

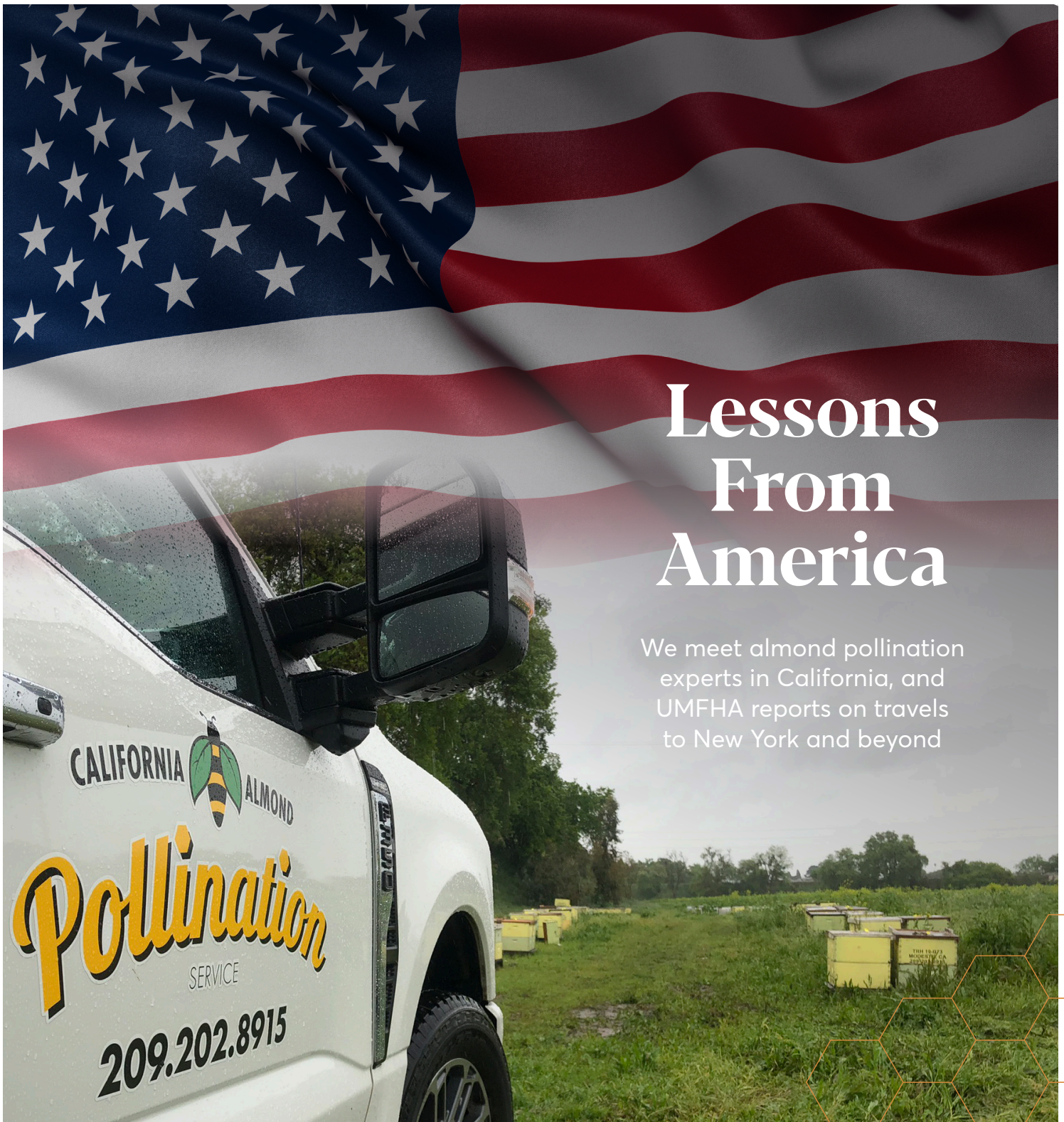
ISSUE 58, MAY 2024

APIARIST'S ADVOCATE

News, Views & Promotions – for Beekeepers – by Beekeepers

Lessons From America

We meet almond pollination
experts in California, and
UMFHA reports on travels
to New York and beyond



The California Bee Broker – Bringing Bees and Orchards Together



A month on from highlighting the disparity in supply and demand between North Island beehives and kiwifruit orchard land requiring them as pollination units, *Apiarist's Advocate* editor Patrick Dawkins takes a trip to an area of the world where mass-migration of beehives takes place every spring – California, for the almond pollination season. There we meet Steve House, managing director of California Almond Pollination Service, a privately owned business which in early April had recently facilitated placement into orchards of 16,000 beehives from 18 different states around the USA.

Americans are fond of saying “everything is bigger in Texas”, but for a Kiwi visiting the United States of America, one needn't venture as far inland as Texas to understand that everything is bigger in a country with a landmass 37 times greater than New Zealand, powering the world's largest economy.

California alone – beginning on the Pacific Coast of America and venturing east into highly fertile cropping and pastoral farm lands, then to deserts in its south and stunningly scenic mountains in its north, provides scale enough. The 'bigness' of America can't help but hit a visitor when their aeroplane lands into cities with populations of 12.5million in the greater Los Angeles area or the sprawling San Francisco Bay Area's 9.7million inhabitants. From the skyscraper buildings, serving sizes at meal times, and hefty America-made vehicles eating up the roads, it's all 'big' stuff. Getting away from the masses of population, the scale of farming

is striking too as mile after mile of varied orchards and cattle farms dominate *The Golden State*, whose landscape is paradoxically green in early spring.

California is a fruit bowl, producing half of all fruits and vegetables grown in the USA, to go with 1.72million milking cows, producing almost a fifth of the country's milk, alongside 670,000 beef cattle. It's 100 miles (160km) inland of San Francisco in the self-proclaimed “Cowboy Capital of the World”, Oakdale CA, where Steve House does much of his business – wrangling bees into almond orchards.

OFF TO THE APIARY

Fittingly, House arrives into our motel parking-lot in the biggest 'pick-up' (read ute) I have ever seen, a Ford F350 proudly adorned with California Almond Pollination Service (CAPS) insignia and – handily for this short-legged Kiwi – retractable running-board to provide ease of access up to the passenger seat.

The 69-year-old Californian has spent almost all his working life as a beekeeper and, while he still owns 600 of his own hives, he has a team of beekeepers which carry out the hands-on work. They arrive at the apiary soon after us.

“I just stay out of their way,” House says of his team of four, who place mated queens into splits on a drizzly spring morning in early April, as we retreat to his office – the spacious cab of the Ford F350.

“When I try to help, they make it pretty clear I am not needed,” he admits with a chuckle.

Turning on the windscreen wipers to improve our view of Ed, Miriam, Blanca and Oscar working through the 80 hives in grassy surrounds, House explains the role of CAPS.

BY THE NUMBERS

California is home to 1.38 million acres of almond orchards, which returns USD\$3.52billion to the state economy. In terms of California's agricultural production, that is only surpassed



California Almond Pollination Service director of operations Steve House, left, and *Apiarist's Advocate* editor Patrick Dawkins on a recent visit.

by dairy products (\$10.4bil), grapes (\$5.54bil) and cattle and calves (\$3.63bil). In comparison the dairy exports which power New Zealand's nation-wide economy amount to approximately USD\$15bil.

New Zealand's honey industry, boosted by mānuka, returns us around USD\$0.3bil a year from 600,000 beehives. That's a similar return in value to the US honey industry (USD\$0.37) from their 2.7million hives, but while their per-hive returns for honey might be greatly reduced, American beekeepers can call on almond growers to help put their hives to work and boost their bank accounts.

At two hives per acre (5/ha), California's demand for beehives to cover the 1.38million acres of orchard would mean every one of the country's beehives would be required in the state, if all the trees flowered at once. With varying growing conditions and plant varieties that is not the case, meaning – much like in New Zealand's kiwifruit orchards – some hives can work multiple orchards. As it is though, around 2million (three quarters) of the USA's beehives spend spring time, February and April, in California's almond orchards.

It's a huge logistical feat for the industry, with thousands of truckloads of up to 408 "double-deep" (double brood box) hives entering the state each year, usually on flatbed trailer units with net coverings to contain any escape-bees. CAPS alone placed 16,000 beehives in orchards in February and March, coming in from 18 states as diverse as Michigan, Wisconsin, North Dakota and Idaho in the cool-wintered Mid-West, to the warmer climates



Visitors Laura and Patrick Dawkins, centre, watch on as California Almond Pollination Service staff place mated queens in splits, made soon after hives were removed from orchards.

of Florida, Georgia and Texas further south.

House and CAPS act as the middle men between beekeepers, predominately from out of state, to the local growers. With hives placed in orchards spread across a 300-mile area, north to south, in the fertile Central Valley this spring, it's not hard to see why the

WANT YOUR EXISTING PRICKER TO BE BETTER?

Save time and money and get more honey.

WE CAN HELP!

CONVERT TO OUR PROVEN STAINLESS STEEL NEEDLES

- ✓ Every cell 100% pricked
- ✓ No more costly needle replacing
- ✓ Sterilization with heat now possible
- ✓ Time and yield losses eliminated
- ✓ Every cell now releasing honey

ORDER NOW

Call Logan Bowyer 027 667 7588
Email Logan logan.bowyer@manukaengineering.com
www.manukaengineering.com

MANUKA ENGINEERING
Innovation is everything



NEED MORE FROM YOUR HONEY?

Battling high moisture or fermented drums?

WE CAN HELP!

TALK TO US ABOUT BULK HONEY STORAGE & SERVICES:

- Growth storage
- Chilled storage
- Ambient storage
- Honey sampling
- Honey moisture reduction
- Fermented pressure release
- Extraction
- Batch Blending to 20Ton



Call Logan or Tania Bowyer

Phone: 027 6677 588

or email: thehive@manukaorchard.com
www.manukaorchard.com

cab of the pickup is deemed the director of the operations' office.

Almond growers usually pay between USD\$200 and \$225 per hive and CAPS pay their suppliers the month after use, by April 20. As a way of comparison, California cherry growers offer USD\$35-65, House explains. Therefore, beekeepers are competing for the almond contracts and CAPS recently lost one of their biggest orchards when the grower cut the price offered to USD\$175 a hive.

House says he has been around the game long enough to know when it's not worth it, and low prices and low quality is the antithesis of CAPS's business model.

THE NUTS AND BOLTS OF IT

House knows both bees and almonds well. Born and raised in California he was working on the family almond orchard when, after showing interest in his early 20s, their beekeeper said he would leave a few hives behind post-flowering.

"I was fascinated by beekeeping, but I didn't seriously get into it as a profession until my late twenties," the California apiarist explains.

That was the mid-1980s and it wouldn't be long before the almond industry began to boom. A Los Angeles Investor launched CAPS in 2012, with House driving operations from the get-go, and now owning a share of the business too.

