Bio*Bytes*



Eichberg Farm, Kakaramea, Taranaki 2014

Brendon Fox admits to having drifted through school, getting good marks without really trying. But he managed to resist pressure to go for academic honours — because he always wanted to be a dairy farmer. From age two, in fact, he said.



Brendon Fox, Contract milker, Eichberg Farm

Brendon manages one of Robert and Susan Richards' two side-by-side dairy farms in southern Taranaki, on the gently rolling country near Patea, and found he was expected to run it on the BioAg system — which, he says, was a bit of a cultural shock after a history of 'conventional' farm management with its reliance on crude applications of phosphate and urea.

He came from three years at Okato in the north, a beach-front 70ha property running 200 cross-breeds, using 120kgs and 500kgs of urea and phosphate respectively during the season.

Now he runs a herd of 260 — half Jersey, half cross-bred — on 62.5ha with a 17ha run-off, wintering them half at home and half on the run-off.

Asked about the key performance indicators he's quick to reply: 'We're in the third season and I haven't called a vet to a lame cow yet. Mastitis is probably a bit higher than I'd like to see it, though no worse than most other farms, and metabolic health, probably down a bit compared with other farms. But as we've got so many Jersey cows the milk fever picture is a bit distorted, and anyway there's been a big improvement since we got here.'

Brendon is positive about his herd's fertility: 'We don't use seeders and yet our empty rates have averaged only 6 percent over the two years' he says. 'The cows get 6 weeks of AI and 4 weeks with the bull.'

He replaces only 40 to 45 animals a year which he believes is exceptional, bettering the dairying community's working average of around 20-25 percent — a benchmark which in his case would put the replacement rate at over 50 beasts. 'There's something there (in the BioAg system) which encourages fertility.' he says. 'A lot of people can't achieve that, even with seeders, using a similar AI/bull combination.'

He broke off to talk about grass and quotes his boss, who had told him in the early stages: 'You don't get longer grass with BioAg products. But it's better quality, with better nutrient composition,' which took us on to milk production levels.

435kgMS per cow per season means 1 740kgMS per hectare and he's pretty happy with that.

How much value do you get from pasture? — is of course difficult to pin down, but if you work back from the good MS performance, factoring in top-up feeds, you get to understand that his grass is doing a pretty good job.

Careful rotation is the key, he said, reflecting the growing conditions as they go through the seasonal changes: 'Not too long, not dead underneath, matching the cow rotation to what's growing. An 18 to 20day round in spring works until Christmas. 62ha divided by 18 allocates 3.4ha/day to the herd. Then in January we leave them on a 26-day round, to dry-off May 10.'

Brendon makes around 400 bales of wrap-silage used for over-wintering cows at the run-off where it's grown — at calving the run-off is shut off for silage — with calves coming off the main farm December 1 and going down to the run-off until May 1. Male calves go to the works at four days as normal.

He feeds 600kgs/cow of kibbled maize with a mineral mix from DBC in the South Island for the season and uses about 80tons of palm kernel over the season.

'When I came for the job interview,' he says, 'Rob showed me the soil fertility tests and everything was within the right margins. So I said "If you can guarantee you can grow me some grass with this system I'll get you some milk."

'The soil fertility's still there: Rob puts "the biology" on in April. Then I see a noticeable growth spurt the first week compared to the paddocks still waiting for application.

'Neighbours who are piling on the urea don't have more grass than us. You might not have the length of it that the neighbours have but during the droughts it holds on. Where the neighbours' fields were brown and dry we still had a tinge of grass for two or three weeks more.

'We were one of the last to dry off during the drought we met in our first season, and then last year there was an extended dry spell — maybe not a real drought around here — and we milked right through to May 12 which got us to our 300 milking days target.

'It held on right through the summer and there's a lot of clover in the grass mix which I like: a lot of people use heaps of urea and get a lot of grass. But are you just filling the cows up with something that's not as good for them? I've always like a lot of clover in my grass for its nutritious value.'



Robert Richards, left, with BioAg Farm Advisor Tony Robinson

Robert Richards, Eichberg Farm owner comments:

'We have completed four years in the BioAg system and we are using tonnes and tonnes less nitrogen on our biological farm. Pre BioAg we averaged 130-140kgN/ha using urea. Last season we used less than 20kgN/ha and this season less than 10kgN/ha.

'The BioAg system is helping my quality in particular and by doing so is helping the production of the property. I'm getting a lot more green leafage that's healthier for the animals.

'The dairy factories and the local regional council are putting more and more pressure on us regarding nitrogen usage and the like. The biggest environmental benefit of the BioAg system is the fact I'm using less nitrogen than I had done traditionally before.

'The health benefits are just coming straight through to the cows themselves. I'm having a lot less trouble with metabolics and sore feet and the like. "I just can't ask for anything more really".'

'During the droughts year my biological farm was one of the last farms to dry off the cows in our area, milking 2 weeks longer than my conventional farm next door.

'The biological farm had an empty rate of 2.9 % compared to my other farm at 9.2 %.'

'With the BioAg system it completely fits with my philosophy of how I want to go in the future. 'I'd recommend the BioAg system, it's completely helped my lower nitrogen usage and I'm grateful for that.'