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Newsletter 132

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This newsletter is long with a wide variety of topics to try and stop the many costly farming mistakes made by some, from being made by others, at a time when none can be afforded.

The next newsletter will include honest and unbiased information on TPP. The NZ parliament has not yet agreed to it or signed anything, so do your research by Googling for 'TPP Wikileaks for New Zealand' and promote the true facts to ensure that NZ doesn't join, so all small countries can have their own agreement. NZ has agreements with both USA and China, both of which are useless, because USA has its own terms within it, and China buys to suit itself, even after Fonterra has taught them how to produce low-cost milk, so it increased their already massive production by 12% in 2014, which increase is about a quarter of New Zealand's production, and their first increase since 2001, when it was only 1%. China has no feeling for New Zealand, so will take and grab, smile and do it again, the same as they do to their own people. China thrives with our agreement thanks to getting bulk timbe, milk and meat, all unprocessed, and selling us all processed, finished items, cheaply, mostly because of their very low exchange rate and our high one. Their cheap labour is not significant because one person can operate three or more plastic moulders. All they have to do is pour plastic into them, and pour the moulded items into cartons. Some companies have brought their moulding back to NZ for very little more cost.

A major cost problem NZ has is that so much from other countries comes via Sydney because they tell manufactures (of computers, electronic organs, some medical supplements, and many more), that New Zealand is part of Australasia and is closer to Sydney than Perth is.

The SA Agriculture Report on the economic benefits accruing to TPP nations, stated that the benefits expected for New Zealand agriculture are negligible. So why join? For USA to fleece us more? Twelve years ago USA made our weak government close our wonderful NZ Dairy Board, which was the envy of our meat industry then, and the USA dairy farmers, so USA made us create and use the dreadful Fonterra, run under USA rules that have ruined ours and many other dairy industries. See below.

Something our politicians and farmers must learn is that no one can change countries, USA will still show its greed and forget honesty, when it come to feathering their own nest. China will always push their barrow to achieve what they want and both those governments print money, again to buy what they want.

From USA in February 2008

"The USA National Milk Producers Federation said it would seek the full exclusion of New Zealand's dairy products under the newly-announced Trans Pacific free-trade agreement, because of the New Zealand dairy industry's unique structure and excessive manipulation of dairy markets globally and in USA."

What dishonest complete tripe and a case of the pot calling the kettle black. USA gets others to remove tariffs. Read www.grazinginfo.com about 'USA rules wrecked Haiti and could wreck NZ.' and read 'Why USA owes Haiti billions of dollars'. USA dumps their highly subsidised grains and dairy into many poor countries putting poor farmers in Africa and other poor countries, out of business. USA has done this for at least 30 years.

NZ Farmers

Our friendly, calm, pleasant and highly productive, but too easy going NZ farmers, need strong government and media honesty, to protect them from large countries - NOT handouts like those in many countries get, to produce more and create surpluses at our expense. Fonterra, which should have been a New Zealand supporter has shown for 12 years that it cares more about other countries, and needs guidance. All that NZ farmers need are fairness and honesty, especially with TPP, where there are no solutions for New Zealand, Japan and similar small countries against the dominant USA. So small countries should form their own marketing group, and they should certainly NOT join TPP. If we do, we will have USA imposing trading rules, which they would work around by giving their farmers help and subsidies, as they've done for 200 years, by supporting family farms, under a long series of Acts that provide support for agriculture and its research, at no cost to their farmers. In 1933, with many farmers world-wide losing money, because of the Great Depression, President Franklin D. Roosevelt brought in the USA Agricultural Adjustment Act, which created the Agricultural Adjustment Administration (AAA) which regulated agricultural production by paying to destroy crops and





artificially reduce production. It also gave subsidies to

bare land owners, to encourage them to not grow some crops. Their Supreme Court later closed the AAA as unconstitutional, so in 1938 the Soil Conservation and Domestic Allotment Act was formed, which created a similar organisation of farmer subsidies, again typically American. These are reasons why trade agreements with USA are unsatisfactory, for all except themselves. The United States 'price and income support', known elsewhere around the world as agricultural subsidies, grew out of low inefficient farm production, so a financial crises, which led to widespread political belief that the market system was not adequately rewarding farm people for their work and produce.

