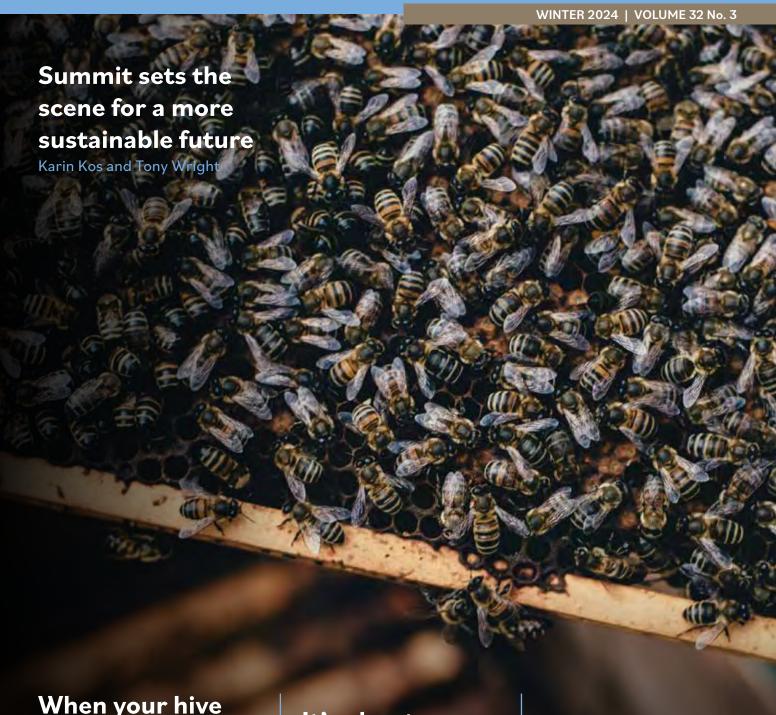
The Beekeper



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Removing the sting of uncertainty in beekeeping

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NZ avoids global exporting price downturn

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EDITORIAL

Summit sets the scene for a more sustainable future

Karin Kos, Apiculture New Zealand Chief Executive and Tony Wright, Unique Mānuka Factor Honey Association Chief Executive

We were thrilled to see over 250 beekeepers, honey packers, exporters and others from across the apiculture industry gather in Hamilton last month to discuss the sector's plans centred on the New Zealand Honey Strategy; *Thriving Together: Futureproofing New Zealand Apiculture 2024–2030* launched earlier this year.

rganised by ApiNZ and UMF™ Honey Association, our shared aim was to continue engagement with all sectors of the industry following the launch of the New Zealand Industry Strategy in February this year.

The day was designed to provide insights into the global market trends that make change in our industry inevitable and have an open dialogue sharing different perspectives and answering questions about the pathway to a sustainable industry future.

Appropriately the three chairs (Nathan Guy of Apiculture New Zealand, Rob Chemaly of the UMF™ Honey Association and Victor Goldsmith of the Mānuka Charitable Trust) opened the Summit together, reflecting the commitment to a unified industry approach to a prosperous future.

A CONSUMER FOCUS

Speakers from New Zealand Trade and Enterprise's London office and New Zealand Winegrowers provided valuable insights into the challenges ahead. We also heard from Kristen Kohere-Soutar on the work Te Pītau (operational arm of the Mānuka Charitable Trust) is doing to shore up the distinctiveness and authenticity story for mānuka and how that benefits their aims to securing long-term IP.

Commercial and legislative expert Stephen Franks took the audience through a proposed pathway to a unified industry structure by outlining the regulatory options open to our sector.

During the Summit, 87% of live poll respondents agreed the industry needed to work collectively to meet the sustainability expectations of their markets, recognising the significant benefits of a single industry body, under a modern structure.

PANEL DISCUSSION AND QUESTIONS FROM THE FLOOR

In the afternoon a panel discussion from representatives across the sector was an opportunity for questions to be answered and views on the strategy aired. We also heard the latest updates on biosecurity and pest control with a guest online appearance from Randy Oliver, well-known USA beekeeper and varroa expert, and an AFB update from Niha Long, General Manager of the AFB Management Agency.

Live polling during the Summit indicated 66% of attendees supported a single industry body with another 21% still thinking about their preference. Only 13% were opposed.

Attendees saw international promotion of New Zealand honey, research into managing the health and welfare of our bee population and focusing on product standards and quality as priorities for a restructured industry body.

The Summit achieved its goal through the presentations and the panel discussion, which saw good questions asked (from the floor and written) highlighting the areas people wanted to know more about, as well as providing valuable input into the process of designing a structure.

NEXT STEPS

Over the page we've outlined the next steps (including ongoing engagement) and expected options to ensure industry good activity can be sustainably funded along with enforceable export standards for mānuka honey.

The Summit has been recorded and will be uploaded on the <u>Industry Summit</u> <u>webpage</u> in the coming weeks.



Industry panel (from left to right): Kristen Kohere-Soutar, Te Pitau Limited; Jane Lorimer, NZ Beekeeping Inc.; Sean Goodwin, The Mānuka Collective; James Jeffery, SummerGlow Apiaries; Dr Jackie Evans, Comvita; Mike Weight, Wedderspoon; Tony Wright, UMFHA; Karin Kos, ApiNZ. Photo: Karen Allan.

New Zealand Honey Strategy Next steps

Forums for further engagement – June - August

Consideration of advice on governance, membership and funding for new organisation and industry good activities – before September

Proposal on new aligned industry organisation shared with ApiNZ and UMFHA members – end September

Settle on recommended course to regulate mānuka honey export standards – before end of 2024

Consult with sector on proposed mānuka honey export rules, and funding model – early 2025

THANK YOU SPONSORS



Thanks to our catering sponsors, Summit attendees were treated to a range of delicious food.







INDUSTRY SUMMIT DAY

PRESENTATIONS

Presentations from a range of experts gave attendees plenty to mull over and discuss throughout the day.

> The three chairs (Nathan Guy of Apiculture New Zealand, Rob Chemaly of the UMF™ Honey Association and Victor Goldsmith of the Mānuka Charitable Trust) opened the Summit.



Commercial and legislative expert Stephen Franks presented industry body options.



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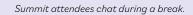


Sophie Craig and Timothy Fogarty, New Zealand Trade and Enterprise UK/EU Commercial Advisors based in London, updated delegates on the export situation in the UK and EU via livestream video.

DISCUSSION

Both formal question-and-answer sessions and informal discussion at break times raised a number of important issues for the industry to consider in the coming months.

NZ Winegrowers General Manager Advocacy Sarah Wilson shared perspectives on the evolution of a successful primary sector industry body.







(from left) Kristen Kohere-Soutar, Te Pītau Limited; Jane Lorimer, NZ Beekeeping Inc.; Sean Goodwin, The Mānuka Collective from the industry panel that answered questions posed from the audience.



Ricki Leahy and Mike Weight catch up over morning tea. All photos: Karen Allan.



MARKET UPDATE

NZ avoids global exporting price downturn

Phil Edmonds, Apiculture New Zealand Senior Policy Analyst

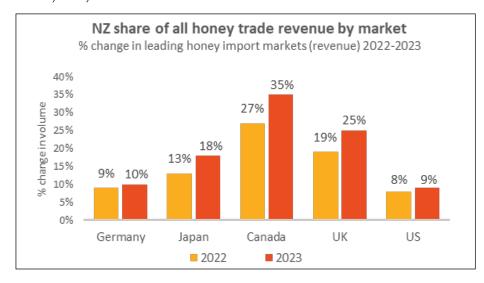
After three successive years of increased value in the global honey trade, 2023 saw a decline with key importing countries pulling back from the market.

he average increase in revenue from global honey selling had increased 4% on average through the peak COVID years (2019 and 2022). But the US\$2.2b spent by importers in 2023 was back to a level reached in 2020, as the USA and Germany both found less need to enter the market. The USA spent 26% less on honey in 2023 than the previous year, and Germany 25% less. Smaller but still significant declines in demand were also evident in other major importers—Japan paid 17% less, as did France (-17%) and the UK (-12%).

To some extent this was unsurprising. The global trade in goods was widely forecast to fall last year, and the World Trade Organisation (WTO) recently confirmed that the value of world merchandise trade was down 6% in 2023. It noted high energy prices and inflation continued to weigh heavily on demand for manufactured goods.

The impact of this decline in the honey trade fell largely on South American exporters. Returns to Argentina from honey exports fell 26%, and Brazil received 38% less—both as a result of the sharp loss of interest in their product from the USA.

Revenue loss did not go hand-in-hand with the drop in volumes traded. Shipments from Argentina were roughly the same as in 2022, and the drop in the amount of honey exported from Brazil was considerably less than the fall in what it earned. The implication here is that traded honey prices per kg took a dive—a finding that was broadly shared by most exporting markets. This was



consistent with the WTO findings for the overall global trade in merchandise goods; the 5% loss in revenue reported by the WTO was significantly greater than the modest 1.5% decline in physical product exports.

Beyond the well-identified stresses from the sluggish global economy, which effectively meant honey-producing countries were exporting more for less, there was an additional influence on the overall export-import profile; that was the USA sourcing much more product from India than in the past, at very low prices. India exported 10,000 tonnes more honey to the USA than it did in 2022 but the USA paid 27% less for that honey than it did in 2022. The price that India received fell from US\$3.26/kg to US\$2.08/kg.

NEW ZEALAND CONTRADICTS GLOBAL DOWNTURN IN PRICING

New Zealand was not exempt from the global trends on merchandise exporting; overall honey export revenue was down for the calendar year, reflecting pressure on consumers to re-evaluate their spending habits. However, New Zealand did manage to bypass the negative impact experienced by almost all other exporters where prices crashed. Across all New Zealand's export honey products, the price/kg increased, albeit marginally by 1% to NZ\$40.26.

Equally significant was the ability of New Zealand honey to withstand the trends in key importing countries to scale back on their spend. In Germany, Japan, Canada, the USA and UK, New Zealand's share of those countries total spend on honey increased. Essentially, New Zealand's premium priced honey fared better than cheaper commodity honey traded by other countries.

TRADING CONDITIONS EXPECTED TO IMPROVE

The latest WTO outlook published in May indicates the abating of inflationary pressures will allow real incomes to grow in the year ahead, particularly in advanced economies, which will provide a recovery of demand for tradeable goods. The forecast for global trade in 2024 is for a 2.7% increase and then a 3.3% uptick in 2025.

So far New Zealand honey exports are meeting this expectation. New Zealand's export volume and value for three of the first four months of the year have exceeded results in 2023. From January to April, overall honey volume is up 5% on 2023, and value up 15%, exceeding the forecast recovery for all global trade.



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MARKET

A free trade agreement with the European Union

The New Zealand–European Union Free Trade Agreement (NZ–EU FTA) will save mānuka honey exporters millions of dollars this year and open the door more widely to a market with hundreds of millions of people. *Fiona Acheson, NZTE Sector Lead for Food, Beverage and Consumer Goods*, shares insights on the opportunity for New Zealand honey producers and exporters.

STARTING AT ZERO, FROM DAY ONE

The FTA, which came into force on 1 May 2024, will result in around \$3.5 million in annual tariff savings on mānuka honey exports to the EU, with these savings accruing from day one. EU tariffs were 17.3% before the FTA and were eliminated from day one.

