

Providing plentiful pasture

supplementary feed, managed to turn a \$240,000 loss into a \$200,000 profit in less than three years.

By doing pasture analyses rather than soil tests, it was revealed that their phosphorus and potassium levels were toxically too high. After applying the lime mixes, the pasture became more prolific and softer, soils more rain-absorbent, growing more clover and subsequently more total pasture, with roots going three times deeper, fewer weeds, and their cows much more content and productive.

"Over the past three years, the Fernyhoughs have spent almost nothing on urea, but grew far more pasture from the LimeMag and trace elements with applications of some modern liquid nitrogen products which are more soil friendly," Vaughan said.

Tania said, "Previously, our cows had not been fed on all pasture for a number of years and the farm had not had lime or magnesium in serpentine for at least 20 years because the soil pH was 6.1 to 6.3. Problems secondary to this were shallow rooting, clover root weevil, clover flea and grass grub thriving on unhealthy pastures, and soils would dry out more quickly in dry weather.

"Pasture tissue analyses figures showed what soil tests couldn't measure simple elements accurately, and can't measure aluminium at all. Calcium, magnesium, boron, cobalt, selenium and sulphur were very low, while pasture phosphorous and potassium were toxically high. This accentuated the animal health problems, which were partly from overfeeding palm kernel extract with its high copper and cadmium."

Following Vaughan's recommendations of applying the lime, trace elements and serpentine, Brendan's father John, the previous farm owner, is impressed with the reduction in weeds without spraying and the increase in clover, and all without applying any expensive potassium at \$900 a tonne, for three years. Another benefit is that calcium and sodium reduce leaching of water



A good root system.

soluble elements which is costly and polluting of underground water.

"Excessive potash use has been wrongly indoctrinated into farmers' minds," Vaughan said. "The Fernyhoughs also now know that their previous heavy reliance on urea, of up to 200kg/ha/year, was part of their problem, as it caused hard, low organic matter soils, fewer earthworms, and shallow rooting, especially when without lime and other deficient elements."

Tania said, "The March rainfall this year was good, after seven weeks of almost none in November and the first three weeks of December.

"However, even in the dry periods, the growth of the new pastures has been amazing thanks to adequate lime and elements applied over three years. The pastures have also been re-grassed with a mix of Bealey NEA2, Tahora 2, Kopu 2 white clovers, puna chicory and tonic plantain."

When their cows graze the Bealey paddocks, milk goes up by as much as two litres per cow per day. This is \$400 a day extra.

The Fernyhoughs can now boast that the best ryegrass roots that were previous only 7cm deep are now down to 35cm.

Following taking in what information we found relevant to ourselves from the field days, we have since had herbage tests done and found that they contradicted some of our soil tests. We have found that our blocks are not in need of any more phosphorous and we can manage with significant applications of lime at two-and-a-half tonnes to the hectare this season, which has been spread, followed by rain, and has been left to work its magic.

With our change to the more pasture and soil-friendly Nitrostim, not only have we noticed good, even growth, but our cows seem to find it more palatable, therefore eating more and staying content.

Vaughan told the field day that cows don't like high N grass, especially from DAP, so eat less and produce less.

No matter what the critics say, and there will always be some, for the majority of farmers, small, large, dairy, beef, goat or alpaca, animal health is of the utmost importance. Not only have we bred them for many years with the progeny becoming part of our family, but even for the large commercial farmers, what the urban public needs to realise is that we all need animal health to be at its best for productive herds and profitability.

It is all about doing your own research, whether that is into the realities of farming or the truth in practices relevant to your farm, and steering away from what is pushed onto you from sales reps for companies. The best advice I can give is do the research, take what you can from it that is relevant to you, and don't always believe that the latest and greatest advice, or for that matter, the most shocking headlines, as they aren't always completely true.

For more information on Vaughan Jones' consulting and his recommendations in *GrazingInfo*, email him at support@grazinginfo.com

He is extremely busy so please state your requirements in your email so that he can direct your email to get the fastest and best reply.

GrazingInfo has 117 chapters and 20 more to come, so answer most questions. If what you ask is not in one, he'll answer your question or write a chapter on it.