

Apologies for the doubling up in the last Newsletter. Telecom won't allow us to send more than 99 emails at a time. If we do they close our whole emailing system down and we have to fill in forms that we are not spammers and will or won't do all sorts of things. After the third time I told them that we had already done so twice and that they had the information. They connected us again, but still would not allow more than 99 emails at any one time, so we use the website which is a Windows system (we have Macintoshes) which means pasting it and then resetting the font, font size, etc. If I go Save which I do frequently in the Mac, the Web sometimes sends it, before finished, and or does other silly things, wasting my time and no doubt frustrating you subscribers.

I've complained to Telecom verbally and got nowhere - they may not have understood! They told me I was a spammer. Their evidence was because I was sending such long emails, so I got their email address which I now use rather than phone them for little if any benefit.

It is telecombb <telecombb@telecom.co.nz>

Their reply to my email was friendly, but stupid (they asked me for my email address which was on my email to them!), so we'll see.

### **Cow deaths from cold rain**

The deaths of cows in parts of Westland following a wet cold spell last week, was sad and possibly unnecessary.

When Bola struck in May 1987, some cows in eastern Waikato had to stand in metre or deeper water for days, and some died, but those of my clients didn't because they had been getting Solminix. The sodium and magnesium in it help blood circulation and help control body temperatures hot and cold.

Do any of you Westcoast subscribers know if the animals that died were not fed good minerals and those that didn't die, had been on Solminix. I stipulate Solminix because some mineral mixes don't contain salt, so would not help prevent deaths by cold, unless close to the sea, but even then in Westland's 3,000 mm (120 inches) or more rain a year, the sodium is diluted and/or washed off.

Please let me know what you know about the reasons for what we saw as strange reasons for animal deaths.

### **Lime-plus**

You 26 Americans who belong to GrazingInfo, will possibly be getting tired of me pushing NZ subscribers to get into the colossal benefits of more lime-plus, but the American, VA Tiedjens, born in 1890, so long gone, wrote a 300 page book called, "More Food From Soil Science" which is all about lime and its synergisms - elements affecting it, and affected by it. Subscribers who have bought the book second hand, thanked me for telling them about it. I was given mine by Ken Scharabok who attended my seminars in USA in the 1970s and 80s. He asked if I had read the book, because I was saying the same things that Tiedjens wrote, which is how useless pH is and how lime can release needed elements or reduce bad ones such as high aluminium and high potassium. See Elements > Calcium.

I ask some of the USA subscribers with whom I correspond if their universities and 'establishment' recognise the truth about Ca in Tiedjens' book and all say that they don't, which is the same as in New Zealand where fertiliser companies, fertiliser consultants, and most general consultants won't give any recognition to lime, because they earn thousands a day from commissions from promoting P at \$400 a tonne and K at \$900 a tonne.

The questions below came after a USA farmer wrote in an American email dairy farmer discussion group to which I belonged, wrote that he had sent parts of the same soil sample to six different USA laboratories and got six widely different fertiliser recommendations.

He asked -

1. Are farmers satisfied with the current soil testing "system"?
2. Do we need to reinvent soil testing?
3. What new soil test methods are due to arrive on the scene?

My answer was 'No' to all. Farmers from around the world send soil to NZ laboratories while a few NZ consultants send soil samples to USA, because they are not happy with what they see - two P tests

and two S tests, each with widely varying recommendations. One analysis from the same sample says too low and the other too high, and some laboratories can recommend anywhere up to 200% difference as OK.

The problem is not the laboratories. It is measuring soils which I in 1956, Ken Mc Naught of Ruakura a bit later and Winchmore Irrigation Station over many years, proved to be inaccurate.

My Pasture Mineral Analysis spreadsheet gives the exact optimum figures for which to aim. If you haven't read or used it, please do so. It is the base of my consulting, backed by applying lime-plus, to correct the low calcium levels that are costing farmers worldwide thousands of dollars, simply because they are not analysing their pastures at all, or correctly, so not keep keeping their pasture calcium levels close to 0.8%. When based on soil testing information, pasture levels will be about half that, so soils, earthworms, pastures, animals will be suffering.