That first year they brokered just 3000 hives into orchards, but have steadily grown since. Orchards range from smaller family owned and operated style businesses, to larger corporations.



Queens go into splits as spring rain threatens in The Golden State.

Average grower size requires about 400 hives and House says he prefers dealing with the family style orchardists, but the business is ultimately about making sure both sides of the arrangement benefit, whether big or small businesses.

That usually begins with a "very detailed" assessment of hives soon after they come off the truck and are placed on "holding yards" ahead of pollination. Local beekeepers are contracted to

HD Process NZ

Specialists in sanitary process equipment

Honey processing equipment

Pumps

- ▶ Flexible impeller
- ▶ Progressive cavity
- ▶ Lobe



Filters

- ▶ Rotary self cleaning
- ▶ Bag filters

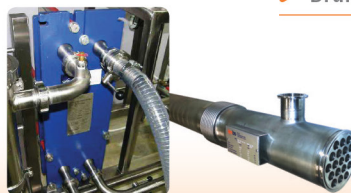


NEW

Filter with heating and agitation helping wax removal

Heat exchangers

- ▶ Shell and tube
- ▶ Plate and frame



Extraction and processing

- ▶ Honey looseners
- ▶ Extractors
- ▶ Drum filling



10 Maurice Road, Penrose, Auckland
Ph: +64 9 580 2520 Fax: +64 9 580 2525

Please enquire to: james@hdprocess.co.nz
or visit: hdprocess.co.nz

PUMPS | FILTERS | HEAT EXCHANGERS | EXTRACTION | PROCESSING



Inspecting an almond tree post pollination – they are not hard to find in California.

undertake the unloading and loading of trucks and into orchards in California, while the CAPS staff carry out hive assessments.

Hives are graded and physically tagged into three categories; red are dead colonies, yellow tags have between one and six frames of bees, untagged units are the ideal seven to 10 frames of occupants, green tags are the strong colonies of 10-plus 'frames'.

Not only does this grading and tagging allow the beekeeper clients (who receive a report) to be kept informed of the status of their beehives, it also plays a pivotal role in CAPS's management.

"Red tagged hives do not receive any further attention in the way of feeding or medication until after almond pollination. Yellow tags will continue to receive feeding and medication and in addition they are placed, free of charge, in orchards where we have already placed strong hives. The growers think they are getting a deal and the weaker hives forage on almond pollen. Last year after placing 4-5 frame hives – which we deemed non-rentable – for two months in almond orchards they came back with 6-8 frames of bees. It's win-win," House explains.

And win-win is the aim of the game. It's not always that simple though. Recently 800 hives arrived all the way from Pennsylvania following a cross-country trip, a distance of over 4000km, in which the beekeeper paid for transport. The condition of the colonies was so poor that only 130 made it to orchards following assessment upon arrival though.

CAPS therefore acts as the gatekeeper, protecting the grower from receiving inferior beehives. The out-of-state beekeepers, who CAPS has sourced work for their hives, are provided the report on the condition of their colonies upon arrival. This communication is important to maintaining trusting relationships, House emphasizes.

Hives go into orchards as "double deeps" with nine frames of bees on average, usually by February 14, Valentine's Day, as a rough and supposedly easy to recall guide. When flowering is finished by mid-March they are removed, usually with an average of 11 frames of bees. Therefore, while it might be a mono-cultural environment in the orchards, when managed well the hives can thrive.

House explains that, while almond trees produce very little nectar, hives are visited at least every two weeks and fed sugar syrup as required. The trees produce a lot of pollen which is high in all 10 amino acids essential to honey bees.

"It's like being fed something really good, prime rib, for six weeks and then moving on," he analogises as we pull away from the apiary and back on the road in cowboy country.

AUDIT ACCURACY

With almonds such big business in the area, the local county has taken to employing independent personal to carry out audits on selections of hives in the orchards. While they offer a service which attempts to keep beekeepers honest, House questions their experience level and accuracy of their reports.

"They hire people with absolutely no experience in beekeeping and who are deathly afraid of being stung. They get a quick course, say one to two hours, of how to incorrectly grade hives and then are sent out with another incompetent person, who is the teacher, with less than two years of incorrectly grading hives.

"They will arrive to audit hives in the middle of a warm, sunny day when twenty to thirty percent of the colony population is out foraging and not account for it," he remonstrates.



Another successful pollination.

Despite such inaccuracies, there is a real need keep checks on beekeepers, especially hive brokers, he explains.

"Brokers are seen as horse traders by some beekeepers. I've seen a hundred different hive brokers come and go and they have left everyone else with a black eye."

AFTER THE ALMONDS

As we make our way through Oakdale and to CAPS's local base – they have five across the state – almond orchards now bereft of beehives and with green nuts forming flash by at 60mph.

"When the hives are removed from the orchard they are taken to holding yards in preparation for their next voyage. That can be back to their home state for a honey season, but is often to more pollination contracts, north to Oregon or Washington states to apple orchards, then potentially to Maine in New England for blueberries or the cranberry flowering in Wisconsin in June.

Many hives are on the point of swarming as spring winds towards summer and so they usually are not fed again before being loaded onto the truck for their next voyage, plus it helps keep their weight down.

House's 600 Tuolumne River Honey hives move from the almonds to either orange pollination or wildflower sites of yellow star thistle, vetch, sunflowers, alfalfa and daisies, where honey is gathered. He averages 35lb (16kg) of honey per hive at wildflower sites, 50lbs (23kg) in the orange orchards.

Varroa is a constant hinderance to production, with amitraz resistance a real problem. House says a regular application of



California Almond Pollination Service director of operations Steve House is a beekeeper with nearing 50 years' experience and still runs Tuolumne River Honey in Modesto, where these hives await the bloom of wildflowers in spring.

formic acid pads and oxalic acid vapour helps keep the mites at bay in their hives.

The sudden dwindling and death of honey bee colonies which took place in America 10-15 years ago dubbed Colony Collapse Disorder (CCD) is still reported by some beekeepers, but House says his hives were never impacted.



**HONEY
TESTING**

Next day turnaround at a 99% success rate

Not only have we achieved a **99% success rate** with our turnaround times this last year, but the majority of our test results are **delivered next day!**

We also provide industry leading detection limits. Our Glyphosate Trace test is down to a detection limit of 0.002 mg/kg.



Trust us with your testing!



0508 HILL LAB 0800 44 555 22



hill-labs.co.nz

"I have never seen CCD and I think it was just bad management. Once people began undertaking better hygienic management practices, such as swapping out older brood frames, it seemed to go away. Before then, I think the beekeepers got lazy," he says.

WATER, WATER

Driving past Oakdale towards House's home and beekeeping base, the California rain begins to hammer down and it guides our conversation. Water is a hot topic in The Golden State – which saw almost a decade of constant drought between 2012 and 2022 before a wet 2023 replenished aquifers – and like a lot of crops, almonds require irrigation.

In 2000 California was home to around 500,000 acres of almond orchards and the price was less than USD\$1 a pound. By 2014 that price had climbed to a high of USD\$4, but has dropped back to \$1.50 in recent years. It has made getting payments from some growers difficult, leaving House feeling like a debt collector some days he says.

Regardless of the pricing fluctuations, 1.38million acres of almonds are now grown, but gaining access to water for them can be difficult. Along with the depressed prices for produce, the water issue is now limiting almond production.

House says he knows almond growers who have bought up neighbouring properties and not planted them out, simply to gain their water rights. Last summer he visited an orchard which had

turned off the irrigation to half of their 300 acres of almond trees and left them to die, to prioritise watering the other 150 acres.

However, this spring day the only problem which water is bringing in almond, bee and cowboy country is interference with beekeeping operations. "I hope they've finished putting those queens into the splits," House thinks aloud.

A WINNING MODEL

We take lunch and shelter from the storm in a local restaurant as House explains that, four years ago, almond growers really struggled to find any extra hives, but now beekeepers are getting more competitive for the contracts as the supply and demand equation alternates. CAPS placed almost 20,000 hives for beekeepers last season. Despite that dropping back to 16,000 in 2024, House is confident their business model is a sound one, for growers and beekeepers alike, as they have been dealing with some repeat customers on both sides of the model for over a decade now.

Like much of America, the almond industry is supersized, and California Almond Pollination Service has formed a valuable niche by setting high beekeeping and communication standards to build relationships which benefit not only grower and out-of-state beekeepers, but also provide local beekeepers with work. So, while some might see it as a form of horse trading, done right, there are winners across the board. 🐝

Superior quality & lead times.

When it comes to export quality packaging for honey, Pharmapac is the industry leader.

Pharmapac is also Toitū Enviromark Diamond certified, Operation Clean Sweep and ISO 9001:2015 accredited.

Ask today about our **quick turnaround times and prompt delivery.**

Second to none, on time, every time.



For more information about our delivery lead times, call us on +64 9 444 9631 or visit the website pharmapac.co.nz

pharmapac™

A Mānuka Honey Mission



Recently Unique Mānuka Factor Honey Association (UMFHA) decision makers Tony Wright (CEO) and Campbell Naish (marketing manager) travelled to key mānuka honey markets around the globe. From New York, to London and then China's bustling city of Nanjing, the mission was to educate those in the markets, but there was also a lot to be learnt. Now back on home soil, Wright details the lessons learned concerning the challenges and opportunities which lie ahead for our prized honey.

BY TONY WRIGHT

In April I visited several northern hemisphere markets to connect with consumers, trade and officials and promote the latest research on the unique nature of New Zealand mānuka honey, mānuka trees and the health benefits that can only be associated with New Zealand mānuka honey.

Along with delivering our message, being in market is always the best way to learn what is happening in markets in detail that cannot be accomplished from New Zealand. This particular trip, with brief stops in the UK, USA and China, did not disappoint and generated some valuable insights.

NEW YORK, NEW YORK

Firstly, exploring the retail environment in Manhattan, rated the world's most affluent city centre, made clear the minimal in-store retail penetration, the opportunity for mānuka, and the scale of the job to raise awareness and interest in the category. Mānuka honey is nearly anonymous in-store with very small stock holdings in natural health stores and boutique grocers, but nothing in mainstream supermarkets and pharmacies.

Consumption per person in the USA is well below other more established markets. So, there is plenty of room to grow and some brands are clearly investing in telling their story and building consumer awareness. But there is still an enormous opportunity, prompting the question: how might we assist brands to grow the category and recruit consumers faster? For example, developing collateral to strengthen our messaging and how we tell the story

about mānuka honey health benefits, and support that with credible evidence. Or investment in generating consumer insights, enabling our storytelling to be optimised for each market and the needs of consumers. These are big investments, hard to pull off at the individual brand level, but something we can collectively invest in.

FRONT FOOTING THE EU GREEN DEAL

We met with the New Zealand Trade and Enterprise EU/UK/Middle East/Africa (EMEA) team at the New Zealand Consulate in London. NZTE's role in the international arena is to facilitate trade and help exporters navigate market requirements and make business connections. They raised their concerns about many New Zealand honey companies lacking awareness or concern about sustainability regulations that are already being implemented and will significantly impact markets in the region further over the next decade.

