APIARIST'S ADVOCATE

News, Views & Promotions - for Beekeepers - by Beekeepers

What's the Plan?

The honey industry gathers to talk strategy, and critics weigh in...

> 2024 Honey Industry Summit



The panel of industry personal at the Industry Summit Day 2024 at Waikato University on June 18 answer questions pertaining to the Honey Industry Strategy. From left, Kristen Kohere-Soutar, Jane Lorimer, Sean Goodwin, James Jeffery, Jackie Evans, Mike Weight, Tony Wright and Karin Kos.



Summit Discussions Delve Deeper into Levy Plans



With around 250 attendees from various corners of apiculture, the Industry Summit Day 2024 at University of Waikato on June 18 served as a platform for further explanation of the strategy proposed to move the honey industry forward with a new industry body, and mānuka honey levy. A panel discussion, with questions from the floor, allowed some of the proposals to be further fleshed out.

It was made clear to those from around the beekeeping industry who gathered at the university's The Pā building that there are headwinds not just in the present, but also the future of the New Zealand honey industry, which organisers believe only a greater level of financial support can alleviate.

At the institute where mānuka honey's unique properties were first quantified 40 years ago, industry-good body Apiculture New Zealand (ApiNZ), along with mānuka honey export group Unique Mānuka Factor Honey Association (UMFHA) and those tasked with protecting the use of the term *Mānuka Honey* for New Zealand use only, the Mānuka Charitable Trust, gave greater detail to the vision of the Honey Industry Strategy 2024-30 which was released in February. It provided an opportunity for industry leaders and strategy authors to speak to their thinking, and questions from the floor to be discussed.

In years gone by, National Beekeepers' Association meetings were renowned for an open floor on which beekeeper voices could be heard, with bolshy discourse often ensuing. In 2024, Industry Summit organisers took a more controlled approach to discussion of the Strategy with attendees asked to submit questions via event app Slido, or a physical dropbox. A selection of questions was then presented to a panel of eight industry stakeholders, at least six of who were directly associated with authorship of the strategy document, while a few questions came directly from the floor.

New Zealand Beekeeping Inc president and Waikato beekeeper Jane Lorimer was the lone panel representative from outside the document authors – and one of just two beekeepers on the panel – and challenged its legitimacy. She said the strategy has too much of a mānuka honey focus and overlooks the value of pollination to the sector.

ApiNZ chief executive Karin Kos replied by stating "ultimately everyone needs to benefit, but there isn't a quick fix. We are tying to set a strategy for where we need to get to".

A theme of the discussion was the need for the two major sectors of the honey industry – production and packers/marketers – to find common ground on the issues that need addressing, and thus funding.

"Are we prepared to look at a model that says 'we packers need you beekeepers, and we beekeepers need you packers'?" asked

Kristen Kohere-Soutar, from the position as executive chair of MCT's operating arm Te Pitau Ltd.

"It's not rocket science. We should be able to do that ourselves."

Mike Weight, general manager of mānuka honey exporter Wedderspoon, stated "it is important the (potential levy) money is spent on an agreed strategy," before putting a stake in the ground regarding exporter opinion.

"All the exporters I have spoken to understand there is a producer requirement," he said.

Representing both fellow mānuka honey export giant Comvita, as chief science officer, and UMFHA, as a director, Dr Jackie Evans reinforced Weight's viewpoint, saying "ensuring the export levy is spent on the beekeeping side is essential".

James Jeffery joined Lorimer as the only other beekeeper on the panel, as co-owner of nearby Summer Glow Apiaries while also wearing a UMFHA directors' hat. "The producer needs to trust the exporter that, when they do well, the beekeeper will also do well," he said.

Lorimer, speaking from the position of that producer, added "how we feed our priorities into things is essential". The question of what safeguards beekeepers would have on what levy money is spent on, especially if exporters were to pay it, also came from the audience.

"A lot, basically," was Weight's answer.

"It is really important the beekeepers are there, functioning, and doing the best work to produce the best honey possible, allowing us to sell the best honey possible. The revenue might have been



The panel fronts an audience of about 250 from around the apiculture industry inside University of Waikato's The Pā building.

gained from the exporters, but it should be spent across the industry to an agreed strategy, agreed by all the players in the industry."

UMFHA chief executive Tony Wright has been instrumental in the Strategy to date and heads up an industry group that already collects millions of dollars annually from mānuka honey exporters. He weighed in on the levy balancing act.

"Whoever is paying the levy gets a say in how the levy is spent. If it is an export levy, it is reasonable that exporters will want to prioritise how it will be spent. All the exporters I have talked to

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...

0800362887 orders@dnature.co.nz www.dnature.co.nz/testing/bees



detect • di<u>scover</u>

3

have understood there is an industry good that goes beyond things like marketing plans and legal protection and all the rest of it. They all get it ... No exporter I have spoken to has been unreasonable about seeing the value of investing back into the supply chain with things like bee health advice, training and all that sort of stuff," Wright said.

4

The UMFHA chief executive did put a cap on how far spend from an export-gained levy might extend though, saying "what is it beekeepers specifically want? If there is a will from beekeepers to have a collective programme to address things which are a priority to them, then it is probably reasonable that they pay a levy as well".

Representation of the different sectors of apiculture in an industry body is likely to be a key talking point going forward. ApiNZ chief executive Karin Kos said "we are thinking about a board, potentially a large board, that would have beekeeper representation".

ApiNZ was formed in 2016 and Kos has been the group's chief executive since inception. Regarding regional representation she admitted, "we tried that and we haven't done a good job of it". Looking forward to a new industry body she added, "if there is a better way where we could get that regional involvement into the board and the governance, then I'm all for it".

As for funding any model, Wright explained that inserting honey into the group of products which fall under the Horticulture Export Authority (HEA) would be step one, but a wider levy would need to go through parliament.

"We would want to make an amendment to the Commodities Levy Act, because that is the mechanism we would use to get the real quantity of money we are talking about to fund what we are interested in," Wright explained.

"We need to make amendment to the HEA Act to recognise honey as a product group and we also need to make an amendment to the Commodities Levy Act because that is the mechanism that will raise funds via exporters."

Closing the panel discussion, Kos reinforced the need to move forward the current Strategy document, and not go back to the drawing board.

"We've got a strategy, we've got a start, let's not muck it up." If NZBI are to buy into that thinking, they are going to want closer involvement moving forward.

"Despite what side of the coin we are looking at, we all need to work together. Exporters need producers, while producers need packers and exporters. It is how we interact with each other, how we feed what our priorities are as beekeepers back in to what is happening, that is the key. The really important thing is getting around the table, discussing where we need to be, and ensuring that the whole industry is brought along, not just the exporters," Lorimer said, adding, "we all need to be brought along so we understand where we are heading." *****



Summit Day Takeaways



The Industry Summit Day held at University of Waikato on June 18 had a heavy focus on the Honey Industry Strategy of hosts Apiculture New Zealand (ApiNZ) and Unique Mānuka Factor Honey Association (UMFHA), but there were more beekeeping-specific discussions too. We explore some of the key takeaways.

Experts from outside the honey industry, such as in law, trade and a fellow primary industry offered insight from the stage of the large conference room in the morning session, while Californian scientific beekeeper Randy Oliver presented via video link in the afternoon, followed by American foulbrood (AFB) Pest Management Plan Agency representatives in person. Given those varying personal, topics discussed were diverse...

- ApiNZ chair Nathan Guy believed apiculture could take heed from seeing other primary industries bounce back from downturns, highlighting the rise of kiwifruit. He saw the Horticulture Export Authority (HEA) as a logical next step, but a honey levy under the Commodities Levy Act was the "ultimate", despite it likely taking many years. "Right now, to beekeepers, a levy is a cup of cold sick," Guy acknowledged, but "in time, a levy with a focus on research and bee health is a no-brainer". He added, "for ApiNZ and UMFHA to go anywhere, it needs to be supported by beekeepers".
- Despite defeat piling upon defeat in the trademark courts, Mānuka Charitable Trust chair Victor Goldsmith reinforced their dedication to the mission of trademarking mānuka honey. "This is a legacy mission for us. We are in it for a long, long time and we are not willing to let our taonga be bastardised out there... we might have lost the battle, but we haven't lost the war."
 - UMFHA chair Rob Chemaly stressed the importance of "the highest quality benchmarks" that a united brand offers to protect "our honey". Adding, "market share is everything".

APICULTURE

UMI

5

2024 Honey Industry Summit

ApiNZ Chair Nathan Guy addresses the Honey Industry Summit at University of Waikato on June 18, saying "For ApiNZ and UMFHA to go anywhere, it needs to be supported by beekeepers".