## Wales

David Wynne-Finch, a GrazingInfo subscriber from Wales emailed me his grass tissue analyses which were the best I have seen in years. P was 0.42%, K 2.9%, Ca 0.94%, Mg 0.26%, Se 0.3 and Al 27. Iron was 103 which showed that there was no soil pollution, so the iron affected figures were not wrong caused by soil pollution. The low Al is because Ca is 0.94%, so shows that his ryegrass roots would be going deeper than New Zealand typical ones growing horizontally at 15 cm, even on most organic farms. David favours cocksfoot because of ryegrass not surviving their harder winters.

He is a good reader (has accessed GrazingInfo 87 times) and a learner, so is successful, and has just been nominated as a Nuffield Scholar.

Most of you will have read about the highly promoted Abermagic and other Aber ryegrasses. They were developed in Wales, and New Zealand's two best ryegrasses now are Bealey NEA2 and Trojan NEA2, which originated in Spain. NZ Grasslands and NZ private pasture variety developers who were world leaders, starting with New Zealand white clover 60 years ago, followed by Huia and then Pitau and Tahora clovers and ryegrasses about 40 years ago, should be ashamed of their now poor results.

So Kiwi readers, NZ is not as smart as we might think we are. Ask DairyNZ what they are doing about it, other than last year, running a field day about chicory that many farmers were already doing in a better way, and oversowing with Tonic Plantain, and recommending reduced ryegrass seeding rates that was known and written about by me 60 years ago, but denied by Ruakura, and of course the seed merchants. At a field day in late 2011 I heard a DairyNZ scientist complain about how hard peat was to farm. Their peat on Lye farm was a disgrace. I consulted for Elsa Lye before Ruakura bought their farm and improved their pastures with correct lime applications and chisel ploughing. Under Dexcel and now DairyNZ they are much worse. Their cows are eating soil, proving a mineral deficiency. See the deficient DairyNZ cow in Elements > Cobalt.

NZ farmers who applied enough lime-plus on the 99% Ca deficient farms, which can need about three tonnes per hectare for each of three years, has seen ryegrass roots go down from only 15 cm, to double and three times that, which reduces ground water pollution of N, P and K, and grow two, three or four times more pasture over a longer period, leaving the soil and earthworm killer, urea, for dead.

If dairy farmers farmed ecologically, they would not be causing the pollution that is banning them from some areas, and their profits would increase. Deeper soils with correct element levels is a solution which is so easy to achieve. Environment Waikato got it and more from me 3 decades ago, but did nothing with it.

We all need a purpose, a reason to be, but for David Wynne Finch it was relatively simple - he wanted to have his own herd of cows. But not just any old cows. He wanted the best herd of cows in the land.

He wrote, "My real interest in cows began when I was about 11 years old,' says Wynne Finch, 'I was given a book called Cows of the World."

It was here that the Welsh farmer, whose family has been tending livestock for 500 years, first discovered Wagyu. "Something about these enigmatic, beer-fed, massaged Japanese cows - a sense of mystique perhaps - grabbed me, even at that young age," he remembers.

"This image stayed with me until adulthood. I now feel like I'm on a mission to introduce the best beef imaginable to the British public."

After spending two years working for Dutch banking firm, Agro-Industrial, in South America and then establishing a thoroughly urban, commodity trader's lifestyle in London, David returned to the

family farm two years ago and began to fulfil his ambition.

“We imported pure breed foetuses and semen at enormous cost and began to develop the nucleus of the herd,” he says.

It's a slow and laborious process and the first British-raised Wagyu meat won't go on sale until the end of this year.

### **Guess what?**

David Wynne-Finch, mentioned above, and I have been emailing each other for a while, and he suggested visiting us which he did at our first field day at 2.30 pm on Thursday 14th June, when he found his own way to our field days farm and introduced himself to my absolute amazement. I asked why he didn't warn me. “I thought I'd give you a surprise.” What a pleasant one it was for him to come all that way just for two days. He didn't know about full accommodation problems during the Fielddays so stayed with us.

It is exciting that a previous field day encouraged an Australian subscriber to come just for two days to meet me and learn more.

