# AUSTRALIA'S HONEYBEE NEWS

"The Voice of the Beekeeper" www.nswaa.com.au Volume 16 Number 5 September - October 2023



Inside:

AHBIC Update Pg 9 Imported Honey Fighting Fund Pg 17 Plant Profile Pg 18

# **DENMAR APIARIES**

# **ITALIAN**

Prices effective from May 2021

## **UNTESTED**

1-10 ...... \$34.00 each 11-49 ..... \$30.00 each 50+ ..... \$26.00 each Join now and isolated mated breeders = \$600.00

TERMS 7 DAYS

Late Payments - Add \$4 Per Queen

PAYMENT BY: Cheque or Direct Debit Details on ordering

> PO Box 99 WONDAI Queensland 4606 Phone: 0448 690 064 Email: ausbee4@hotmail.com







# **NSW APIARISTS' ASSOCIATION INC. EXECUTIVE COUNCIL**



L-R: Candice Clifford - Secretary Treasurer, Matthew Skinner - Vice President, Neil Bingley - President, Zac Alcock, Sam Lockwood, Ray Hull.

# **New Executive Council**

At the NSW Apiarists' Association Inc. AGM held on 18 and 19 May 2023, new members of NSWAA Executive Council were elected by our members. We would like to introduce our new Executive Council for 2023 as follows: Neil Bingley – President – neil.bingley@nswaa.com.au Matthew Skinner – Vice President – matthew.skinner@nswaa.com.au Ray Hull – Executive Councillor – ray.hull@nswaa.com.au Zac Alcock – Executive Councillor – zac.alcock@nswaa.com.au Sam Lockwood - Executive Councillor - sam.lockwood@nswaa.com.au

# **Executive Portfolios**

Australia's Honeybee News - Neil Bingley Biosecurity - Matthew Skinner Conference - All Finances - Sam Lockwood Honeyland - Ray Hull Resourses - Zac Alcock

PRESIDENT: Neil Bingley Mob: 0428 487 105 Email: neil.bingley@nswaa.com.au

VICE PRESIDENT: Matt Skinner Mob: 0427 651 360 Email: matthew.skinner@nswaa.com.au

Ray Hull Mob: 0407 469 176 Email: ray.hull@nswaa.com.au

Zac Alcock Mob: 0422 750 629 Email: zac.alcock@nswaa.com.au

Sam Lockwood Mob: 0477 460 642 Email: sam.lockwood@nswaa.com.au

SECRETARY/TREASURER: Candice Clifford PO Box 3055, West Tamworth, NSW 2340 Mob: 0466 339 506 Email: info@nswaa.com.au Website: www.nswaa.com.au



# AUSTRALIA'S HONEYBEE NEWS

The official Journal of the NSW Apiarists' Association (NSWAA)

www.nswaa.com.au

Email: honeybeenews@icloud.com

Published Bi-Monthly ISSN 1835 6621

# CONTENTS

NSWAA Executive Contacts & Portfolios	Page 3	Honey Bees Inspiring Robotics	Page 33
President's Report	Page 5	Preliminary Treatment for Viruses	Page 34
DPI Support Roles	Page 8	Bee Biosecurity Officer Report	Page 35
AHBIC Update	Page 9	Branch News	Page 42
Honey Bee Industry Development Officer Report	Page 15	Branch Meeting / Conference Dates	Page 44
Imported Honey Fighting Fund	Page 17	Branch & Industry Contacts	Page 44
Plant Profile - White Clover	Page 18	Beekeeping Journals	Page 45
Protecting Bees from Pesticides	Page 27	Member Benefits & Subscriptions	Page 45
Technical Specialist, Honey Bees Report	Page 31	Advertisers	Page 46

# Pre-Paid Advertising Rates

	<b>Full Page</b>	Half Page	Quarter Page	<b>Eighth Page</b>
6 Issues	\$2090.00	\$1180.00	\$640.00	\$380.00
3 Issues	\$1180.00	\$635.00	\$350.00	\$215.00
1 Issue	\$465.00	\$260.00	\$175.00	\$120.00

# Classified Ads up to 5 lines - \$40.00 (FREE TO MEMBERS)

Australia's Honeybee News goes free of charge to NSWAA members.

Subscriptions are welcome - within Australia \$65.00

Overseas (airmail) AUS\$95.00

### Payable to NSWAA, PO Box 3055, West Tamworth, NSW 2340, Australia

Email: info@nswaa..com.au

The opinions expressed in articles published in *Australia's Honeybee News* are those of the authors and do not imply the endorsement of the NSWAA for the promotion of any product, goods or services mentioned unless specifically stated.

# Letters to the Editor to be submitted via email honeybeenews@icloud.com Editor: Vikki Bingley PO Box 7425 Sutton NSW 2620 N.B New Ad setup \$50.00 alterations \$15. Advertising Enquiries: Email: honeybeenews@icloud.com Printer: Impress Printers 2/55 Townsville Street Fyshwick ACT 2609 Phone: (02) 6280 4238 Email: terry.impress@iinet.net.au Copy Deadline for Next Issue of Australia's Honeybee News Friday 17 November 2023



# PRESIDENT'S REPORT



#### Varroa Update

As the Varroa response continues more and more beekeeping enterprises are becoming entangled in red and purple zones.

The eradication plan had the full support of your association executive until the mite spread to central inland NSW at numerous locations.

Your association now cannot continue to support the eradication attempt as too many fellow apiarists become innocent parties having hives and livelihoods destroyed for the impossible dream of keeping Australia Varroa free.

To continue with the original plan will certainly cause irrepairable damage to the NSW apiary industry, not to mention, the ever-increasing mental health issues affected beekeepers are seeing.

Because of the afore mentioned reasons, the NSWAA's position is to now back a transition to management plan.

So please support AHBIC as we need industry representation at a federal level.

What that plan will look like is yet to be determined, but my view is that NSW have no more regulations placed upon it and we learn to deal with pest as best we can and then get back to life as normal as we can, to pollinate crops and produce honey as before the unwanted incursion.

#### **Season Ahead**

Production in southern NSW on canola has been good but as I write this heat is building with no rain in sight. By the time this is printed most canola will be finished flowering.

There are some prospects on yellow box and mallees but ground flora will require rain.

Large areas of potential prospects have been ruled out by the expanding red and purple eradication zones which severely impacts many more beekeepers then just those that had hives there when varroa was detected. There are areas in the Riverina that have good budding on River Red Gum that are now no-go zones.

Extremely dry conditions prevail in northern NSW with few prospects without substantial rain.

#### **Scheduled Meetings**

We have secured a face-to-face meeting with NSW Agriculture Minister Tara Moriaty on September 28 to discuss the future direction of the Varroa Response and other resource issues. We are arranging a meeting with the policy advisor to the Environment Minister to discuss the issue of nonrecognition of private land apiary sites when transferred to the National Park estate. The other major issue is National Parks transition to indigenous management and the likely impacts on apiary sites.

#### AHBIC

Our national peak body has come under fire from many beekeepers in affected zones in NSW. This has mainly come about from a lack of understanding as to how AHBIC is structured. AHBIC has to abide by the decisions of member bodies and so far as this incusion is concerned a member body vote was split so no decisive stance could be taken to allow a concerted effort to push for transition to management. There has been recent movement in NSW's favour from several states to move from eradication to management of Varroa. This now allows AHBIC to be decisive and push for transition which will hopefully sway others in the National Management group and progress from continuing euthanising hives, to allowing NSW apiarists to get on with their usual beekeping activities, albeit with Varroa to contend with.

On a lighter note, AHBIC has a discount deal with DULUX Trade Centres. Any member wishing to purchase greatly discounted paint can do so by showing their NSWAA membership card when purchasing paint at these premises.

#### **Next Executive Meeting**

Our next executive meeting is scheduled for November 3 at Tocal.

Neil Bingley President

# Jz's Bz's QUEEN CAGES

Money & Time Saver
Improves Queen acceptance
Quick & easy to place in hive

Banking Bars - Queen Cell Cups Easy Fit Cell Protectors Queen Candy

#### SUNDERLAND APIARIES

GAMBOL PARK' MINORE ROAD, MS6 DUBBO NSW 2830 Phone: 02 6887 2202 Email: sales@beekeepers.com.au

AUSTRALIAN DISTRIBUTORS

# DON'T SHUT **YOUR DOOR ON TERMITES!**

## **DEMISE**<sup>™</sup> **TERMITE DETECTION & ELIMINATION SYSTEM**

- Kills termites and wipes out the colony
- Easy to use in-ground traps
- Very low toxicity for humans and pets







een Be

www.pestcontroldirect.com.au



will help put you back in control of your hives! Topbait™ PLUS is registered for use within bee hives by the APVMA.

www.pestcontroldirect.com.au

APVMA Approval #68330/108733



**AUSTRALIAN QUEEN BEE LINE P/L** ABN: 88 610 746 257

Italian and Carniolan Queens

PRICES EFFECTIVE FROM SPRING 2022

1 to 10	\$33.00 each + p&h
11 to 49	\$31.00 each
50 to 99	\$29.00 each
Over 100 ( in total)	.\$28.00 each
200 & over	.\$27.00 each

Prices GST Inclusive: \$15 Postage & Handling applies for orders under 11

Terms: Payment prior to dispatch Terms and conditions apply. EFTPOS facility is available.

# For Orders & Enquiries Contact Beck

Address: 21 Leewood Drive, Orange NSW 2800 or PO Box 80 Orange, NSW 2800 Office Hours: 9.00am - 4.00pm Monday to Friday | Phone: (02) 6369 0565 | Fax: (02) 6369 0575 Email: info@australiangueenbeeline.com.au • Web: www.australiangueenbeeline.com.au Before and After Office Hours Phone: 0448 555 157

**ISA** 



# AUSTRALIA'S NO.1 BEEKEEPING LOADER

# BEE SMARTER. WORK SMARTER.

# Add efficiency, comfort and versatility with a multi-purpose loader from Avant Equipment Pty Ltd

Manufactured in Finalnd to the highest specifications, these machines are reliable and well designed for access, safety and ease of maintenance. Free call 1800 686 411 to organise your obligation free demo!