- Particularly enlightening to the potential direction of any future industry body, or levy, were the words of commercial lawyer Stephen Franks, who UMFHA has funded to analyse the industry. He described the HEA as a "clumsy fit" and "quite antiquated" but a potential "economical" start, with membership only in the realms of \$65,000 annually. It would require parliament amendment to the HEA Act though. From there a recognised producer group which sets export standards could flow, Franks believes, whether that be all honey or simply mānuka.
- Any wider levy, beyond funding the HEA membership costs, gets more difficult. "Honey producers may not know, or care, that their honey is going for export when they sell at wholesale," Franks pointed out.
- If an HEA agreement can get across the line Franks believes "we can achieve a lot of the first objectives" of the Honey Strategy. However, a new "Honey Act" would be required, slotting in under the Commodities Levy Act, if the industry wanted to allow the whole of industry to collect a levy and control spend. "We assume there might be categories of membership", such as packers, commercial beekeepers, and hobbyists, he forecast. "The Wine Act is a very good model that could be aimed at in the long-term."
- "Sometimes the industry has divergent interests," Franks said. With beekeepers and honey packers, that could well be the case, and the lawyer offered some insight into how that might be planned for in an industry body structure. "You are best to acknowledge that, no matter how much you talk, you might disagree on what should happen ... in that case, you need protocols that mean the government will listen to both parties."
- As for getting a levy across the line, Franks explained that the Minister would have to be satisfied there is broad agreement across the industry for the concept. That requires 60% by volume, and 60% by value buy-in and "the big players need to be involved".
- NZ Trade and Enterprise employees Sophie Craig and Tim Fogarty spoke via video link, with some of London-based Craig's insights into UK and EU markets illuminating. Playing into our favour is the 'NZ Inc' brand, market access (i.e. free trade agreements) and credible systems. The EU sees itself as a lead actor in the sustainability movement and wants products that will help meet their goals. "Shrinkage" (the UK term for retail theft) of mānuka honey is a major concern as

stores are taking measures to prevent the theft, but this can leave empty shelves or barriers between consumer and product.

That shrinkage is due to mānuka honey's huge premium, retailing for an average price of £47.19/kg, as compared to the wider honey category at £6.49. Craig explained it's a great position, with more potential, "I don't want NZ honey to lose its position, its credibility. There is opportunity and position to be won".

6

Sarah Wilson, general manager advocacy for New Zealand Wine, briefly outlined wine's history with industry representation, starting with the NZ Grape Growers Council in 1968 and progressing to the Wine Act 2003 that directs levy collection. She explained that their levy is calculated using both value (producers paying based off grape income at the vineyard gate) and volume (wineries paying per litre of wine). The board is made up of a mix of directors from growers to wineries, plus some boardappointed directors. They also have 15 regional associations. "New Zealand Wine can speak for the whole industry," Wilson claimed.

Around 250 people attended the Summit Day hosted by ApiNZ and UMFHA.

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
- O Quickly check type, volume, location, price, and availability
- O 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. There are restrictions in what wine levy funds can be spent on, but research into the industry is clearly not one – with Wilson highlighting their state-of-the-art Bragato Research Institute in wine capital Marlborough.

7

- Later on in discussions, Wilson contributed from the floor that separate organisations within the wine industry, between producers and exporters, "led to overlapping activity which wasn't serving our industry well".
- Much of the financial backing of the mānuka honey trademark efforts have come from UMFHA to date, and chief executive Tony Wright said he envisages that will continue. The chief executive also stated that they are running an active campaign to prevent offshore attempts to trademark mānuka honey.
- Randy Oliver's presentation was littered with his usual pieces of wisdom; "when you are talking about varroa management, you're talking about vector management – keep viruses in mind all the time."; "there is no such thing as varroa resistant queens, it's their daughters, so you need to control the drone population."; "selective breeding is the only long-term solution to varroa and tropilaelaps mites ... it takes some work, but it is worth it."; regarding mite washes, "once you know how to do them, they are very quick."; "when you have changes in an industry, it's an opportunity for some to start making money – it's up to you what side you want to be on."



UMFHA chief executive Tony Wright confirmed their intention to continue funding New Zealand's efforts to trademark mānuka honey.

 Niha Long, national compliance manager for the AFB Agency announced a 0.56% incidence rate of AFB in 541,263 registered hives, held by 8592 beekeepers, in year 2023-24. That's 3030 reported AFB cases. That compares to 3499 cases in the previous 12 months, with an almost identical incidence rate (0.55% in 2022-23).



 Long reinforced that the Agency are not concerned with the presence of AFB within beekeeping operations, but they are concerned with what practises are being taken to manage, and ultimately eliminate, the disease.

8

- The national compliance manager outlined five priorities for the Agency.
 - 1. Maintenance and upgrades of the Hive Hub database.
 - 2. Training commercial beekeepers to better manage AFB.
 - 3. A 'DECA review project' where beekeepers who hold Disease Elimination Conformity Agreements with the Agency ensure they are up to date.
 - 4. An improved communications strategy for telling the Agency's story.
 - 5. Effective resource management in the face of falling levy support as registered hive numbers decline.

"Elimination of AFB is the job of the beekeeper, not the Agency," Long reinforced.

Long could not offer any pathway to a beekeeper who questioned what recourse they might have to an Order to Destroy handed out by the Agency – a topic particularly pertinent following Springbank Honey's recent claims – but reassured that the Agency was not in the habit of ordering large-scale destruction of equipment of those beekeepers who are compliant with earlier requests from the Agency.

CrystechNZ

Extraction | Processing | Packaging



Attendees to the Summit Day 'chew the fat' over lunch at the University of Waikato.

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



10 WEEK HALO OF PROTECTION

VOIVOIT



Entrust your core Spring and/or Autumn varroa treatments to Apivar.

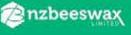


Protection when it matters most; from reinvasion, feral hives, drift, late/non-treating neighbours.

Apivar's controlled release technology provides an unrivalled 10 weeks protection.



Alternate Apivar with Bayvarol/Formic Pro in Spring and Autumn (either way), utilise organics as a suppression tool in-between. Entrust Apivar back-to-back in both the Spring and Autumn, with Formic Pro/ organics as the alternate/suppression tool in-between.



Exclusively distributed in New Zealand and Australia by New Zealand Beeswax Ltd: +64 (0)3 693 9189 - info@beeswax.co.nz - www.beeswax.co.nz



Avoiding the March of the Folly



"We certainly agree something must be done, but the fact this is something, doesn't mean it must be done," New Zealand Beekeeping Inc (NZBI) adviser Ian Fletcher summarises their position on the Honey Industry Strategy 2024-30 put forward by fellow industry groups. So, what is their something? We sit down with NZBI president Jane Lorimer and Fletcher to discern what they believe needs to happen, now, to best advance apiculture in New Zealand.

NZBI have oft been at odds with strategy authors Apiculture New Zealand (ApiNZ) since both national beekeeping representative groups formed in 2016. In 2019 they were instrumental in consolidating beekeeper support against a failed honey levy proposal. In 2024 the latest strategy for the industry, released by ApiNZ in February, was immediately denounced by NZBI and recent discussions of the Strategy at the Industry Summit in Hamilton were written off before they began.

With ApiNZ and Strategy partners the Unique Mānuka Factor Honey Association (UMFHA) setting out a timeline of further industry engagement, followed by a potential merger of their two groups and new mānuka honey export rules in the next six to 12 months, they are not appearing to heed the NZBI warnings though.

In the NZBI leaders' eyes, there are two important next steps which ApiNZ and UMFHA need to take to best provide for beekeepers - firstly, set more realistic timeframes for actions, and also accept the complexity of the industry and problems faced, which predicates the need for more transparent and industry-wide consultation.

IT'S COMPLICATED...

10

"What's our basic argument?" Fletcher asks rhetorically.

"We are looking at a complex economic ecology that includes mānuka honey, non-mānuka honey, pollination, and then ancillary services like queen raising and package bees for export, each of which is a supply chain by itself. All built off honey bees, all built off beekeeping skills and the beekeeping infrastructure, such as the supply companies, those who service the trucks, and

beekeeping staff. It's a complex set of supply chains and the issues the industry faces are complicated as well - the economics of higher costs and low prices, the economics of increasingly protectionist overseas markets. "It's a complex industry and the solution being offered is a simplistic one."

That "simplistic" solution to Fletcher's mind being the merger, of sorts, between ApiNZ and UMFHA, with a levy on mānuka honey as it leaves the country, as has been proposed.

"Their thinking appears to be 'we can't make the current system pay, so we will make it compulsory'. But that ignores pollination, that ignores biosecurity, it ignores non-mānuka producers," Fletcher says.

Carrying on down this path, with the agenda and timeline which ApiNZ propose is akin to a 'March of the Folly', where a government advances an agenda despite knowing it is the wrong thing, Fletcher warns.

SO, LET'S TALK ...?

"I still think they need to start from the basics, of what they found in the initial consultation they did two and a half years ago, and update it," Lorimer says of the Strategy, which is underpinned by beekeeper meetings in 2022.

"The consultation has worked from the top, down to beekeepers. They actually need to bring beekeepers along on a journey to where they want to go. A quick fix is not a good idea. You will put the producers, the beekeepers, offside by saying 'this is what we are going to do, come hell or high water, this is where we are going to go'."

Going forward, NZBI would like to see a greater level of transparency in consultation meetings, with a wider-range of industry groups and stakeholders taking part. They envisage opendoor meetings with seats filled by themselves, ApiNZ, UMFHA, the Mānuka Charitable Trust, Southern North Island Beekeeping Group, and the Ministry for Primary Industries (MPI).

There needs to be full transparency around the consultation, unlike what has taken place thus far, they believe.

"Genuine accountability and real-time accountability as you go along", is what would result from such conversations, Fletcher says.

"The underpinning concern is, we all know the industry has some big problems, and we all know not everyone is going to like every answer, because we are all grownups, but what we don't have to tolerate is a bad process where people run away with the ball. Getting the process right will get the result accepted," he says.

Such meetings would need to be tailored to various issues, and have regional focuses due to the varying complexities in beekeeping businesses in different areas of the country, the pair believe.

