Tom & Abi and Jock & Jan Richmond

Te Horo

Type of operation Deer, dairy grazing, fattening Years of dicalcic use 6 Size of farm (effective) 485ha Stocking rate 5.7 su/ha 2008 production 18.5kg (av) lambs/160% docked Average rainfall 1050-1100mls 2008 product used and application rate No.8S @ 300kg/ha, plus haymix on specific paddocks

Tom and Abi Richmond farm their property inland from Te Horo, situated along the Kapiti coastline. At one stage their property would've been a beachfront location, but over time the land has done a good job at pushing the ocean 10km west, leaving fertile flat land in its wake.





The Richmond's farm takes in 120ha of this, while another 365ha spans briefly eastward over medium hill country, before turning steeply into exposed paddocks and regrown native bush. Tom was born and raised here, before completing a Diploma of Agriculture at Massey, and is now the third generation on the farm, while Abi's family lived twenty minutes down the road. Their first foray into farming was a 50:50 sharemilking family arrangement on the 50ha. Meanwhile, Tom's parents, Jock and Jan, were running a deer operation on the hill country after successfully trapping them on the farm twenty-five years ago. It's a role they still actively manage today.

When dairying became uneconomical, Tom and his parents made the decision to switch to using the land for cropping and fattening, and incorporating it into the rest of the farm. 'We run separate systems for the deer and the beef, they're both easy care,' says Tom. 'The hills run all the breeding hinds and in the winter the cows go in to clean it up, while all the progeny, the fawns at weaning time, come down to the flats. We fatten the steers and heifers on the flats most the year, as well as cut all our own hay and baleage.'

Hatuma's dicalcic phosphate was first applied straight after they stopped dairying. Traditionally, copious amounts of chicken manure from the poultry sheds on the farm were used. They'd been there since the 1970s when a local man, the founder of Gold Coast Poultry, talked Tom's parents into growing broiler chickens on contract. So, every two months, there was approximately 30 tonne of chicken waste produced, and consequently spread over the flat areas of the farm. 'But we haven't used chicken fert here for over ten years. It's given us a P reserve in the ground that doesn't look like fading. When I finished dairying we didn't apply any more concentrated fertiliser and consequently we didn't get any more growth. So we went to dicalcic to help raise the pH, which was pretty low by that stage, and to help release the phosphate that was there. We used a dicalcic and Cropfine blend for two years in a row, then continued using the No.8S blend at a lower rate, as well as some Haymix in different paddocks. We've only flown it on the hill country twice in that time, but a few months after

the first application the response was amazing. I can still see where the plane stopped.'

Back on the rest of the farm and Tom says the results have been equally impressive. 'The first difference I noticed was the earthworm activity I was seeing whenever I dug into the soil. The clover has also come back in places I'd never seen it before. On the hills it was barely existent, really patchy. Even though the applications have been two years apart up there, I've noticed there's more clover and the quality has improved.'

Before using dicalcic on the crops, N35 was the fertiliser used most on the flats. According to Tom, if you got a response, you knew you were short of nitrogen. Since dicalcic, there's been no urea applied, apart from when establishing a new crop. 'I put it down to the increase in clover. Previously the clover was never really active because I assume the cycle wasn't working. It could've had something to do with the high P levels from the chicken manure, but then that's high in N too. So I think we've got a far better natural nitrogen cycle working, things are back in balance with the help of the dicalcic and lime and extra sulphur in the No.8S and No.9S products. Even with the oats and the ryegrass that are sown, the clover comes up in between to fill the gaps. The non water-solubility of the blends was an advantage because you know it's not going to disappear in the next shower of rain. The finer particles of the dicalcic stay there and do their job.'

