

EVIDENCE OF ROBIN BOOM FOR BOPRC PC10

I am a self-employed agronomist, having had my own business for the past 28 years trading as Agronomic Advisory Services. I currently provide independent soil fertility advice on around 180 sheep and beef farms and 280 dairy farms in the greater Waikato/BOP/King Country region, as well as consultancy advice and research work for corporate clients such as Envirowaste, Glencol Energy, DLF Seeds and Beef & Lamb NZ.

I am currently a member of the following Professional Organisations:

NZ Grasslands Association
NZ Society of Soil Science
NZ Institute of Agricultural and Horticultural Science
British Society of Soil Science
The Institute of Professional Soil Scientists
The Brookside Society of Professional Consultants

I have as support people Anna Mayne, an agricultural environmental advocate who has her own business AgMonitor and AgSolutions who has developed a model which looks at economic, environmental and production data which farmers can use to benchmark the efficiencies of these three parameters but has until now not been unable to gain traction in the use of her model. Through her Ag Monitor program Anna has highlighted some promising trends after entering data from some of my clients farms compared to dairy industry average farms from DairyNZ data, but her approaches to DairyNZ, Fonterra and other dairy companies, along with Regional Councils have been met with brick walls as they seem focussed on Overseer as the only model they are interested in considering, yet Overseer is not designed to do what these organisations are attempting to use it for. Overseer has been built and constantly changed without the normal peer review process expected in science. Anyone wanting to see how it does things and if the results are accurate has no way of seeing the science, which is carefully managed between AgResearch and the two big fertiliser co-ops. This lack of transparency in a largely tax payer funded black box is a major flaw in Overseer. No one outside the tent really knows if it is accurate but on every page of output there is a disclaimer that the owners hold no responsibility and give no confidence interval in the accuracy of the results generated. To produce a farm environment plan with a single figure output of N leaching is poor science, but too many have too much vested in Overseer to open Pandoras box for critical review. (*Appendix 1 – Why Overseer Should Not Be Used For Environmental Benchmarking*)

My approach to soil fertility can be summed up as 'healthy soil, healthy pastures, and healthy stock' and is an adapted approach of what has been coined the 'Albrecht approach' instigated by Dr William Albrecht, Emeritus Professor of Soils from Missouri State University during the 1930s and 1940s. I send my soil samples to Brookside Laboratories based in Ohio which is the laboratory Dr Albrecht was involved with establishing in the 1950's after his professorship, which looks at 14 elements in their standard soil test as opposed to 6 element tests mainly used by the fertiliser industry here in New Zealand. To be able to use Brookside Laboratories one must have at least a university degree and be independent and not work for a fertiliser company, and there are currently over 200 consultants worldwide who use Brookside Laboratories plus there are a number of state universities who use their services for their analytical data. My first clients in the Bay of Plenty were Walter and Mary Van Rossum who I have been working with for 27 years and who for many years have been among the top producing dairy farmers in the Edgecumbe area averaging around 1700-1800 kg MS/ha annually. Initially their farm needed a significant amount of altering in terms of soil chemistry to get the balance right for ultimate pasture and animal health performance, but for over

two decades now their basic fertiliser costs are minimal and only a fraction what most farmers are spending on fertiliser per kg of milk solids.

My other support person is Hugh Jellie, a vet and private consultant to dairy and drystock farmers who has tried to implement his Caring Dairying project to produce the Ake Milk brand where he showed how dairy farmers could be both highly profitable and environmentally sustainable by adopting sound farming practices laid down in his project and be rewarded for doing so which would have been a win-win situation, but he also has been unsuccessful in getting traction for this concept he called Ake Milk. I was asked by Hugh to write up a soils standard eighteen months ago which could be used on Ake dairy farms which I am confident if adopted by farmers in the Rotorua catchment will achieve the objectives of what PC10 is hoping to achieve (*Appendix 2 – Ake Soils Standards*). Our overall aim is to see profitable farming being able to continue within the environmental constraints the objectives of what PC10 is hoping to achieve.

Although I currently provide soil fertility advice on over 450 farms, only two of these are within the Rotorua Lake catchment, a dairy farm and a drystock farm. My dairy farmer clients are Brett and Marguerite Martin on Oturoa Rd, and through them Hugh got to learn of me as he had discovered their N leaching losses through Overseer had halved from 96 kg/ha to 41 kg/ha through implementing my fertiliser program. I am not a urea advocate, neither do I normally recommend high amounts of phosphorus (*Appendix 3 – Phosphorus*), but rather try and get other elements up which promote plant growth and try to maintain all elements in the optimum balance for plant and animal production, rather than being fixated on NPK as the fertiliser industry has been prone to do. The two contaminants PC10 is seeking to reduce – N and P will drop when farmers adopt my program. Farmers need not close up shop and good agricultural land does not need to go into trees. Hugh Jellie used Brett's farm to showcase his Caring Dairying project and he demonstrated that the Martin farm could by implementing his management principles reduce the amount of N leaching further from 41 to 25 kg N/ha, less than half the current average for Rotorua dairy farms (*Appendix 4 -Twin Peaks Farm N Reduction*). I understand the Martins have recently accepted an offer to sell their property and the farm will no longer be dairying and in my view, although this may be expedient to the environmental health of Lake Rotorua, it has been an unnecessary loss of good income producing pastoral land. Our collective appeal is that good pastoral land is not converted to trees but through the implementation of better soil management and soil fertility practices and changing farm management practices, that there are win-win opportunities for both farming businesses and the environment.