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Em

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HONEY BEE RESEARCH & DEVELOPMENT COMMITTEE (HBRDC)

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PRESIDENT'S REPORT



SEASON

Last report I stated that little production was expected during Autumn, but as nothing is a given in primary production , Mother Nature had other ideas and provided some extractable surpluses from eucalypts that normally don't yield unless there is a general budding. White gum (E.Rossi) was sparsely budded but is currently yielding enough surpluses to provide good winter stores and fresh bees which should enable hives to enter next Spring in reasonable condition.

There are some small pockets of Spotted gum on the south coast still holding bud for this winter but if the forecast cold wet winter eventuates, hives working this source may suffer greatly. With this in mind please consider your peers and the environment by not overstocking sites.

Early Spring production will depend on substantial rains falling over cropping areas in the coming weeks

RESOURCE

Nick Geoghegan will head the Department of Primary Industries (DPI) support desk. His official tittle is Program Coordinator Apiculture Resource Access. Nick has started part time and transitions to full time employment in April.

Doug Somerville and I took Nick on a field trip on March 8 and 9 to highlight the problems apiarist's are having with access to sites and resource destruction on public lands. We also gave Nick a tour through my family apiary operation. At days end I would suspect Nick was suffering from information overload but I believe the insight into our industry will prove invaluable in the development of the Apiary Support Desk.

MEETINGS

On March 2nd I met with Mick Veitch the Shadow Minister for Primary Industries. We had a lengthy discussion around apiary sites on public lands and the possibility to legislate on apiary policy and the support desk that will manage access issues. Other areas discussed were retention of DPI Apiary staff and future access to areas previously lost to industry. If our industry can gain bipartisan support for continued public land access we will be one step closer to having a sustainable future.

I will be seeking a meeting with Minister Blair to further our cause as soon as possible.

EXECUTIVE

Our secretary Ros has received several nominations for executive council.

Nominations received to date are from myself and both Debbie and Malcolm Porter. Thank you to Debbie and Mal for your support of your association. We still require at least one further nomination to fill vacancies so please send a completed nomination form to be received by our secretary 3 weeks prior to our June 23 AGM.

Past President and current councillor Casey Cooper has been experiencing a few health issues and on behalf of the Executive and members I extend our support and well wishes to a speedy recovery.

MEMBERSHIP

Our new website is up and running albeit with a few teething problems. Please bear with us as these technical issues are overcome.

Some members have had no problems with their online renewals while others have experienced difficulties.

For members that have had not been able to or do not wish to utilise the online payment system , hard copies will be mailed out towards the end of March or early April.

2018 AGM

For members wishing to attend our AGM on June 26 at the Royal Pines on the Gold Coast, registration is required but will be free. Details for registration will be on our website soon.

Any Notices of Motions will need to be forwarded to our secretary no later than June 20. Forms are on the website. Motions from the floor will only be accepted if time permits.

I urge all members travelling to the 3rd Australian National Congress to attend our AGM.

In 2019 we will return to our normal conference format and holding it in Bathurst in May.



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MOMINATION FORM - EXECUTIVE COUNCIL

NOMINEE (Person you are nominating)	
Name: (description and)	Member No:
I hereby accept this numination.	Signed:
NOMINATOR	
I	(مداده والأسلامي سرب اسم)
	Signed:
SECOMDER	
Name: (descript series are)	Member No:
bereby second the numination of the person listed above as NSW Apiarists' Association Inc. Executive Council.	the Nominee for a position on the
	Signed:
 No secular of the Association shall be objects for electrics to the Proceeding Council a Formula Mandar for at least two securion years inconficially point to the date of 	
 Each number shall be abstract for a 2 year term and most ratios form of the second of displace, may mak responsionent. 	and Continues held at the soil of such 2 year term,

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By Post to: NSW Apianists' Association, P O Box 5022, South Tamworth NSW 2340

Or Email to: info@nswaa.com.au.

This form to be submitted no later than three weeks (3) prior to the AGM.

BEE INDUSTRY BIOSECURITY CONSULTATIVE COMMITTEE

Meeting 14th March 2018 Summary

Small Hive Beetle (SHB) is being taken off the notifiable pest list (legislation takes time) NSW DPI have given an undertaking that they will take no action over non reporting of SHB and Nosema.

DPI are looking at Honeybee Pest & Disease refresher courses for all DPI Honeybee compliance officers. Five new officers completed the course at TOCAL Feb 2018.

DPI have budgeted in FY 18/19 for Industry Response Team training. This will entail training beekeepers throughout the state to be able to assist with an event/incident.

Elizabeth Macarthur Agricultural Institute (EMAI) at Camden are keen to be the 'Australian Reference library for Honeybee Diseases.'

EMAI are keen to expand diagnostic facilities to meet increased demand. This will be important when NSW adopts the National Code of Practice where honey sampling is mandatory for all beekeepers with more than 50 hives.

DPI are conducting a Varroa mite exercise in May 18.

The BIBCC are conducting an AFB workshop in the near future.

NSW DPI will be issuing Beekeeper Registration certificates for all new registrations and renewals valid for two years. This will make it much easier for the Amateur Beekeeping Associations to ensure that their members are registered.

NSW DPI have conducted three major beekeeper operations this financial year. At almonds, then blueberries on the north coast and at Orange in the central west.

NSW DPI have undertaken to ensure that the Head Honeybee Compliance Officers (Mick Rankmore) position will be not left vacant even when Mick takes Long Service Leave.

NSW Beekeeper Registrations as @ 13 March 2018

NSW has 6,812 registered beekeepers of which 5,997 are recreational beekeepers.

There are 620 commercial beekeepers with more than 10 hives. Plus there are 195 beekeepers that are registered as commercial beekeepers but have less than 10 hives.

Registration Fees (for two years)

\$366,822 has been collected Commercial above 10 hives = \$55,800.

Commercial below 10 hives + recreational = \$311,022.

For Recreational beekeepers with 1-5 hives which the NSWAA is recommending free registration the DPI collected \$ 228,924. This is 62% of total receipts.

Allowing Recreational beekeepers with less than 5 hives **free registration** will result in better biosecurity outcomes. Which is why this is the NSWAA recommendation. The reality is that DPI is unlikely to recommend this to the minister due to the loss of recreational beekeeper registration income.

Steve Targett BIBCC.

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DOUG'S COLUMN

Doug Somerville Technical Specialist, Apiculture - NSW Department of Primary Industries - Goulburn doug.somerville@dpi.nsw.gov.au



30 years and counting

Back in 1987 (April 27th to be precise), I started my employment with the government as the "bee man".

The bee man title is purposely obscure, as my job has changed several times but I still remain the bee man (possibly not politically correct these days - should be the 'bee person').

The time frame is also a bit out of date. By the time this article goes to print, it will be 31 years. On a few occasions my achievements have been acknowledged by the beekeeping industry. Recently my work colleague highlighted my career; Elizabeth Frost held a surprise morning tea at Tocal Ag College the day after the most recent NSW Apiarists' Association executive meeting at the same location. This made me think that writing on a few points reflecting on this journey may make an interesting article.