- ✓ Ability to load the truck from one side using telescopic boom
- ✓ Huge lifting capacity up to 1500kg
- ✓ Park sideways across truck
- 🗸 Optional air-conditioned cabin
- ✓ Self Levelling Boom
- 🗸 Prompt delivery Australia wide

- ✓ All terrain 4wd with outstanding stability
- ✓ Backed by a Family business for over 25 years
- ✓ Save time and man power
- ✓ Easy to access and operate
- ✓ Over 200 attachments
- ✓ Easy finance options available



1800 686 411 | sales@avantequipment.com | www.avantequipment.com

<b>DPI SUPPORT ROLES</b>		
INTENSIVE LIV	ESTOCK INDUSTRIES	
Ale Director In Livestock NSW Department of P PO Box 900 T: +61 2 6881 1 E: alex.russe Elizabeth Frost Technical Specialist, Bees NSW Department Primary Industries 815 Tocal Road Patterson NSW 2421 T: +61 2 4939 8957 M: 0437 731 273 E: elizabeth frost@dpi psw goy au	<i>ex Russell</i> Itensive Livestock Systems Branch Primary Industries Agriculture Dubbo NSW 2830 1212 M: 0417 492 614 ell@dpi.nsw.gov.au <i>Madlen Kratz</i> Honey Bee Industry Development Officer NSW Department Primary Industries 815 Tocal Road Patterson NSW 2421 T: +61 427 348 521 E: madlen kratz@dpi nsw gov au	
L. enzaoeui.nost@upi.nsw.gov.uu	BPASS	
Nick Geoghegan	Niki McHugh	
Program Coordinator/Apiary Sites/Intensive Livestock NSW Department Primary Industries Locked Bag 21 Orange NSW 2800 T: +61 2 6391 3669 M: 0407 849 516 E: nick.geoghegan@dpi.nsw.gov.au	NSW Department Primary Industries	
COM	<b>IPLIANCE</b>	
Daryl Cooper Compliance Officer Regulartory Operation Unit-RS Apiaries Compliance & Integrity Systems NSW Department Primary Industries Biosecurity & Food Safety 2198 Irrigation Way East PMB Yanco NSW 2703 M: 0429 912 478 E: daryl.cooper@dpi.nsw.gov.au	Stephen Green Regulartory Officer Biosecurity Compliance & RS Apiaries Biosecurity NSW Trenayr Rd Junction Hill NSW 2460 T: 02 6640 1618 F: 02 6644 7251 M: 0438 977 714 E:stephen.green@dpi.nsw.gov.au	
BION Mark Page	SECURITY Bod Bourko	
Mark Page Bee Biosecurity Officer Surveillance NSW Department Primary Industries Biosecurity & Food Safety 815 Tocal Road Patterson NSW 2421 T: 009 299 415 E: mark.page@dpi.nsw.gov.au	Rod Bourke Bee Biosecurity Officer Plant Biosecurity Prevention & Preparedness NSW Department Primary Industries Biosecurity & Food Safety 815 Tocal Road Patterson NSW 2421 T: 02 4939 8946 F: 02 4939 8950 M: 0438 677 195 E: rod.bourke@dpi.nsw.gov.au	
ED Kally Laas	UCATION	
Education Officer Honey Bees Bee Program Tocal College NSW Department Primary Industries 815 Tocal Road Patterson NSW 2421 T: 02 4939 8815 E: kelly.lees@dpi.nsw.gov.au	Honey Bee Training Coordinator Education	
TECHNIC	CAL OFFICERS	
Melinda Brown Technical Officer - Honey Bees NSW Department Primary Industries 815 Tocal Road Patterson NSW 2421 T: 0438 352 744	Emily Noordyke Technical Officer - Plan Bee NSW Department Primary Industries 815 Tocal Road Patterson NSW 2421 E: emily.noordyke@dpi.nsw.gov.au	

Australia's Honeybee News September - October 2023

E: melinda.brown@dpi.nsw.gov.au



# Industry Update – 46 455 days of response

20<sup>th</sup> September 2023

# Varroa Eradication Deemed No Longer Feasible

On the 19<sup>th</sup> September the National Management Group (NMG) met to discuss the recommendation of the Consultative Committee for Emergency Plant Pests (CCEPP). The group of affected industry and government parties unanimously agreed that it was no longer practically feasible to achieve eradication and agreed that the response should transition to a management phase.

It was also agreed to implement interim arrangements to allow clarity for beekeepers whilst the transition to management plan is negotiated by the CCEPP.

NSW has enacted a new Emergency Order which begins operations under an interim management strategy until a formal Transition to Management document is formulated and confirmed via the NMG as a revised Response Plan.

This interim management strategy will be in place for a short period of time and will involve specific rules to minimise impacts on affected beekeepers whilst slowing the spread. AHBIC has been advocating for the best outcome for beekeepers in this short-term strategy including allowing beekeepers to now choose if they want their hives destroyed and ORC's paid or to retain their hives. As part of the new strategy no further mandatory euthanasia will occur and fipronil baiting will cease.

# **AHBIC's position on transitioning to management**

AHBIC regularly consults with our 10 member body organisations from across Australia. We provide these member bodies with regular updates and ask them for opinions on feasibility of eradication. It is up to these bodies as to how they arrive at their decision but in the fast moving, dynamic environment there has been little time for widespread consultation among their members.

The AHBIC executive listens to their advice and decides the AHBIC position before every CCEPP and NMG meeting. Opinions of the 10 member bodies has evolved from fully supportive of eradication at the end of June to a divided opinion in August to the majority position to transition today.

We recognise opinions are divided across the beekeeping community which has made decision making for the AHBIC executive incredibly difficult.

# **Industry Impact**

Whilst the response has now moved into a transition phase it is important to recognise the enormous sacrifices that have been made across the affected response zones by beekeepers during the eradication effort. It is more important now than ever that our industry supports those who have lost hives and rally to support them to reestablish. Our industry is resilient and has overcome repeated incursions of new pests, diseases, droughts, bushfires, floods and global pandemic and our industry will learn to live with Varroa.

e: AHBIC@Honeybee.org.au a: 5 John St Ardrossan SA 5571 ABN: 63 939 614 424 w:www.honeybee.org.au

# **Changes Across NSW**

All beekeepers must comply with the requirements set out in the current <u>Emergency Order</u>. The State of NSW is now divided into two zones, the GREEN Suppression Emergency Zone and the YELLOW Management Emergency Zone.

GREEN Suppression Emergency and YELLOW Management Zones now fall under different rules. It is important that beekeepers understand and comply with these rules before moving their bees. AHBIC will communicate over the coming days the details of these rules.





# What does Transition to Management mean?

The NSW DPI as lead agency, is responsible for leading the development of the draft document to be presented to the CCEPP on Transition to Management. This document will be used as an initial framework by the CCEPP to be discussed and finalised over the next few weeks. The lead agency and affected industry parties will engage and collaborate to identify the aims, scope and objectives and set the expectations for transition to management.

It is expected that the transition to management provisions will enable a short term, nationally cost shared program that will equipe the honey bee industry to be able to deal with Varroa. Once endorsed by both the CCEPP and the NMG, the response will then phase through to a Nationally agreed Response Plan for Transition to Management.

It is anticipated that the transition framework will have the following objectives:

- 1. Slow the spread of Varroa mite
- 2. Build industry resilience to the pest
- 3. Provide management options including IPM recommendation and chemistry, and
- 4. Supporting pollination security

AHBIC will be advocating for the plan to be built around national education for beekeepers through workshops, webinars, videos and factsheets. We will also be ensuring that beekeepers have access to management tools and treatment options accessible as the mite spreads and impacts beekeepers.

We expect that developing and negotiating of the next phase will be slow with all 26 parties at the CCEPP needing to agree to the plan. Whilst much work has already been done there will still be negotiations to get agreeance. This is why there has not been a pre-existing management plan circulated throughout industry as CCEPP negotiations could change any plans overnight.

You can reach out to AHBIC via: Varroa Coordinator Bianca Giggins <u>bianca@honeybee.org.au</u> 0402 467 780





THE BETTER WAY FOR BEEKEEPERS

# **Delivery Australia-Wide**



# AUSTRALIAN AGENTS FOR

Königin TÜV Rheinland Certified Equipment



# **DRS Uncappers**

Quick and easy uncapping without the need for power of heat source, with or without tub

#### Everything in one package including brood division board, top feeders & bottom tray (traps varroa mite & SHB when used with sticky board or canola oil)



**10-Frame Full Depth Ultimate production hive** Supers Full Depth or Manley



**7-Frame Full Depth** Easy lifting lighter weight supers



7-Frame Nuc Incudes pest tray, division board, front and rear entrances



# **10-Frame base for wood hives**

Vented base, entrance closure, pollen trap & bottom tray (traps varroa mite & SHB when used with sticky board or canola oil)



# **Queen Breeding Hive**

The ultimate four compartment visit website for comprehensive details



# **Queen Breeding Kit, Royal Jelly Production**

**Complete high output kit - cells,** insulated Queen Breeding Hive Australia's Honeybee News Januaria interstaqueen cages, royal jelly collection capsules, production timetable



### **BEEWISE - Showroom-Warehouse**

**9** 5 Zeta Crescent, O'Connor WA 6163

- ☑ bees@beewise.com.au ⊗ www.beewise.com.au

# They know me. They know my farm. That's why I'm insured with WFI.

At WFI, we take the time to thoroughly understand your business and how it operates. Because when we get to know a business, we can protect everything that matters.

# Call 1300 934 934 or visit wfi.com.au





As one of Australia's largest packers of pure Australian honey, Superbee Honey Factory is **LOOKING FOR SUPPLIERS** to support our increasing demand for Australian Honey



CONTACT US TO REQUEST A QUOTE OR BOOK A DELIVERY PH: 02 6851 1155 BEN SMITH EMAIL: ben.smith@botanyhoneyco.com.au Botany Honey Company ABN. 71 659 350 642 28-34 Landrace Rd FORBES NSW 2871 PH: 02 6851 1155 www.superbee.com.au

# **PAYMENT IN 14 DAYS OR LESS**

# Honey Bee Industry Development Officer Report

## Madlen Kratz

Honey Bee Industry Development Officer Tocal Agricultural College, NSW Dept. of Primary Industries T: 02 4939 8948 273 E: madlen.kratz@dpi.nsw.gov.au

# She-oak trees and their value to bees

#### Pollen, plant bits or wood shavings?

All of the above! Bees gather the pollen, remove the 'plant bits' they collected along with the pollen and the removed 'bits' look like fine wood shavings (husk).