Reaction to the USA falling grain prices and the widespread economic turmoil of their bad farming, caused by bad shallow non-organic inverting mouldboard ploughing for cropping, rather than pastured animal grazing, that had existed in grass prairies in the area since before man, and is used in most of New Zealand, called permanent pastures here. The Dust Bowl (1931-39), started by the Great Depression (1929-33), led the United States into price subsidies for farmers. After the war in 1945, the American Louis Bromfield bought three 150 acre bared dust bowl farms in Ohio for next to nothing, and improved them by chisel ploughing deeply, mixing in lime and the vegetation leaving most on top, instead of shallow mouldboard, bad inverting, which left the bare subsoils exposed to heat and wind (all trees had been removed), so with the repeated cropping, soils were ruined and blew away for miles.

Louis Bromfield also changed to grazing, as was already done in most of New Zealand. It became Malabar Farm State Park, an American agricultural museum visited by millions. He wrote a book called Malabar Farm, which should be read by all farmers. I read it in 1950 in South Africa, and changed our farming. Our crop yields nearly doubled, soils improved and less irrigation was necessary. After ariving in the Waikato in 1955 I made a chisel plough (not then available in NZ), which with more LimeMagPlus than recommended by the 'establishment', yielded 50% more, and still does, growing maize 4.2 metres high, while mouldboard maize is still only 2.4 m. Neither Pioneer, with whom I spoke and DairyNZ, have learned this, or even tried it. Rotary hoed summer forage crops, criticised for their low yield when grown by Ruakura/AgResearch, also benefit from chisel ploughing, with three times the yields.

The USA system of government-controlled agricultural commodity prices earns some large bare land owners (mostly capitalists) millions of dollars annually. 'Supply Control' was used to decrease over-production, leading to over 50,000,000 acres being subsidised as 'set aside land' during times of low commodity prices from 1955 to 1973, and again from 1984 to 1995, and is still done today. Over time, a variety of problems began to be addressed correctly, such as soil conservation, surplus crops given as food aid (National School Lunch Act of 1946 when the National School Lunch Program, a federally assisted meal program operating in public, and non-profit private schools, and residential child care institutions, giving nutritionally balanced, low-cost, free lunches to children on each school day.

New Zealand's free milk to all school children operated from 1937 until February 1967 by the first Labour government wanting to improve the health of young New Zealanders and use up surplus milk. It was a world first for milk. By 1940, the half-pint (284 ml) of milk was available to over 80% of school children. For a few years during the Second World War, pupils also received an apple a day. In 1967, the National government dropped it all on the grounds of cost and because some people were questioning the benefits of milk, which would have suited the capitalist (rich get richer and poogovernment. Not everyone enjoyed the smell and taste of warm milk before fridges and chillers. Milk does have many benefits including reducing fizzy drink consumption. It is now paid for by dairy farmers, but should be paid for by the government.

During this time, USA agricultural financial support also increased, through increasing subsidies and export subsidies, increased crop insurance, and expanding price supports for different crops, up to 50% for maize, some with its waste going to ethanol fuel production. About 1% (3.2 million) of the USA population of 320 million, own, lease or work full-time on farms. As the agribusiness lobby grows to near \$60 million per year, the interest by agricultural companies remains high, so they support farm subsidies. In recent years, USA farm subsidies have remained high even in times of their record farm profits.