For non-mānuka honey, tariff rates dropped on day one from 17.3% to 13.84% and will continue dropping each year reaching zero after three years, eventually saving \$1.9m per annum in tariffs. (For comparison, under the NZ-UK FTA, all honey tariffs were eliminated on day one.)

These savings are significant and for honey producers and exporters, the NZ-EU FTA presents a growing opportunity. However, the EU is not one market—it is made up of many countries and consumer preferences differ

STRONG GROWTH IN THE EU

The value of New Zealand honey sold in the EU has more than doubled since 2015, with a compound annual growth rate (CAGR) of 11%, according to Stats NZ (To view the graph on the webpage, search: 'EU27' and '0409 Honey'). This has tended to be faster than the overall growth of the honey retail market in Europe: in Germany the honey market has been growing at about 8% per annum in the last five years, and in Italy and France, the next two biggest markets, the growth has been around 2%. In addition, Poland has been growing at 11% and the UK at 6%.

Last year's New Zealand honey exports to the EU totalled \$48.9m. (Source: Stats NZ.)

While this figure is down on the pandemic-related bumps in 2020 (\$59.3m) and 2021 (\$63.7m), the awareness of the natural health and immunity benefits of honey remains high.

The average unit value of New Zealand honey dwarfs all other honey importers into the EU. In the first half of 2023, our honey was valued at $\[\le 27.59 \]$ Kg (see Figure 1). The next highest was the UK, at just $\[\le 4.40 \]$ Kg, and the average of importers to the EU was just $\[\le 2.14 \]$ Kg.

There is an opportunity to grow the awareness of and demand for New Zealand honey in Europe further and NZTE spoke to two EU honey experts about their insights.

GERMANY—THE LARGEST HONEY MARKET IN EUROPE

Germany is by far the largest honey market in the EU, at \$35m with high growth and per capita spend. (Source: Stats NZ, search: 'Germany' and '0409 Honey' to view the online graph).

While retail channel data is not available specifically for honey, sweet spreads is used as a proxy and honey makes up 32% of the sweet spreads category in Germany.

According to German honey market expert Karel Alexander, there is also a strong local producer market in Germany which means consumers are not only familiar with honey; they may also have established preferences for local varieties.

Karel suggests that highlighting the unique floral sources or regional characteristics of your New Zealand honey can be a selling point. Honey customers do not tend to fall in and out of the category. Those that grew up with honey in their homes will continue to repurchase, but current inflation and cost-of-living pressures means they may choose to purchase at different price points.



The average unit value of New Zealand honey dwarfs all other honey importers into the EU.

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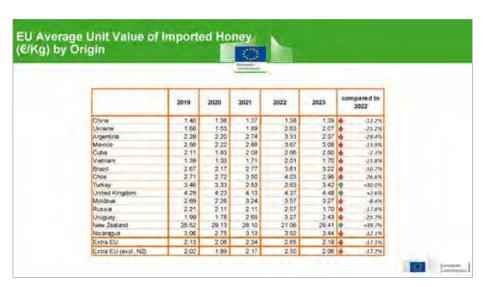


Figure 1: Source: European Commission presentation, see p. 18 of 30



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NEW ZEALAND BEEKEEPER, WINTER 2024



A New Zealand honey display in Harrod's Department Store, London, UK. Photo supplied.

Quality and source knowledge are crucial due to past scandals and transparency and traceability are essential. Sustainability is also becoming more important—to the retailers as well as consumers. There is a requirement to show a clear source and follow ESG rules.

Despite being a significant honey market for New Zealand, German consumers are not necessarily aware that New Zealand sells honey. NZTE data from 2023 shows a good proportion of Germans know that New Zealand produces great red meat (45%) and wine (39%), but far fewer of them know about our other food and beverage subsectors, including honey and jams (18%).

FRANCE—ORGANIC HONEY IS BIG

Organic honey is a big market in France, in comparison to some other European nations. This is even though consumers in Germany and Italy have a similar or higher preference for organic foods more generally.

According to French honey market expert Pierre d'Agay, New Zealand could carve out a niche in France by emphasising its unique origin story, and the new FTA effective from 1 May will result in around \$3.5 million in annual tariff savings on mānuka properties.

The honey market in France has been treated as a commodity in the past 50 years but a rebuild focused on quality and origin is under way. Mr d'Agay sees the opportunity for New Zealand honey companies to educate French retailers and consumers about the health benefits, unique taste profiles and sustainable beekeeping practices in New Zealand.

He also recommends highlighting other attributes such as the pristine environment, beekeeping traditions and the commitment to quality.

THE OPPORTUNITY IN THE UNITED KINGDOM

New Zealand's biggest European honey market is the UK, with about \$44m in exports in 2023. Similarly, there is low awareness in the UK that New Zealand produces good honey compared to our larger exports.

Data from NZTE's promotional campaign 'Made With Care' show that while 67% and 63% of UK consumers associate New Zealand with wine and red meat as the country's two most common products, just 18% of people name honey and jams. This shows an opening to grow awareness of the sector in the UK.

Data from 2024 shows drivers of price premiums globally for honey and jams were, in order: 'locally sourced', 'safe', 'tasty', 'organic' and 'treatment of bees'.

In the UK, 'locally sourced' topped the responses, followed by 'treatment of bees', and 'tasty'.

THE OPPORTUNITY IS NOT WITHOUT ITS CHALLENGES

Certification

There is a high level of mistrust and scepticism around green or environmental claims, or 'greenwashing'. Made with Care research shows 70% of UK consumers find it hard to tell which products are good or bad for the environment, and half distrust companies' green claims.

Understanding which certifications are trusted by consumers will be increasingly important. You may be able to stand out from a crowded 'green' branding market by articulating your traceability credentials or displaying recognised sustainability certifications, such as B Corp.

70% of UK consumers find it hard to tell which products are good or bad for the environment

'Buy local'

The 'buy local' attitude across parts of the UK and Europe may present a barrier to New Zealand exporters of food and beverage. Especially in post-Brexit UK, campaigns by primary producers' unions have picked up public support. More people are more conscious of 'buying British'.

In the EU, about 60% of honey sold is local. This may mean that consumers have established local preferences and highlighting the unique elements of mānuka can be a selling point.

In a good position

With the two FTAs resulting in significant tariff reductions, New Zealand honey producers and exporters are in a good position to take advantage of the improved market access in the UK and the EU.

Consumers are willing to pay for high-quality honey from New Zealand and many consumers are increasingly interested in natural, organic, and healthy foods, which often comes at a premium. The three pillars for success: sustainability, quality-led and consumer focus noted in the recently released New Zealand honey strategy *Thriving Together* support this position.

With New Zealand's already strong reputation for quality food and beverage in the EU and UK, understanding the nuances of each country and what drives consumer preferences will be important in leveraging the FTAs.

Useful NZTE resources can be found via the links below:

- Demand for mānuka honey in 6 overseas markets - myNZTE
- Where Europe gets its honey and which markets to target myNZTE
- How 100% Pure NZ Honey approached selling in the UK & US via Amazon - myNZTE
- Selling honey online in the UK myNZTE
- How to position honey & supplements in NZ's major export markets myNZTE (This link requires a log in/join myNZTE to view.)
- <u>EU-NZ FTA</u> update



BUSINESS

When your hive takes a dive: Removing the sting of uncertainty in beekeeping

Steve Jackson, 'Head Beekeeper' at Jackson Blakeman Chartered Accountants, Gisborne, and treasurer of ApiNZ's Tairāwhiti Hub.



The beekeeping industry, more than most, is fraught with uncertainties. From fluctuating market demands to unpredictable weather conditions, and the neverending battle against varroa, beekeepers face numerous challenges that can derail even the best-laid plans.

n my previous article published in the October 2022 edition of *The New Zealand BeeKeeper*, I introduced the concept of 'Steve's B's'—a framework to help beekeepers

navigate tough times by leveraging key relationships and strategic planning. But what happens when Plan A doesn't work out? In this follow-up article, we'll explore options and strategies to ensure resilience and adaptability in the face of our current challenges.

THE IMPORTANCE OF HAVING A PLAN BEE

While optimism is a valuable trait, relying solely on it can be risky. A robust business strategy should always include contingency plans. Here's how to develop and implement effective backup plans:

1. Develop Multiple Scenarios:

- Plan A: This is your ideal scenario where everything goes as expected. Your budgets, production levels, hive health, and sales targets align perfectly.
- Plan B: This is your fallback plan. It accounts for moderate disruptions—perhaps a lowerthan-expected yield or delayed payments from buyers.
- Plan C: This is your worst-casescenario plan. It prepares you for significant setbacks such as a market crash, natural disasters, or severe illness.

Given the current environment, not many in our industry will still be actioning their Plan A scenario. Most will be exercising Plan B and an increasing number will be scurrying to develop their Plan C. For a number of our Tairāwhiti and Hawke's Bay operations, the worst-case scenario outlined above has already occurred in the aftermath of last year's and recent weather events.

2. Regular Review and Adjustment:

 Continuously monitor your progress and adjust your plans as necessary. This includes revisiting your budgets, production targets, and sales strategies regularly.

LEVERAGING KEY RELATIONSHIPS

In challenging times, your network can be your greatest asset. Here's how to effectively engage with Steve's B's—your Buyers, Business Advisors, Bankers, Band of Workers, and Beekeeping Buddies:

1. Engage with Your Buyers:

- Proactive Communication: Don't wait until your honey is in the drum to talk to your buyers.
 Engage them early to understand their needs and expectations. If you can understand the profile of honey, quantities they are looking for and quality expectations, you have a better chance of preparing your crop for their needs.
- Flexible Contracts: Consider negotiating flexible contracts that allow for adjustments in volume or delivery times based on production realities.
 Be prepared to make win/win concessions with your buyers.
 Your honey earns you nothing sitting in the drum inside your shed or someone else's RMA facility.
- Collaborate with others: Consider the opportunity to work with other beekeepers in your same position. Is there an opportunity to blend your honeys with your fellow beekeepers and provide your buyer with a larger, consistent batch of honey for them to market with your blended profile?

2. Utilize Your Business Advisor or Bean counter:

 Expert Guidance: Seek advice from professionals who can provide strategic insights and financial planning. They can help you navigate through tough times with sound advice and planning.



 Scenario Planning: Work with your advisor to develop and evaluate different scenarios.
 They can help you understand the financial implications of each and recommend the best course of action.

3. Communicate with Your Banker:

- Early Warning System: No one likes nasty surprises—least of all your banker. Inform your bank about potential cash flow issues before they become critical. Early communication can lead to better support and flexibility from your bank.
- Present Your Plans: Share your contingency plans with your bank to demonstrate that you are proactive and prepared.
 This builds confidence and can lead to more favourable terms.

4. Collaborate with Your Band of Workers:

- Transparent Communication: Keep your team informed about the challenges and the steps you are taking to address them. Their buy-in is crucial for the successful implementation of any plan.
- Leverage Their Ideas: Your team may have valuable insights and ideas for overcoming challenges.
 Encourage open dialogue and brainstorming sessions.