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▶ The Richmonds carry approximately 5.7 su/ha across the whole farm, which is indicative after last year's drought, but it can vary. They've managed to maintain that level despite 10ha of land being recently taken out, through supplementing what they grow in the crops. Back in November 2008 the steers were putting on an average of 1.6kg per day. 'The stock agent always comments they're really good, he's impressed with how our operation can turn them over in that time. There have been years where we've sent heifers to the sale and the buyers have asked if we're sending any more because they'll take those too.' Tom says due to the climatic seasons being so irregular over the last four years, it's hard to gauge accurately what the production has been like. 'What I can measure is that 90% of them are fattened and in the works by 18 months. Even last year we had yearlings come through one of our worst droughts ever, and maybe the top 10% of them are only 50kg off works weight now. We've always sold our dry stock at 18 months. We don't keep anything over two years, maybe the odd couple, but they still go to the works by the time they're two. We had deer go to the works at the end of October; they weren't even a year old and they averaged 52kg on the hook. With the current deer schedule that's made each animal worth approx \$400. We don't have any health problems with the stock, so we only use just a bit of drench. The hinds get one a year and that's it. We apply a bit of copper with the top-dressing, but that's the only trace element we use. With the steers and heifers, I give them a 20g bullet at weaning.

In the last dry period while I was mowing the paddocks for hay, I noticed the grass had already popped up an inch in the areas we'd already cut. The dicalcic had improved the soil structure so much that it was able to continue growing. I've seen some farms where if they use a lot of urea I'm almost convinced the plant blows out, it'll get to a certain time of the year and it's had enough nitrogen. In the drought our paddocks will hang on longer, until they reach that point where they can't, then, when the rain comes, they're back away racing again. Other paddocks that haven't had dicalcic are still struggling.

When we were dairy farming the cows would never clean the

paddocks out completely. Since using the dicalcic, all animals, including the deer, will mow it all down evenly and clean it up. Certain times of the year you think there's not enough grass, but that's because they've utilised it all. Instead of having one end of the farm growing more than other, it's a consistent growth, which makes management easier. I've got some corners of the farm that were full of ratstail - you couldn't drive a spade through - but it's been definitely reduced. There's one spot in particular, a shaded gully that was full of ratstail, but now it's almost gone. We haven't sprayed or re-sown, and it's all the same soil type, the only difference is that dicalcic has been applied.

There's a certain peace of mind you get when using Hatuma's dicalcic. In the winter I used to worry if I only had 200kg of dry matter per month behind in grass because we'd have to stick some urea on, but I don't anymore because the dicalcic does its job. When the sun comes back out, and the plants are photosynthesising, we're off again. I'm now doing it cost effectively, it's the one-stop shop. A lot of things in farming today are about economising and getting as much done in the one go. That's the dicalcic story - it's easy care, you do the whole farm, and it's done. With the increase in fert prices we simply change the Hatuma blends to fit the budget.'

Tom believes the emissions trading scheme is going to be a big issue. Farmers will have to start looking for economic solutions to costly inputs like fuel and fertiliser. On top of that, he recognises farmers will be challenged with environmental factors, like reducing nitrogen and phosphate leaching. However, Tom and Abi are comfortable in the direction they've already taken on the farm. 'I think we're on the way to achieving idealism on this property already. We're being kind to our environment because we're not applying a lot of nutrients. Some people can pour the nutrients on in a way that isn't sustainable. We're being much more efficient because we're utilising more grass and obtaining a good level of performance.

We're supplying a product off this farm that's as natural as possible. The meat buyer should be aware what we're doing here is not going to be high in phosphate or nitrates







Left Jock, Tom, Abi and Jen the dog.



and trace elements. It's as green as you can be without being officially organic. That has to be good for someone promoting New Zealand products. We're down the track of future-proofing our farm, certainly the aspects that are in our control anyway. The important thing on any farm is that everything grows from the ground. If the soil isn't right, then nothing is going to grow. You find something that's doing the job, once you've made the wheel, if isn't broken don't fix it. The dicalcic blends are part of our system. They keep the farm balanced.'

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Being brought up around his dad's trucks and machinery, it was only natural for Tom to move into his own contracting business. He started out mowing silage for the farmers in the district with a little tractor, but that was soon replaced with a larger tractor and bigger mower. He began working in with two other locals, Richard Best, and one other who had their own trail harvester and between the three of them they took care of the district's hay requirements. With a couple of joint purchases for things like a square baler under their belt, eight years ago Tom and Abi, Richard and his brother, Kevin, decided to formalise the partnership and started their own company, Te Horo Combined Contractors Ltd. These days they incorporate all types of contracting, including small to medium square bales, big rounds, baleage, the supply and spreading of top-dressing requirements, and the supply of baleage and hay. You'll also find their truck on the road carting product to specific destinations, or smaller orders for the Palmerston North, Levin and Otaki branches of Farmlands.