Figure 1. She-oak husk accumulated in the drawers of bottom board pollen traps (note: the pollen traps were not engaged).

She-oaks, or as previously referred to as a Casuarina, are wind pollinated trees that bees may still choose to visit as a source of pollen.

The pollen is of poor protein quality 11-13%, as it is the case for many other wind-pollinated species such as that of various grass species, plantain and maize. Honey bees are often only seen to collect pollen sources like these 'to fill the gaps', when there may be a shortage of pollen in the area.

She-oak has no value as a source of nectar for bees. This makes sense as wind-pollinated species do not 'need' to attract pollinators with sugary rewards.

#### Why the name 'She-oak'?

One school of thought is that when the branches of the She-oak swish around in the wind, the branches make a -sheeeee sound. Hence the name She-oak. That's one story .....

### A bit about She-oak trees...

As already established, She-oaks are wind pollinated, but they are actually quite interesting trees nevertheless. Often the common name 'She-oak' is used for several species of oak including Black she-oak (*Allocasuarina littoralis*) -described below, Forest oak (*Allocasuarina torulosa*), River oak (*Casuarina cunninghamiana*) and Swamp oak (*Casuarina glauca*).

### Black she-oak (Allocasuarina littoralis)

#### Flowers

She-oaks are typically dioecious, meaning male and female flowers are found on separate trees.



Figure 2. Male flowers (left) – credit: Mark Page, and female flowers (right) – credit: Somerville 2019.

#### Leaves

She-oaks have slender, grooved and jointed branchlets that look like leaves. At the joints of the branchlets are whorls of small 'teeth' which are modified leaves. The species can be identified by the number of teeth.



Figure 3. 'Teeth' of the Forest and Black She-oaks – adapted from *The Glossy Black Conservancy* 

#### Fruit

Female flowers develop into a woody, roughly cylindrical cone. The cones have many paired valves that open when the seed is ripe. The seeds are dispersed by wind.







Figure 4. Unopened cones are grey-brown in colour (left), with old cones turning grey (right).

#### Bark

The Black She-oak has dark grey, deeply furrowed bark, which is hard and rugged. Trees are usually less than 12m in height.



Figure 5. The bark of the Black She-oak (T. Fountain)- – adapted from The Glossy Black Conservancy

So next time you see the bees cleaning out a whole lot of 'wood shavings', don't worry, the termites haven't moved in. Instead, it should be a reminder to you about the quality of pollen that bees may currently have access to at the apiary.

And keep an eye out for our Glossy Black-Cockatoos, who have a highly specialised diet and feed almost exclusively on the seed of she-oaks (*Allocasuarina* and *Casuarina* species).

# APIARY COTS

Manufacturers and Suppliers of Beekeeping equipment

PO Box 5, Mt Nebo Road, Mt Nebo QLD 4520

# **Buy** Australian Made

Hoop Pine Woodware - Frames - Supers Queen Cages etc

Or your special requirements

Phone: 07 3289 8181 Fax: 07 3289 8231



Figure 6. Glossy Black-Cockatoo feeding on Coastal She-oak (photo courtesy Alan Rash) - adapted from The Glossy Black Conservancy

#### References

Somerville, D. 2019. Honey and pollen flora of south-eastern Australia. NSW Department of Primary Industries.

LIVING WITH GLOSSY BLACKS: GLOSSY BLACK-COCKATOO FEED TREE IDENTIFICATION. Glossy Black Fact Sheet No. 5 - Glossy Black Conservancy





# **Imported Honey Fighting Fund**

July 2023

### Imported honey continues to be a priority issue for beekeeping industry in Australia.

The current threats to the Australian beekeeping industry mean that it has never been more important to **protect and promote our industry** to ensure our long-term viability.

Monitoring imported honey products and gathering authenticity data will strengthen AHBIC's ability to lobby on behalf of industry to increase testing of imported honey and improve current testing protocols.

AHBIC is asking for your donation into the imported honey fighting fund, enabling us to establish the **imported honey testing program**. The program will confidentially gather baseline authenticity data from imported honey on retail shelves building a database of deidentified data to present to government strengthen our voice.

Without the support of industry, AHBIC does not have the funds to facilitate this campaign at the level that is needed. AHBIC will be treating the investigation with integrity and anonymity and will not be naming and shaming adulterated samples as this impacts all honey sales.

By supporting the Fighting Fund AHBIC will be able to randomly test off-the-shelf imported honey for its **integrity**. The results will be used to build a solid, data driven de-identified platform to advocate on behalf of industry to government for policy reform.

Your contribution can be recognised on our website or you can choose to remain anonymous.

#### **Terms and conditions**

- You will receive a tax invoice/receipt and notification via email from AHBIC upon successful payment.
- A Voluntary Contributions is **not a tax deductible donation**. You may however be able to claim your contribution as a business expense.

If you prefer to complete a paper form, please email AHBIC - <u>ahbic@honeybee.org.au</u>

Or visit our website: <u>www.honeybee.org.au</u>



Plant Profile

# Plant Profile: white clover (Trifolium repens)

The following plant profile is from *Honey & Pollen Flora of South-Eastern Australia* by Dr. Doug Somerville. This book focuses on the value of plants to nectar and pollen-eating animals, honey bees in particular. The result of over 30 years of research, it brings together scientific knowledge and the experience of hundreds of beekeepers into a valuable reference work. The book can be purchased from Tocal College here: www.tocal. nsw.edu.au/publications/bees

# Honey and pollen flora feedback form:

NSW Department of Primary Industries values your experience working plants for honey and pollen. We would love to hear your feedback on the plant profiles republished in the Honey Bee News. Any help you can provide will be considered in the next update of Dr. Doug Somerville's *Honey & Pollen Flora of South-Eastern Australia*. Please submit your feedback here: https://forms.office.com/r/BmT1kFkF0B

# Honey and pollen flora of South-Eastern Australia

Understanding the biology of flora and its value to honey bees is the foundation of successful beekeeping.

The flowers on which bees forage have a major impact on stocking rates and the level of nutrition available to the colony. Whether a beekeeper owns one hive or a thousand, the principle is the same.

The result of over 30 years of research, this book distills both scientific knowledge and the opinions of hundreds of beekeepers into a reference work that will be the cornerstone of floral understanding in apiculture for years to come.

The publication includes a star rating system to rate each flowering species for their value to bee nutrition. Plants are ordered in botanical family groups with annual flowering charts and geographical distribution maps.

**The author** *Dr Douglas Somerville has a master's degree in Agricultural Extension and Rural Development and a PhD in Honey Bee Nutrition and Floral Biology.* 

RRP \$175 available from Tocal College www.tocal.nsw.edu.au



122-05



# White clover

## Trifolium repens

The most widely cultivated pasture legume in Australia, common in mixed pastures, lawns and gardens. Native to Europe and Central Asia. White clover is a very important forage legume of the temperate zones due to its ability of fixing nitrogen in the soil, thus lifting the overall fertility of the soil for other plants, particularly arasses.

While white clover is generally a valuable plant for honey bees, it is variable in its rewards across the locations and regions in which it grows. One study in New Zealand found that nectar production was higher in sandy soils when regular rainfall was experienced. During dry years the nectar production was higher in heavier soils.

**Description:** Low growing with trifoliate leaves, smooth to egg-shaped with long petioles. There are many varieties of white clover including small, intermediate and large types according to their height. The intermediate types are occasionally referred to as Dutch clover and the smaller varieties as ladino clover.

**Occurrence:** Found in all states and Territories throughout the temperate zone. In NSW it grows in a wide range of locations along the coast, tablelands and slopes requiring a minimal average annual rainfall of 750 mm, preferable with a summer incidence. The main honey-producing areas for white clover in NSW are between Walcha and Tenterfield during late spring to early summer. Periodically heavy short-term honey flows occur on the Central and Southern Tablelands during early summer and their occurrence is related to a combination of rainfall, temperature and wind conditions.

**Flowers:** Whitish coloured, often with a tinge of pink or cream associated with the flower/plant aging. The inflorescences are generally 1.5–2 cm wide on a 7 cm peduncle.

Honey: This species is the most important clover for honey production. During favourable seasons high yields of choicest quality honey are obtained. The honey is extra light in colour, of characteristic pleasant mild sweet flavour and aroma, but may be lacking in density. It granulates readily.

White clover rates medium to major as a honey source in NSW.

As there has been considerable breeding of various cultivars of white clover, it is fair to assume that there



Response Level			
	24		
	1		Mark and
			X
The second			
	-		
Photo: Harry Bose		Photo: Harry F	Rose

RATING

Months



will also be variation between cultivars as far as nectar secretion is concerned. As there is no data to report on what this variation may be, it would be valuable to beekeepers to gather information on the cultivar favoured in their areas and compare this back to honey crops obtained.

Yields of 32 kg can be expected as an average in regions where white clover is favoured for its honey production. Clover yields nectar more reliably in the warmer weather. **Pollen:** Produced in large amounts over an extended time period white clover is considered highly important as a source of pollen. The crude protein levels vary from 22.5%–25.9% with an average of 24.4%.

Unfortunately, many of the pollen samples tested demonstrate a deficiency in one or more amino acids.