Our clean-green

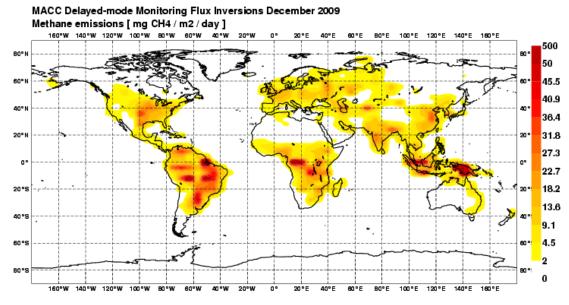
USA and other countries have massive pollution problems, so they are jealous of the New Zealand clean-green reputation. By comparison, NZ has no pollution problems, so some countries have repeatedly looked for faults and made up stories. Examples are methane pollution which they based on the pollution from our large animal numbers against our small human population. The methane figures per animal were USA ones, which are from their grain fed animals, which produce much more methane than from our clover based pastures. Also, USA loaded the total methane production from our nearly 100 million grazing animals onto our 4 million people, to make our figures look worse than theirs.

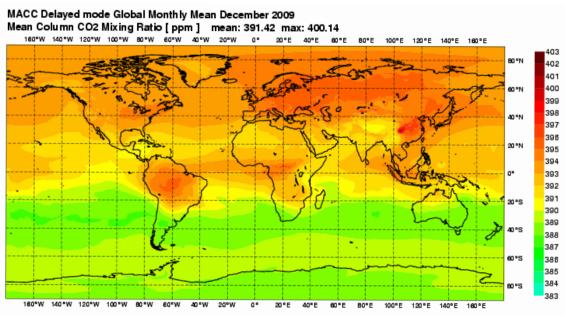
Below are methane surface level indicators which include bush, animals and pastures.

A methane scientist measuring it world-wide, was astounded at the high levels on the soil surface in dense bush in South America, shown below. This silenced some of the animal critics. Read Pollution > Methane.

Below is from http://www.gmes-atmosphere.eu/services/gac/ghg_delayed/

Methane, Carbon Dioxide is below





Both the above show how clean New Zealand is.

Exporting rule. Don't upset the locals

Doing so will encourage their governments to help them and get rid of the cause, as USA has.

When selling NZ electric fencing in USA in 1980 the price for our energiser units that could have a lightning damaged circuit board replaced, was US\$300 while the USA ones were in non-replaceable sealed tin boxes at only US\$60, so their farmers would buy several at a time. The USA manufacture just laughed and ignored us. NZ sales skyrocketed and continue to, even now, 35 years since their launch there.

Jealousy is dangerous

Our milk products, selling in USA for less than theirs, upset them and made them jealous. The NZ Dairy Board should never have done this. It is a 'No, No', in exporting. It caused a Wisconsin dairy farmer to email to Graze-L, a New Zealand run international email group, suggesting that USA nuke New Zealand. This is a fact, because I belonged to Graze-L (it closed about ten years ago) so we saw it.

Who would believe that 12 years ago the NZ Dairy Board marketing system would be changed to the useless Fonterra shambles, which has badly affected all NZ. It allows anyone to buy Fonterra milk, process it and market it against Fonterra and our other marketers. Under the USA imposed rules, Fonterra has to supply anyone! Fonterra was unable to see this and used feeble reasons for the continuing drop in auction prices, such as the industry being volatile. If it is, Fonterra made it so, by having an American company do the badly run auctions for the world's best dairy products.

GrazingInfo successes

It is pleasing that members who have read and applied the many GrazingInfo suggestions have benefitted and:

- Made more profit, so reduced their mortgages one by \$1.4 million this year, after reducing cow numbers by 25% and total production didn't decrease, applying optimum LimeMagPlus each year for three years, stopping growing high cost, low feed value maize silage, and stopping buying PKE and other feeds.
- Applied five tonnes/ha of LimeMagPlus every year for three years, and no superphosphate or potash needed. This is only two tons/acre of lime.
- Fed their own mixed Solmin with Magnesium Sulphate, and not mixes that contain toxic minerals, not much Mg, and no salt which is the most important item for animal health, and soil health, so always apply about 100 kg/ha, depending on the ryegrass level and distance for the sea.
- Some GrazingInfo members are not reading more than the newsletters. Those who don't read a lot, had better start reading and applying more of GrazingInfo chapters, to reduce their costs in every way possible, and to do the right things for more profit.
- Stopped getting Facial Eczema. See Animal Health.
- Stopped having to drench young stock much. See Earthworms.