### **Earthworms**

Are you breeding and moving earthworms around your farm to benefit from hybrid vigour, as my wife Auriel did on our second farm, after which our son-in-law share farmer Ian Dobbs noticed the numbers and worm activity double. When I later took about 50 *Terrestris* earthworms to Ian and Susan's goat farm, the pasture grew 30% higher where they were spread.

Farmers, MAF, DairyNZ, etc., don't realise how much extra pasture lime-plus and earthworms can grow.

### **For New Zealand dairy farmers**

Fonterra's only jobs are to process and add value of milk into the best and most profitable products and to market them at the best prices. They are doing neither satisfactorily, instead, they are more interested in empire building, playing monopoly and teaching our competitors low-cost dairying in China and South America, for reasons only they seem able to see.

Fonterra is partly to blame for telling farmers (Crafer's personally, by Fonterra's BoP director.) to buy more cows and farms, and telling all to increase milk production, causing surpluses and then lower prices, creating increased losses for farmers.

Do your part for New Zealand, the dairy industry and yourself, by entering your dairy farm figures into the spreadsheet called 'Dairy cow numbers for max profit kg'. It will take five minutes and if you apply it, could make you tens of thousands of dollars better off and a much happier farmer. If all New Zealand dairy farmers applied it, the payout would increase.

I had hoped that the new CEO Theo Spierings would keep his feet on the ground, but the Friday 30th May NZ Herald interview has flattened that. You can Google - NZ Herald Spierings.

Fonterra's recent 10% drop in the ridiculous auction system prices, follows months of drops. As I've written before, the best dairy products in the world should not be auctioned, which allows buyers to set how much they will pay. They should be sold at top prices and locked in for months ahead.

Every news release that Fonterra does, boasts, while some tell the world trade what should be secrets about increased (surplus) production that successful companies would never divulge.

Remember that the corrected milk solids payout 60 years ago was \$14, based on cows fetching 20 pounds and today \$2,000 (a hundred times up), with farm machinery up by more. An even better comparison for dairy farmers is that we bought a three bedroom Lockwood house in 1958 out of income from 60 cows (no borrowing - we already had a 90% mortgage), which was the average herd size then. Today the average is 380 cows, but a thousand cows could not buy the equivalent. In 1962, milking 160 cows we bought a Keith Hay two bedroom house for a 29% sharemilker - out of income, without borrowing.

In 1964 we bought 27 hectares from a neighbour, out of income - without borrowing. Please, this is not boasting, it is showing how dairying is going downwards. My wife Auriel, and I feel so sorry for all, except those milking goats.

### **Helper**

Steve Roberts has joined GrazingInfo part time to help with the administration side and promote it to get more farmers, lifestylers and health seekers join.

He helped at the two recent field days and did an excellent job, with setting up the computer and projector for showing photos and spreadsheets at which he is tops. We have all Apple Macintosh computers which are very easy to use, but connecting a projector is a pain. Some buttons have to be pressed slowly twice to operate, and other buttons many times to find the correct settings.

### **More reading**

Could the disbelievers in pasture tissue analysing please read the Beef Profiting latest version, and Elements > Calcium latest version. See how lime-plus increased the P levels thanks to analysing pasture tissue which showed Ca was low, which the soil tests that they had previously used didn't, which, with pH, showed wrongly that Ca was not low. When Ca is low, the soil is drier so the pH is higher. After applying adequate lime-plus, the soil holds more moisture within a month, and the pH figure becomes lower, so those who don't know this say that lime doesn't help.

Earthworms, aluminium and hard pans are better measures of Ca levels. Soil stuck to earthworms means more Ca is needed.

Applying enough lime-plus releases some of the fixed and expensive P, and reduces K leaching (read Elements > Potassium) which is also expensive, saving having to buy so much.

Please don't send me your soil test figures that YOU surely must see are not only useless, but also so wrong that they cause you to waste money on P and K, too much of which can adversely affect your soils, earthworms, pastures and animals' health, and cost you thousands of dollars, seldom for benefit. A year after you get your Ca close to 0.8%, check P and K and then apply them if necessary, which is not likely.

I hope that our dollar value drops now that the payout will. Our comparatively high interest rates already keep our exchange rate too high.