The EU Green Deal is a portfolio of initiatives designed to improve environmental outcomes throughout the supply chain, from farm to fork. One of its stated intents is to level the playing field so both domestic and imported goods are subject to the same environmental standards, regulations and penalties.

One example of note within the Green Deal is the tightening of the EU's Extended Producer Responsibility regulations for packaging. Producers will be increasingly financially responsible for the collection, recycling, and recovery of their packaging waste. We should be looking at these programmes, which are not unique to the EU, and planning how we could excel in outperforming in our response relative to other countries, rather than lagging behind.

Another example is the EU's Carbon Border Adjustment Mechanism (CBAM), which aims to ensure imported products do not have a higher carbon footprint than in-market alternatives. Although food has not been targeted yet, it's not unreasonable to foresee this happening, and before it is regulated we are likely to see major retailers imposing carbon reporting requirements to meet their own needs. We need to pay attention to these trends. Unless we prepare we face regulatory barriers to market entry, increased costs of entry, retail and wholesale price increases, even loss of market partners. In response, we can start working on mapping our supply chain and understanding the material contributors to our carbon footprint. This informs a conversation about how to address this and meet market needs.

These changes also provide an opportunity for New Zealand to lead through rapid adaptation and innovation to production systems that would present opportunity to take market share against slow



Tony Wright, UMFHA CEO, appeared across a range of media in the USA recently, in a bid to educate the American market on the benefits of buying genuine New Zealand mānuka honey.

moving competing suppliers and alternative health categories.

Collaboration with market partners and their customers could build deeper partnerships and value if New Zealand companies are a key part of a smooth transition through regulatory change.

COLLECTIVE ACTION

Finally, one of the benefits of attending and presenting at the China Bee Products Industry Conference in Nanjing is the conversations with influential experts attending from organisations around the world. While Mānuka honey is well known in global trade, we are far from front-of-mind with the experts determining the agenda for international rules and regulation setting across the world. Decisions made in the Northern Hemisphere affect how our product is perceived, but their rules and regulations are informed by input from their producers, not ours.

To advocate effectively for good regulation it is critical that we present a cohesive, credible, professional position. We need to be consistently present in the relevant forums (e.g. International Honey Commission, Apimondia and other technical conferences), and we need to have the scientific data to support our position. Both require a magnitude of investment best done at a collective level.

Then, all messaging underpinning the value and quality of New Zealand honey must be backed up by the output and behaviour of all involved in the industry. That means being clear on the standards we need to meet and ensuring that all product is fully compliant and delivering a positive consumer experience.



"Mānuka honey is nearly anonymous in store" says Tony Wright of the American market, as evidenced by this California supermarket with a wide range of honeys but just two mānuka options, which don't stand out.

While the travels of Campbell and myself were as representatives of the UMFHA and thus an extension of our members, we found ourselves with a broader job to do – promoting and defending the mānuka honey category for the benefit of all New Zealanders. And while we may have shaped some prominent opinions for the better, there's still plenty of work to do. 🐝

Let's talk labels.

Materials, adhesives, coatings, embellishments and security features specifically tailored for the honey industry.

ecl[®]

Proud sponsor of the
National Honey
Competition



Kiwi
Labels

Extended
Content Labels | ecl[®]

Extended content labels (ECL) create additional space for detailed product descriptions, promotions or simply provide a solution to comply with industry standards and regulations. ECLs are the perfect way to convey maximum information needed for a variety of languages to reach a wider global audience.

Get in touch with us today to find out more about our innovative Extended Content Label solution.

www.kiwilabels.co.nz / info@kiwilabels.co.nz

6 Mary Muller Drive, Heathcote, Christchurch / 03 384 2903



NEW PRODUCT RELEASE

Stainless Queen Isolation Cages

- ✓ SMARTER QUEEN BREEDING
- ✓ EFFICIENT VARROA CONTROL
- ✓ IMPROVED HONEY FLOW



1 Frame Cage



3 Frame Cage

CLICK BELOW TO
FIND OUT MORE:
www.bqp.nz/cages

OR GET IN TOUCH >

Beequip^{NZ}[™]

For innovative bee products

03 528 9404 | www.beequip.nz | info@beequip.nz

Sweet Sensory Schooling



For three days last month, seven 'students' undertook New Zealand's first Honey Sensory workshop of its kind, in Auckland April 10-12 and hosted by Maureen Conquer. Among them was *Apiarist's Advocate* editor Patrick Dawkins who went in with an unrefined honey pallet – could it be improved?

BY PATRICK DAWKINS

Despite being from wine country, Marlborough, I have an admittedly uneducated palate. Being a beekeeper with a focus on queen breeding, honey is also not top billing in my business. Nevertheless, I was attracted to undertaking the honey sensory workshop offered by expert honey judge and Wild Forage business owner Maureen Conquer because, one, I am rather fond of consuming honey and wanted to be able to better differentiate between varieties, and two, I had an eye towards any potential future honey label in our Pyramid Apiaries business and best defining and marketing our honey.

So, how capable am I in both those tasks following the April workshop in Mt Eden? I can answer that better after running through what, and how, we learnt. One thing I can say from the start is, I have strengthened relationships with some likeminded

members of our honey industry after three days of putting our tasting skills through a workout together, and there is a lot of value in that alone.

In New Zealand we cannot import any foreign honeys, so this was strictly an education in Aotearoa's finest ... actually it was an education in many fine honeys and a few not so suited to my taste buds (read acacia...). That's a compliment to the wide range of honey varieties assembled by Conquer over several decades, from the likely candidates of clover and mānuka, through to less common but the still well-known vipers bugloss, beech honey dew, rata and rewarewa, plus rarer finds of mingimingi, orange blossom and Spanish heath.

Before any of those honeys went into our mouths however, we were taught the basics of how to assess honey with multiple senses; sight, smell and taste. Alongside that we were encouraged



Participants on Maureen Conquer's Honey Sensory Workshop are treated to a visit to Comvita's Wellness Lab in Auckland where they were hosted by Noelani Waters, standing. From left, Patrick Dawkins, Ralph Mitchell, Jody Mitchell, Logan Bowyer, Rose Swears, Grass Esposti, Michael Molloy and Ken Brown.

to take detailed notes, to assist later recall, and were given guidance on the seven basic honey flavours. With so many honey varieties on the menu, being provided the skills and knowledge to make and record such full assessments was essential to accurate differentiation during training and to build knowledge going forward.

Coming from the South Island, the likes of rewarewa, tawari and pohutukawa honey can be hard to find and the training provided me a far greater ability to identify these varieties. In fact, by the time we got to some blind tastings on day two and three I was over-confident in my ability to match samples with floral source. However, with guidance from our tutor, any mistakes in the blind tasting made for perhaps the best learning tool as they resulted in even deeper analysis of our individual perceptions.

After gaining a greater understanding of various New Zealand varieties, day two and three saw our group presented 'horizontal' tastings, i.e. the same variety of honey from the same season, but from differing regions, as well as 'vertical' assessments, i.e. honey samples from the same apiary but gathered over several seasons. The horizontal tastings were assisted greatly by all my fellow 'students' own offerings of honey, with the likes of Logan Bowyer of Mānuka Orchard providing an array of honeys from their facility and Michael Molloy of Rare Honey with mānuka honeys in a range of grades, complimenting the collection on offer.

Also complimentary to the expertise of Conquer was her aid in preparing samples and presenting the course, Andrea Crawford of Comvita's honey lab, who mirrored our tutor's infectious energy

for honey sensory analysis. It wasn't just an array of honey varieties and blends that the pair dished up either, there was a wealth of knowledge imparted over the three days on wider topics such as detecting honey defects, labelling requirements, and food pairings with various honey varieties. On top of that, a quick trip down to the Auckland Viaduct for a tour of Comvita's Wellness Lab provided more sensory stimulation.

It was a lot to take in for someone entering the training with a limited palate, but Conquer provided an abundant information pack to take home which, along with my own notes, will be invaluable to maintaining my new set of knowledge.

So, can I now identify New Zealand's main honey varieties? And, can I write an appealing honey description of my own business' produce, from year to year? While a rock isn't transformed to a diamond overnight, no matter how much pressure is applied, I am undeniably more confident in both aspects now and feel more compelled to embrace packing the produce of my hives. Plus, I have taken home a tomb of honey sensory analysis information and tasting notes to which I can refer. I think the key will be ongoing tastings, so I will be buying up various honey varieties online and in my travels.

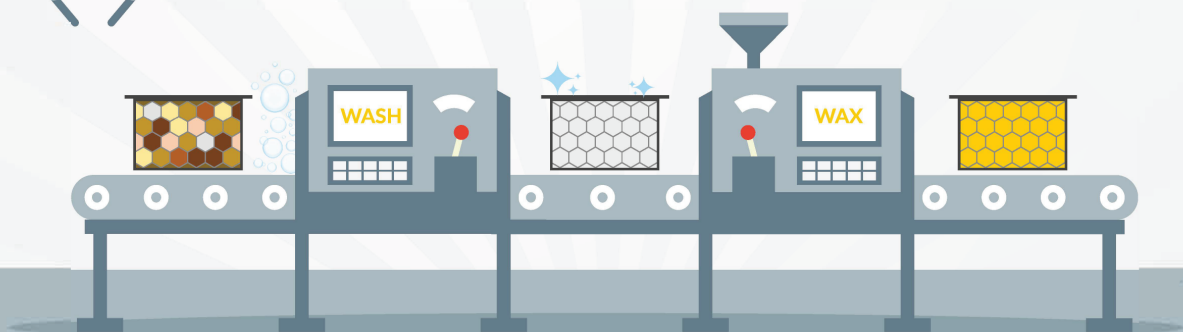
Any beekeeper or honey seller with their own label would benefit from any future training courses which Conquer is willing to host. And that's the rub, she's trying to pass the baton and educate a new generation of honey experts. I for one encourage her to do so and hold more such training courses, and our industry to support such efforts. If I can educate my limited palate, then anyone can! 🐝

FRAME WASH & WAX SERVICE

**SAVE
\$**

**and feel great
about it**


nzbeeswax
LIMITED



\$ Save Money  **Save Time**  **Save the Environment**

More info: <https://beeswax.co.nz/frame-wash-wax-service/>

Frame Wash & Wax Service

Situated in our Hamilton Branch and ready for service

153 Maui St, Pukete, Hamilton 3200 | P: 07 849 6853 | E: info@beeswax.co.nz

Mark Hyslop, here with a small crop of sweet corn, is a keen vegetable grower. It was his first career before beekeeping took over, and he and wife Karen still grow asparagus commercially from their Canterbury home. Photo: Alice Hyslop.