5. Support from Your Buddies in Beekeeping:

- Peer Networks: Reach out to fellow beekeepers. They understand your challenges and can offer support, advice, and potential collaboration opportunities. Our local Tairawhiti ApiNZ Hub actively encourages these types of gettogethers. Wheel out the BBQ, fire up a pizza oven, pull out some drinks, and talk together!
- Shared Resources: Consider pooling resources with other beekeepers. This can include sharing equipment, labour, or even market opportunities.

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SUCCESSION PLANNING: PREPARING FOR RE-QUEENING YOUR BUSINESS

Succession planning is often overlooked until it becomes urgent. However, having a well-thought-out succession plan is crucial for the long-term sustainability of your beekeeping business. Below are some points I raised in my presentation at the 2023 ApiNZ Conference:

1. Start Early:

 Begin your succession planning the day you start your business. This allows you to build a solid foundation and gradually prepare for the eventual transition.

2. Identify Potential Successors:

- Family Members: If you plan to pass your business to a family member, ensure they are prepared and committed to taking over.
- Employees: Groom key employees who show potential to take on leadership roles.
- External Buyers: Keep an eye
 on potential buyers outside your
 immediate circle. Competitors,
 suppliers, or even customers looking
 to vertically integrate, may be
 interested in acquiring your business.

3. Document Your Business Processes:

- Operational Details: Record all operational details, including hive management practices, supplier contacts, and customer relationships. This makes it easier for the successor to understand and continue your work.
- Document your Perks: There will be hundreds, if not thousands of nuances that make your business different from another beekeeper. It could be the access to Spot X for hunting, fishing, or surfing. It could be the stunning views some spots give you for lunch under the shade of a tree, or that special gin-clear swimming hole sought after on a hot day. There's more to your lifestyle than your number of hives or last season's honey production. Spell these perks out to better differentiate your business.
- Financial Records: Maintain transparent and up-to-date financial records. This helps potential buyers or successors evaluate the business' health and make informed decisions.

4. A Word to the 'Why's': Articulate the reasons you do what you do

- Personal Motivation: Clearly document why you started and have continued in the beekeeping business. This personal insight can be invaluable to a successor. Don't be afraid to restate the Perks of your business in this section, as these are often a big part of the reason you have remained in the business for this long.
- Business Rationale: Explain the strategic decisions you've made and the rationale behind them. This helps the successor understand the business direction and potential. It also helps them not repeat your past mistakes, which will in turn make your business more attractive to a potential buyer.
- Who You Deal with and Why?:

Document your business relationships. You are selling your experience. If there is a party you deal with for a particular reason, for goodness' sake, document what those reasons are. People should be buying the benefits you gained from your past mistakes. They are also willing to pay for the knowledge of past favours and business relationships that endured the test of time. Document who you deal with and why—as well as who you won't work with and why.

5. How to Make it Happen

There are many questions to consider in how a successor will buy you out:

- Will this happen as a one-off transaction or over time via a staged buyout?
- How will the business be valued and by whom?
- How will you market this business for sale?
- Will you leave vendor finance in for the buyer?
- Will you work with them over an extended period of time to transition the business? Do you expect to be paid for this?

In answering these How questions, you are best to work with a team

comprising your business adviser, banker, lawyer, valuer, and potentially a business broker. You will need some wriggle room for negotiation with interested parties so again, having a Plan A, B, C. etc for the How's is going to be important.

6. Plan Bee: Contingencies:

- Unexpected Events: Prepare for unexpected events such as illness, accidents, or sudden market changes. Ensure your succession plan includes provisions for these scenarios. Having your succession plan written well before you intend using it ensures the best possible outcome for those charged with selling your business if you are unable to make these decisions yourself.
- Flexible Transition: As mentioned above, consider phased transitions where the successor gradually takes over, allowing for a smoother handover and continued support.
- have a succession plan in place, it is important to keep those around you informed of its existence.

 This helps maximise the potential for out-of-the-blue approaches being made to you. If your banker, accountant, peers, and suppliers know of your plan well in advance of it being needed, you may well be in the driver's seat of successfully managing an early retirement.

CONCLUSION: BUILDING RESILIENCE THROUGH STRATEGIC PLANNING

The beekeeping industry, like many in this recessionary environment, is unpredictable. However, with proactive planning and strategic use of your network, you can navigate through tough times and emerge stronger. Always have a Plan B and Plan C ready, engage with key stakeholders early and often, and ensure you have a solid succession plan in place. By doing so, you not only safeguard your business but also set it up for long-term success and sustainability.

Remember, you are not alone in this journey. Leverage the support and insights from your buyers, business advisors, bankers, team, and fellow beekeepers. Together, we can weather any storm and keep the beekeeping industry thriving for future generations.

NZ HONEY BEE RESEARCH SYMPOSIUM

What's happening in beekeeping science?

Originally started five years ago to give researchers an opportunity to present and discuss bee work in New Zealand, and inform beekeepers, the NZ Honey Bee Research Symposium has grown in attendance every year to just over 100 this year. Event organiser *Phil Lester from the Victoria University School of Biological Sciences* shares some highlights from this year's event that were especially relevant to beekeepers.



dnature generously sponsored the student prizes for the symposium. First place went to (from middle to right) Rose McGruddy (Victoria University of Wellington), second place to Erin Jones (Texas A&M AgriLife Extension, USA), and third place to Epernay Carta (Plant & Food Research). Also pictured (left) Dr James Sainsbury (Plant & Food Research) and John Mackay (dnature).

Around 100 people attended the symposium at Plant & Food Research, Hamilton to view 22 presentations. Photos supplied.

here were many excellent presentations in the symposium. Erin Jones from Texas A&M University showed how newly established hives with more brood collected more pollen. So, if you want more pollination from new hives, make sure they have lots of brood.

Roger Harker from Plant & Food Research talked about honey tasting and demonstrated how tasting honey on mini-toast or on its own alters the perception of flavour characteristics. Mark Goodwin followed with a presentation on his proposed project to identify the percentage of honey produced from each nectar source and to sell honey based on the total floral composition and taste.

Results from a survey of beekeepers' wellbeing were presented by Patrick Dawkins (from the *Apiarist's Advocate*). Beekeepers were found to have life satisfaction below that of other primary industries, and they concluded that almost half of commercial beekeepers are at risk of mental health issues.

Rae Butler and Linda Newstrom-Lloyd from the New Zealand Bee Breeding Association talked about their use of the Harbo Assay for discovering, testing, and maintaining long-term VSH (varroa sensitive hygiene). The method appears to have potential as an effective and relatively easy method for VSH selection and maintenance.

Four speakers from Victoria University gave presentations on double-stranded

RNA (dsRNA) as a novel biopesticide for varroa control. Zoe Smeele showed the molecular mechanism of the product. Joana Merk showed that the survival and foraging of bees treated with dsRNA compared well to bees treated with Apivar® or with no mite control. Rose McGruddy presented national survey results that indicated beekeepers were open to using this biopesticide but also worried about public perception of the treatment.

For a range of resources about this biopesticide, visit: https://www.sciencelearn.org.nz/resources/3258-rna-interference

Michelle Taylor from Plant & Food Research showed that poplar and native plant resins are common sources

continued...

of Aotearoa New Zealand propolis. Poplar is surprisingly a very common component in many propolis samples.

Maëlle Anastasi presented her research that showed amitraz-based miticides (such as Apivar[®]) do not affect honey bee and mite bacterial microbiome.

And Danielle Kok gave an update on progress towards a phage-based (viruses that attack bacteria) solution to American foulbrood in honey bees.

Danielle will be searching for more viruses that attack American foulbrood.

INDUSTRY INSIGHTS FORUM

The "Industry Insights" session allowed beekeepers to offer comments and ask questions of the researchers. One of the first comments was that more basic or practical science was needed to help beekeepers, such as on the use of oxalic acid fogging for varroa control. Beekeepers need new treatments and assistance with bee health.

Beekeepers asked how researchers decide which topics or questions to examine. The researchers present indicated that while meetings like this one are useful for shaping directions, much of the research is also driven by researchers themselves. The Apiculture New Zealand Science and Research Focus Group has historically played a role in suggesting topics, and organizations such as ApiNZ and NZ Beekeeping Inc. have also previously suggested strategies or directions.

There was a discussion about the failed levy proposal that could have funded research. A comment was made that people weren't against the levy, but instead, there should be a research plan derived from the industry as a whole. Some beekeepers present also felt that there was an issue with paying for administration in the previous proposal.

One audience member with extensive commercial research experience in the honey area described the current honey bee industry in New Zealand as being like a cruise ship, with everyone in the engine room but no individual or group steering. What is the highest priority for research? What are the overall strategic goals and directions? They felt that what is needed is a coordinated and directed response.



Varroa mite on honey bee. Photos supplied.

SCIENCE AND RESEARCH

Hot honey: An overview of varroa management using hyperthermia

Varroa destructor management is a substantial part of modern apiculture, and it's expensive! Lucas Avery, visiting student from the Agricultural and Biological Engineering Department, University of Florida, and Ashley Mortensen and James Sainsbury (The New Zealand Institute for Plant and Food Research Limited), share developments in the concept of heat treatment as a varroa management tool.

ven when it does work, varroa treatment in honey bee (*Apis mellifera*) hives was estimated to cost the New Zealand apiculture industry \$14.3 million NZD in the 2019–20 financial year alone (1). If treatment is ineffective, the costs are even higher as colony health is significantly affected, with 30,711 colonies lost in 2020 (1).

Most varroa treatments depend on the application of synthetic or organic chemicals that are potent enough to kill varroa with minimal direct harm to the bees. However, overreliance on chemical treatments can lead to chemical resistance in varroa (as confirmed overseas) and build-up of chemical residues in bee products, notably beeswax and honey. As such, alternative methods are always of interest for practical development.

One possible non-chemical strategy could be heat treatment (hyperthermia). Varroa are less tolerant of high temperatures than



Varroa mite on honey bee larvae.

your standard-issue honey bee. Juvenile honey bees can endure temperatures up to 42-43°C, while adults can endure temperatures up to 48°C (2). In comparison, varroa reproduction is significantly decreased when female mites are heated to 36.5°C and is completely halted at around 38°C (3). Moreover, varroa on nurse bees fully detach and die when maintained at 39-40°C in controlled testing (4).

Exploiting this difference in heat tolerance, heat treatment has been explored as a plausible strategy to reduce varroa populations in colonies since the late 1970s (5). Early strategies for heat treating colonies explored methods such as glass enclosures to capture solar radiation, and hollow bells dipped in hot water (6). However, these techniques were not particularly efficient, and in some cases were not very effective.

Since those initial attempts, two promising design archetypes have emerged: 1) hives with electrically heated frames/boards, and 2) hives heated via solar radiation (6). Currently, several semi-commercial devices are on the market that utilise these techniques. For example, one Czech company created a device that allows sunlight in through a clear lid to gradually heat the entire hive on sunny days to overheat varroa (7), and a local Kiwi inventor group has created a schematic of a bottom heating board

that periodically heats the hive to varroa-lethal temperatures via power generated by a solar panel lid (8). However, the perfect pairing of efficacy and economic value required for commercial viability has not yet been found.