Newsletters

After each newsletter we get an amazing number of thanks and good comments of how well some have done thanks to GrazingInfo, for which we thank them, however a lot of members have not read a single one of the 270 chapters in GrazingInfo. We've written often that the 'good readers' are thriving, while the others battle. One member with health problems in his family had read only two of the 60 health chapters. Another VERY unwell Rick, read what manganese did to cows and identified his problems as similar, so stopped taking the manganese he had been prescribed, and his health improved immediately. Read about it in Testimonials Human Health. If any doctor, specialist, vet, agricultural consultant in New Zealand recommends manganese, drop him.

An old and true saying is 'Small is Smart, Big is Bad'. Tatua has only about 140 herds. For 100 years they have paid their producers more than all the other companies. In the 1950s the NZ Dairy Board inflation adjusted milk payout was \$14, and the average herd was 60 cows, which gave farmers an excellent living, something today's average herd of 370 cows doesn't. Another small milk company, Lewis Road Creamery, produces the best quality organic milk products. Theirs are dearer but much better, in fact analyses show that theirs is the only true organic milk in the country. It has no heavy metals, which most others, including organic milks, do. Despite being dearer, Lewis milks in supermarkets sell out between deliveries. Their rules forbid any PKE to be fed.

I've seen cows so badly affected by PKE that they had to be killed by a vet. Cows in NZ and Australia and milk from it is higher in heavy metals. Lewis are now paying producers the highest payout. Their containers are clear like glass, because they are made of virgin plastic completely free of toxins which others aren't. Others are made from recycled plastic and cardboard.

Fonterra

Fonterra is an example of big. Analyses show that their organic milk is not organic, nor is their packaging of it, which is recycled cardboard and/or plastic, both containing heavy metals, as does their milk, mostly a sign of not enough agricultural lime and too much acid fertilisers having been used recently. See the Milk Profit & Quality chapter in the Dairying folder.

After the USA Dairy Industry with their government, pressurised our weak politicians (both our main parties) to close the highly successful NZ Dairy Board, by wrongly accusing it of being a government run monopoly, and our dairy farmers rightly would not agree about a replacement until it was agreed that there would be 10 directors, ALL FARMERS. Now there are 13 and only four farmers on the Fonterra Board, so the result is wrong stupid decisions galore. In fact I don't know of a single good thing they have completed. Fonterra's job is to market NZ milk, but they have not got a clue about marketing, or they would trash the disastrous auctioning and get marketing.

My forecast 12 years ago was that there would be 10 competing dairy companies within 10 years. There are more. Competing milk selling companies allow buyers to beat them down. The single selling NZ Dairy Board cooperative didn't have this problem.

Bought feed

Fonterra, with farmer support, must get all farmers to stop buying supplements for extra unprofitable milk production, which creates a surplus, reduces the quality and payout to all. They should encourage the optimum number of cows for more profit, and growing summer forage crops, which are profitable to farmers, and then sow improved pastures with NEA2 toxin-free, highly palatable endophyte, rather than the old fashioned AR endophytes. Cows grazing NEA2 endophyte toxin-free grasses during the flush, produce two litres more milk per day than AR endophyte ryegrass es, which pull, when NEA2 ryegrasses on the same farm don't. It is a pity that DairyNZ has not learned from GrazingInfo and promoted this. All checking that I and members have told me about have a lot fewer black beetles (sometimes none) in NEA2 grasses. Most ryegrass pulling by far, is caused by hardpans which are caused by a lack of LimeMagPlus.

Thousands of tonnes of lime at \$25/tonne are now being applied because it is needed so much, especially where P and K are in excess, because of fertiliser companies pushing them at \$400 and \$800/t based on the old fashioned soil tests, which have lost farmers millions of dollars. In 1956 I saw that soil tests were innacurate and misleading, so were costly, so I did no more.