# LYS N BEEKEEPING SUPPLIES



WWW.LYSONAU.COM.AU - 1800 955 579 - INFO@LYSONAU.COM.AU

# Clayton Plastics Servicing the honey industry for over 40 years.

# Jars & Squeezes





250gr & 500gr Square Jars

300ml Twist & Squeeze



500gr Squeeze (Honey Comb)



500gr Upside Down Squeeze



250gr & 500gr Amber Jars

# Pails



## Non Tamper Proof Pails

500gr, 1kg, 1.5kg, 3kg, & 5kg Pail (500gr, 1kg, 1.5kg available in clear as well) Tamper Proof Pails1kg, 1.5kg Honey Pails &102.2L, 5L Pails10

10L, 15L, 20L Pails

AU KINGSUN Clayton Plastics

www.claytonplastics.com.au



# **Bee Frames - Wood and Plastic**



Wood Frame Full Depth Assembled With Wire



Wood Frame Full Depth With Plastic Foundation (Not waxed)



Plastic Frame Full Depth

# **Plastic Beehive**

#### **Plastic Beehive with 10 Frames**

Material: food grade polypropylene Thickness: 30mm Working life: 30 years Packing dimension: 60x50x44cm 13.8/kg

۰		
۲	(F)	
0		
		6
6		6
6		•

#### Features: What you get: UV resistant 2 box hive consisting of: Thermal insulated increasing honey production 1 x ventilated top cover Light weight for easy lifting and carrying 1 x full size super Antioxidant plastic material for longer life expectancy 1 x Queen excluder Holds standard and full depth frames 1 x brood box 1 x bottom board (including 2 feeders and pollen trap) Easily assembled **Digital Thermometer** 1 x Entrance reducer **Built in ventilation** 4 x Lock, Latch connectors No painting required 1 x Temperature Gauge

# iupiarist Supplies

# Spring has arrived!

# better beekeepirig.

Spring can be one of the busiest times of year for bees (and beekeepers alike). It is the season when new colonies are started, and established colonies come back to life. The queen steadily lays more and more eggs, ultimately reaching her greatest rate of egg laying, drones begin reappearing, hive activity starts hopping and nectar and pollen starts coming into the hive thick and fast.

It's important to ensure your hive and bee colony is healthy, and you have your hives ready for the upcoming beekeeping season.

// CALL US: (03) 5032 9199
// EMAIL US: info@nuplasgroup.com.au
// VISIT OUR WEBSITE:
nuplasapiaristsupplies.com.au



# Nuplas Apiarist Supplies has everything you need for Spring.



### **HiveAlive**

To maximise colony build-up, prepare for migration and improve intestinal wellbeing use HiveAlive every spring. Available in 100ml, 500ml, 2L and 10L sizes.



### **Queen Excluders**

Use as a barrier to allow worker bees to reach the honey supers while preventing the queen from reaching the upper honey supers. Available in metal and plastic for 8 & 10 frames.



#### **Plastic Nuc Box**

For swarm collecting and splitting hives, our plastic Nuc Box holds up to 5 frames, has ample ventilation and an adjustable front door/vent.



#### Frames & Foundation

One-piece plastic frames and foundations are being utilised by beekeepers all over the world. No need for tedious construction, plastic frames and foundations are ready to go and come in a range of sizes.



**Order online today** 

WIN THIS SPRING Visit our website to find out how!\*

\*Terms and conditions apply see nuplasapiaristsupplies.com.au for details.

# Imported Honey Fighting Fund



## Imported honey continues to be a priority issue for beekeeping industry in Australia.

AHBIC are asking for your donation to establish an imported honey fighting <u>fund</u> to gather baseline data which will enable us to:

- establish an imported honey testing program
- protect and promote industry
- ensure our long-term viability
- strategically target cheap imported honey products

By supporting the Fighting Fund, AHBIC will be able to randomly test <u>off-the-shelf</u> imported honey for its integrity.

The results will be used to build a solid, data <u>driven</u> de-identified platform to advocate on behalf of industry to government for policy reform.

Your contribution can be recognised on our <u>website</u> or you can choose to remain anonymous.

AHBIC Imported Honey Fighting Fund Account Name: Australian <u>Honey Bee</u> Industry Council Account Number: 150 976 405 BSB: 633 000

Scan the QR code for more details on our website www.honeybee.org.au



# **Protecting Bees from Pesticides**

Do common methods for protecting bees from pesticides actually work?

by Entomological Society of America



Responsible use of pesticides includes striving to avoid negative effects on the environment, often with an emphasis on protecting bees and other pollinators. A new study, however, finds that many common methods for minimizing pesticides' impact on bees—even some recommendations on product labels—are backed by minimal scientific evidence. The researchers behind the study, published in the Journal of Economic Entomology, say stronger testing is needed to evaluate which bee-protection measures are truly effective and which ones may be too reliant on conventional wisdom. Moreover, nearly all of the research that has been conducted on these measures has focused on managed honey bees (left) while ignoring wild, native bees such as bumble bees (right) and other pollinators. Credit: (Honey bee photo by Chris Evans, University of Illinois; bumble bee photo by David Cappaert. Both photos via Bugwood.org)

Responsible use of pesticides includes striving to avoid negative effects on the environment, often with an emphasis on protecting bees and other pollinators. A new study, however, finds that many common methods for minimizing pesticides' impact on bees—even some recommendations on product labels—are backed by minimal scientific evidence.

The researchers behind the study say stronger testing is needed to evaluate which bee-protection measures are truly effective and which ones may be too reliant on conventional wisdom. They share their analysis in a report published in the *Journal of Economic Entomology*.

Growers are urged to follow a variety of "mitigation measures" meant to protect bees during <u>pesticide applications</u>, such as spraying at night, using specific nozzles on sprayers, or maintaining buffer zones.

"It takes time, money, and effort to follow these rules, so if they are not actually helpful, they are a waste of time," says Edward Straw, Ph.D., a postdoctoral researcher in the School of Agriculture and Food Science at University College Dublin (UCD) in Ireland and lead author on the study. "If they are helpful, though, they could be applied more widely, to protect bees further."

Straw and colleague Dara Stanley, Ph.D., assistant professor in applied entomology at UCD, combed published, peer-reviewed research for studies that evaluated the effectiveness of any kind of mitigation measure in reducing a pesticide's impact on bees. Just 34 studies matched their criteria, spread across a wide range of measures—but largely focused on just one kind of bee.

"Almost all research was centered around protecting honey bees. However, honey bees are a managed species that is not endangered," Straw says. "When we try to protect bees, we really want to be protecting wild, unmanaged bee species, as these are the species which are in decline."

Few mitigation measures had more than one or two studies evaluating their effectiveness, and methods of testing varied. For instance, some studies tested for direct overspray while others tested for longer-term pesticide residues. And just three studies among Straw and Stanley's review evaluated measures frequently found on pesticide labels.

"Least researched was testing on how you time a pesticide spray, be that time of day or time of year," Straw says. "There's good reason to believe that if you change when you spray, you could avoid peaks in bee activity. Yet surprisingly no one has really researched if this idea works. This is odd, as it's a very common mitigation measure and not overly hard to test."

Other mitigation measures tested in existing studies included how pesticides are applied (e.g., spray parameters or planting methods for pesticide-coated seeds), <u>buffer zones</u>, removing flowering weeds before spraying, direct interventions for managed bees (e.g., moving or covering colonies), and applying pesticides only in certain weather conditions or during certain crop stages.

A newer method had the most studies (12) investigating its potential: repellent additives to pesticide sprays, which encourage bees to avoid a recently sprayed crop. Several compounds have shown promise in lab testing, but all 12 studies tested repellency for honey bees only, and none were tested in formulation with a pesticide—only on their own.

"It is an interesting idea, but it is not yet ready to be used," says Straw. "It would need to be tested on a diversity of bee and insect species, as if it is only repellent to one or two species, all the other <u>bees</u> would still be exposed to the pesticide."

In sum, Straw and Stanley say too much hinges on bee-protective measures for them to be weakly supported. Bees play a critical role in both <u>natural ecosystems</u> and agriculture, and the presumption that mitigation measures are effective can be factored into decisions to authorize pesticides for use. Rigorous scientific evaluation of these measures is imperative, they say.

"The main limitation is that these studies need to be big, well-funded pieces of research. To test changes to how a pesticide is applied to a crop, you need to have a crop, a pesticide sprayer, and someone licensed to spray. All of that is expensive and time consuming, making it out of reach for most scientists," says Straw.

But, if such research can be generated, there's reason to believe it will have immediate positive impacts. In related research Straw and Stanely published earlier this year, compliance with pesticide regulations and guidelines among farmers in an anonymous survey was high. "We know that these mitigation measures are being followed," says Straw. "We just do not know if they are helpful yet."

More information: Edward Straw et al, Weak evidence base for bee protective pesticide mitigation measures, *Journal of Economic Entomology* (2023). DOI: 10.1093/jee/toad118







# Honey processing and extraction equipment

Whether it's tipping the first drum, or extracting your first box of honey, as well as plant upgrades and maintenance, our team are here to help you along the way.

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

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



FACTORY DIRECT Made in Australia by Danbar Plastics BEEPLAS FOUNDATION SHEETS

<section-header>



# **Bee Build**

It does what is says—Builds BEE\$ A Complete Pollen Replacement based on Scientific Honeybee Industry Research (Fat Bees, Skinny Bees—RIRCD Pub No. 05/054)

Visit www.beebuild.com.au for full story and how to feed. Available in 5kg, 10kg or 20kg

> Enquiries and Sales Contact: Robert & Melissa Dewar Ph: (07) 5463 5513 www.beebuild.com.au

# PREMIUMENT







bouteljeproducts.co.nz | +64 9 820 2244

HUNTER VALLEY APIARIES

Col & Linda Wilson PO Box 180, KURRI KURRI NSW 2327 Ph/Fax: (02) 4930 4950

# FOUNDATION

# PLASTIC

The Best Plastic Foundation You Can Buy Dominates Sales in USA and CANADA Sizes, FD, WSP, Manly, Ideal

Full **PLASTIC FRAMES** available

**FRAMES** 

**Premium Quality** 

For Plastic and Wax Foundation

**BEE BOXES** 

**WEATHERTEX** 

Lids & Bottom Boards

**OUEEN EXCLUDERS** 

FRAME FEEDERS

**QUEEN CELLS** 

# WAX

We can mill to the thickness you require Have your own wax milled or exchanged for foundation in stock

DRONE COMB FOUNDATION available

Wax bought or exchanged for bee goods

# AFB

TEST KITS Quick and easy to use Results in just 3 minutes

SWARM ATTRACTANTS APITHOR for Small Hive Beetle



Products available including Pollen & Feed Supplements

For All Your BEEKEEPING SUPPLIES Email: honeybee100@skymesh.com.au Phone: 02 4930 4950

# Technical Specialist, Honey Bees Report

Elizabeth Frost

Technical Specialist, 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

# 864,348 honey bee hives registered in Australia

864,348 honey bee hives and 45,781 beekeepers are registered across Australia according to NSW Department of Primary Industries Technical Specialist, Honey Bees Elizabeth Frost (Table 1). This is an increase of 20,286 beekeepers and 192,132 in bee hive numbers since the last comprehensive national update in the November 2018 Australian Honey Bee Industry Council newsletter. This significant increase in registered beekeepers and hives nationally over the past five years does not include unregistered managed or feral honey bee hives, so can be considered an underestimation of total hives and beekeepers in Australia.