Pedalling Honey



Canterbury beekeeper Dr Mark Hyslop found beekeeping at a young age, but didn't make a career out of apiculture until he had earned a PhD from Massey University, had already forged a career in vegetable growing and had three kids under two years old. Hyslop Foods Ltd is a sleek 600 hive operation undertaking mānuka honey and beech honey dew production and their own queen rearing. Maggie James talks beekeeping with the contemplative Hyslop, who details his beekeeping story and opinions on the future of the industry.

BY MAGGIE JAMES

Diagnosed with dyslexia at 10 years of age, Hyslop has not let the learning disorder hold him back. In fact, he credits it with helping increase his "memory attention" and thus building a successful beekeeping operation.

Hyslop Foods was launched in 2006 and within three years encompassed 1500 beehives, employing a fulltime beekeeper alongside husband-and-wife owners, Mark and Karen. Now, having sold off many of the hives to a staff member who was keen to go out on their own, a trimmed down 600 hive operation remains, run out of their Greenpark base, south of Christchurch.

Getting to this point has been a long ride though, one which started out with Hyslop towing a trailer load of beekeeping equipment on his push bike as a teenager.

LEARNING THE ROPES

While Canterbury is the business base now, Hyslop grew up in Hawke's Bay, his parents photogrammetrists who emigrated from England in the 1960s. It's a precise occupation for which

very few people were skilled. After receiving aerial photography images, they drew the 1:50,000 contour maps, which any outdoor enthusiast in New Zealand would be familiar with.

At the age of 14 Hyslop first started keeping bees, after the interest was sparked in him by a school teacher. He spent the last week of his fifth form year (Year 11) on work experience with a commercial beekeeper, and thereafter he kept a few hives.

From the get-go, the teen learnt the hard work and dedication required to keep bees on a budget. For four years he transported his beekeeping gear, on a trailer pulled with his pushbike, to his apiary four kilometres from home! The trailer neatly held six to 18 full depth boxes.

With his father's eye for detail, assistance was given to make beekeeping gear from scratch. If Hyslop Jnr wanted something, he was encouraged to either build it or save up money for it, with the exception being frames.

Summer holidays were spent working for Ashcroft's Honey, Havelock North, plus a Hastings commercial beekeeper. That work provided an escape from school, which the dyslexic teen began to

despise. He says he was not academic, failed sixth form (Year 12) at first attempt and by the time of his final year at high school, he was the oldest pupil on the roll.

Despite this, his parents advised he should go to university for one year, and see how he found it. Then he could have a "proper job", and Hyslop had his sights set on being a commercial potter – his other passion alongside honey bees.

Looking back now, he has "absolutely no idea" why he didn't enter the commercial beekeeping environment at that stage, as he "absolutely loved the bees".

UNI, A FAMILY, AND A CAREER – NOT IN BEES!

Despite his academic setbacks, in the late 1980s Hyslop undertook a Bachelor of Agricultural Science at Massey University. Selling his 20 hives to his father and buying a "hard and fast" motorbike to commute to Massey. Following a two year overseas sojourn, he returned home to begin a master's degree. Then, a year into that study, with the help of his supervisors at AgResearch Massey, he upgraded to a PhD.

After graduating in 2000, with a doctorate in plant physiology and morphology, he was posted to AgResearch at Lincoln and moved south.

A CAREER CHANGE

In Canterbury he moved on from AgResearch to a stint with Heinz Watties based at Hornby, on the outskirts of Christchurch. As agricultural manager Hyslop was responsible for managing the

team of agronomists who oversaw growing of the crops and getting crops to the factory.

Reflecting on his path towards a beekeeping business, Hyslop believes his parents' background, his dyslexia, which has the advantage of increasing memory attention, then learning about budgets and running a large department at Watties, was a recipe for success.

"I learnt a great deal managing a lot of people and money. I also learnt that I didn't like working inside with a computer. At that stage we had one child, then Karen became pregnant with twins. With three children under two years of age I left this job when the twins were five months old and I had 25 hives. Over the next 18 months we worked the hives together and that's when we increased to 1500 units," he says.

In 2006, just when varroa landed in the South Island in Nelson, quite a few beekeepers exited the industry and Hyslop purchased 300 hives with strong colonies off James Scott at Darfield. These hives were obtained with excellent gear which is still in use today.

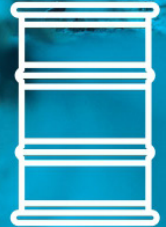
Another 280 hives were acquired, in the Mount Torlesse area. Unfortunately, these came with an AFB issue which was only overcome with considerable tenacity.

Funny as it might sound to younger beekeepers today, the mānuka honey produced then was worthless and fed back as winter feed to Canterbury Plains hives.

A further 280 hives were purchased from a deceased estate, and this time there was a dry rot issue, and all the gear has since been replaced. Hyslop is of the opinion the equipment was not paraffin dipped long, nor hot, enough.

Honey drums

New Zealand manufactured Ex-stock Christchurch and Auckland



Stable pricing
for the whole
season



Available ex-stock
Christchurch
and Auckland
warehouses



No minimum
quantities



NZ made
in Auckland
and Temuka



Stowers service -
national sales and
customer service



delivery
NZ wide



Closed top / Open
top / DG Drums

Contact Stowers

sales@stowers.co.nz
0800 082 000
www.stowers.co.nz



Four years into Hyslop Foods, a beekeeper was employed. Production then was bulk clover honey, plus 500 hives for South Pacific Seeds pollinating carrots, radish, and mustard.

Hyslop was allowed to leave the hives in the crop after flowering finished, aiding honey production in clover areas. Hives left five to six weeks could be six high with four boxes of honey. If only left three to four weeks there would be less honey produced. The surrounding area was starting to be gradually converted to dairy, and if there was rain in November, followed by drought, the land would produce a strong clover flow.

At this stage the Hyslops realised they could run less hives and earn the same amount of money with increased efficiencies. Thus, half the business was sold, including the pollination contracts.

BEEKEEPING IN 2024

These days the 600 hives produce 25 tonne honey per annum on average and currently the Hyslops are holding 70tonne of UMF15+ mānuka honey in their temperature controlled, 6°C, RMP shed. They are aware that they are not the only people with a shed full of honey and it is mentally a huge drain, equating to two to three years without salary, Hyslop says.

In the past Hyslop Foods have bought in queen bees from other breeders, now Hyslop rears his own queens. He estimates that when they had two labour units, 25% of one person's job was tied up with queen bee production.

"We stopped buying in queens because we struggled to find queens that would survive in the mountains, so we now use our own stock. There is no easy way to requeen. At the end of the mānuka flow, from mid-January for four weeks, we use protected queen cells with a 40-45% success rate of mated laying queens. In spring we require 200 mated laying queens – which is not an easy task in Canterbury – to patch up protected queen cell failures," he explains.

Hyslop Foods have incorporated the queen rearing techniques of a beekeeper who worked for them who had also worked for a queen breeder in France. Queen colonies are six colonies inside a normal $\frac{3}{4}$ depth box on a post in a paddock, utilising smaller length frames. The box is overwintered as a one queen unit, with stimulation feeds starting about August 10 to build it back up.

All other apiaries are full depth boxes run as singles in summer, and winter as doubles, with a box of honey stores.

INDUSTRY ISSUES POST 'BOOM'

Having ridden the honey rollercoaster from pre-mānuka boom, through the highs and now to much lower prices, and having previously forged a career in the food industry, Hyslop has some strong thoughts around how the honey industry moves forward. *The Honey Industry Strategy 2024-30* released earlier this year hasn't presented the solutions he would like though.

"It would be good if the Strategy was in English, which the average person could understand. This document will go straight over most beekeepers' heads," he says.

"There is nothing within the report that can be turned into reality. The industry needs a different document. We need a structural plan which includes sales and marketing for the industry and several points where honey is accumulated and blended before sale. Leaving the market to sort out honey handling isn't working. You get a crop, but you can't sell it, and that's not good for the industry. A lot of smaller producers are struggling to get a sale at any price."



The foothills of Canterbury are home to many of Hyslop Foods' hives where mānuka honey and honey dew are produced – but they can see some heavy frosts in winter and even into spring when inspections need to take place. Photo: Karen Hyslop.

The inclusion of a potential national pest management plan for varroa in the Honey Industry Strategy document is also concerning to the Canterbury beekeeper.

"I don't think we need another cost to the beekeeper. People should be left to do what they need to do. If this was going to be implemented, it should have been done when varroa first arrived. Why is it required now?"

BIG NOT NECESSARILY GOOD

Having run his own medium-small scale beekeeping business for two decades, Hyslop says there are certain aspects to beekeeping that larger operators might struggle to optimize. Smaller operators can provide a more hands-on approach to meet the needs of each hive he believes, therefore the bigger businesses are in effect many small operators joined together.

"Larger outfits probably cannot do 14 rounds of bees per annum. Our hives are visited on a three-weekly cycle and, with that more intensive management, yields are superior. You can't mechanise beekeeping completely, a skilled labour unit is still required to manage a certain amount of hives."



Mark Hyslop unloads hives at a mānuka site using a single hive loader he built, with cable lifter driven by a motor at its base to keep weight low down. Photo: Angus Hyslop.

THE FONTERRA MODEL

One way of helping get honey to markets is if there was a honey "depot" in both North and South islands where honey could be accumulated, with packers and buyers going to that outfit. This would be akin to processing plants in the milk industry that Fonterra owns, although Hyslop favours a joint ownership, with "skin in the game".

He therefore looks on at the Mānuka Orchard business of Logan and Tania Bowyer in the Bay of Plenty with some admiration, with it ticking many of the boxes of what is needed in the South Island to add value to the industry.

"The North Island Mānuka Orchard structure is quite sensible and enables accumulation of all the little lines of honey, then these can be blended to create a deal. This is a clever business, if the honey can sell."

Hyslop believes a lot of the funding problems of the apiculture industry could be alleviated if a shareholder type industry model could be implemented where, to sell a certain product you would need to be a shareholder, and if you don't hold enough shares you sell at a cheaper price. There is a lot to be learnt by studying other primary producer business models, such as New Zealand Apples and Pears Inc, Zespri International, New Zealand Avocado Industry, and Fonterra.

SURVIVING AND THRIVING

The Hyslops have survived by being financially aware and self-sufficient. In the good years they invested money and now live off that investment. Their three children are about to leave home. Their lifestyle block provides their meat, vegetables, and fruit. For 20 years the couple have grown small parcels of asparagus commercially and whilst this isn't a huge crop, it has been a good financial backstop.

For Karen, from a corporate business background, the asparagus operation, manning their stand at the South Christchurch Farmers' Market, administration, and raising a young family has been a full-time job.

It's full on for Mark too and has been – and continues to be – quite the journey, having gone from a push bike and trailer, trekking four kilometres down a Hawke's Bay road almost four

decades ago, to now a truck heading into the hills of Canterbury every season to haul in the honey dew and mānuka goodness.