"People need visibility of the process, so there isn't the sense

Ian Fletcher

of a rabbit being pulled out of the hat. The way you would frame that is, acknowledging there are absolutely issues around mānuka honey, other honeys, pollination, biosecurity and by having meetings by topic, and by region," Fletcher says.

"The rabbit out of the hat approach is dangerous as it disempowers groups. It gives those responsible for the rabbit too much power and they are tempted to talk their own book – which is what we have seen – and simplify the complex."

WHAT'S THE TIME?

Going back to the drawing board, or at least taking steps closer to it, is not an approach being advanced by ApiNZ, but they do say the Strategy is "a living document". Their view appears firmly focused on moving forward with what they have proposed.

"They could be more realistic and transparent about how very much in the beginning their thinking actually is," Fletcher says.

"This [strategy] looks like an answer, but it is a sketch plan, not a fully worked out drawing ... If you are running out of money, you do something quick."

In Fletcher's experience – having headed government departments in New Zealand and Australia, and held high-level trade roles in the UK and Europe – the ApiNZ timeframes to implement Strategy ideas are unrealistic when considering their need for legislative change.

"I know these things are quite complicated and there is a series of steps that you have to take. The Cabinet manual sets it out. There is no legislation in progress and it would take six months, minimum, to get to draft legislation, even if MPI decided to get going on Monday," he says.

That means, NZBI believe, there is time for a greater level of more transparent consultation with all the industry, which could be undertaken in the next six to 10 months.

HOPING TO BE HEARD

So, while the two national beekeeping representative groups have differing opinions on what is the best approach to get to a meaningful strategy, and how much time the industry has to do it, the whole of industry is at risk of losing if they can't find common ground.

"The solution must match the something. Something doesn't mean *anything*. What we have ended up with is an anything," Fletcher surmises.

"The failure to face up to how big, diverse and complex the beekeeping sector in New Zealand is, or are, and to think there is a single, simple question with a single, simple answer is misleading and disempowering. I think beekeepers deserve better than that."

Beekeepers might deserve better than the current state of play, but a question-mark looms not only over the best result in industry leaders' eyes, but simply the process to be followed to make anything happen. *****

Want more beekeeping news?

Subscribe to receive the monthly eMagazine direct to your inbox for free.

Save our website to your favourites to keep an eye out for all the latest stories.

Want to reach beekeepers?

Advertise with Apiarist's Advocate and get 5 placements each month – eMagazine, cover email and 3 x online.

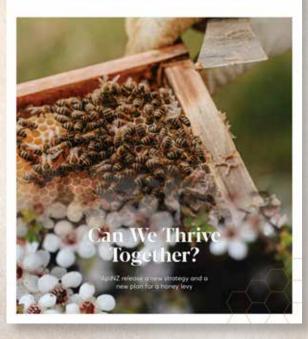
Email advertising@apiadvocate.co.nz

www.apiaristsadvocate.com

ISSUE 56, MARCH 2024

Apiarist's Advocate

News, Views & Productions - for Beekeepers - by Beekeepers



11

Jane Lorimer

Randy Oliver to Jet in for Three-Day Beekeeping Conference



Beekeepers need a good get together every winter, and they certainly need any help they can get controlling varroa mites, say organisers of The Beekeepers Conference, coming to Wanganui August 11-13. With that in mind, world-renown "scientific beekeeper" Randy Oliver is swopping in to attend in person, present some of his findings, and facilitate discussion.

With a little over a month until launch of the three-day event at the Wanganui Racecourse, hosts Southern North Island Beekeeping Group (SNIBG) is encouraging beekeepers from all over to reach out and request a registration pack.

While the full programme of speakers and events are not yet finalised, discussions will centre around varroa management, and Oliver will address the event on all three days, Sunday to Tuesday. There will also be a trade display, and a sponsors evening on the Monday. Conference organiser and SNIBG secretary Frank Lindsay says they were disappointed when Apiculture New Zealand cancelled their usual multi-day event in 2024, "so we have picked up the ball really".

"Conference is generally the time beekeepers get together and talk, and solve problems. It is the one time you get together where you can discuss things and work out things with other beekeepers," Lindsay says.

With varroa being such a pressing issue, controlling the mite will feature heavily. Day one, Sunday August 11, is titled 'All About Varroa – Skills/Tools/Systems', while Monday's programme will centre around Oliver's advice on how to find that one resistant hive and breed from it. Day three will be future focused, with a look to research and what help might be on the horizon for beekeepers.

"Looking at 2022-23 Colony Loss survey, if you add together the losses from winter and autumn you are getting up towards 30 percent, which is the same as every other country really. It goes to show that some of the varroa treatments are not working. They might be knocking down some mites, but not to the levels you expect," Lindsay says.

The event will be "an open forum" to allow attendees to pose questions to those on the microphone as they go.

"Randy will be visiting and talking for a long time. We are not limiting him to just one, one-hour presentation. We will also be allowing questions and answers as we go. This means beekeepers pick up the information as they go, rather than wait until the end when they may have lost questions."

With tickets priced at \$100 per day for those who belong to any industry group or club, or \$140 if unaffiliated and 300/400 for all three days, the event is being run to break even, but not make a profit, the organisers say.

THE BEEKEEPERS CONFERENCE 2024 11-13 AUGUST 2024, WANGANUI RACECOURSE

Hosted by the SNI Beekeepers Group on behalf of the SNI Education Trust

KEYNOTE SPEAKER

Randy Oliver in person



ALL BEEKEEPERS WELCOME

2014 prices to reflect the state of our industry. \$100 a day if you belong to a group or club.

PROGRAMME

SUNDAY	All About Varroa: Skills/Tools/Systems	
MONDAY -TUESDAY	Looking Ahead Randy Oliver: Finding that one hive that tolerates varroa and breeding from it.	

Full programme is not yet finalised.

GOT VARROA ISSUES?

GET HELP WITH OUR FREE CONSULTATION

TALK WITH VARROA EXPERTS

PLAN FOR NEXT SEASON

LEARN PROVEN METHODS



OR CLICK THE LINK BELOW: bqp.nz/consultation

OR GET IN TOUCH DIRECT >

Beequip^{NZ^m}

For innovative bee products

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

Notes from the Honey Bee Research Symposium



Beekeepers, scientists and anyone with an interest in honey bees, honey, and the environment they operate in packed into Plant and Food Research's Ruakura site in Hamilton on June 17 for the 5th New Zealand Honey Bee Research Symposium.

With numbers in attendance slightly exceeding the supposed cap of 100, seats were hard to find as 20 scientists and researchers presented their work and findings from the last 12 months, in 15-minute blocks. With topics as diverse as varroa treatments, bee breeding programmes, propolis, mānuka honey, pollination effectiveness, American foulbrood (AFB) prevention, pesticides and even maramataka (the Māori lunar calendar), you could be forgiven for thinking the apiculture research industry was well resourced. However, an open floor discussion to close the event was particularly enlightening, with scientists making it clear that they are under-funded and spending a far too greater proportion of their time seeking funding.

14

Here's some notes from an information-packed symposium...

- Time wasted: "We spend a lot of time working on grant proposals," explained event organiser Prof. Phil Lester of Victoria University of Wellington, who was once again joined by a contingent of students undertaking honey bee research. "If you want specific work done, fund it," he advised.
- Rudderless: "You are all in the engine room and no one is on the bridge to see where you are going," analogised



Honey Bee Research Symposium sponsor representatives, at left, and winners of the best student presentation awards at the June 17 event. From left, James Sainsbury (Plant and Food Research), John Mackay (dnature diagnostics and research), Rose McGruddy (Victoria University of Wellington), Erin Jones (Texas A&M) and Epernay Carta (P&F Research). experienced honey researcher Terry Braggins. "What is the strategic plan for research? What is the pathway for other New Zealand Honeys to move towards mānuka and how does that compare to AFB, or varroa research? What is needed is a coordinated industry response, from beekeepers to exporters." He called the amount the \$460million honey industry spent on research "diddly squat", admonishing – "pull your socks up".

- Very promising: One area of research that has been successfully funded (largely by American biotech company GreenLight Biosciences, who hope to bring a product to market), is the cutting-edge RNA-interference (aka 'gene silencing') varroa control work of Victoria University. No fewer than four Vic Uni scientists presented on the topic. Their studies have been continuing in the field, where pouches of 'Vadescana' sugar syrup have been administered to hives which then pass the gene-silencing to bees and varroa. It has been found to result in a "significant" reduction in varroa reproduction and thus populations, but had no impact on mite survival. It was not as effective as amitraz treatment. A separate study on the impact of the treatment on honey bee health showed the RNA-i treated bees lived longer and were more active foragers than the control group, further demonstrating the potential of the product.
- Texas Two: Visiting from Texas A&M University in the USA were Juliana Rangel and Erin Jones. Jones has studied the developmental state of honey bee colonies and its impact on pollination effectiveness, with her findings reinforcing that increased brood presence results in increased pollen foraging. Rangel's research into nosema has found that queens infected with the parasite possess a higher speed across the frame, their retinue was smaller and they have a higher egg laying rate – perhaps because infection causes them to eat more.
- Big Difference: Unique Mānuka Factor Honey Association (UMFHA) chief executive Tony Wright presented their research into mānuka tree varieties which identified differences between *Leptospermum Scoparium* DNA in New Zealand and Australia plants. It found they are taxonomically divergent enough that they should be classified as different species.
- From the Crop: Mark Goodwin updated progress on his nectar analysis project which aims to harvest nectar straight from the crop, or foregut, of honey bees. The goal is to get a percentage characterisation of honey based off nectar content, "like pollen analysis, but with a little bit more science

behind it". Nectar sampling direct from flowers is timeconsuming, so the plan is to harvest bees themselves as they forage on flowers this coming honey season. Watch this space.