Studies of various hyperthermic hive models consistently report reduction in the varroa infestation rates of treated colonies, albeit highly variable in efficacy (2,3,9). Moreover, several cases found that varroa populations rapidly rebound (2,9). With all that being said, curbing our overreliance on chemical treatments by incorporating clever mechanical controls like heat treatments promises to benefit beekeeping in a variety of ways including improved honey bee health, increased environmental sustainability, and reduced likelihood of miticide contamination of honey.

Hyperthermia alone is unlikely to sufficiently disrupt varroa population growth, but controlled heat exposure does show promise as an emerging non-chemical strategy for our tool kit in combatting varroa in our colonies. While it may not yet be a feasible solution for most commercial conditions, further research and development of products like this can help ensure honey bees and their products are here to stay.

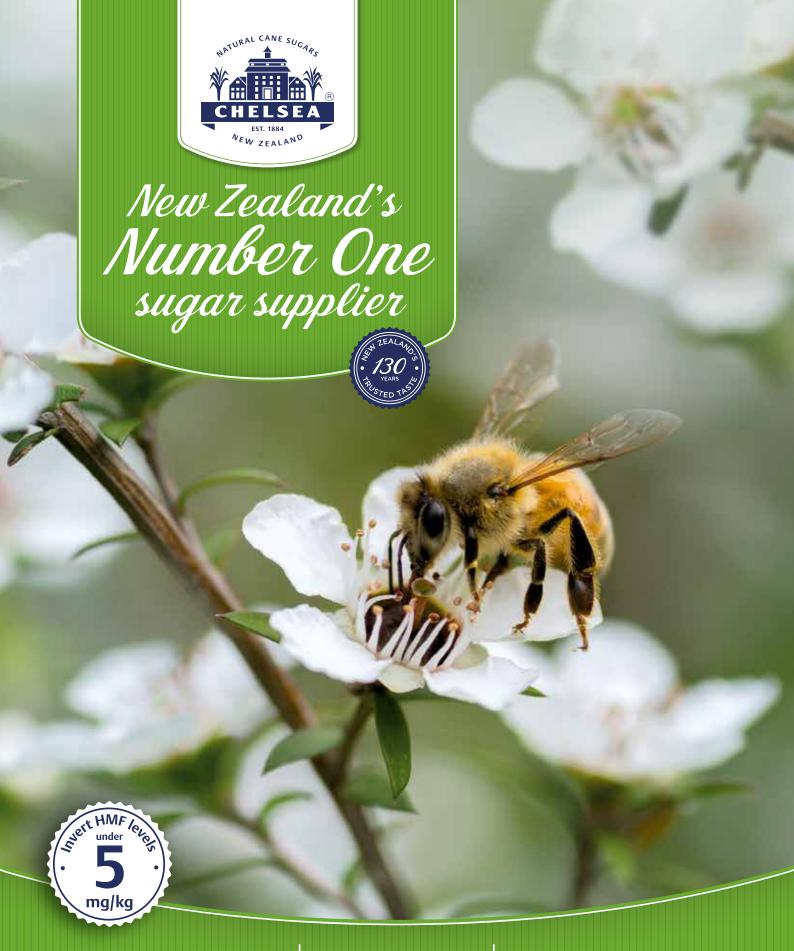
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MEET THE BEEKEEPER



Jess Curtis, Branch Creek Honey, Cardrona Valley, Otago

Jess is a former Ron Mossop Youth Scholarship winner (2019) and has won a number of food awards recently, including the 2024 Outstanding Food Producer Awards where Branch Creek Honey received three gold medals (creamed, raw and comb clover blend honey) and its Raw Clover Blend Honey went on to be awarded as the Farro Earth Champion.

What's your background in beekeeping? How long have you been keeping bees and what got you started?

I started beekeeping in 2019 when I took over existing hives that my Granddad kept on our family farm, Branch Creek, in the Cardrona Valley. We are a high-country sheep and beef station and bees are really important for us to keep our pastures flourishing on the paddocks and also on the hill country.

I did the apprenticeship scheme (level 3 & 4 certificates in Apiculture) through Primary ITO while working for Taylor Pass Honey and I was also lucky enough to win the 2019 Ron Mossop Youth Scholarship. Taylor Pass has been hugely supportive of my beekeeping journey and getting me through the apprenticeship! The scholarship was a huge boost too and has given me a really good start to my beekeeping career. The plan was always to develop my Granddad's hobby into something a little more commercial. I'm still not a huge operation, and actually don't plan on being one in the near future, but I love that I can produce something special on our farm and share that with our community, using it to tell a story about bees and their importance.

How many hives do you run?

I currently have 50 hives. All the hives are on our family farm in the Cardrona Valley. There is space for more, so we'll see where the next few years takes us!

What kind of honey do your bees produce?

Our bees produce a Clover Blend Honey, once packaged I sell our honey under our own brand—Branch Creek Honey. We've won multiple food awards at the Outstanding NZ Food Producer Awards and the NZ Artisan Awards, for all three varieties of our honey, which is pretty cool. This year our Raw Clover Blend Honey was named the Champion of the Earth category too—I am super stoked about this!

What is it that you enjoy about beekeeping?

I enjoy that every day is different and that every season is different too. It can be challenging at times, but the work is rewarding. I also love that I can see the difference my bees make on our farm (I work on the farm too). The bees are a part of a much bigger picture!

What is the best advice you've received about beekeeping?

That even when you think you've learnt it all, there's always something that will surprise you! It's great to have a mentor or someone who you can go to when you've got questions.

I love that I can produce something special on our farm and share that with our community, using it to tell a story about bees and their importance.

What is the biggest pitfall for new beekeepers?

Getting put off when your hives are struggling, or you lose a hive. Ask for help and keep going!

Do you have any advice for beginner beekeepers based on your own experience?

I think it's hard sometimes to ask for help but it's really important to not be afraid to do so. Get yourself a copy of *Practical Beekeeping in New Zealand* by Andrew Matheson and Murray Reid, and make sure to keep in the loop about new developments in the industry.

What do you see as the biggest priority for the beekeeping sector?

Keeping our borders secure from any more pests or diseases entering New Zealand and keeping up our education and technology when it comes to battling those we already have.

QUICK QUESTIONS

Favourite honey? Clover.

Favourite honey drink or recipe?

Honey on toast—surely that's a recipe! I also love to use honey in salad dressings and marinades. Lately I have been trying to perfect using honey as a substitute in all my baking; I'm keen to nail a white bread recipe to take my honey on toast to the next level!

Favourite beekeeping equipment? Hive tool.

Favourite beekeeping book or resource? Practical Beekeeping in New Zealand (Andrew Matheson and Murray Reid)—an essential!

Favourite task at the apiary? Adding more honey supers and sampling the fresh honey!



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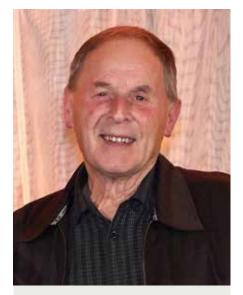


ACKNOWLEDGMENTS

Dedicated to bees for four decades

Karen Allan

Caring for bees and helping maintain an environment that is productive and sustainable is the core role of beekeepers, according to King's Birthday honours recipient Allen McCaw.



Allen McCaw MNZM. Photo: Apiculture New Zealand.

That's where beekeeping lies—keeping honey bees in our environment.

99

arriage into a beekeeping family started Allen's journey from working for social welfare to working with social insects. After graduating from the University of Otago with a Bachelor of Science in Chemistry, Allen worked for three years at the medical school in Dunedin before becoming a social worker for the next three years. He enjoyed the people but "couldn't stand the bureaucracy" and thought in the long run the job would drive him "nuts". His wife, Maria Heineman, was the daughter of a beekeeper nearing retirement, and Allen says she "put up with my decision" to join with his sister and brother-in-law to take over his father-in-law's business at Milburn in South Otago.

HIVES HARDER TO KEEP ALIVE THESE DAYS

Beekeeping practice hasn't changed that much since Allen began in the 1970s, he says, but what has changed is the introduction of a new disease.

"Varroa is an absolute menace!" Allen says emphatically.

Most beekeepers could take the winter months off, says Allen, but the introduction of varroa in 2000, along with changing environmental conditions and farming practices, such as more intensive horticulture, means beekeepers can't afford to take eyes off their bees anymore.

"The pressures of beekeeping and keeping hives alive have changed. A lot of the fun's gone out of it and you really have to look at it as a business," he says.

SOME THINGS DON'T CHANGE

Allen entered industry politics at an interesting point in time that he says was very similar to where the industry is now. Soon after he started beekeeping the Honey Market Authority, which had controlled almost all honey exports, was wound up. The authority had been supported by government funding and the government-controlled prices in the domestic market. The change then was a "What the heck do we do now?" moment, similar to the present, says Allen.

Over the following five to 10 years the industry worked on developing its own Strategic Plan, the AFB pest management strategy, and how the industry body would be structured in light of the changes. Government policy changes also meant the loss of dedicated industry legislation, including the Hive Levy Act and the Apiaries Act, and the need to replace these under new enabling Acts.

"Without [the pest management strategy] we'd be in utter chaos," says Allen, adding that the industry still needs to be vigilant about American foulbrood (AFB).

Allen hopes the latest industry strategy, released in February, will include a bee health and biosecurity focus, as that's what beekeepers relate to.

"How will we approach any future exotic disease incursions? No country is now immune from varroa, the small hive beetle is not far away in Australia," he warns, "and *Tropilaelaps* mites would be completely disastrous for the industry."

It is important not to lose the historical memory of beekeeping in New Zealand, says Allen. He's seen a lot of progress but also frustration in some areas.

The loss of bees and operations has affected the administration of the industry as potential membership comes and goes, says Allen. It's not the same picture as it was five years ago and that raises questions about where to next, he adds. While hive and beekeeper numbers are reducing now, the industry still has nearly twice as many hives as there were during Allen's early beekeeping days and he looks forward to the industry settling down to a more manageable level with supply and demand getting back into balance.

Allen views the new honey industry strategy released in February as "a great thing to have" but believes any strategy needs to have an industry-wide application that addresses the issues of bee health and research, as well as marketing.

"If you want to switch on the beekeepers, talk to them about maintaining the welfare of our bees. That's how we make a living. Most beekeepers have a dedication to the bees themselves."

Honey is something that beekeepers produce to raise money to keep their bees going, says Allen.

"Our place is to actually maintain an environment that is productive and sustainable. That's where beekeeping lies—keeping honey bees in our environment."



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SUPPORT AND VARIETY IMPORTANT TO LONGEVITY IN THE INDUSTRY

Allen was "quite chuffed" to receive the Member of the New Zealand Order of Merit (MNZM) in the King's Birthday honours.

"It is an honour and a pleasure to have the recognition of your peers and people you've worked with." As far as Allen is concerned, the honour is as much an acknowledgment of the efforts of many beekeeping colleagues over the years as it is of his own.

Working with fellow apiculture enthusiasts is part of what has kept Allen going for so long in the industry and he's made some great friends.

"I've worked with a lot of good people. And a few 'pains-in-the neck'. That's part of the flavour and colour of the industry. That's the diversity of the industry."