If you wish to discuss any aspect of this story with Mark Hyslop email mghyslop5@gmail.com 🐝

**Thoughts,
feelings or
other input
you'd like
to share?**

We'd love to hear it.

Email your
'letter to the editor' to
editor@apiadvocate.co.nz

STOP VARROA!



Bayvarol®

- 6-8 week treatment period
- 4 strips per brood box
- Easy to use strips



apitraz

- Easy to use strips
- 2 strips per brood box
- 10 week treatment period



ORGANIC TREATMENTS ARE ALSO AVAILABLE

Please refer to treatment packets for full instructions



Order or learn more at
www.ecrotek.co.nz

 **ECROTEK**
Keeping ahead

It's one of the least enjoyable parts of the job as a beekeeper, and several studies have found that beekeepers are at greater risk of a systemic response to bee stings than the general public.

Why Stings are Good for You



BY DAVE BLACK

Human reactions to bee venom can be categorised as local or systemic, and systemic responses can be anaphylactic or toxic. All elicit either Type 1 or Type 2 responses from the immune system. Science writer Dave Black explains how each of those present on humans and how beekeepers might be at greater likelihood to react severely, but how more stings might just be the best medicine...

It goes without saying that beekeepers have an occupationally high probability of being stung, and a far greater exposure to bee-related antigens than the general population. They have a greater risk of allergy and anaphylaxis, and yet there are plenty of beekeepers who tolerate stings daily, and who have worked for decades with no ill-effects. How do we assess the risk? Are beekeepers born or made? Are they the peculiar group of self-selected individuals we think they are, or can anyone learn to put up with irregular doses of bee venom?

Answering questions like this is difficult, and despite all we know it's still not possible to predict with any certainty individuals who will either develop a progressive tolerance, or who could be tipped into a sudden and possibly fatal allergy. Lots of things make this a tricky topic to study. Bee venom has been examined pretty thoroughly and there are many constituents that someone might be sensitive to, either individually or in combination; it challenges the entire immune system. Some constituents may not be allergenic but are actually toxic to various degrees.

Honeybee venom is different, but similar, to other hymenopteran (the order of insects which includes bees, wasps and ants) venoms, and varies with bee age, species, season, locale, forage, and so on. No two stings are ever the same. Human immune systems also differ, are not particularly well understood, and researchers find testing people with potentially life-threatening allergens um... challenging. Public Health statistics are a bit vague, beset with misreporting, diagnostic uncertainty, methodological differences and disagreement about nomenclature. A lot of myth and anecdote.

When we are stung, on average, 140–150µg of venom is delivered in the first 20 to 30 seconds (ie. 95% of it) and the median lethal dose (LD50) of whole bee venom is known to be between 2.8 and 3.5mg of venom per kg of human body weight. Someone weighing 60–70kg has a 50% chance of death upon being stung by 1,000–1,500 bees, even without any allergy, and it can be much less. The severity of the effects that result from the 'envenomation' is determined mostly by victim age, body weight, number of stings, and individual characteristics of the victim like pre-existing diseases and allergies.

TWO TYPES OF RESPONSE

Immune systems are often thought of in terms of two basic types, based on the kind of pathogen they can deal with. Type 1 immunity specialises in micro-organisms by recognising them and providing ways to directly neutralise them. In contrast, Type 2 immunity is not particularly specific, but focused on macro-organisms (intestinal worms for example) and various kinds of 'contaminants' (like venom) that threaten the host. We are all able to deploy both to a greater or lesser extent. Type 2 responses tend to create defences that block the irritant, or facilitate its expulsion, so producing lots of mucus and getting a runny nose would be considered a Type 2 immune response. Whereas a Type 1 response would destroy the virus, if there is one, or the cells that contain it.

LOCAL VERSUS SYSTEMIC

The reaction to insect stings can be also be classified as either local responses or systemic responses. Local inflammatory reactions are characterized by pain, swelling and itching at the sting site. These reactions are experienced by most non-allergic individuals and are normally resolved within 24h. Some people (about 30%) develop a large local reaction, which involves a slow swelling more than 10 cm in diameter and lasting more than 24h, and which intensifies and reaches its largest size after 24-48h. The swelling may be accompanied by fever or headache, or an inflammatory reaction along the lymphatic vessels, but this improves slowly and gradually over several days. Large local reactions may be life-threatening if the swelling restricts your

airway, but the risk of a systemic reaction is not significantly increased in the case of subsequent stings.

ANAPHYLACTIC VERSUS TOXIC REACTIONS

Systemic (anaphylactic) reactions, and systemic (toxic) reactions are generalised, 'hypersensitive', responses to either allergens or toxins in the venom that affect the whole body, not just the part that has been stung. Hypersensitive individuals show a reaction within five to ten minutes. Toxic reactions are 'dose-dependant' (lots of stings); anaphylactic reactions are not. Anaphylactic immune reactions are extreme Type 2 responses and are considered a bit of a puzzle. There is no obvious reason why sometimes the body should initiate a Type 2 response with such extreme urgency, within minutes of exposure, to tiny amounts of venom.

Allergic hypersensitivity can develop against a huge variety of allergens that have little in common in terms of their structure or origin, and clearly, most allergens do not have any similarity with the immunogenic activities of macro-parasites. Pollen, bee venom, shellfish, peanuts, latex, and penicillin are all possible allergens for some people, but they do not have any chemical or physical characteristics in common that would explain why they might be considered noxious.

For many years 'hypersensitive' (anaphylactic) Type 2 immune responses have been thought of as extreme cases of 'misdirection', an unintended and unlucky side-effect of a mostly functioning immune system. That idea is now being reassessed.

21ST CENTURY BEEKEEPING DISCUSSION DAYS



NEW ZEALAND
BEEKEEPING INC

Time: 9am – 3.30pm
Cost: Registration: \$10pp Non-Members, Members FREE and Catering: \$20pp each venue

MAY 2024 :: SOUTH ISLAND

Saturday 25th May:

Greenvale Honey, 299 Greenvale Rd, Waikaka, Gore

Tuesday 28th May:

Hornby Workingmens Club, 17 Carmen Road, Christchurch

Thursday 30th May:

Alpine Lodge, 75 Main Road, St Arnaud, Tasman

JUNE 2024 :: NORTH ISLAND

Saturday 8th June:

Paengaroa Community Hall, 4 Old Coach Rd, Bay of Plenty

Tuesday 11th June:

Distinction Hotel & Conference Centre, 9 Riverside Dr, Whangarei

Saturday 15th June:

Bunnythorpe Community Centre, Raymond St, Manawatu

FEATURES

Beekeeping Efficiently

Value of Pollination

Varroa Updates

Kanuka Research Outcomes

Proposed ApiNZ Honey

Industry Strategy

Future Direction – Your Views

*Regional topics may vary.
Subject to change.*

TO REGISTER:
www.nzbeekeeping.co.nz/event-2024

BECOME A NZ BEEKEEPING INC MEMBER:
www.nzbeekeeping.co.nz/member-registration

ENQUIRIES:
info@nzbeekeeping.co.nz

ALL WELCOME :: PLEASE REGISTER

A hypersensitivity to allergens may have evolved to ensure we avoid unfavourable environments in future, while allergic reactions themselves (mucus overproduction, sneezing, itching, etc.) are engaged in the present to reduce exposure and promote expulsion of unwanted environmental substances.

Why does this sensitivity vary so much? One possibility is luck, but it may be a consequence of our individual physiologies. For example, if protection from a noxious foreign substance can be conferred by both a thicker membrane and detoxification, the individual that has enhanced detoxification capacity need not resource a strong barrier.

THE CONFOUNDED BEEKEEPER

Various surveys in EU and the USA in the 1980s and 1990s have reported systemic reactions to bee stings in 1–4% of the general population. In the more exposed population of beekeepers 14–32% report systemic



A localised reaction to a bee sting.

Need Quality Honey in Bulk?

Our website makes it simple, quick, and easy.

EVERY DROP IS: PURE • TRACEABLE • AUTHENTICATED

VISIT MANUKAORCHARD.COM TO:

- 🔥 Source honey from our large network of NZ's best beekeepers
- 🔥 Quickly check type, volume, location, price, and availability
- 🔥 Reserve honey to market and sell in the future
- 🔥 Save time, effort, and money

WHY WORK WITH US?

- 🔥 New Zealand's leading honey supplier
- 🔥 One-stop-shop to secure the honey you want
- 🔥 Honey is stored, monitored, and optimised by experts
- 🔥 We'll find you the best honey for your needs

manukaorchard.com



**Access all New Zealand
honey types at the
click of a button.**

reactions^{i, ii, iii, iv}. As a group, beekeepers confound the results of nearly all the studies so far. Risk factors derived from studying the general public don't seem to apply^v. Sensitization to bee or wasp venom occurs frequently in tests, with studies reporting 27.1% to 40.7% of the general population having detectable specific antibodies to Hymenoptera venom^{vi}. Based on previous work, it is known that positive results of diagnostic allergy tests, including skin tests and venom-specific immunoglobulin assays, are found in 30–60% of beekeepers.

Beekeepers have elevated levels of a venom-specific antibody called IgE (immunoglobulin 'E') known to be associated with allergic hypersensitivity. Yet, like beekeepers, many people who develop IgE-dependent Type 2 immune responses to honeybee venom do not exhibit anaphylactic reactivity despite having these specific IgE antibodies. It is also known that a different honeybee venom specific antibody, IgG4 (part of a Type 1 response), is particularly high in the beekeepers' group. Moreover, the higher the number of stings in the beekeepers, the higher the concentration of specific IgG4 antibodies (sIgG4). These seem to be a feature of an acquired tolerance to honeybee venom in the beekeepers.

In the general population increasing age is a risk factor for venom hypersensitivity, but among beekeepers clinical symptoms after bee stings were less severe with the increasing age of the beekeepers. This correlation may be due to the fact that older beekeepers have higher sIgG4 levels that provide better protection. Systemic reactions were observed in 45% of beekeepers with fewer than 15 stings annually, but in none of those with more than 200 annual stings (so about one every other day). The older beekeepers have been exposed to bee venom allergens

for longer than the younger ones, which somehow causes a natural desensitization. Infrequently stung beekeepers are at the highest risk.

OF MICE AND MEN

In recent years studies in experimental animals have produced a growing body of evidence that indicates it's the same IgE-dependant pathways that enhance the resistance of mice to poisons from snakes, scorpions, and honeybees, in subsequent exposures^{vii}. Mice with a previous Type 2 response to a normal dose of bee venom have better survival rates to potentially lethal doses of venom on a later occasion, and mice who lack IgE (due to a genetic abnormality) missed out on this protective effect^{viii}. It's proposed that a form of Type 1 immune interaction with Type 2 immune responses reduces the pathology associated with these responses, while maintaining an ability to learn about protecting us from a good dose of toxic venom^{ix}.