			% Increase from
YEAR	2023	2018	2018 to 2023
TOTAL NUMBER OF BEEKEEPERS			
NATIONALLY	45,781	25,495	80%
TOTAL NUMBER OF BEE HIVES			
NATIONALLY	864,348	672,216	29%

Table 1. Change in total numbers of beekeepers and hives nationally from 2018 to 2023.

Registration of honey bee hives is now a legal requirement in all Australian states and territories. Even Tasmania! Since the previous tally of registered bee hives and beekeeper numbers nearly five years ago in 2018, Tasmania has implemented the legal requirement to register bee hives in the state. This update of beekeeper and hive statistics for Australia, current as of July 2023, was a collaborative effort with the assistance of state and territory government beekeeping, compliance and licencing staff from the ACT, NSW, QLD, VIC and WA (Table 2). Beekeeper and hive statistics however were not provided by South Australia, so are current as of 2018.

State / Territory	Beekeepers	Hives	% of Australia's bee hives
NSW*	15,041	400,434	46.3
QLD	9,225	154,559	17.9
VIC	11,828	130,227	15.1
SA**	1,848	73,955	8.6
WA	4,945	58,501	6.8
TAS	1,338	31,852	3.7
ACT	1,307	11,960	1.4
NT	249	2,860	0.3
TOTAL	45,781	864,348	100

 Table 2: National beekeeper and colony registration statistics as of July 2023. \*NSW figures current as of 1 Sept. 2023. \*SA figures current as of 2018.

Honey bees are livestock and legally need to be registered with the state or territory government where they're located. Registration provides information that is critical to maintaining biosecurity for beekeepers of all scales. Current information on the number of hives and beekeepers in each state and territory contributes to local and national decisionmaking on disease control, management, national disaster and emergency responses. Having the contact details of beekeepers readily available allows for quick notification of an incursion event, as we've seen in the Varroa Mite Emergency Response. Depending on your state or territory, registration may also provide perks such as those in NSW of free or reduced bee disease diagnostic costs or free notifications regarding discovery of endemic diseases such as American foulbrood within flight distance to your hives. You can find your government beekeeping registration instructions online through www.beeaware.org or through your local government agricultural department.



#### Cost of registration in NSW

The following fee (incl. GST) is payable at the time of beekeeper registration or renewal (Table 3). A 10% discount is applied to registrations submitted online via <u>https://www.dpi.nsw.gov.au</u>

		Recreational	
Online	\$90	\$54	\$36
Manual	\$100	\$60	\$40

Table 3. NSW beekeeper registration fees per two year period by beekeeper class and rego pathway.

A bee registration issued under the *Biosecurity Act 2015* will be valid for 2 years.

Business registration is for those intending to derive an income (part time/full time business) from the sale of bees or hive products (eg. honey, beeswax). If you are unsure and would like assistance in determining whether you are running a business please visit www.business.gov.au.

Business registration in NSW is not defined by the number of hives that you own. However, if you own 50 or more hives, there are additional requirements that apply to you under the Code of Practice. There is no fee charged for the variation of a bee registration. Keeping your registration and hive number details up to date either yourself online or by ringing NSW DPI Licensing Team is beneficial both for the department and yourself. In times of natural disasters such as drought, bushfires or flooding hive registration details such as current apiary locations and hive numbers are a vital reference for government and rural assistance agencies working with affected beekeepers.

Beekeeper registration details can be updated through your online login, by post or over the phone through the following resources:

Department of Primary Industries PO Box 232 Taree, NSW, 2430 Further information Tel: 02 6552 3000 Fax: 02 6552 7239 Email: bfs.admin@dpi.nsw.gov.au

# QUEEN BEES

 1-10
 \$35 + \$15 P&H

 11-49
 \$30 P&H inc.

 50+
 \$27.50 P&H inc.

 200+
 \$25 P&H inc.

4 Frame Nuc into your box ..... \$150+GST

Phone: 0488 379 060

Wooroonden, Queensland 4605 — Email: turnout.ent@icloud.com ABN 17 096 160 402 — TERMS - PAYMENT PRIOR TO DISPATCH

# **Honey Bees Inspiring Robotics**

# How Honey Bees Inspire Advanced Robotics And AI

Macquarie University



Bees make decisions better and faster than we do, for the things that matter to them

In a new study published in the Journal eLife, researchers shed light on the remarkable decision-making abilities of honey bees, showcasing how millions of years of evolution have finely tuned these insects to make rapid and accurate choices while minimizing risks. This newfound understanding not only deepens our knowledge of insect brains but also offers valuable insights into the evolution of our own cognitive processes and the design of more advanced robots.

Led by Professor Andrew Barron from Macquarie University in Sydney, along with Dr HaDi MaBouDi, Neville Dearden, and Professor James Marshall from the University of Sheffield, the study presents a comprehensive model of decision-making in bees. By outlining the neural pathways that enable swift decisionmaking, the researchers provide a framework for unraveling the mysteries of these fascinating creatures.

"Decision-making is at the core of cognition," explains Professor Barron. "It results from evaluating possible outcomes, and animals face countless decisions throughout their lives. Despite possessing brains smaller than sesame seeds, honey bees can make decisions faster and more accurately than humans. To replicate a bee's abilities, a robot would require the computational power of a supercomputer."

Professor Barron goes on to highlight the limitations of current autonomous robots, which heavily rely on remote computing support. Drones, for example, lack independent decision-making capabilities and must maintain wireless communication with a data center. This approach, he argues, hampers the prospect of drones exploring distant locations like Mars without external aid, unlike NASA's rovers that have traveled a mere 75 kilometers over several years.

For honey bees, swift and efficient decision-making is crucial to their survival. Balancing the tasks of finding nectar and safeguarding the hive from predators, bees constantly face decisions regarding which flowers are likely to yield food. While airborne, they are vulnerable to aerial attacks, and once they land to feed, they become susceptible to predators, some of which camouflage themselves as flowers.

The researchers trained 20 bees to recognize five differently colored "flower disks." Blue flowers consistently contained sugar syrup, green flowers always contained quinine (imparting a bitter taste to bees), and other colors occasionally contained glucose.

"We then introduced each bee to a 'garden' where the 'flowers' only contained distilled water. We recorded over 40 hours of video, meticulously tracking the bees' flight paths and measuring the time it took them to make decisions," explains Dr MaBouDi.

Dr MaBouDi further elaborates on their findings: "If the bees were confident that a flower held food, they swiftly decided to land on it, taking an average of 0.6 seconds. Conversely, if they were confident that a flower did not contain food, they made the decision just as quickly."

However, when bees were uncertain about a flower's potential yield, they took significantly longer to decide, averaging 1.4 seconds. The time spent reflected the probability of the flower containing food.

Using these observations, the research team constructed a computer model that emulated the decision-making process of bees, mirroring the structural layout of a bee brain.

"Our study demonstrates complex autonomous decisionmaking with minimal neural circuitry," asserts Professor Marshall. "Now that we understand how bees make such intelligent choices, we are investigating how they excel at rapidly gathering and analyzing information. We suspect that bees leverage their flight movements to enhance their visual systems, enabling them to detect the best flowers more effectively."

Insect behavior, including that of seemingly "simple" animals like bees, offers valuable insights for AI researchers. Through millions of years of evolution, these creatures have developed highly efficient brains with remarkably low power requirements. Professor Marshall, who co-founded Opteran, a company dedicated to reverse-engineering insect brain algorithms for autonomous machine movement, believes that the future of AI in industry will be deeply inspired by biological systems.

By unraveling the secrets of honey bee decision-making, researchers pave the way for breakthroughs in robotics and AI. As technology draws inspiration from nature's intricate designs, we inch closer to developing machines capable of autonomous decision-making, mirroring the remarkable abilities of these small but mighty insects.

Reprinted from Cath the Buzz

# **Preliminary Treatment for Viruses**

Successful treatment for deadly honey bee viruses found in US study



US-based researchers have successfully treated honey bees with a novel immune system booster for deadly viruses causing losses of the critical pollinator on a global level. Honey bees play a crucial role in our food system and production by pollinating crops, and their population decline, partly caused by viruses, is a direct danger to human health.

The scientists found that bees could fight many viruses when encouraging their cells to produce free radicals.

"This approach is especially exciting because it doesn't just target a specific type of virus but helps with many different viruses," says Daniel Swale, senior author of the study and the associate director for training and special projects in the UF Emerging Pathogens Institute and associate professor in the UF/IFAS entomology and nematology department.

"Additionally, we demonstrated that our treatment works in the lab and in colonies containing 80,000 bees in the field. This is huge because, in a hive setting, bees are exposed to so many different viruses and stressors, so successfully controlling viruses in that environment is very encouraging," says Swale. of honey bee losses, but it's important to point out that varroa mites, aside from physically weakening bees, also transmit viruses to bees."

The researchers used a protein found in the cells of bees and most other "living things," the compound pinacidil, which alters potassium ion channels and produces more free radicals.

"One of the big takeaways from this study is that potassium ion channels can be a target for improving immune system function in honey bees and possibly other insects. We would like to find a molecule, such as a peptide or a new technology that has the same effect as pinacidil but is more accessible to beekeepers," says Swale.

The protein was mixed with sugar water and drizzled over the honeycomb, making it accessible for the bees to consume. The treatment showed protection from the Israeli acute paralysis virus, deformed wing viruses A and B, black queen cell virus and Lake Sinai viruses 1 and 2.