Spending 30 years with the one employer is becoming a rare event, unfortunately. I say unfortunately, as I believe it takes several years to really get your head around an industry and all its parts. Plus, I believe the cascade of name changes:

- Department of Agriculture
- Department of Agriculture & Fisheries
- NSW Agriculture
- NSW Industry and Investment
- NSW Department of Primary Industries

while amusing to outsiders, has been just noise, as long as the industry has the same staff to deal with within the system.

In 1987 there was a stand-alone beekeeping section which covered all aspects of the services provided to the beekeeping industry. This was comprised of six members - one to each region of NSW. Half the role of the Apiary Officers was AFB inspections and the remainder was advisory/extension, with minor roles in education and research.

In the early 1990s the regulatory role was removed from this group, including myself, and given to the multiskilled regulatory officers. This allowed the bee group to delve more into the education and research areas than before.

For me, I embarked on documenting the floral resources used by beekeepers. This involved surveying all the beekeepers using the 25 NSW Forestry districts across

the state. A major body of work culminated in the publication of 25 separate reports, one for each district and finally with a publication in the Australian Forestry journal "The primary melliferous flora and other aspects associated with beekeeping within State Forests of NSW as determined by surveys of beekeepers".

Then a study on the state floral resources, project title Floral Resource Database for the NSW Apiary Industry, funded by RIRDC (1999). This involved surveying the entire commercial beekeeping industry within NSW. The response was excellent, with an 81% return of surveys. Quite a hefty number, which took some serious lobbying and ground work to achieve.

Somewhere along this pathway I also obtained funding to collect and analyse bee collected pollens to determine their nutritional value to honey bees. The principal attributes were the crude protein levels and amino acid ratios. To a lesser extent, the fat levels and mineral contents were also measured.

This went on for several years and might I say was supported by a number of willing beekeepers who assisted me in these collections. Ultimately the book "Fat bees, skinny bees - a manual on honey bee nutrition for beekeepers" was published by the Rural Industries Research and Development Corporation (RIRDC) in 2005. This publication went on to become the major 'go to' reference on the subject of honey bee nutrition around the world. Still available on the world-wide-web, simply search for 'fat bees skinny bees'.

These projects and others provided me with enough material to submit a PhD thesis in 2004 - "The floral resources of NSW of primary importance to commercial beekeeping" through the Australian National University.

There were many, many other projects conducted during this time on bee subjects, but another theme was emerging. What was left of the bee team (three by 2000), were increasingly being called on to conduct more and more short courses. To start with, they were all based at Tocal. In the beginning we had acetone plastic overheads. It was a major job to produce these teaching aids. Then came 35mm slides, and then 'power point'. This made life easier, but each course we ran was different and we continued to add more photos and images to the presentations.

It was a struggle to get the first DPI book on bees published as the powers-that-be didn't believe there was a market for it. Eventually in 2007 the first Bee AgSkills book was published. This book has been reprinted and up-dated four times since the initial publication and is

one of the best sellers within the DPI book sales. This book was based on a collection of AgNotes/Primefacts written on beekeeping over time, plus the folder of notes handed out at the courses.

Nick Annand and myself compiled and launched the "Pests and Diseases of Honey bees" courses in 2010. These were very popular and eventually an AgGuide on the subject was produced. Then came the AgGuide on "Queen bee breeding" and "Honey production" with the most recent addition on "Pollination".

To parallel this evolution became the need to employ an Education Officer to manage the escalation in demand for formal training in beekeeping. Initially the first officer was Elizabeth Frost, who was quickly joined by Dani Lloyd-Prichard. Elizabeth went on to take over Nick Annand's position as a Development Officer.

While all this was happening, the Biosecurity Division of NSW DPI was solely focused on compliance (AFB inspection work and health certificates). Then along came a concerted effort by the State and Federal beekeeping peak industry bodies to pull together a national approach to bee biosecurity. This got legs and with no small effort from Craig Klingner and Ian Zadow at the time, was sold effectively to the whole industry. Levies became statutory and Plant Health Australia was the organisation identified to coordinate the national program.

Part of this program was the employment of a dedicated Bee Biosecurity Officer, Rod Bourke, industry funded, working within NSW DPI. The functions and jobs changed for each bee biosecurity officer in each state, but even so, there is now stronger support from state governments for bee biosecurity as a result of the industry's collective actions.

More recently Nick Geoghegan was employed to head up the latest addition to the bee team ranks. The beekeeping industry has been, for several years, asking for a simpler system and more user friendly structure around bee sites on public lands. This really got momentum in 2015 with a position paper put together by the NSW Apiarists' Association "Apiary sites on public lands".

Another exciting development is the creation or rebirth of a bee breeding program with Elizabeth Frost as the champion.

I'm conscious that many of the people I deal with have been around longer than me, so lots of my experiences are theirs. But I'm also conscious that there are many new players and what has happened in recent times is their only knowledge and experience so far!

Some other observations worthy of note:

Biosecurity

- EFB came into focus in the mid 70s when I started in bees.
- Chalkbrood in the early 90s, now a major disease of importance.

- SHB in 2002, an obscure pest on the international stage at the time, now well entrenched on the list of major pests of honey bees.
- Nosema ceranae snuck in there somewhere, but its impact is still murky.
- European wasps and cane toads, although they have been around for decades, their impact slowly grows from year to year.

Honey

- The manuka story has exploded, more so in New Zealand than Australia.
- We have gone from storing honey in 27kg square tins, to 44gallon galvanised drums, to 1000 litre IBCs.
- Stainless steel is now the principal material all honey handling equipment is made from.

<u>Flora</u>

- Paterson's Curse has all but disappeared off the radar. Less than 10 years ago, this plant was the number one source of nectar and pollen within the country.
- Blackberries, nodding thistle and scotch thistle have been reduced as sources of nectar and pollen due to successful biological control programs.
- Slow but diminishing demise of desirable eucalypt species across the agricultural landscape, mainly box, ironbark, stringybark and red gums.

Communication

- All the state beekeeping organisations have their own journal/regular publications, 10 years ago this was not the case.
- Email is the means of communicating.
- Older clients still prefer written material, younger clients happy with e-pathways for communication.
- Bombarded with sources of information e.g. "Dr Google" etc. Not always factorial, often opinion based information, but readily available.

What of the future?

While there has been a proliferation of 'new' hive designs and gadgets around the planet, none have really revolutionised or changed the direction of the beekeeping industry.

The speed and growth of technology suggests that this is not going to remain like this over the next 30 years. While we have the continuing threat of exotic mites such as varroa, science is also making rapid headway on how to deal with various issues.

Some topics I think could evolve are:

 remote weigh stations placed on every apiary providing daily data to beekeepers,

- more natural or organic (probiotic) means of dealing with diseases,
- the use of e-noses to detect diseases and pests in hives,
- research around honey as a natural product escalating it into the 'super food' category.

As for the DPI involvement in honey bees, we are in a better place than any point in the last 30 years as far as people resources are concerned.

(Thanks to Vicki Saville for typing my notes and Annette Somerville for proof reading the final article)

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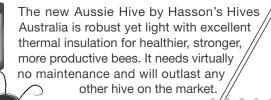
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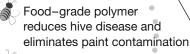
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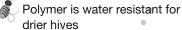
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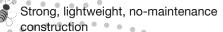
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NSW APIARISTS' ASSOCIATION INC.