The 19th century German philosopher Friedrich Nietzsche observed "Was mich nicht umbringt, macht mich stärker", translated to the often misused "What doesn't kill me, makes me stronger". There's no reason to think he had honeybees in mind, but it seems particularly apt here.

Dave Black is a commercial-beekeeper-turned-hobbyist, now working in the kiwifruit industry. He is a regular science writer providing commentary on "what the books don't tell you", via his Substack [Beyond Bee Books](#), to which you can subscribe [here](#). 🐝

References

1. Ulrich R. Muller, Bee venom allergy in beekeepers and their family members. *Current Opinion in Allergy and Clinical Immunology* 2005; 5:343–347
2. K Müntstedt M Hellner, D Winter, R von Georgi, Allergy to Bee Venom in Beekeepers in Germany, *J Investit Allergol Clin Immunol* 2008; Vol. 18(2): 100–105 PMID:18447138
3. Alex G. Richter, Peter Nightingale, Aarnoud P. Huissoon, and Mamidipudi T. Krishna, Risk factors for systemic reactions to bee venom in British beekeepers, *Ann Allergy Asthma Immunol.* 2011;106:159 –163. doi:10.1016/j.anai.2010.11.005
4. Bousquet J, Menardo JL, Aznar R, Robinet-Levy M, Michel FB. Clinical and immunologic survey in beekeepers in relation to their sensitization. *J Allergy Clin Immunol.* 1984;73:332–40
5. Matysiak J, Matysiak J, Bręborowicz A, Kyler Z, Dereziński P, Kokot ZJ. Immune and clinical response to honeybee venom in beekeepers. *Ann Agric Environ Med.* 2016; 23(1): 120–124. doi: 10.5604/12321966.1196866
6. Gunter J. Sturm, Bettina Kranzelbinder, Christian Schuster, Eva M. Sturm, Danijela Bokanovic, Jutta Vollmann, Karl Crailsheim, Wolfgang Hemmer, and Werner Aberer, Sensitization to Hymenoptera venoms is common, but systemic sting reactions are rare. 2013 American Academy of Allergy, Asthma & Immunology <http://dx.doi.org/10.1016/j.jaci.2013.10.046>
7. Marichal & Starkl et al, A Beneficial Role for Immunoglobulin E in Host Defense against Honeybee Venom, *Immunity* 39, 963–975, November 14, 2013, <http://dx.doi.org/10.1016/j.immuni.2013.10.005>
8. Marichal, T., Starkl, P., Reber, L.L., Kalesnikoff, J., Oettgen, H.C., Tsai, M., Metz, M., Galli, S.J., 2013. A Beneficial Role for Immunoglobulin E in Host Defense against Honeybee Venom. *Immunity* 39, 963–975. <https://doi.org/10.1016/j.immuni.2013.10.005>
9. Stephen J. Gallia, Martin Metz, Philipp Starkl, Thomas Marichal, Mindy Tsai, Mast cells and IgE in defense against lethality of venoms: Possible "benefit" of allergy, *AllergoJnt.* 2020 March ; 29(2): 46–62. doi:10.1007/s40629-020-00118-6.

Want to tell beekeeping stories and earn some extra income?

Apiarist's Advocate is
searching for freelance
writers to contribute to
our monthly eMagazine.

If you have skill with
the written word and an
understanding of beekeeping
and the apiculture industry,
then we want to hear from you.

**Ph. Patrick 027 383 7278 or email
editor@apiadvocate.co.nz**

CrystechNZ – Honey Extraction and Processing Experts at Your Service

It's not easy for Kiwi beekeepers out there at present, with many cutting costs as they attempt to keep businesses alive after several years of reduced honey prices. That reduction in spending obviously hits the service providers hard too, so CrystechNZ manager Jamie Grainger takes this opportunity to reinforce to honey producers that they are not going anywhere. They are still adding value to certain honey producers and processors' business by providing high quality extraction and processing equipment, and consultation – could your honey line benefit from their expertise?

By Jamie Grainger

I must admit, my visits to the honey sheds around the country have been much fewer in the last two years than those preceding them, but my team of engineers and fabricators are still keeping busy and there has been a bit more positivity coming into things in the last six months. At CrystechNZ we are lucky to be part of the wider NZ Manufacturing group, so while



CrystechNZ manager Jamie Grainger, "I get a real buzz around improving people's honey throughput, and the quality of the product. I know what it is like in the hives – it is bloody hard work. To have that hard work semi-wasted, when the honey is not coming out of the shed as well as it could be, doesn't fly with me."

myself and our team have considerable expertise in honey processing – from as soon as it comes in the door to it leaving in drum or packed – there are other jobs and industries we can keep ourselves busy with in the downtimes.

So, what does that mean for you as the beekeeper, or honey processor? Our product range, knowledge and skill set will be here at our Tauranga base and serving the whole of the country for the long run. I'm a former beekeeper myself and so this line of work is dear to me. When you engage CrystechNZ to supply honey processing plant, or just call on us to help with an existing honey line, you can be sure of ongoing support for years to come, if needed. We are not going anywhere – that is a great thing for me to be able to say and back up with action, despite a downturn in honey prices.

WHERE'S THE WORK COMING FROM?

It's no secret that there is used honey processing equipment coming up for sale as honey businesses change hands. Therefore, we have seen a drop off in orders of new equipment. There's still a bit of CrystechNZ gear being fitted into sheds though, as there are obviously huge benefits to buying new and specialised plant, compared to the unreliability of the second-hand market.

With more well-worn honey plants changing hands, we have been able to pivot towards consultation and helping beekeepers gain efficiencies as they familiarise themselves with unfamiliar setups. In April I had a client where the experienced beekeeper and line operator took off on an early holiday and left the boys to it. Things were not going as smoothly as they could though and the honey was coming out with too many impurities in it. I couldn't diagnose it over the phone, so I jumped on a plane and went and saw them.

That service is beneficial in that I was there for a day, ironed out their problems, and their honey was back to being clean. It removes a huge amount of stress on them when they are needing to get drums



There's still a bit of product moving out the door at CrystechNZ, including this small-scale processing plant for heat treating, left, and turnkey honey creaming tank, right, recently.

out the door to their clients. Plus, it's not a good look when you are sending out honey in a less than optimal condition.

On some of those older honey lines, the modern concepts are still fairly much the same, but there are definitely efficiencies that we can help people add in extraction, packing and processing. Little changes here and there can make some pretty big differences.

REWARDING STUFF

Making those adaptations and improving people's honey throughput and the quality of the product gives me a real buzz. I know what it is like in the hives – it is bloody hard work. To have that hard work semi-wasted, when the honey is not coming out of the shed as well as it could be, doesn't fly with me. It is very rewarding to go in and help beekeepers make changes in the shed, and then get the feedback that it has made a big difference.

So, whether you need help installing some plant you have bought, getting the honey line working at maximum

capacity and quality, or you just need some expertise to look over the whole setup, please get in touch. Reaching out via phone or email is at no cost to you. From there, we can advise and you can

decide on the best course of action for your business.

Enjoy a winter break if you can, but remember now is the time to iron out those wrinkles in your processing plant. ■

Help in the Hot Room

One piece of new equipment which is at the more affordable end of our extensive catalogue, and which many honey extractors could benefit from, is our Fork-Extension Box Lifter. It fits to forklifts and makes filleting honey boxes before entering the hot room really fast and easy.

The fillet (usually just a small wedge of wood or rubber between boxes) aids warm air flow through the boxes if they are stacked more than three full-depths high. It will boost your productivity, as less honey is left in frames, and the Box Lifter will save



Many honey extractors can gain more honey by filleting honey supers in the hot room to aid air flow, and this Fork-Extension Box Lifter makes it fast and easy.

time, your back, and is just generally safer than the laborious task of re-handling those heavy supers.



FROM THE HIVE TO THE SHELF



Honey Extraction and Processing Equipment

From initial consultations, layout plans through to tipping the first drum, as well as ongoing servicing and maintenance, our team become your partner along the way.

Dedicated to delivering high quality honey processing equipment and fit out solutions



Phone +64 7 579 0082 Email info@crystech.co.nz www.crystech.co.nz





What's the Story?



BY ROGER BRAY

One of the pillars of the recently announced *Honey Strategy* revolves around the story of New Zealand Honey. As one of an older generation of beekeepers I thought I was familiar with the perhaps untold story that is portrayed in every jar of honey on the supermarket shelves.

To me the story of honey starts with the animals we farm – bees. The incredibly hard work bees undertake just to collect the food that sustains them. The logistics around the number of trips an individual bee must make as well as the abundance of floral sources that needs to be available in order that the colony is able to produce its food source is a story in itself.

A huge number of books have been written about beehives and how the colony is structured to perform its function as an organism that has survived 10,000 years of evolution. Then there have been an additional number of books and manuals written about the actual craft of beekeeping. From a time when the keeping of bees was once undertaken as a religious activity to more recent times where beekeepers had an affinity with their bees and the environment, it seems the Honey Strategy might be promoting a time of change.



Roger Bray has kept bees since a time when beekeepers seemed to come fashioned with a protective beard, albeit a different kind to this which he is showcasing in 1978. The story of beekeepers, bees and honey seems to be changing though and the Mid Canterbury beekeeper worries certain aspects of the new story might not be for the better.

I come from a period where beekeepers understood bees and how their colony works as well as the environmental and seasonal aspects that are an important part of every jar of honey on the supermarket shelves. Beekeepers seemed to fit into a mould that sometimes saw their only protection from bees zeroing in to dispatch their stings was by growing facial hair. The story of a beekeeper today is a person with a suit that covers his whole body that allows him to conduct tasks with more speed. Some of the recent photos of beekeeping often appear with multitudes of bees in the air also covering hives, I wonder about animal welfare issues within the commercialised apiculture industry of today.

Like the wine industry, a few years ago beekeepers and honey marketers promoted honey on its natural flavours with climatic and regional differences. Because bees take advantage of any floral source within their foraging range of 40 square km surrounding their hive it is to be expected their stored honey will be a mix of different nectars. Seems now the Honey Strategy might somehow seek to regulate how beekeepers can promote honey that has been collected by bees for their food when it is marketed as human food. The marketing of honey appears poised to become set by regulation of government where marketers will have a list of chemical ingredients that must be included in each pot of honey they offer for sale. *Is the true story behind honey becoming lost?*

Adding to the confusing message, or story, surrounding mānuka honey, is what is happening to other honey and bee products marketed by those that traditionally are known as honey marketing entities? A quick Google search of "flavoured honeys" will lead you to the products of some well-known labels extolling the virtues of honey with the additional additives of everything from lemon, to chocolate, ginger, orange, mint, hazelnut, lime and, believe it or not, water. Heck, you needn't go far to find some "deer antler mānuka honey" for *cough, cough* "strength and endurance". One might ask what sort of honey story is being promoted by these organisations. Are honey processors becoming food manufacturers? Is there an expectation honey marketers would be extolling 'the story' of our natural and unadulterated bee products?