15

- Pick Me: Ashburton bee breeder Rae Butler and scientist Linda Newstrom-Lloyd extolled the virtues of increasing varroa sensitive hygiene (VSH) traits in our bee stocks. "It's just a trait, it is not a line of bees. It can be combined with the best other traits," Newstrom-Lloyd explained. Use of the Harbro method of VSH analysis of queens has helped Butler build up a line of bees high in the trait. All commercial beekeepers will have a level of VSH traits in their stock, it's just a matter of adding it to breeder queen selection protocols to boost its prominence, Butler encouraged.
- More than Poplar: Propolis in New Zealand differs in compounds between that collected in spring and autumn, and between poplar trees and natives, a Plant and Food Research study has found. Michelle Taylor presented the results, saying the common definition of our propolis as "poplar-type", akin to North America, China and Europe, is probably selling us short.
- Southern Toughness: A strain of AFB in Otago is proving difficult to kill for Canterbury University researchers leading the ABAtE programme to create a 'vaccine' of sorts. They

have spent several years collecting bacteriophages from around New Zealand that kill *paenibacillus larvae* (AFB) spores and combining the most potent into a "cocktail". Field trials will soon launch, but they would desperately like to add the last missing 'phages to the mix and so will soon be calling for submission of more soil samples which may hold the 'phages. *****



The 5th iteration of the New Zealand Honey Bee Research Symposium proved more popular than ever, with over 100 people packing into Plant and Food Research's Ruakura venue in Hamilton on June 17.



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

Not Minding Their Own Beeswax



It was anything but a case of 'mind your own beeswax' at the New Zealand Beeswax Free Open Day on June 19 in Hamilton, as around 50 beekeepers listened in to experts on a range of practical beekeeping applications, and shared their own experiences.

The beekeeping supply company hosted a morning of informative discussion, which included international experts on varroa control beaming in via video, plus updates from closer to home, and a free lunch where apiarists could rub shoulders at the Distinction Hotel.

THE LATEST VARROA CONTROL FROM VETO PHARMA

The open day began with Apivar global distributor Veto Pharma updating their research and development work through Remi Pade, their leader in bee research, presenting via video-link from France. Pade detailed how 100 new compounds have been tested by their company in the last five years in the search for better varroa control, and how they keep "mite concentrator hives", with around 50-100 mites per 300 bees, for research purposes.

Pade detailed a new product which has gained registration in America, but might be some time off arriving in New Zealand. 'Amiflex', like Apivar, has amitraz as the active ingredient, but is applied in a gel formation, to the top bars of the hive. It shapes as a potential winter treatment, with Pade saying it cannot be used when supers are present due to risk of residues entering honey and wax. Trials have shown it to be 99% effective when applied to broodless colonies.

The Frenchman also tipped some promising research taking place into a new organic compound that is proving, thus far, to be twice as effective at killing varroa as oxalic acid, with low bee mortality. So, what is it? That's a trade secret, but it has serious potential they believe.

However, Pade tempered expectations by explaining that it usually takes eight to 12 years from selecting a candidate compound to use as a varroa treatment, to getting it to market.

> A new gel based amitraz product, Amiflex, has been registered for use in varroa control in the USA.

"There is stuff coming, but don't expect it this year or next, or potentially not in the next five years," explained NZ Beeswax general manager Nick Taylor.

FORMIC PRO-FESSIONAL

From France the video link moved to Canada where NOD Apiary Products scientist Heather Broccard-Bell informed the audience about their Formic Pro product and associated research they are undertaking.

While they are not certain of the mode of action which formic acid uses to kill varroa mites, its impact is on the mite's respiratory system, Broccard-Bell believes.

"It's quite unlikely that organisms will be able to evolve resistance to it," she reassured.

Formic acid is also lipophilic, meaning it does not stick to fat. With beeswax being a form of fat, that means no residues.

While formic acid might seem a potent product to beekeepers (and safe handling of any form of formic acid was stressed), the scientist explained that it is far more potent to varroa mites than bees.

"That's how all medicines work. Take too much of anything and it will be toxic."

Taylor said Formic Pro sales in New Zealand have approximately doubled every year for the past four years.

Another project which Broccard-Bell has undertaken is to what level drones act as a "reservoir" or "buffer" to catch viruses before worker bees fall susceptible. Preliminary results show more drone brood in a hive has resulted in reduced viral loading in workers.

FOSTER METHOD IN DETAIL

While dnature diagnostic and research's Foster Method of beehive swabbing and qPCR testing for American foulbrood (AFB) has been on the market for several years, technical director John Mackay took some time to detail its effectiveness.

"This is not a replacement for visual inspections. It is just another tool in the toolbox," Mackay explained.

"The vast majority of hives have no spores whatsoever," he pointed out, in response to recent public claims that the method could be used to find AFB in any hives or used equipment. People who claimed that were either misinformed or "what's the word?... oh yes, lying".

Mackay presented various case studies where the Foster Method was used to swab either hives in the field, or equipment not in use, to greatly reduce AFB incidence. In one case a large mānuka

honey company was able to reduce AFB spore counts from 23 tonnes of honey down to just one tonne the following season by using the Foster Method to cull any spore-infected dead-out hiveware, and some live hives.

Project Clean Hive, undertaken in Otago and Southland

2018-21, was also referenced by Mackay as being instrumental in the development of their new qPCR method. When one beekeeper involved in the project had a major outbreak of AFB following purchase of hives, they soon turned to swabbing the entrances of all hives. Any hives that returned a positive result were burned and the business's infection level was returned to industry standard within eight months, Mackay said.

Using the method in cases of outbreaks like that is its best use Mackay explained saying "this is a backstop, it's not a frontline, 'whose hive can we swab next' tool". A big part of dnature's service is helping beekeepers interpret test results, especially when composite tests are usually carried out in the first instance.

Spore counts of 18,000 on any hive or equipment is the threshold for a sure-to-come clinical infection, Mackay explained.

"At 18,000, if it's not clinical now, it will be in the coming weeks." Several beekeepers at the event espoused the value of the Foster Method, including John Berry, who called it "a wonderful system".

MIDLANDS FINDINGS

While Midlands research apiarist Martin Laas might not have been present to present some of their findings around varroa management, Taylor did so on his behalf.

Titbits which Laas had noted in the presentation included the advice 'if you are not looking, you are guessing' when it comes to the value of mite washes, and pre and post treatment is the key time to monitor; beekeepers should fully understand the pros and cons of the various varroa treatments available, and the best time to use them; all treatments suffer from the same challenge – if you start with high mite counts, it's hard to win.

Taylor summed up the ability of varroa mites to hide on the bodies of honey bees, saying "they have evolved to be a tiny, little, hidden leach and the only way to find them at any accurate level is an alcohol wash or similar". ******



The Foster Method hive swabbing in action. Inventor of the new technology, John Mackay, says claims that all hives or hiveware have AFB spores are misinformed, or lies, and dnature's qPCR testing is an accurate way of determining infection levels.

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[®]

17



UNPARALLELED GENETICS, SELECTION AND BREEDING PROCESS

NEW ZEALAND'S EXCLUSIVE CERTIFIED ORGANIC MATED QUEEN SUPPLIER : BG 6389



Disease resistance and mite tolerance are at the forefront of our livestock improvement program.

We select a large number of breeder queens from a very large base population because genetic diversity is the key to healthy and productive colonies.

RAF@MANAQUEEN.CO.NZ / 022 417 4856 / WWW.MANAQUEEN.CO.NZ

The Dynamic Dunedin Duo



With diversity at its core, Bee Supplies Otago strongly connects owners Murray and Heidi Rixon to the local beekeeping industry. From Murray's work as an AP2 inspector, to a contract extraction facility, sales of nucs, queen cells, virgin and mated queens, and even an educational aspect to the business, plus local sale of beekeeping equipment, there are few beekeepers at the bottom of the south who wouldn't have crossed paths with the energetic husband and wife. Maggie James explores what motivates the industrious beekeeping couple.

BY MAGGIE JAMES

Ten years ago Murray Rixon wanted some honey bees. One hive was acquired, then it became two, then five, which became seven and so forth until peaking at 400 hives, with wife Heidi also taking up the hive tool. Stories of fast-expanding beekeeping businesses are not unique, but how many extend into contract extraction, all manner of queen sales, hiveware supply, plus an on-site beekeeping education room?

These days they have settled at 40 hard-working hives to support their cell and queen raising venture, but initially a large portion of the "beekeeping endeavour" were hives in the greater Dunedin city area. They peaked at 90 of their 400 hives in various gardens and schools. A key principle was that a customer got their own honey out of the beehive and would help extract their own honey for an hour each year.

EXTRACTION ACTION

"We sold off the bee rental business three years ago, but continue to extract honey for South Island beekeepers," Murray Rixon explains.

"The smallest batch might be only two frames, or up to 550 boxes. The latter came in over a period of two months.



"It is most important beekeepers get their own honey back, no matter how small or big the quantity is. Honey is not tanked or held in pooled volumes. The recipient can be confident that it is their honey."

Varietals extracted are clover, thyme, kamahi, mānuka and bush honey and most honey supers arrive in cars or vans to a covered internal trucking bay. From there the hot room holds 150 fulldepth supers for two days at 30°C. The floor is not heated, hot air is circulated, and each layer of supers has 15mm₂ wooden spacer sticks between boxes.