Dr Ken McNaught, a top Ruakura scientist, in 1958 also showed that pasture analyses were much more accurate and more profitable than soil tests, but DairyNZ still doesn't know this, but must know that Overseer is useless in this respect. It is so bad that it is being looked into. I was asked for my opinion on it by the designers before they released it, and I told them it was useless because it didn't analyse plants and didn't consider trace elements. It is the use of Overseer and soil tests that have caused the serious calcium deficiency throughout the country - except in GrazingInfo member farms who analyse ryegrass.

Often the major cost of lime is the transport, which can be double the cost of the lime, but now there are a lot more lime mines with improved quality lime. Over the years, many have asked me what they would have to do for me to recommend their lime, and for 20 years I've been saying to grind it finer. That seldom applies now, in fact McDonald's Lime at Otorohanga now owned by Graymont, has the finest ground soft agricultural lime I've seen. Ravensdown owns 12 limestone mines, and there are dozens more around the country, so start by contacting those closest to you and get samples, analyses freight and other costs, and copy me please. Some may not buy and mix other minerals, but some carriers do at their depots. I need not tell you that reducing costs are essential, but when two years of correct liming nearly doubles pasture production, and saves the cost of P and K, farmers can't afford to skimp on it.

Fonterra mistakes, faults & suggestions

1. Fonterra should have set up a marketing system, not the weak disastrous auctioning which allows buyers to decide the price, that vendors should decide. Auctions are for unsaleable items, not the world's best. I did a survey of shops in London in 1984 and they all said that they sold more New Zealand butter

than UK and Danish butter and said, "NZ butter was better, and had no costly comebacks, which others did."

- 2. Botulism disaster. Fonterra should have their own laboratory to cope with all the analysing necessary in dairying. They are still facing a multimillion dollar compensation claim from the French food giant Danone, and infant formula maker in Auckland is losing out on \$12 million a year due to the botulism scare. Has Fonterra claimed against the laboratory?
- 3. Fonterra has had to recall many products, each of which is a disgrace and decreases the demand for our exported milk products.
- 4. Teaching and helping China to produce more milk which increased their production by 12% in 2014. Before then, China had not increased their milk productio since the 1% in 2001. China and New Zealand have a free trade agreement, which means little. They ignored it and stopped buying our milk. Their exchange rate is very low which favours their exports. Ours has been very high which penalizes our exporters. They buy our bulk low-cost timber, wool, meat, etc., and sell us their finished products.
- 5. Buying and fixing two failing dairy companies in Australia.
- 6. Negotiating marketing milk from Uruguay and helping other South American countries.
- 7. Helping Holland build a modern factory that will process their milk much more quickly.
- 8. Telling us that New Zealand should teach the rest of the world our low cost milk production systems. Are they mad or being bribed?
- 9. Told us that they were going to increase organic milk production by three times within three months, but it takes three years of organic farming to get organic approval. Do Fonterra million dollar a year managers know anything about farming? We know that the NZ\$4 million manager doesn't.
- 10. Stopped collecting organic milk from some organic farms for feeble reasons (too small and too distant), after telling us that demand for organic milk was increasing.
- 11. In 2013 Chinese mothers complained that New Zealand baby milk was very low in iodine. I measured it and they were right, so I worked on it and increased a client's milk iodine level from 15 to 80 ppm and improved the overall quality, from Compatibility 23/100 and ppm's Hg 15, Cd 20, Mn 20, Iodine 15. Mastitis 30 cows, SCC 400, to 18 months later Compatibility 95/100, Hg 0, Cd 1, Mn 1, Iodine 80. Mastitis 1 cow, SCC 220. Full details are in the Milk Profit & Quality chapter in Dairying.
- 12. Their reducing the payout, when another company is paying \$7, and their bad management of organic milk production, has caused nearly half the organic dairy producers to give up producing organics. Fonterra reduced the organic reward for the higher production costs, and allowed USA to not allow copper chrome and arsenic (CCA) treated Pinus Radiata soft pine fencing posts to be used for fencing on organic farms. There are millions in use in New Zealand, mostly older than 20 years so the toxins are out of them. Milk can be measured for the toxins. All USA's 300 rivers have more mercury than is suitable for consumption, so it will be in their drinking water and organic milk. Mercury is much worse than copper chrome and arsenic; a little of each is needed for good health.
- 13. Something that Fonterra should have done by now is to make our own 'New Zealand better than organic' rules, and not use USA ones that have clauses to make New Zealand organic milk not comply, such as no CCA posts, which are unique to New Zealand because we don't have many hardwood posts now, and their are vast numbers of CCA fence posts already been on farms for 50 years not causing problems. It is known to let them be weathered for a two years before using them to where animals, especially deer can access them, because they eat them to get minerals.

