

Bees buzzing in Mangere Bridge

It's not often these days that I am left holding the baby, since our children are teenagers now. But that is what happened when I visited Kerry and Alexandra McCurdy's Bee'z Thingz Ltd company in Mangere Bridge.

They had been working till 3am that morning picking up bees and hives diseased with American foul brood (AFB), caused by a spore-forming bacterium. Its spores can remain alive for at least 40 years, and resist boiling and dehydration. New Zealand authorities therefore only allow control of the disease by burning all diseased material, a costly affair when an average hive may be worth about \$800. So I was treated to a good bon fire while taking care of their 8 month old granddaughter.

So what does a beekeeper do in a suburb like Mangere Bridge? Well, according to Kerry "Mangere Bridge is one of the best places to keep bees. Our winters are warm so bees don't over-winter, and breed all year around. Manukau has a great diversity of flowering trees and shrubs that you don't see in other warmer places like Northland".

How did Kerry end up with bees? Kerry has a long agricultural history. He started farming in the Waikato in the 1960s, and spent 4 years in the early seventies as a farm advisor in Columbia, working for the WorldBank in one of their dairy programmes. After a few years travelling the United States, Kerry bought the current property on Wallace Road, about 2 acres with 3 glasshouses. "I set up a 'Hire-a-plant' business and sold that in 1982, moved to Northern Queensland and farmed there till 1991".

He moved back to New Zealand to run a sheep station in Gisborne, and in 1999 returned to the Wallace Road property which was luckily none the worse for wear after several years of being rented out. Following a certificate in apiculture at the Telford Rural Polytechnic, near Balclutha

(South Island) (<http://www.telford.ac.nz/>), Bee'z Thingz Ltd (<http://www.beezthingz.co.nz/>) was set up in 2000.

Kerry's passion for beekeeping is very obvious, and this is shared by Alexandra who joined Kerry a few years ago, both on a personal and business level. Alexandra has a background in KinderGarten teaching and she still relieves from time to time at the Mangere Bridge branch.



Photo: Alexandra, with cabinet hive design

For Kerry, becoming a beekeeper was the pinnacle of his career and personal life. "If the bee disappeared off the surface of the globe, then man would only have four years of life left. This is a quote attributed to Albert Einstein (CBC News – The National: <http://www.cbc.ca/national/science/bees.html>) but it highlights the importance of bees not just for honey but especially pollination". He mentions his strong beliefs in organic farming. "When I was doing practical work after I had finished my beekeeping course I realised that

current practices are labour-intensive and inappropriate, take for example varroa mite control” (see Insert for more details about varroa, its impact and control).

Kerry mentions to me that one organically acceptable option researched overseas is a fogger which vaporises a food grade mineral oil (FGMO). The resulting fog particles are very small and will block the breathing pores or spiracles of the varroa mite, killing it. Since the breathing pores of bees are much larger, they don't suffer any ill effects. This method has been researched and promoted by Dr Pedro Rodriguez who was an invited speaker at the recent (June-July) National Beekeeping Association of New Zealand conference (<http://www.nba.org.nz/>).

The BeeSource.Com

<http://www.beesource.com/pov/rodriguez/>) web site carries some information on this method: “...While the use of FGMO is still unregulated and in a testing phase, it's potential use and benefit as a miticide (substance that kills mites - Editor)is worthy of consideration...”. Kerry mentions that fogging food grade mineral oil could be an effective and environmentally sustainable control of varroa mite. But he adds that “...this is an interesting development which still needs final approval in New Zealand before it can be used...”.

I ask Kerry what the requirements are to be a good beekeeper. He responds that “you need a lot of patience, commitment, time and energy”. Bee'z Thingz Ltd focuses on organic beekeeping. They hire out hives with bees between Mercer and Kaukapakapa, service all their hives and collect the honey. They also do contract work for pollination of kiwifruit, and have a strong link with BeesOnLine in Waimauku, north-west of Auckland (<http://www.beesonline.co.nz/>).

Kerry has designed a new cabinet hive which he has patented, and builds for his clients. The cabinet system has major benefits over the

standard box hive, such as slightly higher internal temperature, and better protection against wasps. His hive design may also help with varroa mite control, says Kerry. “In conventional box hives, varroa mites will fall to the bottom when mites are being killed or removed when bees groom themselves. Bees returning to the hive through the standard bottom inlet will accidentally collect mites from the base and carry them back in. In our cabinet system, mites will fall through a screen onto the ground, and since bees come in through the side at the different levels, these mites do not hitch a ride”.

As I was sipping my lemon tea with honey, I asked Kerry about the different types of honey. While we are all familiar with manuka and clover honey, pohutakawa honey is collected especially in the coastal areas. Kerry adds that “...city honey is also quite delicious, with nectar collected from anything like hibiscus to rhododendrons ”.

This year Kerry and Alexandra expect a bumper crop of honey from pohutakawa. The weather needs to co-operate, preferably be “...humid and warm so the nectar flows better”. But production is not only dependent on the weather, and bee management plays an important role. Beekeepers may manipulate their colonies by artificial feeding to stimulate queen breeding. Location of hives near suitable food sources is very important, and hives may be re-located during the year, depending on what flowers.

Beekeeping is not without its entertaining moments. Kerry recalls reversing his ute, stacked high with beehives, in a kiwifruit orchard and not seeing an overhead wire. “It rained hives” recalls Kerry. One of the less enjoyable moments happened on a rainy day. “I was very wet and the weather must have upset the bees too. They kept stinging my back, there must have been a hundred bees getting at me. Those are the rare moments when I ask myself why I want to be a beekeeper”.

So if this story has wetted your appetite for honey and bees, visit the Bee'z Things web site. And for those wanting to go the whole hog, rent a beehive from Kerry, and get a guaranteed "...10 kilos a year of completely organic honey

made by your own bees while pollinating the trees and flowers in your own garden...".

So what are you waiting for!

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Varroa mite background

Varroa mite, detected in New Zealand in 2000 but possibly present since 1998, is an external parasite that attacks all honeybee lifecycle stages, weakening and killing honeybee colonies. The mite spreads naturally between bee colonies by travelling with drifting bees and swarms (The Varroa Mite: some questions and answers: <http://www.biosecurity.govt.nz/pests-diseases/animals/varroa/faq/faq-varroa-mite.htm>).

Organically acceptable treatments to treat them such as oxalic acid and formic acid have now been approved by New Zealand MAF for varroa control in beehives but neither provide full control. An extensive overview about varroa mite and its control has been published by Mark Goodwin and Cliff van Eaton, two HortResearch scientists (Control of varroa: a guide for New Zealand beekeepers: <http://www.biosecurity.govt.nz/pests-diseases/animals/varroa/guidelines/control-of-varroa-guide.pdf>).

MAF's economic impact assessment (November 2000) "...suggests that, under beekeeper management only, varroa is likely to cost New Zealand agriculture at best around \$400 million and at worst around \$900 million, in present value terms, over the next 35 years...". While these figures were revised down in December 2002, varroa mite impact was still expected to "...range between \$365 million and \$661 million The largest of these impacts are on the South Island pastoral sector...." (MAF varroa economic impact assessments:

<http://www.biosecurity.govt.nz/pests-diseases/animals/varroa/papers/assessment.htm> (November 2000);

<http://www.biosecurity.govt.nz/pests-diseases/animals/varroa/papers/assessment-review.htm> (December 2002);

<http://www.biosecurity.govt.nz/pests-diseases/animals/varroa/papers/assessment-summary.htm> (Summary of Assessment of the Economic Impact of Varroa in the South Island of New Zealand).