ABN: 89 417 216 326

POSITIONS VACANT - EXECUTIVE COUNCIL

At our next AGM we will have several vacant positions to fill on our Executive Council
with a number of our long serving and dedicated Executive Councillors retiring for
reasons out of their control.

This is an opportunity for progressive and passionate members to take on a leadership role within the Association to help drive and govern the direction of the Association now and into the future.

If you are interested in nominating for the Executive Council we encourage you to have a look at our website, chat to a current Executive Councillar or call our Secretary who will happily talk you through the roles and responsibilities.

- There is no doubt that taking on a position of the Executive Council comes with a level
 of responsibility and commitment, however it is important that members understand
 the commitment and responsibilities especially around time and attendance at
 meetings.
- Currently the Executive Council hold 5 meetings per year of which all are face to face, 2 of these meetings are held in conjunction with the annual conference/AGM which means the Executive Council travel to 3 other meetings per year, these meetings are generally 1 to 1 1/2 days in length and the location rotates to ensure travel is fair across the executive.
- Although the silting fees are not paid, the Executive Council are paid a travel allowance and accommodation is supplied by the Association reducing the financial impact on Executive Council members.
- The current Executive Council have been considering online and video link meetings to replace some of the face to face meetings and although this has not happened as yet it is a real option that will be tabled for the Executive Committee to consider.

SUCCESSION PLANNING

- The Executive Council recognise the needs for a strong succession model to ensure the long term sustainability and viability of our Association.
- We recognise that there are barriers and challenges that discourage and prevent
 people from applying to be on the Executive Council and we are asking members
 to provide us with advice and feedback that will allow us to identify these barriers and
 implement techniques to mitigate the issues.
- Your survey will be treated as confidential if you request, the results will be published in a brief report to the members via our Facebook, E-bee and Honey Bee News.
- This is your opportunity to provide advice and information to ensure the long term sustainability of our Association, the Executive Council encourage you to think outside the box and provide innovative solutions to meet your needs, the needs of our members.

To complete the survey go to https://www.surveymonkev.com/n/HVTWVW6 this link is also available on our website and Facebook page.



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Queen Breeding Equipment
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and much, much more....



Australian BEE CONGRESS

27th - 30th June 2018

RACV Royal Pines Resort, Gold Coast, Queensland

Last held in 1988, the Australian Bee Congress is back! For further information and to join the mailing list, please visit the conference website.

www.australianbeecongress.com.au

CONTACT DETAILS:

Jayne Hindle, East Coast Conferences Phone: 02 6650 9800 or 0423 497 038 Email: Jayne **©**eastcoastconferences.com.au

DPI expands team to improve access to apiary sites on public lands.

Nick Geoghegan recently joined the DPI in the new role of Program Coordinator Apiculture Resource Access.

He'll coordinate the implementation of the new policy framework for apiary sites on public land and the establishment of a support desk for apiary site permit holders. The key aim is to make the process for accessing and managing apiary sites easier and more consistent.

"I visited the South Coast recently with Neil Bingley from the NSWAA. We visited some of his sites in Forestry Corporation and National Parks locations on the South Coast. It was great to see some of the challenges and opportunities first hand and to tap Neil's knowledge of the industry. The forests and other public lands are a critical resource for the industry and I'm excited about making it easier for beekeepers to find out about available sites and manage their permits.

Meeting with a number of beekeepers over the last few weeks, I've seen huge interest in the program. We're now establishing the various projects we need to deliver the support desk, the online maps, the notifications systems and other resources to manage the site information and permits. I look forward to bringing Honeybee News

more updates as we roll out the different components of the program."

Nick has recently moved from Sydney to Orange with his family and is making the most of his new location; joining 3rd Orange Scout group as a cub leader and playing a stage role in an upcoming Orange Theatre Company production.

Prior to joining the DPI Nick has held a number of senior roles in the telecommunications and technology sector, with a strong focus on product development, marketing, stakeholder engagement and customer experience. His qualifications include a Masters of Information Technology (USyd) and a BSc (Management) from Dublin University.



NSW AA 2018 Annual General Meeting Tuesday 26 June 2018

The NSW AA 2018 Annual General Meeting will be held in conjunction with the 3rd Australian National

Congress

RACV Royal Pines, Gold Coast, QLD (Members only event)

Date: Tuesday 26 June 2018. 1.00pm - 4.30pm.

Room: TBA

Registrations (Free): Required **BEFORE** 20 June 2018 See nswaa.com.au for registration details

Notices of Motion: Must be submitted before 20 June 2018 See nswaa.com.au for Notice of Motion form

Executive Nominations: Must be received by the Secretary on later than three weeks prior to AGM.

See nswaa.com.au for nomination form.

A minimum of one executive member will not be seeking re-election.





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THE FROST REPORT

Elizabeth Frost Education Officer, Honey Bees Tocal Agricultural College, NSW Dept. of Primary Industries T: 02 4939 8821 M: 0437 731 273 E: elizabeth.frost@dpi.nsw.gov.au



DPI Bee Team and Queen Breeding Project



DPI staff and casual employees who work with bees. From left to right, Back Row: Darren Butt, Nick Geoghegan, Alex Russell, Rod Bourke, Doug Somerville, Mark Page. Front Row: Emma Cottage, Genevieve Leonard, Mick Rankmore, Danielle Lloyd-Prichard, Brianna Callum, Liz Frost, Chris Anderson.

DPI BEE TEAM

Beekeeping expertise and personnel working within DPI is currently at a high point. It's been quite some time since the NSW beekeeping industry has had the quantity of specific positions and personnel in DPI dealing with beekeeping industry related issues. On 22 February 2018 DPI staff leading various projects around the state came together at Tocal College for a planning meeting with the goal in the next few months of producing a Strategic Plan for DPI beekeeping-related compliance, education, research and development activities.

Biosecurity Compliance

In the photo above are four representatives from the Biosecurity Compliance Section: Mick Rankmore (Regulatory Specialist, Apiaries – Gunnedah), Darren Butt (Regulatory Compliance Manager – Orange), Genevieve Leonard (Senior Inspector Regulatory - Paterson), Mick Thompson (Regulatory Officer – Paterson/Sydney Markets). The aim of this section is to protect the beekeeping industry, recreational beekeepers and the public through compliance activities. It is worth noting that additional biosecurity staff are located throughout the state and undertake compliance activities for many additional industries in addition to beekeeping.

Education

Located at Tocal College, Danielle Lloyd-Prichard (Education Officer, Honey Bees) and Brianna Callum (Education Officer) lead the development and delivery of the nationally accredited Certificate III in Beekeeping (AHC32016 qualification). Brianna recently joined DPI as a casual staff member, previously working as an Ag Teacher at Barker College in Hornsby. Key projects for accredited education include: online training course development; delivery of Cert III Beekeeping qualification; and a focus on compliant, credible, current training in a trade level qualification which creates a pathway into the beekeeping industry.