USA has many more toxins affecting human health than does New Zealand.

The 'Better than organic' is because we measure the mineral content of plants, then LimeMagPlus and/or fertilise to correct the soil levels more accurately than in any other country - except the hundred overseas followers of GrazingInfo.

PKE kills.

In fairness to Fonterra, they have at last seen the very bad points of PKE produced milk, but many farmers have committed to long-term orders. The world's disapproval of PKE has been known since its beginning, which is when Fonterra and DairyNZ should have warned all about its problems above, and its highly toxic levels of manganese which sresses cows animals with it high copper levels have killed cows. Some claims made by some PKE vendors such as reasonable levels of energy (ME) and protein, and good feed value are

wrong in that Ca, Mg and Se are very low, while the poisonous stress giver, manganese, is up to 340 ppm causing nervousness, kicking and dunging, so some staff retaliate.

The feeding of a maximum of 3kg/per cow/per day, is too high, and impossible to control when bulk feeding in paddocks.

History

When Fonterra started under USA's imposed limiting terms, my prediction was that within 10 years there would be a dozen new milk companies in New Zealand, all in the high milk producing areas. I also wrote that Fonterra would end up with only the milk suppliers in the remote areas.

Does Fonterra realise that their teaching, and financing, our low-cost production systems to the Chinese is a main reason for their 12% increased milk production. China is big enough to produce more milk than we could, by a long way.

Do our dairy farmers and our dairy industry (i.e., all producers and manufacturers) know that some New Zealand dairy farmers are dairying in a big way in USA, and that colossal dairy farms are being planned in their drought areas where effluent disposal is not a problem. They will be fed 100% bought feed with no grazing, so living short unhealthy lives on concrete, or in dust blowing over highways, or in mud like their beef does.

I don't like criticising and writing about gloomy things without solutions, which in this case are easy.

The world wants top quality dairy produce from pasture fed grazing cows, not PKE or even grain fed, the use of which is increasing in New Zealand and helped increase autumn milk production, which helped create the milk production increase that reduced demand, and the price to our farmers.

Most who increased cows numbers, and bought feed, increased their production, but reduced their profit. The increased production is one of the reasons for the surplus milk causing the lower auction prices.

Growing Maize!

In 1984 we swapped our 87 ha best-on-Piako-Road, Gordonton dairy farm, with a 50% sharemilker, for a 107 ha maize growing farm, the worst on Greenhill Road, close to Hamilton, that had gone bankrupt because of USA 50% subsidised maize being dumped into NZ, keeping our price down. We had to borrow \$250,000. Interest rates were 25%, or higher, because of Labour/ACT Party, using USA crooked capitalistic policies making the rich get richer. Some of you will remember those days, when finance companies galore went bankrupt, partly because commission agents were losing investors' money. We shopped around and borrowed through an NZ bank from Switzerland, at 5% fixed for one year. We were warned about exchange rate fluctuations, but it worked out all right. Lending rates were 3% in Switzerland and Japan and still are. Both are where NZ banks borrow, and make 100% profit by lending at up to 6%. Farmers in Japan borrow at 3% and their government subsidises it for them down to 1%.