Allen has been a member of the Southern Beekeepers' Discussion Group since its inception more than 20 years ago. The opportunity to get together every six weeks with 20-25 other commercial beekeepers to talk about issues and share information has been a great support, he says.

"This is particularly important in an industry where it's too easy to get isolated, where sometimes the only person you have to talk to is yourself ... and that's not always good company."

Allen says southern beekeepers have largely avoided the competition created by the mānuka boom, making it easier to talk to each other. The majority of beekeepers in the area produce

clover honey and don't have to worry about competition for space, or maybe paying a farmer or the Department of Conservation for access to land.

"[In other areas] you have to overcome the pressures created by competition, so people are reluctant to talk to each other. That's so sad," reflects Allen.

The diverse range of opportunities in the industry also kept Allen interested. His beekeeping career included consultancy work in the Pacific Islands, managing exports to Japan, Germany, and the USA and giving addresses at conferences about processing and creaming honey.

"It's kept us busy. It hasn't been all classic beekeeping. Getting involved in the market and processing side has kept it interesting. When you stop learning, that's the day they nail the lid on!"

When you stop learning, that's the day they nail the lid on!



SUCCESSION PLANNING

Their business' succession plan, on reading the industry, was initially to gradually wind it down. They'd reduced their hive stock over the years, either by on selling or not replacing them.

Selling the whole operation as a going concern was not going to be easy, Allen says. Options didn't look promising in terms of succession until a couple of years ago, when Allen's daughter Carlee and husband Tim showed an interest in

taking over the business, predominantly the honey packing and processing side of the operation. They then had re-think how it could work. Allen and Maria now live a few kilometres down the road from the main operation and Allen is still helping out where he can and answering questions.

A trained airline pilot, Carlee's interest in beekeeping was initially just curiosity. Having travelled the world, Allen says she was looking to be a bit more settled.

"She should have seen enough industry ups and downs to be wary," says Allen wryly, "She wanted to carry on the reputation that we'd built up of quality honey production to the third generation. She had an eye for the future."

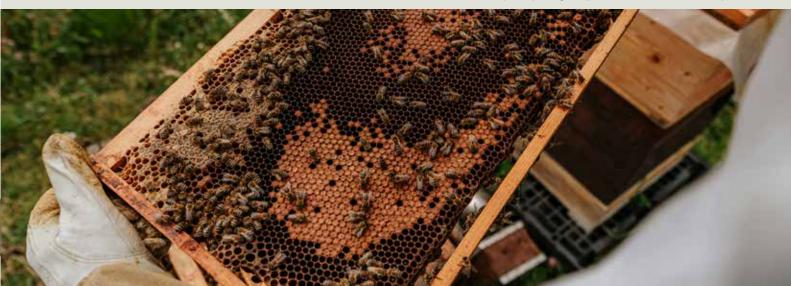
"In some ways it's delightful and in some ways a bit scary. It's a difficult time but it'll pass. If they can get through this patch they should do nicely."

Allen's advice when handing on your business is to be as helpful as you can without interfering. "Sooner or later you have to say 'it's over to you'. It isn't easy ... be prepared to exit yourself when you say you're going to."

WHERE TO NEXT?

After finishing off some of the cleanup required from more than 40 years of beekeeping, Allen says he is hoping to retire gracefully while remaining connected with the industry. He has no great plans as yet and will continue to support his daughter and carry on in his role as a trustee of the NZ Honey Industry Charitable Trust.

Beekeeper inspecting hive frame. Bianca Ackermann, Unsplash.



BOOK REVIEW

Piping Hot Bees and Boisterous Buzz-Runners: 20 Mysteries of Honey Bee Behaviour Solved

by Thomas D. Seeley

Ken Brown

Not many researchers can write that they have confirmed some of Karl von Frisch's work, and in one case solved a mystery that he couldn't, without seeming vain or ridiculous. Thomas D. Seeley has spent a lifetime studying the behaviour of honey bees, swarming and communication in particular.

fter 185 publications including five books and at 71 years old, you know there will be stories and research that will always fascinate. Seeley's studies inspired engineers to create the Honey Bee Algorithm, which is used in cloud computing to optimise server computers, and for which he was part of the team awarded the Golden Goose Award from the Association for the Advancement of Science.

If you haven't read any of his books, this would be a great place to start. This book is broken down into 20 chapters, each one of which is a different piece of research. Rather than a simple experiment, Seeley poses a question which becomes a story of a journey of discovery. Starting with the regulation of CO_2 in a hive, he narrates a story that starts with him as a kiddle discovering a colony in a big old walnut tree. It covers bee biology and behaviour with some carefully designed experiments.

After emerging, a bee soon goes to work and as its body develops it changes jobs, two of which are the title of this book. Chapter three investigates whether it's a consensus or quorum of nest site scouts in a swarm that determines where a swarm will move into. This is of interest to a swarm collector and whether the swarm's departure is imminent. There are two tells: firstly a quorum of at least 20–30 scouts promoting the same site; secondly, scouts can be heard piping when all bees have warmed up enough to fly, hence Piping Hot Bees.

In chapter 18, Groom Me Please, Seeley goes into the mechanics and biology of grooming, both autogrooming and allogrooming. The grooming invitation dance makes for interesting reading for anyone particularly interested in bee dances.

Chapter 15 investigates the tremble dance, a dance that had mystified researchers since it was first observed. Initially it had been thought of as a seizure; Karl von Frisch realised that it was communication but couldn't discern what the message was. Seeley's experiments show under what circumstances foragers would perform this dance.

One of his experiments required labelling 4,000 bees in three days so that every single bee in a swarm could be identified. Then the hundreds of hours of rewatching slow-motion footage of the results of his experiments. It seems as though half the battle is framing the experiments in such a way that will answer these mysteries most efficiently without making assumptions. Seeley's studies build on those that went before him and which his students are in turn building on.

Margaret C. Nelson's illustrations and graphs complement his work and clearly describe his experiments. Thomas Seeley is one of my favourite authors, his style is easy and interesting. He writes for beekeepers, but you don't have to be a genius graduate to understand it. He goes in depth into his experiments so you can fully get how he reaches his conclusions from the original hypothesis, although some start from observing anomalies. He breathes life into his experiments with the telling. Each chapter is like a short story, he guides you on a mini journey of bee discovery, easily swinging from anecdotes with Roger Morse, Martin Landauer and Jurgen Tauntz to those with his students and co-researchers. His narrative gives us a story akin to an Attenborough documentary but about bees and solving some of the mysteries that we as beekeepers often see.





This is a column where you get the opportunity to ask your burning beekeeping, science and honey-related questions.

Send your questions to editor@apinz.org.nz and we'll find an expert to answer them.

Q. I'm a second-year beekeeper, I lost my hives last winter. Should I check my hives in the winter?

A. It depends. Like most things in beekeeping, context is everything. There is the dilemma that going into a hive will actually set it back, but a hive needs to be managed and not going in could mean that critical intervention is missed. We should check our hives to ensure that they are healthy and that they have everything they need.

A colony can't survive without intervention due to introduced pests and diseases, so we must ensure that mites and disease loads are kept down to manageable levels. Where you live will be important—the upper North Island regularly has warm, sunny winter days, while in the southern South Island the temperatures may stay in single figures for long periods. We should avoid opening a hive when the temperature is below 14°C or when it is raining or too windy—if the bees aren't flying, don't go inside. The reason for this is that the brood will get cooled and the pheromones in the hive will dissipate, then the hive must expend energy to get back to pre-inspection

Winter bees are physiologically different than summer bees; they live longer but they aren't suited to working too hard. Any stress on the bees can affect their immunity, individually and as a colony, making them more susceptible to any disease that may be in the hive but at a previously manageable level.

The trick therefore is ensuring that the hive is healthy and prepared for winter before winter. The three key factors for overwintering are mite levels, adequate stores and a suitable hive. If your mite treatments were successful in late summer and you made sure that mite levels stayed very low in autumn, then they should be OK for winter. Monitoring mite levels is one of the most important tasks for a beekeeper. It can be detrimental to the hive to do a sugar shake test in the middle of winter,

but 24- and 48-hour mite drop after oxalic vaporisation can give you both an idea of mite levels and a treatment in one.

Leaving hives enough honey for winter is, by far, best beekeeping practice but getting it right can be difficult, especially with uncertain weather patterns. Autumn feeding is important if stores are down. Bees use most stores in early spring, during the spring build-up. You can heft your hive (lift up one side of the hive to get an idea of its weight) throughout winter to gauge food supplies inside without disturbing the colony.

The hive should be the best home that it can be for the bees—reduce it down to one or two boxes, make sure that the hiveware is sound and is dry with airflow around it. Too much space in the hive is harder to keep warm and dry, harder to defend and the queen mandibular pheromone (QMP) will be more diluted.

Non-invasive hive checks include: watching the bees coming and going for normal behaviour; hefting the hive; natural mite drop; and tapping the side of hive with your ear against it (there should be a loud buzz that quickly settles down). I've made Perspex covers for some of my hives. These are useful for doing quick checks, especially of moisture levels, as the covers will show condensation.

My rule of thumb for hobbyists for hive checks is: every 10 days during swarm season; every two to three weeks in summer and every six to eight weeks in winter (if the weather is OK). The first year you'll check much more often, maybe weekly. This is an important part of your learning and natural curiosity (first-year beekeepers typically go in too often, second year just right and third year not enough).

Ken Brown is President of the Auckland Beekeepers' Club and a Land Based Training Apiculture Tutor



Close-up of bees working. Alvin David, Unsplash.

Q. Why do drones have such big eyes when they hardly do anything?

A. Bees have evolved very efficient processes in such a small package. It's incredible what they can achieve with such tiny brains. Nothing demonstrates this more than their eyes. For a start, bees have five eyes: the two large compound eyes that we're familiar with and three ocelli. Ocelli are called simple eyes, not because they are basic or primitive, but they aren't multiple like compound eyes or complex like our camera eyes. Ocelli sense light and variations of light. The three ocelli can triangulate the light source, which combined with the compound eyes helps the bees to navigate with the sun.

Bees' compound eyes comprise thousands of hexagonal facets; each one is like an individual eye. Each caste has different needs and therefore has a different number of facets approximately 5,500 for a worker;

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We created the 3-in-1 test **Partner** We were the first NZ lab to We developed test down to 3-in1 with the 0.004mg/kg forecasting for Glyphosate Did you Market know? We identified We developed Leptosperin Leaders the C4 marker (with Screening Test funding provided by the UMFHA) We were chosen to carry out MPI's Manuka authenticity research



3,500 for a queen and 7,500 for a drone. They point in all directions, giving a wider field of vision than a fixed eye. Each facet is at the end of a tapering tube called an ommatidia. They converge at the back of the eye to the optic nerve. The optic nerve carries thousands of different images to the brain to be processed. The bee sees an image that to us would look pixelated. There are nine receptor cells in each ommatidium, which perceive either blue, green or UV, depending where in the eye they are.

Drones have many more ommatidia as they need to find and follow the queen. Their compound eyes are not only larger, but go over the top of their head, so that they can see up, making it easier to find the queen. They also have more blue ommatidium to better perceive the sky. Workers have more green ommatidium to see plants better. The queen has the fewest ommatidia as she spends most of her life in the darkened hive, only venturing out to mate and maybe swarm.

