cut the farm in half and cattle would cross from one side to the other and collapse the banks,” Trevor said.

“There were lots of remnant trees that were disappearing, no laneways, that kind of thing.

“So I thought I would wipe the slate clean, focusing on pasture management, water supply and protecting remnant vegetation.”

He turned 25 paddocks into 50 and removed the barbed wire fencing, replacing it with single wire electric fencing, which allowed him to move from set stocking to rotational grazing.

This saw immediate pasture growth, improved soil fertility and increased stocking rates by about 50 per cent with no added inputs.

In addition Trevor created an effluent system that has irrigated a quarter of the farm through a series of poly pipes and travelling irrigator.

Trevor said he planned to upgrade this system on the back of the robotic dairy, with a new slope screen separator more successfully separating solids from liquids.

“The effluent system has saved a lot in reducing the need for fertiliser, I’d say thousands of dollars,” he said.

“It’s improved the pastures but in some places the nutrient has become so high weeds have come up, so that’s why I need to start getting it around more of the farm.”

Arguably the greatest farm improvements have been done alongside Landcare, which last year won him his region’s Landcare award, and runner-up in the state awards.



So far the Millses have planted about 30,000 trees, installed 3km of wind breaks, planted wildlife corridors, protected 2km of creek frontage and created cattle shelters.

“One of the things that drives me is the Landcare work. I’m a great believer in protecting the environment. If we look after it, it will look after us,” he said.

Trevor and Annemarie now farm 150 Friesian and Jersey-Friesian-cross cows.

Innovate to stay: Trevor Mills says the robotic dairy means his family may have future in farming.

Picture: Greg Scullin

Source: WeeklyTimesNow

Milk goes to Fonterra with about 3.2 per cent protein, 4.2 per cent butterfat and a cell count of about 250,000 cells/ml. Trevor was once in the top five in Victoria for cell count but said it was not a figure he chased now, although the robotic dairy — with its daily tagging and monitoring — would improve the cell count.

“I don’t chase maximum production either, but focus on maximum profitability. There is no point giving the herd expensive feed to get 10,000 litres a year if the extra 3000 litres is not profit.”

Their average rainfall is about 850-900mm, down from 1000mm in the past, with supplementary grain feed required year-round to top up rye and clover pastures.

Unlike most dairies, Trevor does not rear his replacements, finding it cheaper and more efficient to buy Friesian and crossbred heifers at the point of calving from Warragul’s dairy saleyards.

He said prices varied, up to \$2000 a head being paid by some producers, but by regularly attending sales it was possible to buy heifers at a lower cost (\$660 to \$1300 was the range this autumn).

He said pure bred Friesian heifers were harder to buy in recent years with exports to China, but on the whole it was a more affordable exercise.

A major income stream for the farm is buying in week-old Friesian heifer calves to export to China, sold about five to six months of age or 120-140kg — up to 200 a year.

Despite the improvements, Trevor said the robotic dairy was needed to stay in the game.