"While free radicals are often bad for cell health, they can be therapeutic in moderate amounts, as we see in this study. In this case, the additional free radicals signal to the immune system to ramp up, which helps the bees fight off viruses," says Troy Anderson, a co-author of the paper and a professor of entomology at the University of Nebraska-Lincoln.

"If we can mitigate viruses in honey bee colonies, that would be a big step forward," Simone-Finstrom adds. The team of researchers says there are challenges in treating all commercial honey bees, although it "opens the door" to identify other, and maybe more costeffective, treatments.

Reprinted from Cath the Buzz



The protein was mixed with sugar water and drizzled over the honeycomb, making it accessible for the bees to consume.

#### A threatened specie

Michael Simone-Finstrom, a co-author of the study and a molecular research biologist with the ARS Honey Bee Breeding, Genetics and Physiology Research Lab in Louisiana, US, says that "varroa mites [a parasitic mite that attacks honey bees] are the number one cause



Photo: Brett Bingley

# BEE BIOSECURITY OFFICER REPORT



Rod Bourke - NSW Bee Biosecurity Officer NSW Department of Primary Industries - Biosecurity NSW Tocal Ag College, Tocal Rd Paterson NSW 2320 Ph: 02 4939 8946 Mob: 0438 677 195 Email: rod.bourke@dpi.nsw.gov.au

# **Healthy Hives and Varroa**

In the months after the initial varroa detection in June '22 I proposed heading over the ditch to New Zealand that October to look at their varroa spring management practices. Whilst the idea had merit it was definitely not the right time to go, as we were all a bit busy here.

Fast forward to this year and AHBIC started planning a trip funded by the Agrifutures Capacity Building Project (a separate project which does not use funds derived from honey levies) for NZ springtime. I have just returned from that trip with Bianca Giggins from AHBIC and other BBO's/Apiary staff from both WA and Victoria, where we had a very insightful look into how a number of different sized operators (up to 24 000 hives) manage varroa. A detailed trip report will be produced shortly.

The trip to NZ coincided with some very difficult times for beekeepers in NSW, with many hives still sitting on almond orchards in various red and purple zones, and with new Infected Premises being detected in areas right around NSW. It felt surreal seeing the extent of the actions that NSW DPI was taking to try to contain the varroa outbreak at home whilst in NZ every successful beekeeper has to fight the ongoing war against mites every day. Shortly after my return, the transition to management was announced and so the learnings both this trip and a previous trip in 2019 are especially pertinent to NSW beekeepers.

Here is a brief list of my combined observations from those 2 trips.

- much of NZ is colder than most of NSW, so whilst their treatment timings do not coincide with what would be required here (much warmer and no brood-breaks) both the products used and techniques would be similar. The biggest difference is that more frequent treatments would need to be used here and we may face larger challenges with minimising our miticide residues due to many more honey flows throughout the year.
- You can still run a profitable and successful beekeeping operation with varroa mites, it just requires regular attention (as in doing it regularly) to control your mite numbers.
- Every beekeeping operation that we visited undertook different varroa management strategies. Some were 100% "pharmaceutical" miticide strips, some were 100% "organic acids" and some undertook a mixture of both.
- All reported issues from nearby "beekeepers" who

did not undertake mite management and bred up mites that spread to others.

- Most regularly alcohol washed around 10% of their apiary, conducting them both before (to determine mite loading), during (to check if the treatment is working) and after various treatments (to determine overall effectiveness of mite knockdown and levels of reinvasion).
- We alcohol washed a hive that was getting regular Oxalic acid vapour treatments and got mites, but uncapped drone brood in the same hive and found none.
- Every beekeeper said it would be far better if Australia could eradicate varroa than have its beekeepers have to live with it daily. They acknowledged that the mite is extremely hard to control so it was always going to be a very difficult job to eradicate, but the fact that we tried so hard to stop it shows how much we support our beekeeping industry here.
- All beekeepers experienced hive losses attributed directly to the impacts of varroa, and those losses were much higher than those directly attributed to AFB. During my first visit in 2019 it was the opposite, with AFB being more destructive. This may indicate that their AFB management agency is making progress by burning AFB infected apiaries, or that varroa is getting harder to manage.
- Managing varroa adds significantly to the ongoing maintenance costs of each hive. This increases when the additional travel and staff hours required to undertake frequent varroa management (especially when using "flash treatments" or fogging with organic acids) are correctly calculated and added to the direct costs of the various miticides and equipment used.
- The "economic threshold" in NZ is a 3% mite infestation, so when you find 9 mites in a ½ cup (300 bee) alcohol wash you know that the hive is already on the point of under-performing and you should have started treatment earlier.
- Managing residues in honey (from both chemical miticides but also from organic acids) were a big issue and many had a dedicated honey box (full of honey/sugar syrup) that was always on the hive when miticide strips or thymol treatments were being used (instead of impacting a honey box collecting a crop of honey). This box needed to be pulled off and stored when a honey flow was on and no strips





were in the hive, and returned to the hive afterwards (which was often much of the year as their honey season is quite short).

- The number of hives managed by each qualified beekeeper was less than in pre-varroa times.
- The annual NZ MPI colony loss survey was a very important source of information on how well/poorly their industry was coping with varroa and other bee pests and diseases.
- Managing your varroa numbers is the most important part of managing your bee health. As only healthy hives are productive and profitable, varroa management becomes a major priority in your daily beekeeping.

Looking at that last point highlights the very significant rule that should already be a major part of your beekeeping...whether you have varroa mites or not managing your hive health is critical if you are (or want to be) running a productive and profitable beekeeping operation. Skimp on managing your brood box means your economic returns will be less.



Definitely time to start thinking about treating when you find 5-6 mites in your standard 300 bee alcohol wash.

NSW has a large number of commercial beekeeping operations and it is fair to say that they are vastly different in their abilities, nature, design, ethics, health and profitability. Some operators run extremely well organised operations and have fairly consistent production for most hives within each load, whilst others have never been on top of their bee health and routinely have extremely weak or dead hives sitting within their loads of bees, and honey production is variable/less than it could be. These two groups each sit at opposing ends of the "beekeeper bell-curve", whilst most operators are sitting somewhere in the middle. The golden rule is the more you put into managing your bees the more you will get out of them in return.

As I write this article in mid-September the varroa response has transitioned to a containment strategy rather than eradication. At the end of the day the response was put into play to try and stop the world's most destructive bee pest from becoming a big part of everyday beekeeping life in Australia, and whilst the challenge has always been great it was always best to try to fight it instead of just giving up.

So, amongst all of the stress, unknowns, anger and anxiety that NSW beekeepers are currently feeling and experiencing one thing is crystal clear...we need to prioritise our bee health (and our own health too) so that our bees will do their best. Healthy bees are the ONLY bees that should ever be used to make up new hives or nucs. Healthy bees are also the best bees for producing honey.

Just concentrate on healthy bees and everything else to do with varroa etc. will work itself out and then we will be able to get on with that job too. It is unrealistic to expect to get all the answers straight away. We all need to acknowledge that because these times are not normal, we should not be expecting the same amount of "clarity" for our beekeeping as we normally have, so we need to add some wait and see into our days and weeks.



Thymol wafer (an "Organic" treatment) in NZ hive. Bees often do not like the smell (which may also taint honey) so it is often propolised up and should not be used when honey supers are on. Wear appropriate gloves (chemical, not leather) when handling it and all other mite treatments.



In NZ a lot of Oxalic acid is used to control mite numbers, often in combination with miticide strips. At this time we cannot legally use this chemical in Australia. Appropriate PPE and breathing protection is required.

With unsettled times ahead we must maintain our focus on keeping our bees healthy. If at some point varroa management needs to be included within your regular hive management procedures then so be it, but it may require some alterations to your current beekeeping schedules and practices. Therefore, I encourage all beekeepers to take a long hard look at their current and historical beekeeping practices and think about where varroa management may sit/fit within the current seasonal workload. It may be either quite easy or on the other hand extremely difficult to add varroa management practices into your current processes, which means you will need to consider changes to how you currently do things. That may include increasing staff numbers and the amount of quality training they receive, or a planned decrease in hive numbers to cater for current staff numbers and the increased workload.



In NZ coreflute sticky mats (sprayed with vegetable oil) are regularly used to count mite drop during treatments. Note the chewed up Oxalic acid strip on mat and corrosion on hive lid from the use of organic acids. Our metal excluders may suffer.



ApiZoom is a mite counting app that is widely used in NZ. Green dots are identified as mites (it may not always be 100% accurate).

I think the critical point to consider is that if you are not prepared to make changes to address new threats then it will be harder to stay in the game. Looking at change ahead of when you actually need to change (preparation and planning) will always result in a smoother outcome than having to make rash and rushed changes because it is now an emergency.

DPI have a supply of miticides that can be made available to beekeepers with confirmed varroa mite infestations. A number of varroa mite treatments have already reached "Shelf registration" and others are progressing with the APVMA, to be made publicly available through commercial suppliers. BUT, just like the panic buying of toilet paper during COVID please only consider sourcing these products when you think you may actually need them. Unlike toilet paper the miticides have a shelf life and will not work effectively after expiry (one NZ operation experienced high losses after using expired strips), so don't go crazy trying to buy up everything you don't even need yet. Until such time as we may need miticides just keep doing your alcohol washing and monitoring your hives, as that becomes a constant, ongoing thing when you are battling varroa mites.

Updating your bee biosecurity (bee pest and disease) training is also another good idea, as there are always new things to learn in beekeeping AND it is also a legal requirement in NSW that all commercial beekeepers update that training every 3 years. NSW DPI has a bunch of varroa training (online and face-to-face) and other resources ready to roll out. Contact Tocal College for more information.

It is hard predicting the future with absolute certainty, and in beekeeping you often have to make "educated decisions" that rely just as much on luck as believed certainty that they will pan out and exactly the same is true when we have to manage varroa mites. Training, lots of reading and research, looking at how others do it overseas, developing your own experience in your region and learning from all your previous mistakes will all play a part of a varroa management future, so when that time



The National Bee Biosecurity Program is funded by the honey bee industry through a component of the agricultural honey levy, with state governments contributing in-kind resources. Plant Health Australia manage the program on behalf of Australian Honey Bee Industry Council.