So, drones have bigger eyes to see better.

Q. Why don't drones sting?

A. Only female insects sting. This is because the sting has evolved from the ovipositor, which lays eggs. We can see this today in parasitoid wasps where she lays an egg inside an immobilised host which the young wasp consumes as it develops. The sting of the honey bee has moved on to become a defensive tool and even the queen doesn't use her sting to lay eggs. So, the males never evolved the hardware to sting.



Q. Can I sell my beeswax if it has been processed in a NP1 kitchen?

A. If you are operating under a <u>National Programme (NP) 1 Guidance</u> and want to process beeswax for sale that is not for human or animal consumption, then you do not require a registration or have requirements to meet under the Food Act

We would recommend that further processing of beeswax products is kept separate from the processing you do under the NP1. You can process beeswax at your NP1 kitchen, provided you follow the good hygienic practices of your NP1, and make sure that when or after processing beeswax there are no likely food safety hazards presented for other foods processed in the kitchen. For example, you may be able to keep processing beeswax separate from processing food by using different surfaces and utensils to process the beeswax.

Molly McConville is a Regulatory Delivery advisor for New Zealand Food Safety's Food Regulation team.





REGIONAL REPORTS

FROM THE COLONIES

WAIKATO

The season is winding down with hives being prepared for winter. The weather is still unsettled and, as such, many beekeepers are feeding hives. The general consensus is that while there was honey collected this year, it still wasn't a great season.

- Crystal Lange

TAIRĀWHITI



Asian retail district. Photo supplied.

From reports received, hives went into winter in good shape. Some late flows of pasture honey filled up boxes that had already been extracted from a previous crop that season. In many cases this honey has been left on hives as feed, which will mean strong healthy hives coming out of winter that can be split early in spring. Double cropping in one season like this is unusual and was a welcome boost to those businesses.

Levels of varroa are reported as generally low with a few rogue hives in some sites testing with high numbers of mites through reinvasion. Some beekeepers lost quite a few hives in autumn from varroa. Most beekeepers have made up for their losses suffered due to Cyclone Gabrielle in February 2023, while others have left the industry.

Those businesses that remain are working through tight trading conditions that see slow sales, if any, in monofloral mānuka honey and low break-even prices for other types of honey.

BAY OF PLENTY

The Bay of Plenty has had a few frosts and winter has finally arrived.

There are still a few sugar tanks on utes and it appears the bees did not bring in a lot of honey after harvesting.

Most beekeepers I have talked to have had honey to harvest, albeit a bit lighter than expected.

More AFB reports have come through this autumn, and it seems to be fairly widespread.

With the amount of hive movement that happens in the Bay of Plenty with

kiwifruit pollination, we are going to need to be very vigilant.

Beekeeping is still a tough game. I would think that with New Zealand having around half a million hives, our industry should return to equilibrium, with supply and demand of honey matched. Hopefully this balance will get hive returns back to a sustainable level. We look forward to our industry flourishing again.

Hopefully everyone can have a bit of time off to reset for next season.

- Bruce Lowe

Multifloral mānuka honey seems to be the only honey type that is moving with any consistency.

Some businesses are considering not producing mānuka honey in the 2025 season, particularly if they still have stock on hand from previous years. It makes chasing some crops less appealing given the little to no sales differential ... but substantially cheaper to produce if not travelling far.

Once again for many businesses I spoke to, reliable income from pollination contracts is what still pays the fixed costs and keeps them going. There have been a few staff layoffs.

A new honey extraction facility in Te Araroa finally opened in mid-January and went very well processing that season's honey crop. The team of people who worked and ran this new facility were awesome and this facility has provided a real boost to business confidence in an area of traditionally high unemployment.

A few local businesses export honey to various markets. Exporting, particularly breaking into markets and getting repeat orders, is a hard and costly business. Those who have been exporting for many years are seeing sales grow, with sales of multifloral mānuka growing as well. Many smaller beekeeping businesses in our region are

new to exporting and see this as a way to build their businesses for the future. They will be looking for all the help they can get.

Local beekeepers are interested in seeing and participating in the Industry Summit in Waikato. The big thing for them is to get past the talk and see some concrete results from the development of the strategy that will build business confidence. As this column is being written before this meeting, we hope there will have been productive talk to see some concrete steps forward.

It has been suggested that participation in ministerial trade delegations into some of our important markets would be a good way for small and mid-size enterprises, like many in our region, to build credibility and footholds in new markets. This might be one way of walking the talk.

Normally with each column we would have a photo of a seasonal flower in bloom. However, developing new markets, including export markets, are front of mind for many local beekeeping businesses. For this reason, our photo this time is of a daily scene in an Asian market rather than the customary seasonal flower.

- Barry Foster

HAWKE'S BAY

It's winter so there's not a lot to write about as far as beehives go.

We have finally had some rain with parts of the Hawke's Bay being seriously dry for this time of year.

Most beekeepers seem pretty happy with the past season although bush areas were not as productive as clover pastures, which were exceptional this year.

Recently we had a packed meeting of local beekeepers, at a venue kindly provided by Arataki Honey, for a talk by Dr Melissa Oddie. Dr Oddie is a Canadian bee scientist friend of mine who has been studying varroa tolerance in Norwegian bees. Most of her research is available online and I recommend it to anyone trying to improve varroa tolerance in their own hives.

There is still a lot of debate about whether resistance to current treatments is happening in New Zealand or not but in the Hawke's Bay, the old practice of just treating with synthetics twice a year is no longer guaranteed to keep hives healthy, or even alive.

- John Berry

NELSON

With winter setting in, hopefully beekeepers are getting a bit of rest.

We had a good discussion group at St Arnaud, Nelson at the end of May that was well attended. Marco Gonzalez from the AFB Management Agency spoke, as well as Jane Lorimer from NZ Beekeeping Inc, on some of the issues we need to look at to unite us more.

The top of the south has had good weather through the fall and into winter with hives wintering heavier than usual, especially on honeydew.

It's nice to see some increase in honey prices this season. Every bit helps. It was good to see that varroa did not hit us as hard as last season and, combined with a better honey yield, this has helped us a lot.

- Jeff Lukey

WELLINGTON

Autumn in Wellington has been warm and dry and bees have been flying. Even though they are bringing in only a little pollen and nectar at this time of year, the queens have kept on laying and bees are using up their honey stores. Beekeepers will need to be checking honey stores and making sure the hives are heavy enough to get through the winter. Some beekeepers are already feeding.

Plants that are flowering at this time of year are tree lucerne, black wattle, banksia, Spanish heath and rosemary. Kohekohe is also flowering and attracting the tui. I'm not sure if bees go for this in the darker bush though.

At the May meeting of the Wellington Beekeepers' Association we had our honey competition. There was a very good turnout this year: 14 liquid honey entries, 15 creamed honey entries and one comb honey entry. It was good to see so many people entering the competition, including lots of new members.

Comments from the judge (Frank Lindsay) were that some of the liquid honey had too much water and competitors should use a creamer to get a smooth creamed honey, rather than let the honey cream naturally.

The winner of the Bodmin Cup for the best honey was Christine Gregory.

- Jane Harding

Right: Wellington Beekeepers' Association honey competition overall winner Christine Gregory (left) with competition judge Frank Lindsay. Photo supplied.



Kowhai. Photo: Barry Foster.



WEST COAST

The shortest day is only a couple of weeks away, and then the new beekeeping season starts. As that shortest day passes, hives will really start brood raising. We will certainly need to check around to see how the stores are looking. I am expecting to feed a lot of sugar this spring and this follows on from a very hungry autumn.

At most sites, the honey flow stepped before the end of January. Normally,

a trickle of honey continues, and this becomes winter stores. That did not happen, and we fed more sugar than ever before. Two feeds of 10 litres adds up to a lot of sugar and some hives just kept on brood raising, and still are light.

The hives generally look good, bee strength is good and hives are healthy. Away from the areas of higher population of beehives, the varroa hasn't been too bad. I have seen a few continued...

WEST COAST (Continued...)



Wintering hives in Harihari, West Coast.

Photo: Bruce Wardle.

viral-affected hives that I suspect won't make it through the winter but not enough to make replacing hives the big job for spring.

For the first time I can remember I have no staff, as they are all overseas enjoying the post-COVID era freedoms. Between that and short days, I am falling behind with the everyday autumn tasks that need doing. I did manage a day out in the field checking hives last week. Some already have a few frames of brood and the pollen was pouring in on the warm afternoons. The gorse is coming into flower well as I write in June, yielding most of the pollen. It is warm enough to top up sugar feeders so I fed a few, thinking that may buy me a little time in the early spring in some apiaries.

The weather has been great overall. I think May was the driest on record for the central West Coast. We've had a couple of frosts so maybe winter is on the way, but it never gets really cold close to the sea. Rain is more of a problem here on the West Coast for beekeepers, but I am looking forward to the new season. Last season was hard work for a below-average crop for us, so I am sure we are due for an above-average season!

- Bruce Wardle

SOUTH CANTERBURY

Beekeepers in South Canterbury were 'hot under the collar' when TV One aired its (one-sided) story featuring the pile of burning AFB-infected honey supers. South Canterbury beekeepers support the AFB Pest Management Agency and are grateful for their approach to rid New Zealand of American foulbrood. Since that article our New Zealand honey buyer has been fielding questions from overseas asking, "Is AFB in the honey we buy?" "No," they replied, "our beekeepers are good beekeepers".

More than 99 percent of New Zealand beekeepers comply with AFB pest management rules. One South Canterbury beekeeper, noting the New Zealand Bee Care Code, appropriate monitoring, prevention activities and appropriate treatment, believes we could eliminate AFB if we all played by the rules.

It is a small world nowadays and news gets around fast—the good and, more often, the bad. Let's try not to shoot ourselves in the foot, especially when our industry, like many other agricultural sectors, is going through tough times.

It was a fairly slow end to the season in most parts of South Canterbury. The big dry continued into the autumn months and growth was minimal or nil. Around the foothills and in the Mackenzie Basin we fed more than normal, but further east catsear bloomed well and helped keep the feeding bill down.

One beekeeper I spoke with said varroa continued to be a pain in the butt and a second autumn treatment was necessary. They were expecting to fog at least twice over the winter. Others said varroa was under control this year. We found it to be a hundred times better than last year, thank goodness. Our apiary's bees were looking healthy going into the winter.

Most beekeepers have sold their crop. There has been a very slight price increase on last year.

Words like "quit the bees, downsize, sell up and retire" are being bandied around. A reflection perhaps on where our industry is at and, of course, some of us are getting old! But a couple of young beekeepers, both of whom are taking over their parents' businesses, still have much passion for bees and honey.

"Wouldn't want to be doing anything else," said one. He has shut the bee shed door, put on his tool bag and gone building for the winter to make ends meet. The other believes "things are going to come right very soon".

Downtime has come bringing opportunities for winter projects, some travel at home and abroad, less staff/no staff, more time for the kids and grandkids, or enjoying doing not much at all.

- Ali Bell

BEE AWARE MONTH

EVERY SEPTEMBER WE ENCOURAGE BEEKEEPERS TO SHARE THE WONDER OF BEES WITH THE NEXT GENERATION.