In the extraction room, they have done away with the traditional uncapping machine.

"We use a New Zealand manufactured Boutelje honey loosener (pricker) and extractor can. The loosener is a wonderful device that replaces the capping machine, and is safer, quieter and compact. We wanted minimalist space, so everything is shiny stainless steel, and off the floor."

The holding tanks have electric motors and there is a range of honey creaming tanks. Creamed honey volumes range from a hobbyist with 2kg, to 2000kg for commercial operators.

FROM SCOTLAND WITH LOVE - AND PARROTS

Born in Mosgiel, Otago, Rixon is not far from home at their current base on the Taieri Plain, but it took a stint in Scotland, where he met Heidi, before returning home to take up beekeeping.

After leaving school at 16, Rixon spent 10 years working for the Dunedin Botanic Gardens, building a good proportion of the rock gardens. An overseas stint followed at the Royal Botanical Gardens in Edinburgh where, for 10 years, he specialised in high altitude alpine plants from around the world. Then came another decade stint on a UK property which included involvement in a large breeding programme for – of all things – high-value, large, royal-blue, hyacinth macaw parrots.

HEIDI'S STORY

"I was raised in Scotland and on leaving high school I undertook a degree in drama, but upon graduation I found I was totally unemployable," Heidi says of her background. However, she did manage to secure a job on a certain UK property growing rhododendrons, propagating plants and... breeding parrots under Murray's supervision. She also needed somewhere to live, and moved in with Murray, making her totally unsackable! The pair have been together since.

Children followed and, when they were six and eight years old, it was decided to shift to New Zealand for a better-quality family life. After a short stint in Mosgiel, came a move to their current Taieri Plains property.

"Our property and lifestyle are ever evolving – it's like a 1000-piece jigsaw puzzle moving in every direction, with lots of opportunity to do stuff," Murray says.

CAN'T BEAT 'EM, JOIN 'EM

20

The dominant part of that lifestyle is the couple's love for beekeeping, which came to Murray first, but then, as her husband's hive numbers grew, Heidi started seeing less of him. She decided the best option was to become a beekeeper also.

Out of necessity, when queen supply became unreliable, Heidi started producing Italian queens for their operation, and has done so now for over 10 years, whilst surrounding herself and learning from quality, experienced beekeepers. Over that time Heidi has refined every aspect of her queen cell and queen bee production.

In approximately 2017/18, over a two year period, Murray, alongside Dr Otto Hyink, worked for Betta Bees Research Ltd, based at Invermay. Rixon's work involved collecting semen from many different colonies, which was used for artificial insemination of queen bees. Otago bee breeder Heidi Rixon loves the placid temperament of her Italian bee stock. She may not require a full bee suit, gloves or shoes, however, this writer encourages wearing a bee suit, until the beekeeper is certain that going without protective gear is a safe practise for themselves and their bees. Photo: Murray Rixon



IN THE HIVES

Bee Supplies Otago brood-boxes are full-depth, either one or two boxes, dependent on location and time of year. Generally, hives are wintered down as one brood box, reflecting the severity of Otago winters. The Rixons regard full-depth honey supers as too heavy, so ³/₄-depth are used.

In the past the couple supplied nucleus colonies to large scale beekeepers throughout New Zealand, but these days the business has scaled back to fit in with their desired lifestyle. Now, the focus is on supplying virgin queens of Italian stock, mainly to hobbyist and semi-commercial beekeepers. Queen cells and mated laying caged queens are also sold, but to a lesser extent.

The grafting yard comprises 30 mostly full-depth double broodbox hives, separated with a queen excluder at times. High protein pollen sources required to produce quality queen cells include





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





The Rixons' homemade grafting stand, designed to elevate and secure the frame and hold a cell bar.

gorse on nearby hillsides, native fuchsia and flaxes, plus paddocks underrun with white clover.

During the season, wearing a head torch for illumination, grafting is undertaken two days weekly, generally in the honey house. The grafting time of the day varies, and the number of larvae grafted varies according to orders to be filled. The starter hive is usually completely queenless, and consists of a corflute nuc box, into which have been shaken a large volume of nurse bees. The nuc is ideal, because Heidi can help control conditions inside, such as shifting it to a shady spot on hot days.

The grafted frame holds two bars, each with approximately 17 lugged Beetek polypropylene cell cups. Heidi regards grafting day as 'day one' and the new graft remains in the starter for 36 hours, then the frame and bars are transferred as one unit to a finisher hive. On day eight the cells are removed from the finisher, to a chicken incubator, in which they hatch into a hair roller cage. One end of the roller is blocked with the lugged cell, the other end with queen candy. Virgins are collected or mailed to beekeepers as promptly as possible, either same day or, if hatched overnight, next day.

To fit in with an ethos of not using any single use plastics anywhere in their operation, Heidi recycles used cell cups by cleaning them in hot water and washing detergent.

"I don't call myself a commercial beekeeper, I like to call myself a hobbyist because I thoroughly enjoy what I do," she says.



ISOLATOR VARROA CONTROL

HARNESS THE POTENTIAL OF A BROOD BREAK AND GIVE YOUR HIVES THE BEST POSSIBLE START TO THE NEW SEASON **Click here** to learn about the importance of brood break in varroa management. It's a two minute read that could be a game changer in your approach to varroa control.

Simple, two-visit IPM method adapted to NZ conditions and commercial operations.



raf@managueen.co.nz | 027 417 4856 | www.managueen.co.nz

"Over the years, I have gradually weeded out any stock that is not suitable, and when working our bees I only use bare hands and do not require a smoker. We get school groups and busloads of tourists visiting, so we must be extremely confident that our bees are not going to chase people!"

Why the visitors? That's because there is a lot to take in at the Rixons' various beekeeping enterprises, so, next month, we will explore Murray's excellent AFB detection efforts as an AP2, plus delve deeper into their sustainability efforts, including a rotating solar panel and huge greenhouse...

To discuss any aspect of this story with Murray or Heidi Rixon, email beesuppliesotago@gmail.com. 🐨

The Bee Supplies Otago extraction room doubles as an educational facility for visiting school groups and tourists. Photo: Maggie James.

Help Now on Hand to Beat Wax Moth

If you've kept bees for any length of time, you've almost certainly seen it - the destructive capabilities of wax moth. Prevention is really the only cure too, because once the moths set in, it's too late. Kiwi beekeepers now have help at hand though, with Ceracell and global honey bee health experts Vita Bee Health teaming up to provide a preventative treatment for the first time.

It's named *B402*, and once diluted in water can be sprayed onto both sides of wax frames post-harvest, to provide protection through to the following honey season. Based on a concentrated solution of the micro-organism *Bacillus thuringiensis*, it is an environmentally friendly product, which leaves no residue in wax or honey and does not alter the taste of honey.

"After years of research and development, Ceracell is thrilled to introduce B402 to New Zealand beekeepers," Ceracell owner Bruce Clow says.

"This product offers a straightforward yet effective solution by eliminating wax moth larvae, thereby preventing the havoc they wreak on beehive equipment. B402 not only addresses this critical issue but also supports beekeepers in maintaining their equipment more effectively. By safeguarding frames during storage over winter, it helps reduce costs and streamline preparation for the upcoming spring season." The serotype present in B402 is an organic compound and the sole variety of *Bacillus thuringiensis* to give excellent results against wax moth while being safe for bees and users alike.

"One of the most pressing issues we encounter from beekeepers is combating wax moth infestations. This problem is deeply troubling for both hobbyist and commercial beekeepers due to its destructive impact, leading to significant financial costs for equipment replacement and extensive time spent on cleaning and preparation for the spring season," Clow says.

In New Zealand, beekeepers primarily contend with two species of wax moth that pose significant challenges: the Greater Wax Moth (*Galleria mellonella*) and the Lesser Wax Moth (*Achroia grisella*). Both species are notorious for infesting beehives, laying eggs in beeswax and pollen residues. Once hatched, the larvae tunnel through comb, feeding on beeswax, pollen, and even bee larvae and pupae, which can lead



New Zealand beekeepers now have a treatment in B402 to combat wax moth and prevent this sort of destruction.



Ceracell have teamed up with Vita Bee Health to bring B402 to New Zealand, adding the valuable wax moth preventative to beekeepers' arsenals.

to structural damage and contamination of hive equipment. Wax moth larvae prefer dark, warm environments, making stored hive equipment and neglected hives vulnerable. The larvae of both species can quickly destroy honeycomb and cause contamination of stored honey with their silk cocoons and fecal matter. This not only compromises the quality of honey but also necessitates extensive cleaning and replacement of damaged comb.

B402 is a preventative treatment, which should be applied to equipment before heavy infestation as it is most effective against young larvae of both Greater Wax Moth and Lesser Wax Moth species. The product comes in two concentrate sizes, which are to be diluted at a 1:19 ratio with water. The 148ml bottle will treat 70-100 full-depth Langstroth frames, and the 946ml bottle 450-650 frames.

"Wax moth is a pernicious problem that reports suggest is increasing across the world," says Vita Bee Health commercial manager Sebastian Owen, who overseas distribution of B402 to beekeepers around the globe.

"So we are especially pleased that we can now introduce this biotech wax moth control solution to New Zealand beekeepers."