Biosecurity Preparedness & Education

Rod Bourke (Bee Biosecurity Officer – commercial beekeeping) and Mark Page (Bee Biosecurity Officer – recreational beekeeping), both located at Paterson, lead education initiatives across the state around the Biosecurity Act 2015. Mark also manages the National Bee Pest Surveillance Program. Key projects include: Biosecurity Online Training (BOLT) token redemption; National Bee Pest Surveillance Program; AFB regional reporting improvement. Chris Anderson (Manager Plant Biosecurity Prevention & Preparedness – Orange) manages Rod, Mark and Emma Cottage (Senior Plant Biosecurity Officer Preparedness & Programs – Orange) and has additional exotic pest insect activities on scope in addition to those related to beekeeping.

Intensive Livestock Industries

Doug Somerville (Technical Specialist, Honey Bees – Goulburn) has been with DPI over 30 years. New addition, Nick Geoghegan (Program Coordinator Apiculture Resource Access – Orange) will coordinate the implementation of the new policy framework for apiary sites on public land and the establishment of a support desk for apiary site permit holders (beekeepers). This support desk will include an online platform to present geospatial information, a customer database and tools to allow communication between agencies and permit holders. Importantly, Nick will work with beekeepers and agencies to resolve issues affecting access to apiary sites on public land. In my new role (Honey Bee Industry Development Officer – Paterson) I deliver research, development and nationally accredited education. I'll also manage the honey bee genetic improvement program outlined below. Alex Russell (Manager Intensive Livestock Industries – Dubbo)

manages Doug, Nick and myself as well as specialists in the poultry – meat, poultry – egg, dairy and pork industries across the state.

Core services

NSW DPI Bee Team's core services are industry protection through compliance undertakings and biosecurity education, industry development through accredited vocational education, research and development and engagement between industry, government and research providers.

HONEY BEE GENETIC IMPROVEMENT PROGRAM

NSW Department of Primary Industries is investing \$1.3 million over five years in a commercially relevant and scientific bee breeding project.

Project location: Tocal Agricultural College, NSW DPI's Registered Training Organisation, is a leading agricultural educational facility providing nationally accredited training to the Australian beekeeping industry.

Apiary: Traditional nomadic style operation of 200 production hives with Tocal as a base where 50 breeder queen colonies will be located (25 Italian, 25 Carniolan/ Caucasian). Two distinct apiaries, 100 hives of Italian stock at one apiary and 100 hives of Carniolan stock at the other, will be migrated around NSW to key flowering events, including almond and canola pollination and seasonal eucalypt flowering. These locations will serve as testing grounds for honey production, brood viability, disease resistance, temperament and, pending horticulture industry funding, pollination efficiency of various pollination-reliant crops.

Breeding Program: The 200 migratory hives and 50 breeder queen colonies will be managed as a breeding population according to the Page/Laidlaw Closed Population System using the supersedure replacement method to refresh the core breeder queens with artificially inseminated daughter queens. 25 Italian breeder queens will be managed issuing five replicates per breeder queen and 25 Carniolan breeder queens will be managed issuing five replicates per breeder queen to populate the 200 migratory hives which will be performance tested for commercially relevant production traits (i.e.- honey production, disease resistance, pollen storage, brood viability, temperament, etc.).

NSW commercial beekeeper collaborators are vital to the success of this program. This collaboration is likely to be as follows: NSW DPI supplies queens of either the Italian or Carniolan/Caucasian line to head one load of hives managed commercially within NSW for most of the year. DPI staff and USyd staff and students will test these colonies for production traits at key points in the load's season (i.e.- during/after contract pollination,

honey production events, etc.). Commercial collaboration options are still being developed.

Elizabeth Frost is happy to receive feedback from industry on this matter.

E: elizabeth.frost@dpi.nsw.gov.au, M: 0437 731 273

Key DPI personnel: Elizabeth Frost, Honey Bee Industry Development Officer, based at Tocal. Beekeeping Technical Officer – position to be advertised. Dr Doug Somerville, Technical Specialist Honey Bees is involved in the establishment of the project.

Project Aim:

- **1.** Evaluate important traits relating to honey production, pollination efficiency and health
- 2. Compare and evaluate genetic material for overseas populations (pending import/export legislation)
- **3.** Produce a standardised system for tracking the genetic merit of the various lines
- **4.** Establish pedigrees and performance records for specific populations.

Collaboration:

University of New England: Professor Robert Banks, is a world leader in the successful development of animal industry-based breeding programs with over 25 years experience in genetic improvement of livestock industries.

University of Sydney: Professor Ben Oldroyd and Dr Nadine Chapman. Prof. Oldroyd has over 30 years experience in honey bee biology, particularly genetics, genomics and bee breeding.

Wheen Bee Foundation has pledged to assist the project with on-going financial support.

NSW DPI commitment of AUD \$1.3 million over five years:

- Funds to support a fulltime beekeeper/scientific officer for five years, plus operational costs during this establishment phase.
- Significant up-front financial inputs to establish the extracting shed and necessary equipment to establish the research apiaries.

What is needed:

- Further funds to purchase equipment in the start-up phase.
- Build a facility to house the honey processing and storage of equipment, which may also be complemented by office space and lecture theatre.



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 Queen breeder input into a national database of production traits and queen bee estimated breeding values to be managed by UNE.

How will we improve on past breeding programs?

Dr. Rob Banks says, "Our modern techniques will allow us to evaluate the queens' DNA, and work out which have the best genetics for things like honey production, health, temperament and foraging ability. We're reasonably confident that the healthier, more productive bees are also better at pollination, and the economic consequences of improved pollination are enormous." Genetic gains in honey production are estimated to be worth up to \$41 million over the next 25 years, according to Banks and Vincent Boerner's AgriFutures-funded research "Genetic Evaluation of Australian Honey Bees using BLUP procedures."

"We will use the breeders' pedigree information on the ancestry of the queens or extract DNA from worker bees to determine the genetic make-up of the queen and of the drones she was mated to," Rob said. "Our DNA analysis will determine the best pedigrees, so that the industry can apply more systematic breeding methods to breed better bees."

For further information regarding co-investment:

- Alex Russell. E: <u>alex.russell@dpi.nsw.gov.</u> au, M: 0417 492 614
- Fiona Chambers. E: <u>ceo@wheenbeefoundation.org.au</u>, M: 0427 354 457
- Dr. Rob Banks. E: <u>rbanks@une.edu.au</u>, M: 0417 679 095

NSW AA Annual General Meeting 2018

Tuesday 26 June 1.00pm -4.30pm

RACV Royal Pines Resort Gold Coast QLD

HONEY TESTS REVEAL GLOBAL CONTAMINATION BY BEE-HARMING PESTICIDES



Contamination rates were highest in North America, with 86% of samples containing one or more neonicotinoid.

Photograph: Magdalena Iordache/Alamy

Neonicotinoid insecticides are found in 75% of global honey samples and half contain a cocktail of chemicals

Honey from across the world is contaminated with potent pesticides known to harm bees, new research shows, clearly revealing the global exposure of vital pollinators for the first time.

Almost 200 samples of honey were analysed for neonicotinoid insecticides and 75% contained the chemicals, with most contaminated with multiple types. Bees range over many kilometres to collect nectar and pollen, making the honey they produce an excellent indicator of the pesticide pollution across their local landscape.