If you have an educational activity planned you'd like us to advertise, or would like some ideas on how you could share your love of bees with your community, please get in touch: info@apinz.org.nz

For free downloadable educational resources visit: https://apinz.org.nz/bee-aware-month-resources/

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ABOUT THE APIARY

It's about planning and working into the new season

Barry Foster

Depending on where you are in the country, the three-month period from July to September is a period of awakening out of winter, followed quickly by a (hopefully) exponential growth in hives provided they have the food and a reliable queen to do so.

he further south you are during this period affects the extent of the winter hiatus until the increasing warmth and daylight hours during October bring on spring flowering and increased activity within hives. Wherever you are, this three-month period is crucial for the health of your bees, the seasonal production from them and the ongoing benefits that you may derive.

Where I live, in Tāirawhiti on the East Coast of the North Island, this threemonth period is often one of the wettest of the four seasons and one where bee losses from starvation are often most acute, particularly among unwary beekeepers. You might think that you have enough stores on your hives as you go into winter, but many of your losses can and do occur in spring

as there are increasing demands on supplies of pollen and nectar for brood rearing. Couple this with high numbers of bees and brood in a hive with low stores and a sudden cold snap and you can very quickly end up with dead hives. Any sudden changes in temperature can cut nectar production at a crucial time of the year, which can, in turn, lead to starvation and hive collapse for the unwary. It pays to plan carefully during this period and regularly make careful checks on the weather. I will break down this period by month.

JULY

Check hives are safe, dry and in sunny locations. The best locations should have been chosen when you last moved your hives, bearing in mind the critical elements that make good apiary sites: sunny aspect, good air drainage,

shelter from cold southerly winds, available forage, and good access. Check that farm animals such as young bulls haven't been using your hives as a scratching pole and, in doing so, knocking the boxes out of line or, worse, tipping hives over so they might get robbed out and lost. I always strap my hives down onto pallets over winter for this reason. Being on pallets means that they are raised above wet grass and therefore will be drier and will use fewer stores.

It's always good to do an initial round in mid or late July with just an external check of hives. Add feed where necessary. Lifting the hive from the back is a reasonable indicator of levels of stores inside, once you get used to it. Occasionally check inside to help calibrate what feels like a reasonable weight for the hive. If in doubt, feed it. I usually give mine four litres of inverted sugar, preferably in late July/early August, just as pollen sources such as long-flowering species like tagasaste begin to flower.

I prefer inverted sugar because the bees don't have to use up precious body fats and energy to invert the sugar to make it consumable for them. Make sure that you have natural pollen or protein patties in hives when you feed as your bees will require protein—preferably natural protein along with the carbohydrates you feed them in the sugar. Natural pollen has immunebuilding attributes for honey bees that artificial protein sources don't emulate.

Build your skill base—attend business education courses, read, go to Hub meetings and discussion groups. Right now, as the industry is going through tough economic times, it is the right time to plan and enact new directions if you haven't already done so. These







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Cherry blossoms planted for bee forage.

could include lifting your business skills and improving your business networks. It's a time to work **on** your business not **in** your business. Reflect, learn, develop new skills, and engage with others.

One of the most useful short two-day business courses I have ever done out of Auckland University School of Business is called *Negotiation Skills* (see link at the end of this article). All too many beekeepers tend to be price takers. Attitude is critical. Remember everything is negotiable, all of the time. It's a four-step pathway involving preparation, information exchange, explicit bargaining, and commitment. It's not always all about price.

Get ready for the next season. Do those repair and maintenance jobs. Check vehicles for warrants of fitness, COFs, and any maintenance required. Some items that often get overlooked are fire extinguishers, first aid kits and certificates. If you have pollination contracts, call on growers and discuss the forthcoming pollination season and their requirements.

Last, but not least, if you haven't planted any trees for bees, get them in now. This really is about changing your thinking to being more future-focused and engaging with long-term planning. If you get nutrition right, and preferably naturally-derived nutrition, then you will have much healthier hives.

Those relationships with landowners are all important. There is nothing quite like planting some trees on their land, with their consent and their help, to really make for good enduring relationships with landowners. Remember, we are landless farmers and good relationships with landowners are critical to our success. Carefully pick your landowners for this investment and you won't regret it.

Have a holiday. It's important to take a break if you haven't already done so through the winter.





Barry's back-saving hive stand.

AUGUST

The purpose of the first inspection, whether it's in August or September, is to clean up the hive, inspect for disease and to assess the laying pattern of the queen, as well as assess stocks of honey and pollen in the hive. I usually first walk around an apiary and observe the comings and goings at each entrance and mark any that have no or low activity by placing something like a branch on the lid. This gives me a quick assessment of the entire apiary.

I look for good amounts of pollen coming into the hives along with bees with distended abdomens, indicating that brood development is well under way. I also make sure that there are mature drones around before doing my full spring inspections, just in case you kill the queen—with drones around the hive has a chance to make a new queen. Then, starting at one end of the apiary, I begin by opening all the hives.

I have made up a metal stand out of 25mm angle iron (see photo below) that has served me well, saving my back from lifting heavy full-depth boxes from ground level. I run my hives on pallets, and I made this stand to match the height of the second brood box on the pallet.

I winter my hives as doubles. To inspect, I first give the hive a little smoke in the entrance and under the lid. Then I open a hive and place the lid upside down

continued

As this edition was being prepared for publication, severe weather hit the upper North Island again. If this has impacted your beekeeping operation, there are places you can go for help. Visit MPI's Getting help during natural disasters webpage or ApiNZ's Health and Wellbeing webpage for more information.

The deadline for receipt of advertising material is 12 Sep for the Spring publication! If you are advertising, mark this in your diary and make sure you don't miss it!



on the ground away from the entrance with the top feeder on top of it. Then I crack the second box clear of the first box and shift the weight sideways onto the stand without bending my back much at all, minimising the risk of a back injury.

Often the bees are in the second box and the bottom is clear. Even so, I always start at the bottom box and gently remove the second frame from the outside, first easing it apart from adjacent frames so that it comes out without prising the top bar off in most cases. First frames are often stuck to the inside edge of the box and are more difficult to remove. I use plastic frames, but you can still break frames by using too much force at this stage. Taking out the second frame first makes it easier to work across the brood box, easing out frames to inspect them. A good technique is to loosen up the frames first in groups of three across the box and then start inspecting from the far side, working towards yourself. This also helps to prevent rolling the queen. Inspect every frame of brood for American foulbrood (AFB) after first shaking all the bees off into the bottom box and floor so that you have an unobstructed vision of all of the brood. Replace frames in the same pattern as you took them out, leaving the brood nest intact. This way you can find singlecell infections of AFB (see 'September' section for further detail).

Underneath cell cappings you should see pearly coloured pupae inside the cells that have good visible segmentation and sitting head upright in the cell. Mark any hive that might be suspicious and record to come back and check again or get a test done. I often record on the lid the number of brood frames in a hive at this stage as it helps indicate the strong and weak ones for later splitting or feeding. I tend to only shift frames between hives on one pallet rather than between pallets. Record the origins of any splits both on the split and the parent hive in case tracking is required later. I use a combination of site name and date/number for this.

Now is also a suitable time to monitor varroa levels. I use a sugar shake for monitoring. Record varroa numbers before and after treatment in your truck

book, hive lid or hand-held device, to confirm the efficacy of treatments. I introduce varroa treatment at this stage (early August). I do another round of the apiaries, soon after all inspections, to place in treatments, ensuring that everything is done at the same time.

SEPTEMBER

August and September, at least in the North Island, is about inspection time. Firstly, inspecting for AFB, queen rightness, stores, bee numbers, swarm control and all those other clues we look for when inspecting a hive. These are the kind of things that become second nature with experience.

Secondly, you need to see if the queen is laying. If you can see eggs, then that's good news; you do not necessarily need to find the queen unless she needs replacing. Next, look at your brood. What you want to see here is sealed brood in the centre, with uncapped larvae and eggs on the outer edges and very few open cells. If there are a lot of uncapped cells amongst the capped brood, then you need to order or raise a new queen.

Finally, look at the young larvae. There should be good amounts of royal jelly for them to float in. If the larvae are looking dry, then the hive is lacking in pollen. You can fix this immediately by feeding a pollen supplement. Do not consider putting foundation frames on until you can see white waxing on the hive frames, as this indicates there is a honey flow on.



American foulbrood (AFB) ropiness test. Photo: The AFB PMP Management Agency.

CHECKING FOR AFB

It is vital to familiarise yourself with the visual symptoms of American foulbrood before you inspect your hives by first visiting the 'Recognising AFB' section of the Management Agency website at https://afb.org.nz/visual-symptoms-of-afb. I would also recommend that you download the AFB app onto your phone as an in-the-field resource to aid in recognising AFB.

Two things are of critical importance with good AFB control when inspecting hives:

- 1. Shake all the bees off all the brood frames being inspected as you cannot hope to find low-level, single-cell infections of AFB if bees are still on the frames you are looking at.
- 2. Check all brood frames for AFB.

Do not be lured into just checking a sample number of frames. The more frames you inspect, the more likely you are to not miss any AFB infections that may result in spreading the infection further.

If there were a third thing, I would say make sure that you can see freshly laid eggs. If you need glasses, make sure you wear them when doing inspections; otherwise you are liable to miss the signs of AFB.

If you can do these two things, then you are likely to have good AFB control and pick up early stage infections as they may occur. I would also recommend that if you haven't done a course on AFB that you register for and do an AFB recognition course or an AFB refresher course. Again, these are available through the Management Agency website https://afb.org.nz.

If you find American foulbrood, close the hive and disinfect your gear. This means scorching your hive tool and washing your gloves and smoker bellows in a bucket of water with detergent and a scrubbing brush. Notify the Management Agency through its website and destroy the hive, all within seven days. Check with other beekeepers if you are not sure or take a sample of infected brood for testing. Once again, check details on how to go about this on the Management Agency website.



Willow branch in flower. All photos by Barry Foster unless stated.

Raising cells in September.

Do not burn your infected hives and gear on the local beach. Check for any potential nuisance to others from the fumes. Check with your local council about seasonal fire regulations and permits before destroying hives. Much of this can be done online.

Always keep in mind that you are looking for any exotic pests or diseases, particularly during important seasonal inspections like these. Always keep a cell phone handy to take a picture and a zip lock plastic bag and container in which to place samples of bees and brood. Call the MPI Biosecurity hotline on 0800-809-966 if you are unsure and wish to report something. This number is monitored 24/7. Or you can use the MPI Biosecurity website to report any suspected diseases or pests: https://report.mpi.govt.nz/pest/.

It is far better to err on the side of caution than miss something important.

SWARM CONTROL

Good swarm control is about giving the queen adequate space to lay and having a new queen. It is also about being mindful and preparing for upcoming flushes of nectar in the area that can trigger swarming such as from willow or citrus, depending on where you live.

August and September are when willows are coming into full flower. Willows provide good nutritious pollen at a scale that makes them a critical source of pollen and nectar to build up your hives.

More likely than not, by September the brood nest will have followed the honey up into the top super and bees will not want to move down to lower supers.