### **Broadband speed measurer**

I've found a Faster Broadband speed measurer at <http://speedtest.worldnet.co.nz/>

If you have problems loading or sending large emails with photos, check your speed first. We sometimes have to wait until after midnight to load and send things.

In our eastern area of Hamilton we have a real problem of slow Broadband speed. When we moved here in 1999 it had half the speed of the west, so I complained. A technician told me that being 4.5 km from the exchange and with so many on our line using Broadband, it would always be slow. We've been told that fibreoptic will be to our road in 2014.

### **Pasture analyses**

Some have not been sending enough ryegrass to do all the tests needed by Hill Laboratories. Please send at least 200 grams, which is a large, heaped double handful from about 30 takes across the paddock, away from high fertility areas. Testing for aluminium is a separate test which needs a bit more grass.

A subscriber asked why I suggest testing for aluminium. Aluminium toxicity loses farmers a lot of money as it causes more ryegrass pulling than any other factor, while Black Beetle and previous soil pests are blamed. Light volcanic soils and others with high aluminium levels suffer more costly ryegrass pulling than soils with lower aluminium levels. Light volcanic soils can have a pH of 6.1 and a low ryegrass calcium level of 0.5% instead of 0.8%. Walton, central Waikato area, has suffered this for 50 years that I know of, i.e., hard pans, so a lack of clover and few earthworms, low boron and magnesium, poor pasture growth and worst of all, ryegrass pulling because they don't apply lime-plus. Pulling has occurred for so long that most farmers don't even notice the small pulled ryegrass plants, and if they do, they think that even 20 per m<sup>2</sup> is standard.

I repeatedly ask farmers if ryegrass pulling is a problem and they say, "No." I then get down and show them they often have close to 20 per square metre. Some is because pasture has been sown too thickly (more than 25 kg of mix per hectare), which I proved and wrote about in 1960. At last, congratulations to DairyNZ for showing it in 2011.

I see ryegrass pulling in most photos some are now sending me because of distance or lack of time to visit them.

Because the pH is OK according to the establishment, but not according to me, farmers then don't solve their problem by applying lime-plus.

### **Mineral Feeding**

Row 42 and below it in Mineral Feeding + Solminix, show that with Solminix, Selcote Ultra fertilised pastures are the best and cheapest way of supplying selenium, but if lime is lacking, soils won't hold selenium or cobalt, so more Solminix and selenium may be needed.

The extra milk protein produced, halving the somatic cell count and other benefits more than reimburses the cost of Solminix and Selcote Ultra at 1 kg per hectare costing \$8 per ha, but firstly get pasture tissue calcium levels correct at 0.8%.

The original DeLaval and Animal Remedies Board veterinarians' recommendation in 1990 for Solminix or Feedtech minerals was 0.006% or 30 grams per 500 kg cow. Since then the typical selenium level in NZ pastures has decreased, because so much urea use has lowered humus, and a lack of calcium has decreased humus so the holding capacity of selenium, cobalt and other elements in soils.

Selcote Ultra slow release prills contain 1% of elemental selenium and can achieve 5 mg of elemental Se in 17 kg of pasture, which is needed for good health.

Selenium chips are water soluble fast release so can make the selenium level go much too high, which can be dangerous, especially for horses. This is something organic farmers have to be careful of. Selenium chips should not be applied at more than 0.5 kg per hectare, so needs to be applied twice or more a year. Even then, the selenium will go too high and then too low.

In North America applying selenium was not allowed until Selcote Ultra was invented and tested to ensure that that there was no leaching which chips do.

I worked with the Principal Research Scientist, Dr Umesh Gupta of the Canadian Department of Agriculture who accepted for the whole of Canada that leaching and pollution from 1 kg of per hectare of Selcote Ultra prills did not occur, so all of Canada is allowed to use it, while not all USA States allow it, partly because dry, alkali soil central states have toxically high Se levels.

### **Thanks**

Thank you to those who email us kind comments after receiving our newsletters, like this one -

“Every thing is going well on the farm at the moment. Please keep writing the newsletters. They are about the only thing I read at the moment that relates to what is happening on our farm.”

Thank you to the 11 who have contributed to help ensure GrazingInfo continues.

We have increased joining for the first time to \$50 plus GST.

Vaughan Jones  
GrazingInfo Ltd