There are some within beekeeping circles that hold the wine industry in high regard for its marketing strategy. Do you think our wineries will start marketing Caramel Flavoured Pinot Noir, or Sparkling Cola Flavoured Cuvee? Wouldn't that be a great story for the wine industry?

One of the pillars of the beekeeping industry is bees, their work and the efforts of beekeepers too. I find it hard to imagine 'the story' of the beekeeping industry might revolve around 3-MAP, 2-PLA, MGO, UMF and an array of numbers with a + sign preceding.

There are similarities between the honey and wool stories. For both, there are man-made products that are considerably cheaper to produce and at volume too. The producer cannot compete against price or volume of the marketing power of those that deal in man-made products. We should guard against erosion of our naturalness with the introduction of stuff that detracts from that concept. We have to collectively promote our products on a point of difference, and that starts with being a natural and sustainable product. Right now, with honey, that story is not being collectively told though. 🐝

Wear the same togs every day?



We didn't think so...

It's just as important to change up your varroa control regularly. Apiguard, from Vita Bee Health, is the perfect rotational partner in your IPM strategy.



Apistan is an ideal rotational partner but Apiguard can be paired with other products on the market.

Keep it Fresh

Ceracell are Vita's exclusive distributors in NZ and Australia.



vitabeehealth.com



healthybeeguide.com



[vitabeehealth](https://www.facebook.com/vitabeehealth)



[@vitabeehealth](https://twitter.com/vitabeehealth)





Amitraz Resistance Described



BY JOHN MACKAY

The genetic mechanisms behind synthetic pyrethroid resistance in varroa have been known for over 10 years – since the first description of DNA mutations in the sodium channels of varroa was made in 2013. Varroa treatments that fall into this class of chemicals include Bayvarol® and Apistan®. Since this time, other mutations have been found to be linked to resistance, but interestingly all mutations are in a very small area of DNA – a so-called ‘hotspot’ of mutations. This area of DNA codes for the ‘pocket’ where the pyrethroids bind to affect the channel. A mutation means no pocket and no pyrethroid binding.

However, little was known about resistance to amitraz treatment products (Apivar® and Apitraz® in New Zealand) until recently. Amitraz resistance was described in various USA locations in 2020 using bioassays (think Pettis tests) coupled with treatment failure reports. The key varroa target for amitraz, an octopamine receptor gene, was described in 2021 and showed why amitraz killed varroa but didn't harm bees that carry similar receptors. Investigating this target gene for sequence variations showed two different mutations on this target gene – one in varroa found in Europe and one in a different location on the gene of varroa found in the USA. The mutations are known by the location of the mutation – Y215H is the mutation prominent in the USA, and N87S in European varroa.

More recently, a follow-up report reaffirmed Y215H as the cause of resistance to amitraz in the USA when the presence of the

mutation was confirmed in nearly three-quarters of all varroa showing resistance when exposed to amitraz chemical in a container/Pettis test.

Bioassays such as those can be difficult to perform and they rely on a high background level of live varroa to be present in the sample. As such, DNA-based assays can be more easily applied, but do have the drawback that they are generally highly targeted to the mutation(s) of interest. That's not such an issue for the highly targeted mutations of pyrethroid resistance, but may be more important for any amitraz resistance reported here.

To go with our pyrethroid resistance assays, at dnature we have recently developed rapid screening tests for both amitraz mutations, Y215H and N87S, down to the level of a single varroa.

However, the presence of mutations in different areas of the octopamine receptor gene suggests that other mutations may also cause treatment resistance, as compared to the highly localised



Varroa undergo lab testing for amitraz resistance.


Neville Marr

Chartered Accountant

**An accountant who understands
your business!**

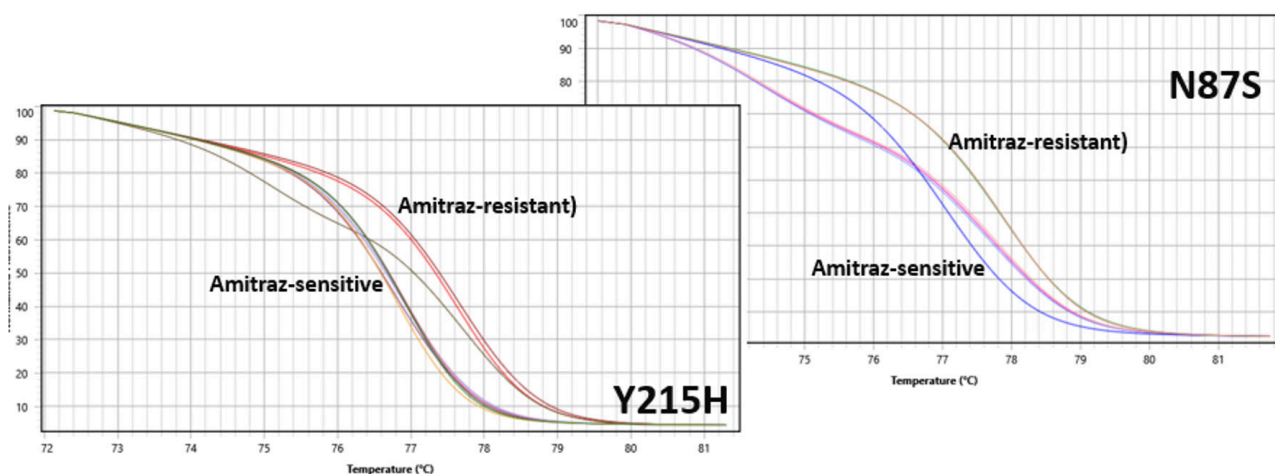
I'm a Blenheim-based chartered accountant, hobbyist beekeeper, and business partner with all of my clients. What's important to me is understanding my clients' business and bringing that personal touch. Please contact me confidentially and without obligation if you'd like to discuss how I can assist you and your business this year.


CHARTERED ACCOUNTANTS
AUSTRALIA • NEW ZEALAND



www.marrnz.com
Office: 03 929 3100
Mobile: 027 276 7682
Email: office@marrnz.com



mutations for pyrethroid resistance. Simply put, identifying amitraz resistance might not be so simple

SUSPECT RESISTANCE?

We should definitely be looking for it though so, if you suspect resistance, keep the varroa from your alcohol/sugar/CO₂ shake and notify the supplier of the treatment. The manufacturers want to know of any suspected resistance issues and are obliged to act on reports. Once you've stored the (labelled) samples, an alternative treatment can be immediately applied. The DNA based

tests for resistance mutations can be applied to the dead varroa from all monitoring regimes.

Beekeepers complain the manufacturers "don't do anything about resistance". Why? Because the suppliers and manufacturers receive very few reports of it!

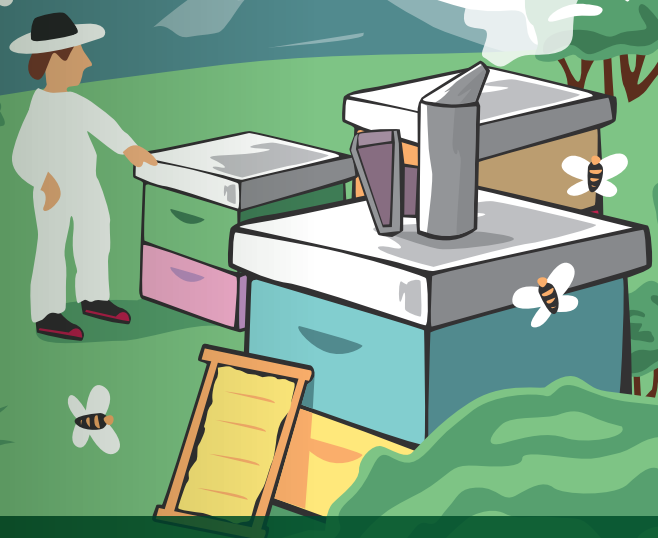
Report it and remember, keep the varroa from your monitoring that made you suspect resistance in the first place.

John Mackay is a molecular biologist and the technical director of Gisborne-based lab dnature diagnostics and logistics, as well as a hobby beekeeper. 🐝

Test using **dnature's** AFB Foster Method.

THIS SWAB TEST...

- ✓ makes it easier and faster to discover AFB
- ✓ means you can composite tests
- ✓ detects AFB in the absence of brood



Contact **dnature** for your AFB Sampling kit...

0800 362 887

orders@dnature.co.nz

www.dnature.co.nz/testing/bees

dnature[®]

detect • discover

Hunter-Reilly's Cost-Effective Formic Formula

Necessity is the mother of invention, so the old proverb goes, and it has been the case at Hunter-Reilly in the Wairarapa where, faced with a shortage of their regular formic acid varroa treatments they were forced to look elsewhere. That shift in gaze only needed to go as far as a couple of sample boxes of Nassenheider evaporators in the corner of their shed and the units have been so effective in trials that Hunter-Reilly are planning on importing a whole container-load from Europe, which owner Stu Ferguson hopes other beekeepers can help fill.

While Ferguson has been mightily impressed by the effectiveness of the German-made Nassenheider applicator and its ability to offer extended varroa control by distributing formic acid to his hives over a three week period, it is unregistered in New Zealand.

"We got some great results in the season just been, but that's just us doing our own thing on a few trial apiaries as very much an own-use system," the Wairarapa beekeeper says.

He had a few boxes of Nassenheider pro units gained years ago as part of his product development with the Hive Doctor brand he founded, and has since sold. In previous seasons they had used the Formic Pro "pad" method as a get out of jail card in varroa mite problem areas, with the pads sitting directly on the top bars of the frames. However, Ferguson had trouble sourcing cost effective Formic Pro options at the end of 2023-24 season.

"We ran out of our formic-pro in January just as we needed it the most, so we had no option but to reluctantly trial the stored

Nassenheider units that we had no experience or feel for," he explains.

The Nassenheider "Professional" design is placed on top of the hive. At Hunter-Reilly they have cut down old boxes to a height of 75-80mm to house the applicators. It contains a sump which holds around 240ml of solution, which then drips down a wick and onto a pad from where it evaporates over a period of two-three weeks, almost a whole brood cycle.

"We are so impressed. We had a couple of areas that were loaded with mites and getting reinfestation. We couldn't get on top cost-effectively and it was causing headaches. Now, it is like a light has been switched. We are on top of the mites for under one dollar per treatment and we are getting results."

While there is some negativity around formic treatments and queen loss, the Hunter-Reilly hives have not observed any such problems when using the Nassenheider system.

Entering next season, Ferguson plans to use the Nassenheider applicators on all of his hives. That will mean importing around 1500 more of the units into the country. He figures he might as well cast around beekeepers to see what interest there is in filling a container and distributing at the lowest possible price, to provide a cost-effective hive treatment for many.

"Varroa is the number one threat to bee health, it keeps a lot of beekeepers up at night, so I thought it only fair to share our experience and offer the opportunity for others to be part of a collective effort."