Swapping around the top and bottom supers will give the bees space above to move into, thereby reducing the likelihood of swarming.

VARROA CONTROL AND MONITORING

Most will have started treating for mites either in August or this month. It is important to rotate your treatments. However, whatever method you use for varroa control it is becoming increasingly important to monitor before and after treatments. See chapter five in *Control of Varroa: A Guide for New Zealand Beekeepers*, by Mark Goodwin and Michelle Taylor, for more details. Re-invasion of mites could be an issue that you may not be aware of, or what you use to control mites might not have been as effective as you thought it might.

Good monitoring of hives is vital.
Successive New Zealand Colony Loss
Surveys conducted by Manaaki Whenua
-Landcare Research have shown
that far too many beekeepers are not
monitoring levels of varroa in their hives
or are relying solely on visual inspections
of bees to determine mite levels.
We must improve our monitoring;
otherwise, at some point, we risk having
unexpected large-scale losses of hives
to varroa that we did not see coming.

Auckland University Business School short courses: https://www.exec.auckland.ac.nz/programmes-and-courses-for-individuals/short-courses/

Dnature Diagnostics & Research Ltd—AFB DNA Foster method swab test: https://dnature.co.nz/product/american-foulbrood-afb-foster-method/?v=8e3eb2c69a18

THINGS TO DO IN JULY:

- Check over equipment for the coming season. Check drawn supers for wax moth and vehicles for maintenance, if not already done. Make up new equipment, as necessary. Wax dip equipment to refurbish or protect it.
- Plan to work *on* your business not *in* your business.
- Budget for the coming season.
- Check on pollination contracts for the coming season.

THINGS TO DO IN AUGUST AND SEPTEMBER:

- Hive inspections. Inspect all brood frames for AFB and check for laying queens and laying patterns. Replace queens, as necessary.
- Check availability of stores of pollen and nectar. Feed as necessary and check on what will flower next in the area and when. Aim to fill in the gaps in nutrition with future planting next winter.
- Do early varroa control if not already done and monitor before and after treatments.
- Check for swarm control and split hives, as necessary.
- Raise queens or purchase them as required.
 - Take part in Bee Aware Month this September by visiting schools and taking part in other activities.



APICULTURE NZ CLUB CONTACTS AND SPECIALTY GROUPS

WHANGAREI BEE CLUB

www.whangareibeeclub.co.nz

Meets on the first Saturday of every month at 10 am at the Whareora Hall on Pataua North Road, Whangarei.

President - Nick Watkins

E: n.i.watkins@hotmail.com

Secretary - Vincent Lane

E. wbccommunication@gmail.com

AUCKLAND BEEKEEPERS CLUB

www.aucklandbeekeepers.club.org.nz

Meets second Saturday of the month from 11am at: Gribblehirst Park

5 Cabbage Tree Swamp Drive, Sandringham, Auckland 1025

Please send all correspondence to: PO Box 44-427, Pt Chevalier 124, Auckland 1022 or email: admin@aucklandbeekeepersclub.org.nz

President - Ken Brown

P: +64 21 088 01700

RODNEY BEEKEEPERS CLUB

www.rodneybeekeepersclub.co.nz

Meets the first Wednesday of the month, 7.30pm at: St. Matthews Lounge, Garfield Road, Helensville.

All welcome.

President-lan Harris

P:021 910 724

E: ian_harris@sapienter.co.nz

Secretary - Barbara Ryan

P: 021 238 2935

FRANKLIN BEEKEEPERS CLUB

www.franklinbees.co.nz

Meets the second Sunday of the month at: The club hives at 137 Sim Road, Paerātā

10am - midday. Visitors welcome.

Secretary - Kylee Howe

E: secretary@franklinbees.co.nz

ROTORUA HONEY BEE CLUB

www.rotoruahoneybeeclub.co.nz

Please send all correspondence to: 45 Keith Road, Ngongotaha, Rotorua RD7 3097

Chair - Pauline Spear

P: +64 21 022 80591

E: pauline.spear@xtra.co.nz

Secretary - Sharron Pope

E: rotoruahoneybeeclub@gmail.com

TARANAKI BEEKEEPERS CLUB

Meets 3rd Monday of every month at: West Baptist Hall 144 South Road, Spotswood, New Plymouth.

President - Wayne Brownson

P: +64 27 208 3664

E: taranakibeekeepers@gmail.com

WAIKATO DOMESTIC BEEKEEPERS ASSOCIATION

www.waikatobeekeepers.org.nz

Meets every third Thursday of the month at 7.30pm at: The Cosmopolitan Club, 32 Claudelands Rd, Hamilton

President - Crystal Lange

E: president@waikatobeekeepers.org.nz

Secretary - Corey Regnerus-Kell

E: secretary@waikatobeekeepers.org.nz

BEEKEEPERS HAWKE'S BAY INCORPORATED

Meets first Thursday of the month, 7 pm at: EIT Rooms, Meanee Rd, Taradale. New members are welcome.

President - Robyn Gichard

P: 06 858 7833

E: robynandgg@gmail.com

THE BUZZ CLUB OTAKI

Meets every third Wednesday of the month at 7 pm at: Waitohu School Hall. Te Manuao Road. Otaki

President - Mike Noon

P: +64 21 659 704

Secretary - Thomas Reisinger

E: thebuzzclubotaki@gmail.com

WELLINGTON BEEKEEPERS ASSOCIATION

www.beehive.org.nz

https://www.facebook.com/wellingtonbeekeepers

Meets first Wednesday of the month (except Jan) at: Johnsonville Community Centre Main Hall, Moorefield Road, Johnsonville

6.45 pm Beginners' session, 7.30 pm main meeting

President - Tricia Laing

P: +64 27 4766540 E: tricialaing48@gmail.com

Secretary - Jane Harding

P: +64 4 499 4123 / +64 27 421 2417

E: info@beehive.org.nz

MARLBOROUGH BEEKEEPING ASSOCIATION

www.marlboroughbeekeepers.co.nz https://www.facebook.com/MarlboroughBeeKeepers

Meets the last Sunday of the month at 2 pm at: NMIT carpark, off Budge Street, Blenheim.

Chairperson - Dion Mundy

P: 021 226 8327

E: marlboroughbeekeepers@gmail.com

NELSON BEEKEEPERS CLUB

www.nelsonbeekeepers.org.nz

Meets first Tuesday of the month, Feb-Dec inclusive, 7-9pm. Waimea Lounge, Nelson A&P Showgrounds, Lower Queen Street, Richmond.

Secretary - Mary Dowie

E: tasmanbees@gmail.com

NORTH CANTERBURY BEEKEEPERS CLUB INC.

www.ncbeeclub.org.nz

Meets second Sunday of the month at Eyreton Hall, corner of Mandeville Road & South Eyre Road, Mandeville.

President - Gerard van Kuppevelt

P. 03 312 6966

Secretary - Grant Stalker

P. 021 899 516

E. ncbeeclub@gmail.com

CHRISTCHURCH HOBBYIST BEEKEEPERS' CLUB

www.chchbeekeepers.org.nz

Meets the first Saturday of the month, 9.30am to 12.30pm. 681 Cashmere Road, Hoon Hay Valley

President - Josephine Winter

E: chch.beekeepers@gmail.com

DUNEDIN BEEKEEPERS CLUB

www.dunedinbeekeepersclub.org

President - Brian Ellis

M. 027 460 5985

Secretary - Chris Hinton

 $\hbox{E.\,secretary} @ {\tt dunedinbeekeepersclub.org}\\$

SOUTHLAND BEE SOCIETY

www.southlandbeesociety.co.nz

Lindsay Affleck

P: +64 3 214 0304 M: +64 27 283 7575

E: lindsay.affleck@cvc.co.nz

Contact info@apinz.org.nz. Please also send any changes or additions to: editor@apinz.org.nz

NB: listings on this page are limited to clubs and groups that are financial members of Apiculture New Zealand.



APICULTURE NEW ZEALAND (INC). BOARD REPRESENTATIVES

NATHAN GUY (INDEPENDENT CHAIR)

M: +64 21 618 498 E: nathguy@xtra.co.nz

MURRAY ELWOOD (C)

+64 27 496 7623 muzzbuzz2602@gmail.com STU FERGUSON (C)

+64 21 526 555 stu@hunter-reilly.co.nz

LISA NICHOLSON (C)

+64 21 243 1676 Inicholson@prolife.co.nz **SEAN GOODWIN (M)**

+64 21 872 583 Sean.Goodwin@themanukacollective.com

TONY WRIGHT (M)

+64 21 386 710 tony@umf.org.nz

M (MARKET), C (COMMERCIAL), N (NON-COMMERCIAL)

APINZ REGIONAL CONTACTS: First named is President/Chairperson. The second named is Secretary.

NORTHLAND AUCKLAND

Interested parties wishing to start a regional hub, please contact the ApiNZ Communications Coordinator E: info@apinz.org.nz or P: +64 4 471 6254

TAIRĀWHITI

Barry Foster P: +64 6 867 4591 M: +64 27 449 7131 E: bjfoster@xtra.co.nz

Steve Jackson P: +64 6 867 9290 M: +64 22 069 9283 E: steve@jplusb.co.nz

HAWKE'S BAY

Brian Cowper
P: +64 6 836 5225
E: beekeepershbinc@gmail.com

Dave Hills P: +64 6 836 6324 M: +64 21 0782 041

NELSON

Murray Elwood 259 Main Road Spring Grove RD1 Wakefield 7095 P: +64 3 541 8929 E: info@mountainvalleyhoney.co.nz

Nicky Elwood 259 Main Road Spring Grove RD1 Wakefield 7095 P: +64 3 541 8929

E: info@mountainvalleyhoney.co.nz

CANTERBURY

Hub Management Committee
Carolyn McMahon, Nick Taylor, Marco
Gonzalez, Gary Glasson, Alex Eason,
Claudine McCormick, Andrea McGill,
Reagan Martin
www.apinz.org.nz/clubs-and-hubs/
canterbury-hub/
E: apinzcanterbury@gmail.com

LIBRARIANS

Roger and Linda Bray
Braesby Farm, RD 1, Ashburton 7771
P/Fax: +64 3 308 4964
E: birdsnbees@xtra.co.nz

APIMONDIA OCEANIA COMMISSION

John Caldeira, President (italics)
PO Box 224
Rakiraki
FIJI
P: (+679) 907-1247
E: john@outdoorplace.org

Maureen Conquer, Vice President/NZ representative $M: +64\ 21\ 956\ 349$

PAUL MARTIN (N)

perenphord@xtra.co.nz

027 262 9566

E: maure en @wildforage.co.nz

THE NZ HONEY INDUSTRY CHARITABLE TRUST

Administrative contact:
Michelle Valler, Chairman of Trustees
Baker Tilly Staples Rodway Hawkes Bay
T +64 6 878 7004 M +64 27 4715 148
205 Hastings Street South | PO Box 46 |
Hastings 4156 | New Zealand
E: Dave.Sawers@bakertillysr.nz

Contact for Funding Applications: The CEO, Apiculture New Zealand PO Box 10 414, Wellington 6140 P: +64 4 471 6254 E: ceo@apinz.org.nz Innovation & reliability from start to finish.









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