WAX MOTH: THE SOLUTION



B402

is the most advanced, effective and economical product for the protection of your combs from damage by wax moth



Distributed in New Zealand

Concentrated solution of *Bacillus thuringiensis*

> Completely harmless to humans and honey bees



Environmentally

friendly

B402°

Ċ

Efficacy of up to 100% against wax moth larvae



Leaves no residues in wax or honey Only one application needed for complete protection



Vita Bee Health is a trading name of Vita (Europe) Ltd.

Ceracell Beekeeping Supplies (NZ) Ltd are Vita's exclusive distributors in NZ and Australia. P: 0800 CERACELL | A: 23 Ra Ora Drive, East Tamaki, AKL 2013 | W: www.ceracell.co.nz

healthybeeguide.com





Simple Tasks Can Save AFB Management Agency Big



On a dreary winters day, when beekeepers' body and minds are both far from hive work, there is a quick and easy task that anyone in New Zealand with registered beehives can do to save the American foulbrood (AFB) Pest Management Plan Agency money, and thus increase the likelihood of keeping beekeeper levy costs down.

"Our apiary inspectors are spending a lot of time travelling to registered apiary sites during surveillance following an AFB report, only to find the hives are no longer there," explains the Agency's general manager Niha Long.

24

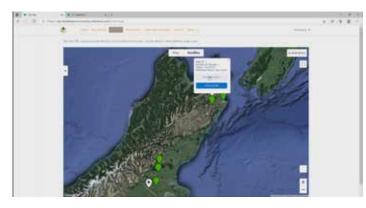
This is incurring the Agency – which is funded by beekeepers to assist in eliminating AFB from managed colonies – significant cost at present. Therefore, Long is encouraging beekeepers to log into HiveHub (*hivehub.afb.org.nz*) and review their list of apiaries and colonies.

"July will be the month to tackle this task if a beekeeper has not done it already with their Annual Disease Return, which many haven't. With the new HiveHub platform, managing beekeeping admin tasks are much easier than in years past. Updating registered apiaries and colonies will be a simple task for most beekeepers, which will assist the Management Agency in using levy payers' funds wisely for conducting targeted inspections," Long says.

Those beekeepers who do not use HiveHub can de-register apiaries using the online form available *here*.

With spring just around the corner, workloads in other areas of businesses will soon increase and so beekeepers are urged to get online and get the updates made as soon as possible.

"As we know, colony numbers are contracting in New Zealand, and many hives are changing hands, or no longer being managed at all. With that comes an increase in abandoned apiaries, a potential increase in AFB risk, but also a huge reduction in hive sites. We simply ask that when these apiary sites are no longer in use, they are removed from the HiveHub database as promptly as possible, for both the Agency and beekeepers' benefit," Long says.



The AFB Management Agency is encouraging beekeepers to update their apiary register using HiveHub this winter, and deregister any vacant sites, to help reduce Agency inspection costs.

The Agency has recently been promoting five priorities in their management, with more effective use of resources, amidst falling levy revenues, one of them.

"We are doing our best to strip back costs, while still committed to providing an important service to beekeepers, but there are always ways beekeepers can help us too and right now the easiest and most impactful way is by simply heading online to assess their HiveHub," Long stresses.

For more information related to updating apiaries, please contact the Management Agency Apiary Coordinators (0800 232 767) or email: apiary@afb.org.nz. *****

Helpful tips for beekeepers

- Apiary registration demonstrates compliance with the AFB PMP. Under section 17 of the AFB PMP, apiary registration means that a beekeeper has registered a particular location as the site containing one or more hives (dead or alive) with the AFB Management Agency.
- Apiary registration does not mean site ownership or exclusive access to that site.
- There are no restrictions on the minimum distance two beekeepers can share an apiary with the caveat being this shared apiary must be registered under both beekeepers' registration codes.
- If a beekeeper no longer has bees, has blocked up and safely stored away all hives and hiveware from the site, then it is recommended that this site be deregistered.
- Permanent apiaries must be deregistered immediately when they become vacant.
- Seasonal apiaries are to be deregistered if they have not been used for 30 consecutive days in any year starting 1st of July.
- Deregistering an apiary does not mean a beekeeper will lose access to that site.
- Any apiary that is de-registered can easily be reregistered again, when needed with an email request to apairy@afb.org.nz or by calling an Apiary Coordinator. In some cases, an apiary inspector may be deployed to confirm a site is indeed vacant, as part of the deregistration process.

UbeeO In Selection for Varroa Resistance



UbeeO is a groundbreaking new tool designed to rapidly and accurately measure a honey bee colony's level of varroa resistance. Researched and developed over a decade by Dr Kaira Wagoner at Optera in North Carolina, USA, through her PhD and post-doctoral work, UbeeO just launched in the United States in spring 2024. Now Marlborough queen breeder Raf Augustyn, owner of Mana Queen, is hoping to incorporate it into his breeding programme, he explains the concept, as compared to other hygienic traits.

BY RAF AUGUSTYN

The honey bee colony is a superorganism, a group of synergistically interacting individuals that function as a unified being. They have evolved several social immune mechanism sets of behavioural and physiological traits that serve as selfpreservation against entrance, establishment, and spread of pathogens in the colony. Hygienic behaviour – the detection, uncapping and removal of unhealthy brood from the colony – is one such example.

Selective breeding for hygienic behaviour has the potential to be a viable, long-term solution for varroa control because it places the implication of mite control on bees rather than beekeeper. It is not inclined to development of resistance by varroa and it does not harm bees or leave residues in honey. However, while the hygienic trait is elevated in many varroa resistant colonies, hygienic response does not always confer varroa resistance.

Several different testing methods have been developed by the queen breeders and researches over last two decades to quantify hygienic behaviour at colony level in order to make informed decisions in selection process. All of these methods have certain drawbacks including accuracy, difficulty of application, and in most cases it's labour intensive and time consuming.

PIN TEST (PT)

The pin test involves killing the developing pupae by making a pin-sized hole through the capped brood cells. Colonies are considered hygienic if, after 24 hours, bees successfully remove 95% or more of the dead pupae. However, bees not only detect

> dead brood through their olfactory (smell) senses, but they can also feel pierced capping's through their antenna, thus limiting the accuracy of the pin test. This test can also be very tedious if one uses

> > Mana Queen owner and dedicated breeder of hygienic bees, Raf Augustyn.





The Weimar needle stamp used to Pin Test brood. Photo: Mana Queen.

98% Hygienic behaviour – 49 of 50 pin tested cells successfully removed. Photo: Mana Queen.

a single pin to punch through 50 capped cells on one frame of brood, as original protocols suggested.

FREEZE KILLED BROOD (FKB)

To perform the FKB test, a frame containing sealed brood is removed from the colony and a standardized number of developing pupae are freeze-killed with liquid nitrogen. The frame is then returned to the colony. Twenty-four hours later, the number of freeze-killed pupae the bees successfully detected and removed is quantified. FKB can be a difficult test to perform as liquid nitrogen is not easy to work with. It can cause cold burns and asphyxiation. In addition, FKB does not always corelate well with chalkbrood resistance.

Hygienic response to pin killed, or freeze brood does not always measure varroa resistance since tested brood is presumably not infected in the first instance, as we can't see what is under the brood cappings. Incorporating this testing method into your breeding stock however, leads to better hive health and in turn colonies with greater overall resistance to pests and disease. In contrast, selecting for VSH can reliably achieve varroa resistance.

VARROA SENSITIVE HYGIENE (VSH)

VSH is a genetic, heritable trait defined as the ability of honey bees to detect varroa in sealed brood and uncap the infested cell, disrupting their reproductive cycle. This leads to fewer varroa being able to reproduce in the colony. VSH bees do not disturb a cell that contains a non-reproducing mite. Where VSH is not present, less than 15% of varroa infested cells have nonreproducing mites, so when one finds non-reproducing mites in VSH bees uncapping brood cells to interrupt varroa reproduction.

26

40, 65 or 100% of the mite-infested cells, the colony has approximately 50, 75, or 100% of the VSH trait. respectively. The Harbo assay used to measure the number of nonreproductive mites per 100 cells is a skilled and laborious task if one wants to perform it on large testing population.

UNHEALTHY BROOD ODOUR (UBEEO)

In 2019, researcher Dr Kaira Wagoner, of the University of North Carolina, described the discovery of specific cuticular hydrocarbons (CHCs) produced by brood infected with varroa mites. Dr Wagoner demonstrated that these unhealthy brood odours were increased in brood targeted for hygienic uncapping and confirmed that these compounds, synthesized in laboratory conditions, could be applied to brood cell caps to activate hygienic response. Wagoner then set out to develop rapid, precise and effective assay to predict varroa resistance at colony level.

This new field test is performed by application of synthetic pheromones to a standardized number of capped brood cells, before returning the frame to the colony. Subsequent quantification of the bees' hygienic response to treated cells is conducted after two hours. The UbeeO score is a percentage of cells uncapped. More cells uncapped, the higher the score. It has been shown that colonies capable of uncapping \geq 60% of UbeeO treated cells in a two hour, early season test have significantly lower varroa infestation level at the end of the season and are significantly more likely to survive winter compared with lower scored colonies.

UbeeO method, does not kill brood, unlike PT, FKB or VSH, but places the unhealthy brood odour on the cappings of a smaller number of cells and can be performed more efficiently than any of the above described methods. There is also preliminary data suggesting that UbeeO assay may be useful in identifying honey bee colony resistance to diseases that are not associated with varroa such as Black Queen Cell Virus and Lake Sinai Virus.

