CLEAN, GREEN AND PROFITABLE

David Jones
Farmer

Background

I bought my first farm in 1989 having done share milking in Ashburton, Picton and the Waitaki. I firmly believed that we were all clean and green. Well, we all were. I mean, Judy Bailey and lots of politicians used to tell us so regularly. An article in a farming publication suggested that we should market these images of our sleek, beautiful cows being milked in a restaurant-standard dairy amidst gorgeous scenery, alongside a picture they had of a dirty European peasant milking a scrubby, tatty cow in filthy conditions. It indeed appeared that we were automatically clean and green merely by being Kiwi and getting up in the morning.

However, around that time, chinks started appearing in this concept.

I had a visit from the Blackwater discussion group in Ireland, who had been through the North Island in winter. Some of the sights hadn't exactly impressed them, and indeed, back in Ireland, one would have been prosecuted for some of the things they had seen. They described cows mob stocked behind hot wires, on tiny breaks up to their knees in mud, with the run-off going straight into the nearest brown green waterway. These cows were cold and skinny with tails about two inches long. At that stage of the game this all seemed perfectly normal, and we mostly just accepted that that was the way things were. I thought I was quite environmentally aware. I induced my cows, docked tails, wintered my cows on a river bed because it was free draining and had a pot spreader to get rid of my effluent. It was handy having all those creeks running through the farm because it saved having to have water troughs in every paddock. However, I planted a few trees and everything I have just described was normal practice. The pot spreader was a hassle as it had to be shifted occasionally, whereas when I was sharemilking on the Waitaki, we pumped the effluent straight into the irrigation race, which was washed out every three weeks - or rather the solid stuff was; the liquid component disappeared somewhere. My dead calves, induced and otherwise, were put out at the roadside gate in the spring. I felt I was more enlightened than most; I put a bag over mine so they didn't look quite so bad to the "townies" driving by. Please note there the glimmer of a concept that "image" might be important!

Some time after this, I received a study grant from the Rabobank/Lincoln University Foundation which I used to visit Ireland to look at their farming systems. I wanted to see where they were going with their move towards "New Zealand style" low cost farming systems and I was very keen to look into how attitudes to environmental issues fitted in with this. I was lucky enough to be able to meet with farmers and attend discussion groups, as well as going to research farms and agricultural centres, where I met many leading scientists, such as Sinclair

Mayne and Pat Dillon. I spent an afternoon with Noel Culleton, who was doing environmental research relating to dairy farming near Cork. The environmental impacts of farming seemed so much more immediate there than in Canterbury, as it appeared to rain most days and every piece of muck and dirt seemed to dissolve and run away downhill somewhere. There seemed to be a constant flow of people and tourists looking over the fence at the countryside and farms. There was an awareness at this level of the importance of maintaining a good image both for the tourists and the marketing of clean green and natural produce. There seemed to be an impression amongst many people I met that we could get away with murder in New Zealand, mainly, I think, because our population is so small that our impacts on the environment are naturally less visible.

I came back from this trip with a heightened awareness that we had to do better in environmental terms. When involved with SIDE, I visited Zane Moss at Fish and Game in Invercargill and naively suggested that we needed to work better together with a bit more carrot and less stick. He politely suggested that a bit of stick was needed .He then proceeded to show me some horrific pictures of cow wintering in Southland. Some of it was annihilation of streams, rather than degradation. On the positive side however, he showed me that even quite severe damage to water quality could be improved markedly by good riparian planting.

With all this as a background, I think that over the years I have become a better environmental manager than I one was. Last year I won the Canterbury section of the Balance Farm Environmental Awards. This was an immense buzz and the following year was full of meetings with like-minded people at many levels. I always felt however, that I was not really doing anything very different from, or better than, most of my mates and people I met at various meetings. I just happened to have entered the competition and they hadn't.

I was gutted however, at the reaction of so many people. The image of our industry is such that even well educated and supposedly well-informed town people could not comprehend how a dairy farmer could possibly win this award considering the huge amount of damage we cause to the environment, mainly with pumping our effluent straight into waterways, but also with our draining and destruction of rivers, massive deforestation and the constant flow of toxic, carcinogenic chemicals into the environment. This view is encouraged by people purporting to be green, but often with other agendas. I also consider myself as a bit of a "foodie" but am

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constantly amazed by the inspirational chefs I enjoy on Food TV, who insist on food being organic as only that tastes good and is safe.

The reality is that the world's population is growing and will obviously require more food to be grown off an area of land which is dwindling due to land erosion, urbanisation and the need to grow biofuels. Some will suggest that this does not apply to us, as we only supply the quality top end of the market. That in my opinion is naive, and as farmers we have always had to increase our productivity levels merely to survive financially.

My worry is that our ability to achieve these goals is strongly dependent on getting public opinion more on our side. Look at the opposition to various irrigation initiatives from the public who do not buy into the concept of increasing rural prosperity filtering down into town but see the disastrous effects on the environment caused by more intensive agricultural (especially dairy farm) activity . I can argue with these people that my farming is not like that, but the view is usually that maybe my operation is okay, but most are not. A survey carried out by Ken Hughey, a professor of environmental management at Lincoln University, revealed that most New Zealanders believe that effluent run off from farms is the worst managed of all environmental problems facing the country (quoted from Christchurch Press in February 2007).

The problem is that we cannot seriously market ourselves as being better than that if a significant number of us are not even paying lip service to the concept of better environmental management.