# **Cover Photos**

Do you have a bee related photograph that you would like to see on the cover of Australia's Honeybee News?

Email it to honeybeenews@icloud.com



# New digital beehive monitoring system improves efficiency of managing remote beehives

# Multiple features in an affordable, flexible and intuitive system.

Many beekeepers travel long distances to visit their apiaries. If that's you, you'll appreciate how valuable it would be to have an insight into the health of your hives and the needs of your bees, before you make the trip to check on them. Just imagine how much more enjoyable and efficient beekeeping could be if there were no surprises when you arrived at the apiary.

That's where Hivemate steps in. It's like having an extra pair of hands in the apiary, helping you keep an eye on your hives, even when you're not there.

Hivemate's digital beehive monitoring system allows you to work smarter, saving you time and money by ensuring you only make the journey out to the apiary when your bees need you. By simply checking the Hivemate app, you'll know in advance when the flow has dried up and it's time to move the hives, and you'll never lose bees to swarming again because Hivemate will let you know when it's time to harvest your honey.

The Hivemate system can be used on wooden or plastic hives and sits underneath the box, replacing the original base. Hivemate records the hive's weight, temperature, humidity, and exact location, providing updated data every 30 minutes between 4 am and 10 pm, every single day. This allows you to monitor and track the honey output and the box entrance temperature during the bees' active hours, and enjoy peace of mind knowing that your hive is where you left it. You can even opt for sound monitoring as an added extra, so you can listen to your bees no matter where you are.

Hivemate can run off Wi-Fi, 4G, or a combination of both, to ensure instant access to your data as soon as it's recorded. The Hivemate unit is fitted with a solar charging panel, meaning it'll charge itself automatically for long, uninterrupted battery life.

All the data will be recorded and kept within the Hivemate app on your smartphone, computer, or television, meaning you won't have to worry about taking hive notes ever again.

Whether you keep bees as a hobby or have a large commercial apiary, Hivemate has been designed for you. Our system can be customised to suit your needs, to ensure that you'll get the most out of working with Hivemate.

With our world-class beehive monitoring system on your team, you'll be able to watch over your bees no matter where you are – even when you're on holiday. Hivemate gives you all the information you need to keep your bees happy, healthy, and productive, leaving you to focus on the rewards.

With Hivemate by your side, you don't have to do it all on your own anymore.

Work smarter with Hivemate. Contact us today!

For more information about Hivemate, including all the technical specifications, available packages and products, and answers to our most frequently asked questions, head to our website at www.hivemate.com.au or get in touch at sales@hivemate.com.au or (03) 8401 4248. Distributors and retailers wanted!



Visit us at **Booth 35-36** at the **4th Australian Bee Congress** on June 8-11 at Rosehill Gardens Racecourse, Sydney

# Work Smarter with Hivemate®

Watch your bees from anywhere with the patented Hivemate<sup>®</sup> monitoring system - just a single base that's easy to use and more affordable than you think!

# 6 key benefits with Hivemate<sup>®</sup>:



Watch over your bees no matter where you are



Monitor your bees through the app anywhere, anytime



Check your hive's weight at any time







uninterrupted battery life



Know the temperature and humidity of your hives

Hivemate<sup>®</sup> is a digital beehive monitoring system that provides live data on the health and productivity of your bees. With Hivemate, all it takes to check on your hives is a quick glance at the Hivemate app.

Whether you keep bees as a hobby or have a large commercial apiary, Hivemate has been designed for you. Our system can be customised to suit your needs, to ensure that you'll get the most out of working with Hivemate.

With Hivemate by your side, you don't have to do it all on your own anymore.

Save money and time, contact us today!



www.hivemate.com.au or get in touch at sales@hivemate.com.au or (03) 8401 4248.

Distributors and retailers wanted!



Scan QR code



# Australia's Most Satisfied Customers

Thank you to Australia's best beekeepers for supplying your honey to us. Together we can be proud to be voted Australia's #1 Honey.



\*\*\*\* TEXTURE & CONSISTENCY

PACKAGING DESIGN

If you're interested in selling your quality Australian honey or beeswax please call Steven Goldsworthy on 0419 559 242 or 02 6033 2322.

beechworthhoney.com.au





Specialising in Caucasian **Oueen Bees** 

Marked Queens		\$45 ea.
1-9		\$40 ea
10 - 49		\$35 ea.
50 - 199		\$31 ea
200 plus per season		Discounts Apply
Queen Cells		\$8 - collect only
Droad	an Outoma	\$975

Breeder Queens - \$825 Naturally mated on a remote island.

Post & Handling \$15 per dispatch under 50 qty.

Prices include GST Valid September 20 22 to March 2023

Terms: Payment 10 days prior to dispatch, For orders contact:

#### John Covey

Email: sales@coveybees.com.au Ph: 0427 046 966 PO Box 72 Jimboomba QLD 4280

# **N**HII For decapping, extractors,

wax reducer & wash down



# **Fully Automatic Electric Steam Boilers**

Model shown ranges from 3kW to 42kW

Steam output from 5.7 to 66.8kg/hr.

Models range from 1/3 h.p. (3kW) to 48 h.p. (480kW).

workspace

Can be installed adjacent to steam appliance in

Quiet & reliable operation

Simple to operate

- low maintenance cost

& maintain – no sophis-

ticated burner/ignition/

no heat transfer surfaces

draft controls - no fire

brick maintenance

Low heating element replacement cost

instructions, wiring & piping diagrams

ex stock

Comprehensive

All spare parts available

operating & maintenance

accompany each boiler

Corrosion resistant, no tubes, gussets or stays -

- Fast steam raising
- Compactly packaged & self contained, no plant room required
- 99% Thermal efficiency
- Low capital & low installation costs
- No boiler attendant reauired (state regulations may limit maximum capacity)
- Simple installation requires only connection of water & electricity
- No flue no fire no risk of explosion
- no fumes or smell No oil storage tank
- no oil deliveries
- Clean equipment & work area

# 

1/33 Maddox Street Alexandria NSW 2015 Ph: (02) 8338 8660 Fax: (02) 8338 8661

Australian family owned company Est.1932 **144 Colchester Road Bayswater North VIC 3153** Ph: (03) 9462 6700 Agents in all other states

www.simonsboiler.com.au



PRESSURE CLEANERS





# SAME RUGGED RELIABILITY

# Brand new look

Since 1982, we've been helping hard-working Aussies clean machinery, mines, farms, factories, and fleets of vehicles. Our brand now has a fresh new look while we continue to work tirelessly to exceed your reliability expectations.



Call 1300 880 403 spitwater.com.au



# **Bogged Again ?**

Twelve hardy souls braved the chilly Uralla weather to attend a 4WD/Truck Recovery Workshop on Saturday 2 September.

The workshop was hosted by Darryl and Robyn Carter utilizing Darryl's new shed.

Who doesn't like a new shed?

The day was funded from Branch funds.

The workshop covered vehicles up to 50 tonnes, with plenty of stories of bogged bee trucks, four in one day took out the "Bogger Award".

Handy hint here was don't bury your vehicle, if it's not going forward, stop and assess what's going on.

Safety must play a part in any recovery situation, use appropriately rated gear and understand how your gear works and what's likely to fail in a recovery situation.

Stress and panic can cause you to make mistakes some of which could be fatal. Once any life threating danger has passed take a step back, sit down for 10 minutes then assess the situation from every angle before you proceed.

Participants were able to get their hands on various recovery equipment items and learn how to use them. The soft shackle was a new one for most of us as well as the "Black Snake" nylon recovery strop.



At the end of the session the general consensus was it was time for a recovery kit upgrade or replacement.

A \$1,000 grant is available for the purchase of safety equipment eg Vehicle Recovery Equipment. Details are available at

https://www.nsw.gov.au/safework-small-business-rebate-eligible-safety-items

Norm Maher Secretary Tamworth Branch



Australia's Honeybee News September - October 2023



for commercial beekeepers.

Administration is boring Get in depth site breakdowns at a glance with digital dashboards. Save an hour a day **Go deep with in-depth reports** Spot informative trends, under-performing hives, and hidden value from your data.

Are your staff slacking off? Achieve higher staff accountability

without micro-managing

**Constantly losing information?** All your hive, site and landowner records kept in one central place.



Visit us at: **MyApiary.com** Call us at: **02 4089 0639** Smarter systems, smarter business, **smarter beekeeping** 

# **Meeting / Conference Dates**

## **BRANCH**

#### **Sydney Metro**

First Tuesday of every month at 7.30pm at Chifley College Bidwell Campus, Daniels Road, Bidwell.

#### **Central Tablelands**

January - third Tuesday April Saturday 22nd 10:30am Orange area July Saturday 22nd 10:30am Bathurst area October Saturday 21st 10:30am Orange area

#### **Riverina**

Our meeting dates are usually in the first week of February, May, August, and November each year.

Lately our meetings have been held alternatively between Wagga Wagga and Griffith.

Usually on the first Monday, when held in Wagga Wagga and on the first Thursday, when held in Griffith.

The venues change to suit availability.