THE MANA QUEEN PHILOSOPHY

I believe that the bigger the testing population, the greater is the chance of finding individual colonies expressing the trait one is looking for. This is one of the reasons why I test a very large number of colonies. The other reason is of course genetic

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
- Y No more costly needle replacing
- Sterilization with heat now possible
- Y 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



Score





Low UBeeO™ Medium UBeeO™ Score

High UBeeO™ Score

diversity. Maintaining high genetic diversity results in colonies exhibiting higher disease resistance. It also reduces the likelihood of inbreeding, it helps to adapt more effectively to different environmental changes and it enhances productivity. I have been selecting for hygienic behaviour since 2018. Sourcing from overseas a special needle stamp allowed me to test all my wintering hives fast and efficiently. I test approximately 1000 aueens each vear.

With base hygienic behaviour bred into my population, where bees have improved ability to deal with brood diseases, I have now started to test for VSH using Harbo assay.

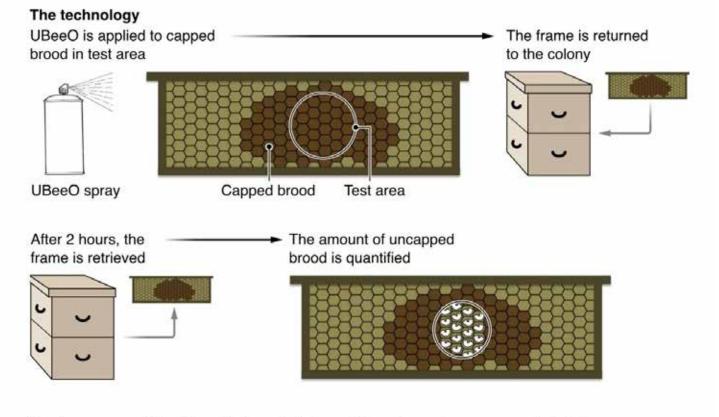
While this is a very reliable test for varroa resistance, in its current form it is very labour intensive, resulting in me being able to perform it on about 100 hives at the most each season. These colonies are usually my best Pin Test scorers, and queens where I have noticed uncapping/recapping of brood on my spring evaluation round. I would love to be in a position where I am able to test for VSH in all my wintering colonies, like I do with a Pin Test, but currently it is unrealistic.

This is where UbeeO can make a difference. It is rapid, reliable test that accurately predicts varroa resistance abilities of tested colonies. It fits perfectly into my breeding concept of testing a large number of queens. Currently it is unavailable in New Zealand, but I am working with Dr. Wagoner to bring it in to the country for testing and research purposes. This September I plan to incorporate it into my spring evaluation round.

It's an expensive beast though, with the UbeeO formula costing about USD\$25 per test. Therefore I encourage beekeepers to support Mana Queen by ordering our stock, for not just the benefit of your beekeeping, but to support something which has the ability to benefit the entire apiculture industry. 🚿

References

- Hygiene-Eliciting Brood Semiochemicals as a Tool for Assaying Honey Bee (Hymenoptera: Apidae) Colony Resistance to Varroa (Mesostigmata: Varroidae). Wagoner, J. G. Millar, J. Keller, J. Bello, P. Waiker, C. Schal, M. Spivak, and Rueppell.
- Cuticular pheromones stimulate hugienic behavior in the honey bee (Apis mellifera). Kaira M. Wagoner, Jocelyn G. Millar, Coby Schal & Olav Rueppell.
- Multiple benefits of breeding honey bees for hygienic behavior. Tal Erez, Elad Bond, Paz Kahanov, Olav Rueppell, Kaira Wagoner, Nor Chejanovsky, Victoria Soroker.
- Stock-specific chemical brood signals are induced by Varroa and Deformed Wing Virus, and elicit hygienic response in the honey bee. K. Wagoner, M. Spivak, A. Hefetz , T. Reams & O. Rueppell.
- Time-accuracy trade-off and task partitioning of hygienic behavior among honey bee (Apis mellifera) workers. Katherine R. Barrs (1,2) & M. Omar Ani (1,3) & Kimberlyn K. Eversman (1.4) & Jonathan T. Rowell (5) & Kaira M. Wagoner (1) & Olav Rueppell (1,6).
- Brood Affects Hygienic Behavior in the Honey Bee (Hymenoptera: Apidae). Kaira M. Wagoner, Marla Spivak and Olav Rueppell.
- Effects of steel foundation wire on elemental content and hygienic removal of honey bee (Apis mellifera) brood. Kaira Malinda Wagoner & Olav Rueppell.



Beekeepers use UBeeO results to make informed breeding and management decisions

GRAPHIC: ADAPTED FROM K. WAGONER

Hillabs

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 0.002mg/kg.

We've enjoyed our clients' trust for 40 years. Talk to us today about what we can do for you.





Beekeeper Wellbeing: Weather and Working Outdoors



Subjective wellbeing of New Zealand beekeepers was empirically measured for the first time in the 2023 Colony Loss Survey, with the finding that beekeepers' wellbeing was among the lowest across all primary industries. Data on eight different factors which affect beekeepers was collected, including 'weather and working outdoors' which we take a deeper dive into here.

In 2023, of all years, beekeepers could be forgiven for saying the weather put them in a foul mood. Cyclone Gabrielle wreaked havoc on much of the North Island's east coast, washing away hives and hindering access to many remaining sites, and, for vast swathes of the country, summer '22-23 was described by many well-versed beekeepers as the worst honey production season in memory, due to cool temperatures and high rainfall. Despite this, no factor was identified as having more of a positive impact on commercial beekeeper wellbeing than 'weather and working outdoors' in the survey.

29

The preliminary results of the 2023 Colony Loss Survey found life satisfaction of commercial beekeepers to be below that of the dairy industry, sheep and beef, arable, horticulture and forestry, as detailed in *Beekeeper Life Satisfaction Worst of Primary Industries*. Since then a full and comprehensive report of the complete wellbeing findings of the survey have been published in the international journal *Bee World* as an open access document, *Perspectives on Well-being Among Commercial Beekeepers in New Zealand*.

Of survey respondents, 62% were either 'somewhat positive' or 'very positive' about weather and working outdoors' impact on their wellbeing. Only 17% fell onto the negative side, with the balance of 21% neutral.

"We think there were at least 21,000 hives lost in Cyclone Gabrielle and people were still recovering in September, when

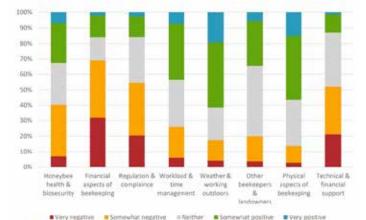


Figure 3. Beekeeper responses to how selected factors influence well-being at the present. the survey was conducted. So, this was actually a bad year for it," concludes survey author Pike Stahlmann-Brown, of Landcare Research.

Respondents who provided greater context to the topic during the Colony Loss Survey scattered their answers with things like "working outdoors is good for the soul" and "I love a beautiful day working the bees".

While the feel-good factor is clearly there, the honey was not in 2023, with the Ministry for Primary Industries estimating the national honey crop to be just 12,000 tonnes – more than 50% down on the 12-year average.

"Island weather patterns can be erratic – even in summer – and idyllic conditions may turn poor, eliminating a years' total nectar flow in a matter of hours. This makes honey production in many parts of New Zealand fickle, both economically and emotionally, which may in turn affect overall beekeeper wellbeing," the full Perspectives on Wellbeing Among Commercial Beekeepers in New Zealand paper details.

Despite the majority seeing the outdoor conditions as a positive, the minority on the negative side explained their position with comments in the survey such as "lately hives are running low on stores and weather has been bad, so unable to get around them" and "we have just come through the worst season, weather-wise, that I have experienced in my nine-year beekeeping career".

Despite a lot of uncooperative weather to productive beekeeping – or just keeping bees alive – the mood is positive though and overall a pragmatic mood emanates from Survey respondents.

"Well, it just is what it is... we are in an industry that just needs to get on with the job, weather is a constant challenge, but very normal," one beekeeper in the 'neither positive or negative' category stated.

Perhaps the best example of the ability of beekeepers to forgive weather setbacks and embrace working outdoors was a survey respondent who was still "somewhat positive" despite claiming Cyclone Gabrielle had destroyed huge amounts of their hives.

"After an extremely wet 12-plus months, and a cyclone claiming nearly 1000 hives, we are now in spring with warmer dryer weather starting which will hopefully result in a better production season."

If more than three-quarters of beekeepers can say the weather and outdoors does not affect them negatively in a season where climatic conditions were not favourable, for the most part, it surely bodes well for more sunny days for beekeepers around the corner. ******



A First Time for Everything

Last month we met second-generation Bay of Plenty beekeeper 'Aimz', who had recently returned home to pick up the hive tool for the first time. Settling into the winter, she recounts some of the 'firsts' experienced thus far.

You probably remember your first... love? Job? Beehive?

30

With my dad's newly acquired bees now snug in their box (after he kicked the post they were swarmed on and ran like hell), he set about caring for them as one might a puppy or a kitten. After checking on them nearly every day and almost killing them with kindness, he purchased his first beekeeping book, *Practical Beekeeping in New Zealand* by Andrew Matheson, and what is written in those pages is like a literal translation of dad's beekeeping practices to this day.

Being concerned about keeping them alive and maybe overconcerned he would lose them, dad set about raising his first queen. He carefully followed the instructions in the book and cut a zigzag part way up a frame of drawn brood comb. After giving his queen a few days to lay it up, this frame went into the newly created queenless division, and just like that, one had become two. Talk about hook, line, and sinker...

