

My New Year resolutions since I started consulting have always been the same, i.e., to do the best I can for as many farmers as I can.

At agricultural college we were taught that good farming is doing the greatest good to the greatest area - on time.

I hope that the resolutions of grazing farmers' is to analyse pasture twice each year and to read how to take pasture samples without soil pollution. The iron level should be lower than 100. When higher, it falsely increases cobalt and manganese levels in particular. Read Sampling & Reading Plant Tissue.

We were also taught to aim high, so open the free Pasture Mineral Analysis spreadsheet to see the optimum levels for which to aim, rather than the typical laboratory figures which sometimes can be anything within a 200% range. For accuracy, sample ryegrass only. Aim to have all levels at optimum, not just average. Your pastures, soils and animals will love you for it, as will your bank. Don't waste money on soil tests. The wrong information from them has caused farmers to lose millions of dollars collectively and caused many soils to have tonnes of P and K locked up, polluting underground water.

Banks are concerned about the high debt levels, as they should be, so farm to increase your profit and reduce your debt. Many GrazingInfo subscribers have done so, one increased profit by \$444,000 in three years and reduced their mortgage by \$100,000, and bought a tractor and car. Many have increased their beef and milk production, all by using pasture analyses and then applying lime, serpentine, boron and all deficient elements.

If your calcium level in ryegrass is not close to 0.8%, you will need to apply LimeMag or its equivalent with synergisms. See Elements > Calcium. When calcium is low, those who have applied what I recommend, which is usually at least 3 tonnes per hectare of lime and deficient trace elements, have been delighted. Some have asked me if it is the reason for their substantial increase in clover and pasture growth, and I could always agree that it was.

#### Finding chapters in GrazingInfo

Now that GrazingInfo has got bigger, finding chapters can take time. From the Home Page, click Chapters and then open the one likely to have the one you want, for example Earthworms is in Soils, as is Cultivation. You can take Screen Shots of them all, one at a time, and store them on your computer, but remember that more are being added.

#### Leaching

The high rainfall that some parts of New Zealand had in December (Waikato the highest recorded since the first in 1905) has meant that high leaching has lowered pasture tissue levels of sulphur, sodium, nitrogen, selenium and other water soluble minerals. Soil tests don't show this. All except the 5% (my survey at Ruakura in 2009) who apply elemental sulphur, will be low in S which is an important growth element. Low selenium, especially in nitrogen boosted pastures, cause increased scouring so more unnecessary drenching for worms which helps cause drench resistance. The Beef chapter, which all animal farmers should read, is one of many with evidence of scouring being from low selenium, not from parasites.

Selenium levels in pastures have decreased as pasture fertility has increased which has decreased slower growing grasses like Browntop. It has more than twice the selenium levels of perennial ryegrass. To get ryegrass to its optimum of 0.3 mg/kg takes lots of selenium fertiliser and an optimum Ca level, which helps increase humus levels which holds selenium (and cobalt).

#### Rotaries

The angle spacers between the back legs to spread them, make it easier to apply clusters more carefully with less sucking of air and shhhhh clip, that causes teat blasting and increases the somatic cell count and mastitis. They make it a bit harder for cows to kick off the clusters and make it easier to teat spray accurately. See Mastitis.

It was a pleasure being in a rotary of calm cows last week for more than an hour with not one of the 160 dropping any dung. The farmer has been analysing his pastures and feeding Solminix adjusted to have more of the deficient pasture minerals, and his cows were responding.

He had been applying LimeMag, but not enough, so ryegrass Ca was 0.52%. Sodium, boron, cobalt and selenium were low. All can be fixed by fertilising.

## Slow Broadband

I made suggestions about this in Newsletter 25, but I didn't emphasise turning the Router off for half a minute, then on again. I had not turned my Router off for about three weeks and noticed Broadband loading was very slow so I turned the router off for half a minute and then on again, and the speed increased to where it should be.

Incidentally, a few months ago I became conscious of something affecting my health adversely, so having been affected by Electro Magnetic Fields (EMF), I turned all wireless connections off and direct coupled the computers and printers which doubled the Broadband speed, and I felt much better. Look at <http://emf.mercola.com/sites/emf/emf-dangers.aspx> and Google for Electro Magnetic Fields.

## Calcium (Ca)

If any young animal (Calf, lamb, kid, etc.) growth is slow, it could be because of low Ca levels. Perennial ryegrass leaves with stems, but not seeded, should be close to 0.8% Ca. If lime is lacking, your pasture calcium level is likely to be about half the 0.8% which will then give only half the annual pasture growth you could achieve. 3,000 kg per hectare of LimeMag and deficient elements, after good rain will give increased growth and after earthworms increase, less or no facial eczema provided you have earthworms that can multiply. See Animal Health > Facial eczema, and Calcium, and Calcium successes.

## Manganese (Mn)

If calcium levels are OK, but young animals are not growing, or are unwell, check pasture Mn, copper, selenium and iodine levels. The only way to provide iodine is in the drinking water, or teat spray.

In New Zealand Mn is usually too high, but in North America and the UK, it is often too low.

Enter your pasture mineral analysis levels into Pasture Mineral Analysis spreadsheet which is free in GrazingInfo because it is so important to farmers to see the effects of mineral levels being too low and too high. It also shows the grass and clover optimum levels for which to aim. Then copy the figures to the Pasture Records spreadsheet to file and keep and watch the trends over the years.

Then use the Lime Nutrient Planner spreadsheet to decide how much of everything to apply. Enter the figures into the yellow cells.

If unsure, email the completed spreadsheet to me and I'll help with it and email it back.

## Email address

I changed from Xtra to [support@grazinginfo.com](mailto:support@grazinginfo.com) but some have not identified "support" as coming from me and some have said that they had not received my email when they had, so I now use [grazinginfo@grazinginfo.com](mailto:grazinginfo@grazinginfo.com)

When emailing me questions please add your full name, location and very brief farm details to save me looking them up. Thanks.

Please recommend GrazingInfo to all farmers and townies

Dairy farmers have learned that increased milk production reduces the milk payout, so most now don't recommend that dairy farmers join GrazingInfo to increase their milk production. Unfortunately Fonterra has not learned it, so they boast about their milk production increases, causing buyers to bid less, and townies to think dairy farmers are rolling in money. A Canterbury townie raved to me about the good job Fonterra had done in getting so much dairying in the South Island. I pointed out that it was not Fonterra, but North Island dairy farmers by the thousand who moved there for cheaper land. At the same time, 80% of the dairy farmers in Tasmania, and about 15% in Victoria are from our North Island.

You may ask why townies are joining GrazingInfo. It is because about a quarter of them are also unwell and deficient in minerals. See Human Health and Human Health Elements. Also, most benefit from reading the Garden information. Have you glanced at it.

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