Bees and other pollinators are vital to three-quarters of the world's food crops but have been in serious decline in recent decades. The destruction of wild habitats, disease and widespread pesticide use are all important factors. Scientists responding to the new work say a crackdown on the industrial-scale use of the nerve agents is urgently needed.

The new analysis joins a growing number of highly critical reports on pesticides, including research showing most farmers could slash their pesticide use without losses, a UN report that denounced the "myth" that pesticides are necessary to feed the world, and a UK chief government scientist stating that the assumption by regulators it is safe to use pesticides at industrial scales across landscapes is false.

The honey analyses, published in the journal

Science, began as a citizen science project when researchers at the Botanical Garden of Neuchâtel, Switzerland, asked people to donate honey collected from around the world between 2012 and 2016. They received hundreds of samples and analysed 198 of known local origin for the five main types of neonicotinoid.

Contamination rates were highest in North America with 86% of samples containing one or more neonicotinoid, followed by Asia (80%) and Europe (79%). It was lowest in South America at 57%. Almost half the samples contained a cocktail of the insecticides.

"The striking finding is that 75% of our samples had measurable quantities," said Prof Edward Mitchell at the University of Neuchâtel. "That was surprising to us, since our coverage included many remote areas, including oceanic islands."

Worldwide distribution of honey contamination



Furthermore, Mitchell said: "If you look at the minimum concentration for which a significant negative impact on bees has been found, then 48% of our samples exceed this level." The researchers said these impacts include damage to learning, behaviour and colony success. "The concentrations are often very low, but we are talking about pesticides that are extremely toxic: something like 4,000 to 10,000 times more toxic than DDT [dichlorodiphenyltrichloroethane]," he said.

In June, the largest-ever field trial showed that neonicotinoids damage the survival of honeybee colonies, as well as harming wild bees, and suggested a toxic "cocktail effect" from multiple pesticides.

All but two of the samples had total contamination levels below the "maximum residue level" (MRL) allowed for human consumption under EU laws. But Mitchell said there was little published research on the effect of neonicotinoids on vertebrates, though there were some indications of harm. "You can wonder if the MRLs are really good enough – I think this is an open question, "Mitchell said.

Prof Dave Goulson at the University of Sussex, UK, and not involved in the new work, said: "Entire landscapes all over the world are now permeated with highly potent neurotoxins, undoubtedly contributing to the global collapse of biodiversity. It is hard not to feel a sense of deja vu: Rachel Carson was saying the same things more than 50 years ago, but we seem not to have learned any lessons. It is high time that we developed a global regulatory system for pesticides, to prevent such catastrophes being repeated over and over again."

Christopher Connolly at the University of Dundee, UK, said: "The findings are alarming. It is time that these chemicals are heavily restricted for use. In this way, their impact on the environment can be limited and their efficacy against pests preserved for when there is no other alternative option."

Jonathan Storkey at Rothamsted Research in the UK said the situation has arisen as much through the overuse of neonicotinoids as through their chemical properties, which may be more benign overall than older alternatives. "Rather than seeking an outright ban, research should focus on developing strategies for limiting their use," he said.

In 2014, a global assessment of neonicotinoids concluded that their widespread use was putting the global food production system at risk. An updated assessment, to be published in the journal Environmental Science and Pollution Research, found even stronger evidence of the insecticides' harm: "The consequences are far reaching and cannot be ignored any longer."

Jean-Marc Bonmatin, at the Centre National de la Recherche Scientifique in Orléans, France, and one of the assessment team, said: "The use of these pesticides runs contrary to environmentally sustainable agricultural practices. It provides no real benefit to farmers, decreases soil quality, hurts biodiversity and contaminates water, air and food. There is no longer any reason to continue down this path of destruction."

Three neonicotinoids were banned from use on flowering crops in the EEU in 2013. The European commission has drafted new regulations that would ban these pesticides from all fields and these look likely to be passed in the coming months.

"The global neonicotinoid contamination in honey is another reminder that wildlife is threatened by these chemicals around the world, and there is growing momentum in support of a new global solution to ensure that high standards of protection for the environment and people are applied everywhere," said Matt Shardlow at Buglife UK.



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PRIDAY & MAY

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SATURDAY 10 MAY

Brenk registration

250 Welcome, MC: Scott Land

ABC Gardening 's Cools Googlads, on Pleasing for Sees

10 Official opening by NSW Governor (and beekseper), David Hartey

10.15 Stutet Anterses (with Brech Will on The Flour libra three years on

11.30 Or Mark Green on Aber bees here and recember - Artest research

12.15 Das Cannos en Flore to taro a bee beliefy into a Jeches

Lunch (included in tidest price)

Dr Romi on Roder on Boer as politotors: 7.30 usbath near

Dr Emily Hammart on See genetics 3 and developing resistance to sincere

Prof Sirace Haberle on The Assiratesian Pollen & Spare Atles 3.30

6.30 Conference dinner

SUNDAY 20 MAY

Members breakfast. ABA AGM and awards presentation. Times & venues to be advised.

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The National Bee Pest Surveillance Program

Honeybees are extremely valuable, not only for the production of Australian honey, but also to farmers who rely on honeybees to pollinate commercial crops. A number of efforts are being made to ward off the threat of other introduced bee species or bee parasites, such as the potentially catastrophic varroa mite. But how can you stop the introduction of such pests?

Enter the <u>National Bee Pest Surveillance Program</u>, an early-detection system to identify incursions of exotic bee pests and pest bees in support of Australia's beekeeping and agricultural industries.

The program is primarily composed of 'sentinel hives'—hives of typical commercial honeybees (European honeybees—*Apis mellifera*) of known health status located at various high-risk locations throughout Australia, usually around shipping and airports. These hives are thoroughly surveyed every few months to identify the existence of any exotic pests. Surveying activities include testing the hives for the presence of pest mites that pose significant risk, such as *Varroa* and *Tropilaelaps*, and sample bees for dissections to identify the presence of tracheal mites.

'sentinel hives' ... are located at various high-risk locations throughout Australia, usually around shipping and airports.

The program also uses remote catch-boxes—empty bee hives that attract swarming colonies—again positioned around high-risk areas, that may also help detect invading bee species or newly arrived European honeybees that could be bringing in a mite or other pest. Some of these boxes have a mobile phone installed (with a solar panel and camera) that provides surveillance of the hive, along with a remotely controlled lid to keep the colony contained until sampling can be carried out.

The program is complemented by hobby beekeepers in high-risk areas who complete regular surveys and checks of their hives for mites and other pests. Manual netting is also used to detect species of pest bees that aren't easily detected by the catch-boxes (such as the Asian honeybee—Apis cerana).

Most recently, the rainbow bee-eater (*Merops ornatus*) has provided another effective detection method for introduced bee species. The colourful bird eats hundreds of bees daily and regurgitates pellets of what it cannot digest—including the bees' wing-parts. These pellets can be tested to identify whether any pest species of bees are within the bird's feeding area, which was done by <u>Biosecurity Queensland</u> in response to a detection of Asian honeybee in mid-2016 infested with the *Varroa jacobsoni* mite.