After the first year, our NZ bank increased our rate from 5% to 6% for a year. I phoned a good farmer friend in Switzerland whose brother was a bank manager, and found that their rate had not increased, so I complained to our bank and they reduced ours back to 5%. We had been using that bank since 1955 (29 years), so told them their fortune, and after the year ended we dropped them. The new bank we changed to had a money making scheme to make more money by trading it, but lost money, so I told them to stop, but they didn't and lost \$13,000 of our money, so we increased our overdraft to \$13,000 and changed to Taranaki Savings Bank (TSB) where we have now been for 18 years at much better rates, attitudes and terms, with almost no bank charges. Our previous bank threatened us, so we pointed out that they would lose a lot if we told New Zealand what they had done to us. They agreed, provided we didn't tell anyone their name, so we had got our \$13,000 back.

If you don't feel up to beating your bank down to close to 5%, then shop around and/or ask your spouse or accountant to help do so. Take your spouse to important meetings. At a recent meeting with a property tenant we could not get a rent increase after having had none for three years. They asked for another two years with no increase. Auriel suggested one year, and they agreed. They are having difficult times, but so are many. We are earning 14% on this property investment, so can't complain.

Many New Zealand farmers lost a lot to banks in the Swap interest rate roguery about a decade ago, and, as a group, some are still hoping to be refunded. Each farmer would have been better off had they worked out a scheme to be treated justly at the time, or to expose the cheating banks.

Farmers are loyal people, so don't like changing banks, vets, consultants, doctors, political parties or wives, which is good. One peat farmer used a crooked consultant for about 20 years which lost him a few million dollars because he repeatedly recommended more P and K based on soil analyses, which our pasture analyses

showed were too high, and calcium was very low (0.4 ppm instead of 0.9). The result was weeds galore, sick animals and calves not growing well, 30 cows with mastitis, which dropped to one, after two years of LimeMagPlus and Solmin.

Increasing Income

Some farmers (and spouses) can add to their income with one getting a job, taking in boarders, renting an empty room or house, running free range poultry to sell eggs (Read Poultry), changing to beef, but think it all through, and make it easy to go back to dairying, because, like NZ, USA beef farmers are rearing more calves, and their government has said it plans to increase their beef production.

Farmers' successes

In 50 years NZ dairy farmers have doubled milk production per cow and doubled pasture production per hectare, and increased cow numbers from 70 per herd to 370 now. They can't do it again, which is just as well because USA and Fonterra have ruined our dairy market.

The Main Profit Makers in Dairying

- 1. Milking only once a day. After breakfast, is not as cold as 5 am, but is still comfortably cool in summer, and doesn't have to be finished by 5 pm for staff. About 9 am is when most automatic milked cows choose, and they also choose once a day, and make more profit, so farmers should copy them. In the first year you may like to not start OAD until udders are less tight, but remember that conception rates are better in OAD, and with correctly fed minerals like Solmin in their water.
- 2. Milking the optimum number of cows for your farm for maximum profit, by using the spreadsheet called Dairy Cow Numbers for Max Profit. AgResearch Ruakura checked my figures in Oct 1991 and said that the production/cow would increase by even more than those I've used. Lincoln University in January 2013 approved and recommended it.

Did you know that the cost of keeping, milking and feeding one cow for a year is \$1,300 pa each. To make a profit on her she needs to be fully fed. If you have twenty cows more than your farm can feed without buying feed, in an average year, the twenty cows and the others will not make a profit, and that of all your cows will be lower. Buying bought feed has always been a dead loss, and is now worse. Growing maize has always been unprofitable. We, and top member Ian McDonald of Patetonga, found this 30 years ago, and that growing forage crops is good insurance for dry summers, and is profitable, and leads to sowing the best new NEA2 endophyte pastures, which some farmers said are bad - because they didn't choose the best, and didn't chisel plough in LimeMagPlus, and didn't fully feed their pastures or cows. Ian McDonald bought two neighbouring farms and we did the same. Ian's son still grows 12 tonnes per hectare of turnips every summer. There are now much better forage crops. Read Forage Crops. The 'establishment' told farmers not to grow summer forage crops, based on their pathetic yield of only 5 tonnes/ha of turnips on Silverdale Road, Ruakura, because drainage, cultivation and liming were all inadequate. Ruakura's Dr Koos Baars saw the patheic 5 tonne/ha crop they quoted with me.