#### **North Coast**

Meetings are generally held on the last Friday of January, March, May, July, September & November

## **2024 CONFERENCE**

NSWAA - TBC QBA - TBC SAAA - TBC VAA - TBC AHBIC AGM - TBC

### **BRANCHES**

**Central Tablelands Hunter Valley** North Coast **Northern Tablelands** Riverina **Southern Tablelands** Svdnev Tamworth Western Plains

### PRESIDENTS

0477 460 642 Sam Lockwood Col Wilson 02 4930 4950 Stephen Fuller 0488 434 498 **Richard Willis** 0428 323 812 Steve Cunial 0448 627 291 Zac Alcock 0422 750 629 Paul Drew 0403 175 708 Ray Hull 02 6760 3634 Daniel Warman 0431 386 481

Claire Bennett **Contact President** Col Maloney Glenn McConnell Lee Neagle Garth McClay Jane Flitter Norm Maher Shaun Sykes

**SECRETARIES** 

0409 340 502 02 6663 7051 02 6732 3222 0499 004 213 0400 989 115 0413 769 411 0447 603 245 0437 044 010

## **EMAIL**

	centraltablelandsbranch@nswaa.com.au
	huntervalleybranch@nswaa.com.au
	northcoastbranch@nswaa.com.au
2	northerntablelandsbranch@nswaa.com.au
;	riverinabranch@nswaa.com.au
j	southerntablelandsbranch@nswaa.com.au
	sydneybranch@nswaa.com.au
5	tamworthbranch@nswaa.com.au
)	westernplainsbranch@nswaa.com.au

### **AUSTRALIAN HONEY BEE INDUSTRY COUNCIL (AHBIC)**

Chairman: Stephen Targett **CEO:** Danny le Feuvre Ph: 0402 467 780 Email: ahbic@honeybee.org.au Website: www.honeybee.org.au Mailing address: PO Box 42 Jamison Centre Macquarie ACT 2614

#### **AGRIFUTURES - Honeybee & Pollination** Annelies McGaw Manager

Ph: 02 6923 6913 0407 987 738 Email: Annelies.McGaw@agrifutures.com.au Website: www.agrifutures.com.au

#### AUSTRALIAN QUEEN BEE BREEDERS ASSOCIATION (AQBBA) Secretary: Mr Richard Simms, 40 Kyle Rd Murwillumbah NSW 2484 Ph: 0468 481 768 Email: AQBBA21@gmail.com

### **CROP POLLINATION ASSOCIATION (CPA)**

Secretary: Janine Rudder PO Box 9305 Bathurst West NSW 2795 Ph: 0428 431 502 Email: jbrbees@gmail.com

### HONEY PACKERS & MARKETERS ASSOCIATION (HPMAA)

Secretary: Mr Kevin Webb Email: kevin.webb@springgullyfoods.com.au

The industry benchmark in beekeeping equipment & stainless steel manufacturing. Creating the largest Automated Honey Extractors in the world!



# **Horizontal Extractors**

• 36 to 60 frame 3 bank • 48 to 144 frame 4 bank • 198 frame 6 bank • Twin Systems Automated self loading machines

 Wax Melters – 200 ltr to 750 ltr • Reducers - 1200 to 1800 Capping spinner • S/S vane pumps Centrifuge 
 Heat exchange Storage tanks
 Mixing/heating tanks



1994 Finlay Road (P.O. Box 187) Tongala Victoria 3621 P: +61 3 5859 1492 • F: +61 3 5859 1495 E: info@prestigestainless.com

www.prestigestainless.com.au



# BEEKEEPING JOURNALS

# AMERICAN BEE JOURNAL

For beekeeping information read The American Bee Journal Editorial emphasis on practical-down-to-earth material, including questions and answers. 1 year US\$52.00, 2 years US\$99.00 Digital Edition price US\$16.00 Please inquire for airmail - VISA, MasterCard accepted For more information or free sample copy, write to: 51 South 2<sup>nd</sup> Street, Hamilton, Illinois, 62341 Tel: (217) 847 3324 Fax: (217) 847 3660 Email: abj@dadant.com Website: www.americanbeejournal.com The American Bee Journal is the largest monthly apiculture magazine in the world.

# **BEE CULTURE**

The Magazine of American Beekeeping Published Monthly - Free Calendar with Subscription www.BeeCulture.com for details

# AUSTRALIAN BEE JOURNAL

The Journal of the Victorian Apiarists' Association Inc. Published monthly Annual subscription:\$82 Australia / \$120 overseas For more information and a free sample copy Contact: The Editor PO Box 42, Newstead VIC 3462 Email: abjeditors@yahoo.com

## **THE BUZZ!**

South Australian Apiarists' Association Newsletter Published 5 times annually Included in annual membership subscription to SAAA (minimum subs \$100.00) For further information please contact: The Secretary, SAAA PO Box 45 Salisbury SA 5108 Ph; 0419 982 102 Email: secretary@saaa.org.au

# THE AMATEUR BEEKEEPER

Bi-monthly newsletter for The Amateur Beekeepers' Association Inc.. Email: editor@beekeepers.asn.au

# THE NEW ZEALAND BEEKEEPER

Official Journal of Apiculture New Zealand Inc. www.nba.org.nz Accounts & Subscriptions: Pauline Downie PO Box 25207 Wellington 6146 New Zealand Phone: 04 471 6254 Email: secretary@nba.org.nz Advertising: Certa Solutions PO Box 2494, Dunedin 9044, New Zealand Ph: 0800 404 515 Email: beekeeper@certasolutions.co.nz

# **Member Benefits**

- Provide a means for the commercial apiarists of NSW to be represented through a common organisation
- Lobby to maintain access to essential floral resources
- Help to secure your Industry's future
- Provide strong representation to Government
- Membership Badge
- Copy of Biosecurity Manual for Beekeepers
- Annual subscription to Australia's Honeybee News the NSWAA bi-monthly journal & FREE classified advertisment in journal
- Annual State Conference & Trade / Feild Days
- Support beekeepers in all regions through 9 NSWAA branches
- Provide opportunities to meet other beekeepers & NSW DPI representatives at meetings, workshops & conferences
- WFI Insurance for Rural Business, Business & Strata -1300 934 934. WFI provides commission to NSW Apiarists' Association (NSWAA) to help member benefits. Please let your local Area Manager know you are a member to receive this benefit for the Association - Ms Jane Jones Mob: 0417 943 451 E: jane.jones@wfi.com.au
- Discounts available through Bee Hive Incentive Program
- SCHUTZ (Australia) Pty Ltd IBCs special members; rate

# **Membership Subscription Rates**

The Association Membership year runs from: 1 March to 28 February

# Note: Rates from 1 March 2017

0 to 10 hives	\$100.00	1 vote
11 to 200 hives	\$200.00	2 votes
201 to 400 hives	\$300.00	4 votes
401 +	\$1.00 per hive	6 votes
700 +	\$1.00 per hive	8 votes
1001 +	\$1.00 per hive	10 votes
Over 1500 hives	\$1.00 per hive	12 votes
Affiliated/Retired/Student	\$65.00	1 vote
Honeybee News subscriber	/member	
	\$65.00	0 vote

# Junior Beekeeper Club

Are you an aspiring beekeeper, written a story or poem, taken a photoor painted a picture about bees or beekeeping?

Then we want to hear from you!

All you need to do is get permission from your parents to have it published & send it to

> info@nswaa.com.au Participants will receive a certificate from NSW Apiarists' Association

POLLEN		
<b>100% PURE</b> <b>NATURAL POLLEN</b> Just as the bees collect it for themselves! We have irradiated pollen as per AQIS standard Just the right thing to get a broodnest started for <u>almond pollination</u>		
<u>Pollen available in 5kgs bags</u>		
1 x 5 kg bag \$16/kg 4 x 5kg bags 1 Box \$14/kg 20 x 5kg bags 5 Boxes \$13/kg Plus freight		
Contact: Browns Bees Australia Terry Brown Ph: 02 6886 1448 Email: brownsbees@gmail.com		
- <b>B</b> T		
AUSTRALIAN EXPORTERS		
AUSTRALIAN       EXPORTERS         ABN 96 078 192 300         Queen Bees         Prices include GST:         1 - 10         1 - 10         \$39.00 each         11 - 49         \$36.00 each         50 - 100         \$34.00 each         100 or over         \$33.50 each         200 and over - Discounts apply		
AUSTRALIAN EXPORTERS AUSTRALIAN EXPORTERS ABN 96 078 192 300 Queen Bees Prices include GST: 1 - 10		
AUSTRALIAN EXPORTERS AUSTRALIAN EXPORTERS ABN 96 078 192 300 Queen Bees Prices include GST: 1 - 10		
AUSTRALIAN EXPORTERS AUSTRALIAN ABN 96 078 192 300 Queen Bees Prices include GST: 1 - 10		

# ADVERTISERS

Apiary Cots	16
Australian Queen Bee Exporters	46
Australian Queen Bee Line Pty L	td 6
Avant Equipment	7
Bee Build	28
Beechworth Honey Pty Ltd	40
BeePlas Australia	28
BeeWise	12/13
Boutelje Products	29
Browns Bees Australia	46
Burnett Bee Keeping Supplies	2
Clayton Plastics	22/23
Covey Queens	40
Crystech	28
Dalrymple View Apiary Supplies	2
Demise	6
Denmar Apiaries	2
Ezyloader	26
Hivemate	38/39
Hunter Valley Apiaries	30
Jz's Bz's Queen Cages	5
Lyson Beekeeping Supplies	21
MyApiary	43
NUPLAS - Plastic Hives	24/25
Prestige Stainless	44
SCHÜTZ	48
Simons Boiler Co	40
Spitwater	41
Steritech Pty Ltd	47
Superbee	14
Swarm Boss	16
The Lupin Co	29
Top Bait Plus	6
Turnout Ent	32
WFI Insurance	14



# Protecting the Bee Industry from Disease & Pests Matters

Steritech Wetherill Park's Gamma Irradiation Facility offers commercial treatment to the Beekeeping Community.

# **Gamma Irradiation Kills:**

- American Foulbrood (AFB)
- European Foulbrood (EFB)
- Nosema ceranae
- Ascosphaera apis
- Small Hive Beetle
- Nosema apis

Gamma Irradiation is a chemical-free, heat-free alternative used to protect beehives from disease and pests.

# Sterilisation with Steritech is easy.



- NSW Wetherill Park 02 8785 4400
- QLD Narangba 07 3385 8400
- VIC Dandenong 03 8726 5566
- VIC Merrifield (Mickleham) 03 9216 3500

# www.steritech.com.au



# Our claim for every packaging task – **bee the best solution!**

Honey is a natural wonder food – packed with vitamins, minerals, enzymes and antioxidants. At SCHÜTZ we do our best to protect the original quality during transport and storage. We offer a wide range of IBCs and PE drums with an environmentally friendly circular economy system. Our FOODCERT packaging is FSSC 22000 certified and meets the highest safety and cleanliness standards in the food industry.

Ve

Find out more at www.schuetz.net/australia



SCHÜTZ Australia Pty Ltd. 17 Burr Court AU-Laverton North VIC 3026 Phone +61 3 9360 9291 salesau@schuetz.net www.schuetz.net