Significant control measures are being implemented as the mite presents a risk to Australian industry, potentially leading to broad honeybee population losses. Fortunately, the control measures appear to have been successful with no further detections of the varroa mite since July 2016.



The rainbow bee-eater regurgitates indigestible pellets containing bee wings that can be used to identify pest bees within the feeding area of the bird. *Image adapted from:* <u>Geoff Whalan; CC BY-NC-ND</u> <u>2.0</u>

This article was adapted from Academy website content reviewed by the following expert: Professor Boris Baer Professor for Pollinator Health, Centre for Integrative Bee Research, Department of Entomology, University of California

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As we come into autumn all beekeepers should be preparing to or have already done what is normally their last full brood check for the season, unless their local winter conditions allow otherwise. If you find hives with AFB they should be dealt with immediately. Allowing them to persist overwinter will result in them becoming a far greater biosecurity risk the following spring. Hives suffering from AFB tend to dwindle quickly at this time of the year and will be easy to rob out when bees are looking for honey later on, so it is best to remove them from your apiary now.

At this time of the season a lot of beekeepers are also finding that the nectar is patchy, drying up or has already gone, which often causes bees to turn to robbing. Robbing bees are terrible to work with and the last thing you want to do is pull a hive apart and do a full brood inspection when they are like that. Heavy robbing is also an opportunity for AFB spores to be spread throughout and beyond the apiary site, so it should be prevented at all costs.

How do you do your autumn brood inspections if the bees are robbing? Quick answer is by getting them onto a nectar flow. Getting them happy and then thoroughly checking all their brood frames (including the outside frames) very carefully is key to ensuring that there are no infected cells of AFB present.

But how can we get bees onto a honey flow if nothing is flowering? One good way is to use sugar syrup!

Many beekeepers love sugar syrup and many others hate it, but whatever the case it is a valuable tool that is available to allow beekeepers to undertake their autumn brood checks safely and without heavy robbing, which means you can be more thorough and hopefully not miss that one infected AFB cell. One cell of AFB in a hive means that your hive has AFB!



This is all it takes for a hive to have AFB. This hive is now a biosecurity threat.



Proof enough for most beekeepers that this is AFB. Any roping at all from the cell generally indicates AFB.

The main ways that sugar syrup is normally fed is either within the hive in frame or top feeders, externally by using an entrance or lid feeder, or via open feeding in larger containers. Whichever way you choose to feed sugar syrup please aim to minimize the incidence of drowned bees, as that may increase the incidence of Nosema spores.

Frame feeders allow the hive to retain its original size which may be of benefit over parts of the winter, and often (but not always) they have rough sides or ladders so that the bees can climb back out once full of syrup. One detractor is that the volume of syrup that can be added at any one time is at most 4-5 liters (equaling roughly 2-3 frames of capped honey), which is not generally enough if you are looking to fill out the hive for winter in 1-2 feeds. For most other feeding applications a frame feeder is great.

Top feeders are larger volume containers added directly above the honey box, normally on top of a mat or feeder board. They are housed within an extra super, timber box or are a one piece unit made out of timber, ply, plastic or Styrofoam (which wax moths love tunneling through during the off season-so expect to find some extra holes!). The hive lid sits directly on top of this. Kitty litter trays are a popular container for the top feeder, whilst some others use standard Wax molds or 20-25L square water/chemical (bee safe chemicals advised) drum containers that have been cut diagonally in half. The main benefit of top feeders are that you can completely fill out a hive for winter in 1-2 feeds, but on the downside they need good bee floats/ladders inside them otherwise a lot of bees can drown very quickly. An ill-fitting lid can also promote robbing as there is nothing between that hole and the syrup, plus when left on the hive over winter they can make it harder for weaker hives to maintain good

heat during the colder periods. The beekeeper needs to decide if they pull them off once the hive has filled out to a sufficient weight or leave them on. If they leave them on then they should check the hives over winter as the bees may sometimes use more of their stores keeping warm.









Common types of frame feeder.

A fast and easy way to top feed. A painted timber box and bigger floats/ladders (for the bees to get out) works best.

Entrance feeders are generally smaller volume bottles or containers, are not always robber proof and can attract ants. They are great for building nucs and stimulating hives, but need to be serviced frequently and may be knocked over/out by animals, birds and reptiles etc.

Lid feeders (accessing the hive through a hole in the lid) are small-medium volume and may require the use of a different specialized lid or have a permanent cap/bung in your normal lid, which may pose other issues over time. Livestock and other animals sometimes disturb exposed lid feeders.

Open feeding is very popular with some commercial operators and is a legally permitted activity in NSW. Stock feed tubs, cut down 1000 liter IBC/Pelicons and 200 liter drums are commonly used containers. The main considerations are that open feeders allow ALL bees (and potentially livestock and animals) in the area to access the syrup, which means that your stronger hives will get more of it and the smaller/ weaker ones less, plus any other nearby managed or feral bees colonies will also be feeding from it. Due to the high density of bees this can pose some risk as far as potential pest and disease spread (especially if we had Varroa), plus there can be a lot of competition and fighting between bees. Fighting between bees tends to cause increased losses and is normally seen at robbing events.

Open feeders often end up with a lot of dead, drowned, injured or sickly bees in and around them. Whilst this may look very concerning it may simply also be a representation of the normal losses that field bees suffer daily due to wear and tear, old age and Nosema etc., except that instead of their bodies being spread over many kilometers of nectar resource the feeder is the one and only "nectar flow" so the localized numbers are high. On a normal day a strong bee hive could lose up to 1000 field bees, so if you have a few thousand dead bees around an open feeder servicing many hives then those numbers are not concerning.

It may be advisable to fence off open feeders from larger animals and reduce access to birds/animals by using a mesh/tin lid. Reduce the impact of rain events by partially covering the container and have lots of bee ladders like dry tree branches, straw, timber frames, shade-cloth, Styrofoam and corflute etc. so that most of the bees can crawl out.

With regards to density of sugar syrup used there are also a few considerations. Heavy sugar syrup made up with up to 2-2.25 parts sugar to 1 part water (which may weigh up to 1.4kg per liter) is the best for adding weight directly to a bee hive, and you will achieve the desired target in less feedings and have less overall "stimulation" of the beehive.

The standard 1:1 sugar syrup is great for stimulating bees, but a much larger volume is required to get them up to a heavy winter weight.

The normal opinion is that all grades up to heavy sugar syrup are best fed directly into a hive and open feeding should only be done with lighter grade syrups, as the heavier syrups have been known to later promote robbing when fed externally.

Overstimulating a beehive going into a winter hibernation is detrimental, whereas if you wanted to increase bee strength in preparation for a winter honey flow starting in a few months' time you would do that (plus supplement feed of pollen etc.) if nothing is around outside.

Two scenarios for enabling your autumn brood check in low nectar conditions are as follows;

A – You are preparing your hives for some months of winter hibernation and would use heavier grades of sugar syrup. On day 1 you would individually assess the weight of each hive. Heavier hives would have a frame feeder and 3-5L of syrup added. Strong but lighter hives would have a top feeder and 6-10L of syrup added. The next day brood inspections would be started, with the frame fed hives done first (check how much syrup they have consumed). The full brood box should be thoroughly inspected (shaking off all bees from each frame as you go). Depending on the situation it may take 15-25 minutes to complete this procedure (remembering that a full brood inspection takes much more time than just removing honey), so depending on hive and staff numbers you may want to check all the frame fed hives on day 2 and then start on the top fed hives after that (as they were supplied more syrup and may still be working on it and so be "happier" for longer). Upon completing each hive you would determine how much additional syrup (if any) they need to be fed and top them up.