Some firsts are life changing, some best forgotten, and some we can't afford to forget. In my case, taking on beekeeping is like my first time in a plane going to Australia – the world has opened up around me and I am seeing in a different light. I want to know more, I want to do better, and I want to bee involved.

My first job leaving school at 15 was in part because of the bees. My mother got me a job sweeping the floor at the mechanic's where the bee trucks were in constant loop for service and repairs. By the end of the first day I was pulling motors apart to scrap, and



That's a teenage me, Aimz, at my first job at the local mechanics. Dad's beekeeping trucks were regular visitors.

with oily zebra-striped knuckles I found something I could lose myself doing.

Mindfulness – the bees give me this. It's like I can switch to a different channel and join them with my full attention... there is so much to learn! I have jumped feet first into a commercial beekeeping operation and my days are full of 'firsts'.

Getting into winter and I am truly loving every day out with the bees. Chill frosty mornings with some absolutely cracker days see most of our hives in single boxes (running singles helps to keep varroa costs down) with a few scattered doubles. Opening lids first thing I am greeted with skyward stingers waving at me. The chilly bees are blasted with a puff of smoke and the day commences.

Checking feed stores, making up nucs or chocking some with polystyrene. Mite strips are coming out and we are supplementing the sugar with apple cider vinegar. Some hives are united as they are found queenless (or made queenless... I squashed my first queen not long ago – a drone layer, and because I have always held a pretty blunt view on the adage "where there's livestock, there's deadstock", it wasn't too much of a life-changing moment, although it may have had more impact if I'd built those hives up split by split as my dad had done).

We have come across the odd dead one, and I have seen my first starving hive. Bees will perch motionless when their blood sugar concentration falls below 0.05%, and these guys were falling off the frames. We were just in time – hopefully. I found the queen still hanging on to the comb, so we broke them down, gave them a feed, and fitted an entrance reducer to give them a fighting chance. As I closed up the lid, I really hoped we would be able to revive them.

I was then gutted to find a dead hive after someone stole the middle out of it, a couple of frames of bees with the queen – yea, winter can be tough on some "bee-keepers".

More positively, most boxes are bulging with bees. They are bringing in beautiful pink pollen from the Spanish heath and orange from gorse and there's showers of nectar from open frames. Drones have pretty well been ousted, and the queens have put the brakes on egg laying.

In the shed there's boxes and frames to be sorted and cleaned, or to repair, and my repertoire is expanding as I have gained my class 2 learner licence. It's definitely a busy profession and I am getting a lot of experience driving the bee trucks to sites and carting honey and sugar around the country.

We have a new beekeeper who has started with us, currently relaying feed and gear around the truck but he is as keen as



mustard and a solid candidate to be a very proficient beekeeper. New to the trade as well, he literally threw down the gloves on the first day and decided a few stings is worth the dexterity gained by going it bare handed, pretty impressive for a newbee.

Incidentally he may have caused me to lift my game a little when the old man put to us an unofficial competition on who could get their truck licence first. He still hasn't got his, and don't tell him, but I beat him to the firewood too... snooze, ya lose!

Now here's a snippet that may intrigue some of you. My dad is still experiencing beekeeping 'firsts' after nearly 40 years in the industry. Just recently on a routine site check he noticed one hive in particular that had lines of bees leaving from the entrance – walking. Upon investigating these earth-bound bees, he believed the cause to be physical damage to brood from heavy mite predation, with subsequently chewed wings (possibly it was deformed wing virus, but being only a singular occurrence in a long career is something dad is yet unfamiliar with).

The amazing thing was, even under the circumstances, these bees had been driven by an innate urge to forage, something inside told them it was time to leave the hive, and my dad sadly doubts whether any of them at all would have returned to the hive.

To finish with another first, you may remember your first sting. They can be life-changing, though I don't recall mine. Some people suffer severe reactions and anaphylactic shock is just that. I remember my cousin getting stung on the throat and being taken away in an ambulance – scary stuff. I am fortunate as a parent that my children have reacted only mildly to stings, and honey has always been my go-to for taking the pain away. Now I work the bees without gloves, and I find most stings don't bother me – although the odd one at times can still be hell! At the start of this job getting stung and having itchy hands was almost like an addiction where I couldn't wait to get back the next day for more! I'm not tough, but the bees are quiet, (our bees are Italian lines and bred for temperament) and working with bare hands really gives you a feel for the bees – it's a definite buzz!

Signing off for now, you'll hear from me after another round of the bees. Until next time...

Aimz 🚿



Even after my Dad's 40 years beekeeping, he still sees some firsts, including varroa mites, literally, chewing on bee wings.



31

Infrastructure – Systematic thinking about Systems



BY IAN FLETCHER

It's been a month where infrastructure has looked fragile. The ferry grounding (and the previous decision to cancel the replacements), the TransPower pylon collapse in Northland, and even the high-profile troubles with RNZAF's vintage B757s (both over 31 years old) have highlighted the age, fragility and vulnerability of some of our most important connective systems.

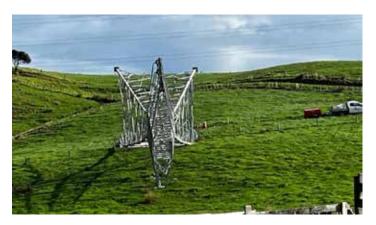
On the ferries, the Government has played for time, saying it's getting and "reading" advice. But time is against them, as KiwiRail is talking only about keeping the current ships running another five years. Building new ships will take most of that time; buying (again) second-hand ones might buy more time, but at the expense of reliability and, I fear, safety. Cook Strait (including Tory Channel and the Wellington Heads) is an unforgiving waterway, and if the *Aratere's* steering gear had failed at the entrance to Tory Channel, the ship could easily have driven itself onto the rocks at speed. I will no longer use these ships.

32

The Northland pylon seems to have been human error. Maintenance crews undid almost all the bolts holding the pylon down, and unsurprisingly it fell over. Heavens. What level of training and supervision does that reflect? And as for the B757, well, the RNZAF is commendably committed to safe flying, so



That's not good... the Aratere Interislander ferry runs aground in Picton, June 21, but it is far from the only piece of national infrastructure needing upgrading.



Maintenance crews undo all the bolts holding down a Northland power pylon and the predictable ensures – cutting power to much of the far north for several days in June.

there are a lot of breakdowns. The planes are just too old. It would be a perfectly good choice for Ministers to fly commercially as a matter of policy in future, but the point is that – like the ferries – you can only put off new investment for a bit, before you start to pay the price.

CYNICS AT THE WHEEL

The problem here is that the Government is like Oscar Wilde's definition of a cynic – someone who knows the price of everything and the value of nothing. Infrastructure is a common good (we all depend on the lights working, water flowing, telecoms systems working). Each is a system and not just a collection of things, built up from a succession of investments in connecting and supportive elements. For example, the Cook Strait ferries depend on port facilities, navigation aids, crews, pilots, tugs, connecting roads, internet booking and banking systems, catering and bunkering and more besides. Infrastructure includes people, their skills, institutions and support systems as well as ships, planes and pylons.

I don't think the Government sees that. KiwiRail's defunct plans for a new ship was rejected because they also included the cost of decent new port facilities (the current ones are literally rotting). So, the numbers looked big. And the Government choked on the total. My prediction is that, with hindsight, we will find that the rejected proposal was very good value.

I rarely find myself in agreement with Auckland Mayor Wayne Brown, but his comment that big projects need to be managed by engineers, and not Wellington committees, rings true.

I'd add that the government needs to see infrastructure as systems, not just things. So, infrastructure isn't just roads, ferries and pylons, but the people, skills pipelines, data systems, institutions, and other bits of support and connectivity to make things work and keep them operating, maintained, upgraded and fit for purpose. The real test for a successful bit of infrastructure is that in daily life we don't notice it. Being taken for granted is a measure of success.

PHARMAC

33

The Pharmac cancer drug story fits this picture too. The health system is a complex system (I've written about this **before in the** *Advocate*), with all the elements I've described above. The added sensitivities are that health consumers have less choice and are more vulnerable and the skills pipelines are long, costly and very sensitive to trans-Tasman wage comparisons. And the drugs bill is eye-watering. Pharmac, for all its faults and its occasional tin ear, is a strong player in this system, good at getting the best value for money and helping the most people at least cost. Of course, an aging population, rising drug costs and the unavoidable emotional element (others' drugs are a cost; mine are an investment) mean this is always going to be imperfect, and prone to politicisation.

Which is what we've seen as the government clearly underestimated how much people cared about their election promise to fund more cancer drugs, and led to an outcry when they then kicked it into the long grass of next year. All's well that ends well, but I'm sure that we will end up paying more than we needed to for these drugs (the pharma companies will have seen us coming), and I'm sure the government will get addicted to tinkering with the health machinery, rather than tackling it as a system. That was hard to do with DHBs – their stubborn localism was inefficient, but resisted Wellington tinkering.

Gosh, I sound like Wayne Brown. That'll never do.

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. *****



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

34

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 Cover images: Karen Allen/ApiNZ

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

advertising@apiadvocate.co.nz Patrick 027 383 7278 Laura 021 130 7446



Apiarist's Advocate



Never miss an issue! Subscribe at www.apiaristsadvocate.com

Don't miss the latest industry news

SAVE

Save Apiarist's Aduocate 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 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.