For any beekeepers who contact him and help fill the container, it is up to them

to do their own research and determine how the applicator can best assist their beekeeping, he stresses. He also points out that they have been using stringent adherence to personal safety procedures when handling acid solutions, and that he is open to advising on best safety practices they have learnt.

Ferguson has received assurance from MPI that import of the Nassenheider applicators alone, without any treatment compounds, is above board. There is space for 4500 more units in the container (less than 1% of hives in New Zealand), so beekeepers should get in touch promptly if they want to be included.

Expected cost of each unit is about \$17, a cheaper price than which they are retailed in Europe, and they will be available in boxes of 23 or 46 for commercial beekeepers. From there each hive treatment has been costing Hunter-Reilly 30-40c in consumables and they have been carrying out three or four treatments a year, alongside other organic methods.

"I figure if I am going to be bringing some of these units into the country for my own use, why not try to help other beekeepers along the way by offering them the opportunity too?"

Any beekeepers wishing to get more info or join the order can contact Stu Ferguson via email varroa@hunter-reilly.co.nz

More info on Nassenheider units:
German study by Stein, Beinert & Kirchner. Manufacturers website.
Dave-cushman.net review. ■



The Nassenheider professional model for beehive treatments which has been a game-changer for varroa control at Wairarapa beekeeping business Hunter-Reilly.



The Final Countdown



As the leaves brown, beekeepers look to tuck their hives into bed for winter, and its no different at Pyramid Apiaries in Marlborough, owner Patrick Dawkins reports, although their hives do get a peculiar local boost every April...

We're nearly there ... as the calendar flicks over to May we are amidst the last round of Pyramid Apiaries hives in Marlborough. Not before time too. After a long season, by autumn most beekeepers are usually ready for a winter pause from the hivework. We are a bit different this autumn though, having fit in an early two week break from the bees before getting into the final trip around the hives later in April.

The final round means ensuring all hives have plenty of honey and pollen stores for winter, be they double brood box 'production' hives, or the three-way mating units. Despite our region suffering a drought this summer, and thus the late

summer months provided very little bee forage as pastures dried off, a lot of our sites do get a timely boost heading into winter when the grapes come off the vines.

Marlborough's lower valleys are dominated by vineyards, which are harvested in late March to early April. Left behind on the canopy are the fructose and glucose of any crushed berries, which the bees are fast to pounce on. It means brood boxes nicely packed with honey so very little supplementary feeding has been required, thus far, as we winter down.

We are also pulling out amitraz treatments as we go, and usually conducting a mite wash on at least one colony per apiary. So far so good, with three mites in a 300 bee sample the



Grape honey fills up mating units at Pyramid Apiaries.



most we have seen. All the same, most production hives get a few oxalic acid staples to see them through to early spring.

An interesting addition to our business is a first ever run of packed and labelled honey, which we are in the planning stages of – a whopping 330 1kg jars, one drum's worth. We never envisaged packing our own honey when we first launched Pyramid Apiaries seven years ago, but one of the cherry orchards we have been providing hives for each spring has asked us if we want to help fill some shelf space in their summer cherry shop. So, we will give it a go on a very small scale this year. Thus far we have been playing around with design of a label and that is as far as we have got – luckily honey doesn't spoil!

A much more important part of our business is sale of our mated queens. We put the last of our cells out in March, and April has meant assessing matings and uniting any failed units. With many of these mating yards located in vineyards, feeding is not required and they are now set to come out the other side of winter with some fighting fit young queens.

Yes it's all shaping well, we've even found a buyer for our honey. The prices earned won't be sending us to an early retirement, but it is all helping put a bow on another season of fun and games keeping the bees. 🐝



School holidays in April provided another set of helping hands at Pyramid Apiaries. Gemma Dawkins undertakes her favourite job – scraping wax.



Pyramid Apiaries

Place your orders
now for mated queens

MATED QUEENS | CELLS | NUC & HIVE SALES



Patrick & Laura Dawkins – Marlborough
pyramid.apiaries@gmail.com
027 383 7278
www.pyramidapiaries.co.nz





What Might Really Make a Difference?



BY IAN FLETCHER

Health, crime, education, housing, productivity. It's a familiar list of things that just seem like they won't get better no matter who's the government, or what they do. Add a dose of ministerial incompetence (and maybe sackings), a pithy quote from Te Pati Māori, and that's the weekly news diet. Is there anything that might make a difference?

Standing back from it all, one thing stands out. No one has enough money.

Firstly, the Government (stupidly committed to tax cuts) is trying to cut its way to better public services. Just writing – or reading – that sentence exposes the futility of it all.

I don't much care about the recent core public service cuts (there's a lot of showing off on that, and a lot of departments tell me they are bravely "giving up" existing vacancies, as if that were a sacrifice). The real problem with the Wellington public service is its blame culture, groupthink, optimism bias, inertia, and systematic promotion of astonishing mediocrity. The current cuts process just gives those in charge at every level an excuse to avoid dealing with these issues. You can hear the cans being kicked down the road all along The Terrace.

What bothers me more are the recruitment freezes in Health NZ, and the associated decision not to pay for cover when front-line health staff get sick. That sort of silly, short-sighted decision-

making exposes the lack of both systemic understanding and the moral cowardice of senior management. If you say you won't cut front line staff, then don't use these tactics to undermine your own promises. Flu jab, anyone?

Secondly, households – families, like you and me – don't have enough money, and it hurts. It strikes at confidence, suppresses demand, and causes real stress in families. We're now officially in a recession, as slumping domestic demand (people not spending) and gently falling export revenues interact.

Finally, the system of government is visibly broken. Everyone seems to agree that the consenting process is bogged down, and needs fixing. Local government is generally in a parlous financial state, with little room for anything much more than keeping the lights on. And good people actively avoid getting into local politics. Who can blame them?

The other half of this wicked little problem is that the solution is thought to be even greater centralisation, so under the current government's 'fast track' proposals, decisions would be remitted

to a small group (a Cabal? a Junta?) of three Ministers, with an advisory panel. The answer to a failure of central government is surely not to centralise a bit more.

SAVING THE SITUATION

So, what can we do? First, save more money, both as a country, and as individuals. More savings will fund investment, infrastructure, innovation, and of course give savers a more secure future. It's not a cure for our national productivity crisis, but it's a necessary part of any solution: without more savings at





a national level, we won't be able to invest in other things that help.

How? We could jack up KiwiSaver rates to create a system that more closely resembles Australia's excellent superannuation system. After several decades, the Australian system and its component funds now provide a world leading savings and retirement ecosystem. If we did that we could also cut (or means-test) so-called national superannuation here, and maybe raise the retirement age a bit. Everyone would win. Obvious, right?

No. The problem is that people don't earn enough to meet their bills today, let alone put 10-15 percent of their income into a beefed-up KiwiSaver. We need to tackle the pernicious groupthink that says we can't afford to pay people more. In fact, it's only by paying more that people will save more, and let these other issues get tackled. The Australian secret (not really secret; we just don't want to know) is that workers get a higher share of national income than in New Zealand. Some of that is the impact of very highly-paid and super-productive mining jobs; however, Australia has a more unionised workforce, and that has helped keep the share of national income enjoyed by workers higher than it would otherwise be. We need to consciously, significantly raise minimum and other wages, and increase savings rates, at the same time.

This won't be a popular thought with struggling beekeepers. I get that. But with enough warning, and time to prepare, I think we'd surprise ourselves. Businesses facing higher wages would have the incentive to invest in skills, IT, machinery and so on, and over time they'd have access to the capital (via a growing savings pool) to do so.

GETTING AWAY FROM WELLINGTON

The other thing we need to do is also an attack on existing groupthink: decentralise real political authority to revamped local government (maybe renamed too). Wellington doing it all has failed, and we're just mad if we think trying harder will change the result. Elected regional governments with some revenue of their own (Australian States share the GST take, for example) and

HONEY WANTED

All honey considered

Email us at:

info@harvesthealth.co.nz

HONEY EXTRACTION Services IN CANTERBURY

- Pick up and deliver your honey supers at your ease
 - Extract your honey with care and precision
- No mix or blend. Your honey stays pure and tasty from every apiary
 - Standard jars, pails, and more to your specifications
- Sell your honey legally and profitably with our NP3 licence and help
 - Share, sell, or store your honey

Contact Us :

www.gielfamilyfarm.co.nz
 022 388 7959
admin@gielfamilyfarm.co.nz



a clear mandate to manage both economic development and service delivery (like health, schools, roads). Some would succeed; others might fail. But that would create both the incentive and the example to sort out the laggards at the hands of the electorate. Nothing voters like more than the chance to throw the rascals out.

This is all long-term stuff, but (as the UK's Meg Hillier says), good politics means looking 20 years ahead as well as dealing with today's crisis and next week's emergency. We need to do both. So, let me finally urge MPI and the whole government to have a plan, shared with us all, to deal with Highly Pathogenic Avian Influenza, a savage viral disease decimating wild birds and marine mammals in the Northern Hemisphere, and now found in dairy cattle in the US. It seems infected cattle mainly survive, though birds and marine mammals can be wiped out.

Rare in humans, but very high mortality when we do get. We need a plan.

Flu Jab anyone?...

Ian Fletcher is a former head of New Zealand's security agency, the GCSB, chief executive of the UK Patents Office, free trade negotiator with the European Commission and biosecurity expert for the Queensland government. These days he is a commercial flower grower in the Wairarapa and consultant to the apiculture industry with NZ Beekeeping Inc.

Flu jab anyone? Cuts to health funding are trying to be hidden warns Ian Fletcher, while imploring the government to have a plan should Highly Pathogenic Avian Influenza reach our shores.



Apiarist's Advocate is brought to you by Patrick & Laura Dawkins, Marlborough beekeepers.

www.apiaristsadvocate.com

www.facebook.com/apiadvocate

www.instagram.com/apiarists_advocate

Editorial

Editor: Patrick Dawkins

To make comment or send press releases please email editor@apiadvocate.co.nz or phone **Patrick, 027 383 7278**.

Creative

Design: Ashleigh Ryan

Advertising

For more information or to make a booking, email advertising@apiadvocate.co.nz or phone **Patrick 027 383 7278** or **Laura 021 130 7446**.

Booking deadline is the second to last Friday of the month prior to publication and artwork must be supplied by the final Friday of the month.

Take your place in these pages

advertising@apiadvocate.co.nz

Patrick 027 383 7278

Laura 021 130 7446



Never miss an issue!

Subscribe at



www.apiaristsadvocate.com

Don't miss the latest industry news



SAVE



Save *Apiarist's Advocate* to your mobile device for ease of access anytime! Just choose the download  option from the bottom menu, then the Save to Home Screen  option from the next menu.

PRINT



Print *Apiarist's Advocate* anywhere! Our layout is designed to fit A4 paper, so whether you're at home or work, simply hit print for your hard-copy.