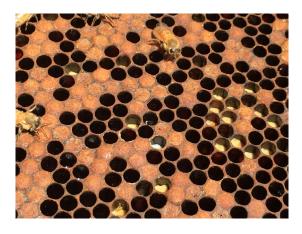
B – Bees are being prepared for a winter honey flow or will experience some other nectar flows within coming weeks to top them up (but need to be inspected now and are robby). These bees will be open fed using lower density sugar syrup. Some operators start them off on 30% sugar solution (which is a lot thinner than 1;1 sugar syrup) and reduce this to 25% once the bees are accustomed to the feeder, as this keeps them happy and stops them robbing. 30% syrup equals 300grams of dissolved sugar in every liter of final sugar solution, not by adding 300 grams to 1 liter of water, as this makes a lower density and more than 1 liter of syrup. Easiest way to make it up is to add 3kg sugar to 5-6 liters of water and once dissolved make this up to 10L, or at whatever scale you use it. This syrup can ferment quickly in warm conditions, so only enough to sustain 1 day of feeding is generally made and dispensed at once, with less on the first days as they may take a while to get the taste for it. You may be feeding these bees regularly and so after a few days you will see them waiting for you and your vehicle to arrive, just like livestock being fed hay!

Once these bees are on the "flow" they will be easy to work, but whilst doing your inspections you still need to ensure that hives have adequate honey in the top box, as the weaker hives are not getting as much of this thin sugar syrup as the big hives so will not make any surplus, and all these hives will be stimulated to lay brood and hence consume honey. Give them

the same thorough brood inspection as described in scenario A.



Leaving bees on the frame makes it difficult to see AFB... especially for older eyes that need glasses but don't wear them!



Once the bees are off the frame you can see suspect cells much clearer.



Classic roping of AFB.

It should also be noted that any "honey" derived from sugar syrups is not real honey, but is instead a form of adulterated/fake honey. Many Australian beekeepers are critical of various importations of cheap foreign honey that may be derived from various syrups that routinely get fed to hives, so we should not be hypocritical by extracting honey derived from our own sugar syrup feedings. If in doubt use these "honey" frames to support next season's nucs etc.

Beekeepers should also consider the following;

Depending on the location and winter conditions of your hives you may need hives to be very heavy or somewhat lighter, so only feed as much syrup as you really need to.

If the hives are heading to the almonds in spring (and will be rested over winter, versus being run down on a honey flow like Mugga Ironbark) then they will need some honey stores to carry them right through winter, as the high protein almond pollen will stimulate brood production and there may also be cold snaps that require large amounts of heat generation.

Breeding bees require the brood area to be maintained around 35-36 degrees Celsius (which chews through honey), whereas bees that are not rearing brood sit in the low twenties. If your bees are located in warmer areas where they fly a lot or are stimulated then they may go through more honey than those kept in cold miserable conditions where they decide not to even fly, let alone breed up bees. Many hives have starved out where they were overstimulated and their metabolic expenditure from rearing brood was not balanced out by what nectar they could bring back in, so sometimes it is better to keep bees cold or to check their weight and feed heavy syrup as required.

Each time you check and feed bees is more work for you and your bees, so there are multiple points to consider such as is it better to do nothing for longer and let them sit idle, but not be so relaxed that you let it go so long that they start declining or even starve out! Adding dry sugar above the mat can be another good insurance scheme to reduce starve outs when you are letting hives sit idle for periods over winter, plus checking those stores simply by lifting the lid (and topping up if necessary) does little to disturb the hive.

Moving bees from cold areas around the shortest day and putting them somewhere "warmer" (lower altitude, higher day temps etc.) will fool bees into thinking that spring has arrived and their brood production may start far earlier than if left in the cold spot. You will need to consider pollen and nectar sources in the new area and if you need to supplement feed them to avoid a hive collapse, as producing more bees equals more stress (Nosema, EFB etc.) and consuming more food supplies.

Some take-home messages are;

- You should be doing a full brood inspection on every one of your hives before winter, with now being the best time to do it if not already done.
- You should shake all the bees off each frame before checking it.
- You should check every frame in the brood box, including the outer ones that may not have brood, as there could still be AFB infected cells sitting in those frames amongst the pollen and honey. Finding such indicates that

this hive may have had AFB for a while.

- Have a box of matches handy and use a match or twig to poke every sunken, overly dark or perforated capping that you see on EACH frame.
- Hitting something hard under the capping probably means chalkbrood, so ensure that you record that in your daily site records too, as that hive may struggle in spring.
- If you do encounter chalkbrood then don't assume that all those other suspect looking cells are also chalkbrood. They could be AFB, so check all of them.
- Feeding sugar syrup can help with brood inspections, adding weight for winter and also for clearing out chalk brood mummies.
- Checking your brood is an extremely important part of being a beekeeper, so don't be lazy in that area. What goes on down there ultimately determines how well (or poorly) you hive will perform, and knowing that allows you to prevent high rates of AFB infection and better manage all other aspects of your hives such as drone layer/failing queens, swarming and hive strength.
- Any hives that you find with AFB should be destroyed now (don't be tempted to sprinkle "magic powder" on them!), as you need to prevent them becoming a biosecurity risk later on.
- Getting rid of hives with an AFB spore load reduces your overall risk of internal transmission of AFB within your apiaries.
- One cell of brood with AFB produces 2.6 BIL-LION AFB spores, so when you consider that it only takes 6-10 spores being fed to a very young bee larva to cause AFB it is best to assume that 1 AFB cell is confirmation that the hive already has lots of AFB.
- AFB spores are very hardy and can survive for 40-60 years.
- When spores are ingested by a young bee larva (which is initially being fed royal jelly by nurse bees) it reactivates the bacteria and it starts multiplying in their gut.
- Older bee larvae need to ingest far higher numbers of AFB spores (1000+) to become infected, and they also develop further under the capped cell before dying. As such they will sometimes have developed a tongue that is left in the top of the cell. Finding this and/or scale indicate a longer term infection and far higher spore count within the hive.
- OTC (aka Terramycin, "powder" etc.) does not kill AFB spores and OTC will not cure AFB

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in a hive. It only stops AFB's brood killing effects for a little while and your hive will still come down with active AFB again!

- If hives have AFB then its best to destroy the bee colony and burn and/or irradiate the equipment.
- Prevention works better than a cure for AFB, so remove and destroy AFB infected hives early on and don't allow the AFB spore count to increase by allowing the hive to live longer and die out later.
- Barrier Systems greatly assist with reducing internal AFB transmission within apiaries/operations.
- Any weaker hives should be identified and noted in your records, and if necessary reduced to a single box with a small entrance (to be re-queened in spring) or united onto a stronger hive if the queen is suspect.
- It is often better getting rid of the weakest hives right now, as they will generally struggle in winter and the resulting robbed dead-outs may cause disease issues for the rest of your hives in late winter-spring.
- Don't take any of your weak hives to the almonds...nobody wants them there!