I am no rocket scientist, as those who know me will testify, and the things I have done on my farm are very basic and simple. If they have cost me money then they have given me an economic return, but the point must be made that I can only afford to spend money on environmental actions if I am running a strong viable and profitable business, not one that is severely hampered by rules forced upon me by ill informed people in authority. For example, putting a tax on Nitrogen usage will achieve nothing except to compromise the use of a valuable farming tool.

When I say these are simple things, I mean no disrespect to those people facing huge challenges, such as those relating to the North Island lakes, for example.

Over the last few years, I have planted in excess of 4500 trees. I have found no hard data to show how many extra kilograms of milk solids have been produced as a result. Ian McIndoe from Aqualink however, tells me that trees have a strong effect on wind eight times their height, with a lesser affect 10 to 15 times their height. In a howling nor-wester, we can actually feel the wind break effect most of the way down some paddocks. With an impending southerly storm at calving time, it is easy to bed the calving mob down at night and sleep easy.

Again there is no data to prove that my cows benefit from shade on hot Amuri summer days, but away from trees, we have seen very clear effects of heat stress on the cows which have led to us installing sprinklers at the dairy to keep cows cool during milking . At any time on a sunny day we will see a third of the herd relaxing under the shade of the trees.

Although my farm is my income producing factory, I do view it as being an extension of my home and I derive a great deal of pleasure from what I perceive as the beauty of the place. It thrills me to see the increased number and variety of birds on my farm, many of which we did not used to see at all. Importantly though, is the image I believe the farm portrays to the townsfolk and non-dairying locals.

Effluent

This is one of the great issues. I have read many times that the effluent produced on a dairy farm is equivalent to x number of people, or a small town. It is perceived as destroying our freshwater fisheries, threatening urban water quality and was even quoted in the Christchurch Press a number of years ago as one reason why Pegasus Bay was not a suitable place to have a mussel farm. So why can we not simply point out that this effluent is recycled onto pasture and reduces the artificial fertilisers being applied? Possibly because most people seem to have had some contact with or seen the results of bad effluent management. I could point out a creek that I used to catch trout in, which a recent visit showed to be devoid of fish, but with flecks of effluent around the edges. This may not be the full reason for the absence of life, but try convincing a keen fisherman of that.

Note that we keep coming back to Image?

Anyway effluent is worth too much money to waste as a fertiliser. I use it as a growth promoter around my trees and as irrigation at the ends of runs which always seem to be dry.

Figures vary, but approximately $1500 worth of fertiliser is produced per 100 cows.

Waterways

Dairy cows in a waterway are very visible and are a bad look. Our local irrigation company recognised that it didn't look good to have cows in the main race on the side of a busy road and sent a letter out to those few who were constant offenders .Concepts of the common good with regard to image did not work here, but threats of damage to the pocket appears to have paid off. I have fenced off the 1.7 kms of water race on my farm right to the edge which has in fact given me a significant extra area of grazing for cattle.

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Again, we are back to image here. How do we contradict dirty dairying type campaigns when it is still too easy to find bad examples out there which are so visible?

Fertiliser

Why on earth would anyone want to waste this precious, expensive stuff? I have been told by fertiliser company representatives of resistance to nutrient budgets from farmers in some areas. I have never quite understood this, as it seems as easy as making the fertiliser company representative a coffee and sitting around the kitchen table for a short time. If it means that I have put on the correct fertiliser rather than under or over applying, then it seems good business.

I adopted the use of nitrate inhibitors early in the piece. I believe that this has the environmental benefit of reducing the nitrates from entering the water table, but obviously the big driver is that it is extremely good business to do so. I believe that the nitrogen saved through the use of Eco N is available to me at significantly less cost than buying in more Urea.

I have capped my Nitrogen use at 200 kgs per ha. The results coming from the lysimeters at Lincoln University show that at this level of use, there is little N leaching into the water table assuming I am using a nitrate inhibitor. Last year, I used 175 kgs per ha but felt that the extra 25 kgs would have grown at least another 375 kgs of economic dry matter without environmental impact. I often meet people using in excess of 300 kgs per ha. I do not believe this is environmentally good practice and the law of diminishing returns suggests significantly lower responses at this higher level.

Water use efficiency

All my border dykes have been replaced with spray irrigation. I am not suggesting that all border dykes should go, but certainly on my farm the change has given me more "bang for my bucks" with greater efficiency of water use. The moisture levels have been monitored again to reduce over watering. The system has been designed around the retention of useful trees, as well as allowing the planting of more trees and plants as part of our annual routine.

In fact, so many of these things (initiatives seems too grandiose a word) are dead simple and most of us are carrying them out now. I believe very strongly that our ability to move ahead as farmers, to adopt new and better farming techniques and endeavour to remain profitable can only be achieved if we can get the general public onside and show them that our practices are indeed as environmentally sustainable as possible. If non-farming people, who outnumber us 10 to one in terms of voting power, continue to view and hear about environmentally bad farming practice, then the stereotyped view will continue, even if it is only a tiny minority of us giving the bad impression. In fact, I am told by Phil McGuigan at Ecan that the farmers causing the environmental issues are between three and five percent of farmers, yet they are the ones that the general public see. Personally, I would be happy to see those offenders hit hard, if all else fails.

I think there is a need for a stronger environmental ethos throughout our farming culture so that it is as much part of our thought processes and conversations, like for example, kgs of milksolids.

Maybe we need a very charismatic young dairy farmer out there promoting this in the media showing that it is cool to be clean, green and profitable.

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