- 3. Cutting out all bought feed. All those who have correctly budgeted saw that there is no profit in buying, growing, harvesting and feeding maize, even when the payout was \$8. Doing so for their ego is not profitable for themselves, their family, or other dairy farmers, and is costly for all New Zealand. Worst of all, the extra milk, produced at a loss, increased the world's over production of milk, which reduced the payout for every dairy farmer in the world which you would have seen. Highly subsidised USA dairy farmers are dumping surplus milk which is a reason for not wanting ours. Meanwhile milk sales middlemen are making more profit out of dairy farmers.
- 4. In the 1960s six Waikato dairy farmers went to USA and were talked into buying tower silos and building barns on their farms and carting feed to cows. All six gave up within a few years because USA farmers didn't tell them of the colossal subsidies they were getting, and the fact that they were paid nearly double ours for their inferior grain-fed milk. One of the six was Ralph Woolerton, father of Doug, who sharemilked and suffered increased work load and costs and increased milk production, but after three years lost their Peacockes Road farm, after 'cut and carry' feeding broke them with a much higher payout than now! In the 1960s our payout was \$14 per kg equivalent. The conversion is easily calculated because cows then cost about twenty pounds each, the spinner drain digger I invented was thirty pounds, are now \$3,000. Also county council charges and rates, etc., were close to zero. There was no DairyNZ costs of thousands each year. The government paid for Ruakura, which did more useful research then, proving that

what the best farmers had been doing for a decade was right. In the 1960s and still now, thousands of USA confinement dairy farms are closing down and thousands have changed to pasture grazing to survive. Now some are changing to beef, and USA is rearing more beef calves than ever, which will reduce our main beef export market, so our farmers should look into milking goats or farming alpacas, both of which are currently very profitable, or a bit of each.

- 5. Growing today's highest yielding forage crops for summer and/or winter are highly profitable, but not if done incorrectly, as in last summer, when the old known rules abou brassicas were broken. Briefly, brassica root crops like turnips, swedes, beets, etc., must contain 25% leaves or be fed with at least 25% of pasture. After the deaths last summer, the TV showed massive heaps of leafless bulbs being fed at a time when there was no pasture left. Animals can die on any brassica or similar bulbs, on their own. We have not grown or recommended bulbed crops for ages, but do recommend Pasja, a brassica with almost no bulb, which regrows leaves and can be regrazed every 18 days, with Shirohie Millet or Nutrifeed, giving a total yield of 25 tonnes/ha of far better feed provided every thing is done correctly. Spread the sowing over 16 days or longer to prevent the last of the mix getting too long before grazing. The last batch sown will grow faster in the warmer weather. Stagger the cultivation so that none is sown later than three days (two is better) of starting the cultivation, to avoid weeds. Read Forage Crops for photos and full details. I know that, for winter feed, the south of the South Island is harder than the north of the North Island, but overstocking anywhere causes many problems.
- 6. Feeding deficient minerals through the drinking water. Ninety percent of cows shown on TV and in the Waikato Times this year were deficient in selenium, sodium and/or cobalt and were too thin, all causes of tick born diseases like theileria and internal parasite problems.

Best wishes,

Vaughan Jones, ONZM Queen's Honour 2013, for services to farming. 99% Honours in Dairying 1948. NZ Dairy Board award for Waikato Most Improved Dairy Farm 1959. International Agricultural Consultant & Journalist. Represented NZ in Ag Journalist Congresses in USA in 1992 & Austria 1994. Managing Director of the website GrazingInfo Ltd, compiled since 1970. NZ M.Mkt.I.

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