Burning suspect brood frames is a regular activity for some beekeepers. Ensure that you have a fire permit if required and fire-fighting equipment.



Finding this amount of scale indicates a long term unmanaged AFB infection. Regularly inspected hives should not have this advanced condition.



Don't think that AFB is only seen in bad brood. This very strong hive had a number of AFB cells in what was generally a well laid brood box.

I wish you the best with your autumn brood checks and hope that you find all your AFB infected hives and deal with them now. It is relatively easy to breed bees, so you are doing yourself a great service by getting rid of the diseased hives now, burning the junk and irradiating the good gear over winter and using those clean pre-loved frames in your new splits from healthy colonies in spring as part of your swarm management. Irradiated frames have no AFB, EFB, Chalkbrood or Nosema, so they are really well liked by bees and promote quick build-up.

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For NSW registered commercial beekeepers (with 50 hives or more) who would like to do the Biosecurity for Beekeepers BOLT online course but have not yet received a code from me (to do it at no cost) please send me an e-mail to rod.bourke@dpi.nsw.gov.au listing your brand, individual or company name and I will get this out to you.

For all beekeepers use the following link to access the course. https://honeybee.canopihr.com.au

Barrier Systems & AFB management

Any NSW registered commercial beekeepers who would like assistance in setting up a barrier system within their operation or whom have AFB issues that they would like help in minimizing please contact me at rod.bourke@dpi.nsw.gov.au or call 0438 677 195. Don't feel embarrassed or ashamed about contacting me...I will not judge you on the past and am here to help you with your beekeeping future, so I look forward hearing from you.

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Sugar Shake Month

Sugar Shake Month – test your hives in April

Sugar shake month is an initiative of NSW DPI and the Amateur Beekeepers' Association.

The aim of the program is to increase surveillance of exotic external parasites such as braula fly, varroa mite and tropilaelaps mite.

Varroa and tropilaelaps have not been detected in Australia. Braula fly is present in Tasmania but not on mainland Australia.

Sugar shaking bees is a technique used to detect these parasites. It is a quick and easy field procedure that does not kill the bees. The method is based on coating bees with icing sugar, which dislodges parasites from the bee.

Sugar shake kits will be supplied to branches of the Amateur Beekeepers' Association and members encouraged to test their hives and report their results.

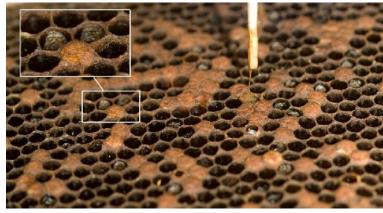
Sugar shake results will be also used to support access to our export markets for live bees.

If you are interested in joining our network of sugar shake volunteers, please contact NSW DPI Bee Biosecurity Officer (Surveillance) Mark Page or Emma Cottage.

For more information about bee biosecurity and exotic bee pests, please see the website www. dpi.nsw.gov.au/animals-and-livestock/bees

If you suspect that you have seen any exotic bee pest, please call the Exotic Plant Pest hotline on 1800 084 881 immediately.

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AUSTRALIAN HONEY BEE INDUSTRY COUNCIL INC (AHBIC) UPDATE

ADULTERATED BEESWAX

For some time now AHBIC has been concerned that beeswax being imported into Australia may be adulterated and may contain chemical residues. AHBIC obtained some beeswax blocks, originating from Malaysia, being sold by a major hardware chain and arranged to have it analysed. It came back as 100% paraffin wax. AHBIC has advised the chain concerned and also passed the information onto the Australian Competition and Consumer Commission.

There was also some beeswax foundation which originated from China. Analysis of this showed it to be 84.9% paraffin. The suppliers from China had been claiming that it was 100% beeswax but upon further enquiry and being fronted with the results admitted they do add paraffin, they say at 1 or 2%. The same batch was also analysed for chemical residues by a different person and the results came back with residues of chemicals that are used for varroa treatments.

AHBIC has made representation to the Department of Agriculture and Water Resources and, as a result of these developments, AHBIC is requesting that all imports of beeswax into Australia should be analysed for adulteration and chemical residues.

APIMONDIA 2019

Information on Apimondia 2019 in Montreal Canada is available on their website http://www.apimondia2019.com/

QUEEN BEES TO LEBANON

The Department of Agriculture and Water Resources (DAWR) have just received confirmation from Lebanon that the proposed updated health certification for the export of queen bees has been accepted. The import requirements for queen bees to Lebanon are available on MICoR

https://micor.agriculture.gov.au/liveanimals/Pages/lebanon/queen-bees.aspx

If this is a market you're interested in for exporting queen honey bees, the regional departmental veterinary officers from DAWR will be able to assist you.

AUSTRALIAN MANUKA HONEY ASSOCIATION

A letter from Paul Callander from the Australian Manuka Honey Association for your consideration.

Dear Colleagues

As many of you know, we have now formally created the **Australian Manuka Honey Association** (AMHA), establishing it as the leading national body for the production and promotion of Manuka honey in Australia.

In response to requests made by beekeepers, we have now set a two-tiered membership fee for producers as follows:

Up to and including 400 hives - \$350 plus GST 401 + hives - \$750 plus GST.

Our mission statement is simple:

To protect and promote the global appeal and awareness of Manuka honey produced in Australia.

AMHA objectives are to:

- · Foster the growth of our local Manuka honey industry and the sale of Australian Manuka honey internationally
- · Provide authenticity to all Australian produced Manuka honey
- · Support scientific research of Australian Manuka honey and its uses
- · Increase the knowledge and understanding of the properties of Australian Manuka honey
- · Restrict international naming or market rights to Manuka honev
- · Protect and promote Australian Leptospermum species plant material
- · Represent Australian Manuka producers and packers through one common organisation
- Advocate for the interests of our industry in administrative and legislative matters

The first and most important action we are taking as the AMHA is to defend the AUSTRALIAN RIGHT TO USE THE NAME "MANUKA".

At present we are engaged in defending an attempt by New Zealand which is trying to trademark the word "Manuka" exclusively for themselves.

Manuka (Leptospermum spp.) is a native Australian plant genus that evolved in Australia. Manuka is a descriptive term for something that is found in both Australia and New Zealand.

The group has assembled a panel of industry authorities including leading scientific experts, the Honeybee Cooperative Research Centre (CRC HBP), Australian Government Intellectual Property (IP) Officials, the Australian Honey Bee Industry Council (AHBIC) and a legal team to lead the charge in protecting Australia's right to promote its native Manuka honey.

Our collective mission is to formally oppose any attempts to monopolise international naming or market rights, support each other and promote the Australian Manuka industry.

We need your help urgently: By joining the AMHA now you can help fund this important initiative. Please log onto the AMHA website www. manukaaustralia.org.au and complete the Membership application.

Many thanks
Paul Callander
Chairman
Australian Manuka Honey Association Ltd

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Contact: Bill Winner

Beekeeper Services Manager Phone: 1800 350 977 Fax: (07) 3712 8285 Email: b.winner@capilano.com.au

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