

DENMAR APIARIES



ITALIAN

Prices effective from 1 July 2012

UNTESTED

1-10 \$24.55 each 11-49 \$18.50 each 50+ \$16.00 each



ISOLATED MATED BREEDERS \$280.00 EACH

TERMS 7 DAYS

Late Payments - Add \$2 Per Queen

PAYMENT BY: Cheque or Direct Debit

Details on ordering

PO Box 99 WONDAI Queensland 4606

Phone: (07) 4168 6005 Fax: (07) 4169 0966

International Ph: +61 7 4168 6005 Fax: +61 7 4169 0966

Email: ausbee4@hotmail.com



John or Stephen Covey

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

Caucasian Queen Bees

1 - 9\$26 ea 10 - 49\$22 ea 50 - 199\$19.50 ea 200 and over per season Discounts apply Queen Cells \$6 ea – collect only

> Post and Handling \$15 per dispatch under 50 qty. Prices include GST Valid September 2015 to March 2016

> > Breeder Queens - \$550

Naturally mated on a remote island

Terms: Payment 10 days prior to dispatch



LLoyd & Dawn Smith

Committed to maximising returns to beekeepers

Honey & Beeswax for sale? Call us for a quote

Phone 07 3271 2830 Fax 07 3376 0017 Mobile 0418 786 158 136 Mica Street, Carole Park Qld 4300 Email: hdunder@bigpond.net.au



Complete Line of Beekeeping Equipment and Supplies

P: 02 6226 8866 M: 0408 260 164 10 Vine Close, Murrumbateman NSW 2582 E: sales2@bindaree.com.au W: www.bindaree.com.au

AUSTRALIA'S HONEYBEE NEWS



The official Journal of the NSW Apiarists' Association (NSWAA) www.nswaa.com.au

Published Bi-Monthly Email: honeybeenews@bigpond.com ISSN 1835 6621

	CONT	ENTS	
Executive & Industry Contacts	Page 4	SICK BEES - Part 18F2 - The Leaky Boat Analogy	Page 30
President's Report	Page 5	Crop Pollination AGM/Conference	Page 33
Conference Accommodation, New Members	Page 6	Bees Hungry for Access to NSW Public Lands	Page 34
Auction of Beekeeper Sites Unfair	Page 8	Full-Time Beekeeper Role	Page 34
Test to Keep out Killer Bees a Double Boon	Page 10	NSW Bee Week & Honey Festival Photos	Page 35
Letter to the Editior	Page 10	Spitwater Advertorial	Page 36
Bio Security Code of Practice	Page 11	Beekeeping Apprenticeships	Page 36
Bus Trip - Conference	Page 12	AHBIC Report & Constitution Review	Page 38
NSWAA Trade Show	Page 14	Honey Levy Reforms	Page 39
Nick's News	Page 15	Honeyland 2015 Reports	Page 41
Doug's Column - Those other Bees	Page 20	Beekeeper Field Day - Tamworth	Page 43
Annual Conference Program	Page 22	Classifieds/Beekeeping Journals	Page 44
National Honey Show 2015	Page 27	Advertisers	Page 46

COVER: State President Casey Cooper taking a stand against auctioning bee sites PHOTO: Rachael Webb - The Land

Copy Deadline for Next Issue of *Australia's Honeybee News* - 24 July 2015

Pre-Paid Advertising Rates

	FULL	PAGE	HALF	PAGE	QUARTE	R PAGE	EIGHT	H PAGE
	B & W	Colour	B & W	Colour	B & W	Colour	B & W	Colour
6 Issues	\$1180.00	\$1950.00	\$680.00	\$1100.00	\$440.00	\$595.00	\$250.00	\$355.00
3 Issues	\$710.00	\$1100.00	\$420.00	\$590.00	\$265.00	\$325.00	\$160.00	\$200.00
1 Issue	\$290.00	\$430.00	\$160.00	\$240.00	\$120.00	\$160.00	\$85.00	\$110.00
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 \$45.00, Overseas (airmail) AUS\$65.00 - Payable to NSWAA, PO Box 833 Mudgee 2850 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.

Margaret Blunden PO Box 352 Leichhardt NSW 2040 - Phone: 02 9798 6240 Mobile: 0411 662 014 Fax: 02 9797 8061 Email: honeybeenews@bigpond.com **Advertising Enquiries:**

Farrell Printers PO Box 253 Croydon NSW 2132 **Printer:**

Phone: (02) 9550 4055 Fax: 02 9550 3403 Email: rob@farrellprinters.com.au

Membership Subscription Rates

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

Affiliated	t \$65.00	1 vote	
0 to	10 hives	\$65.00	1 vote
11 to	200 hives	\$120.00	2 votes
201 to	400 hives	\$180.00	4 votes
401 to	700 hives	\$230.00	6 votes
701 to	1000 hives	\$300.00	8 votes
1001 to	1500 hives	\$340.00	10 votes
Over 150	0 hives	\$400.00	12 votes

MEMBERSHIP 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 Code of Practice for Keeping Bees on Forested Lands
- Annual subscription to Australia's Honeybee News the NSWAA bimonthly Journal and free classified advertisement in Journal
- Annual State Conference & Trade/Field Days
- Support beekeepers in all regions through 9 NSWAA Branches
- Provide opportunities to meet other beekeepers and NSW DPI representatives at meetings, workshops and conferences
- AUSURE Insurance Brokers (5% Discount on all policies) Leigh Laydon Ph: 02 4822 1322 E: leigh.layden@ausure.com.au
- 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 that you are a member to receive this benefit for the Association. - Ms Jane Hayes Mob: 0417 943 451 E: jane. haves@wfi.com.au
- SCHUTZ-DSL (Australia) Pty Ltd IBCs special members' rate

NSW Apiarists' Association Inc. Executive Council



Neil Bingley, Lamorna Osborne, Rob Michie, Shona Blair, Kate McGilvray, Casey Cooper

PRESIDENT: Casey Cooper Darby's Road Tingha 2369 M: 0428 233 551 Email: cooperbees@bigpond.com.au VICE PRESIDENT: Neil Bingley 101 Woodfield Rd Sutton 2620 M: 0428 487 105 Email: beez101@bigpond.net.au **COUNCILLORS:**

Rob Michie 127 Stirling Rd Moore Creek 2340 Ph: 02 6767 1066 Email: robraem@westnet.com.au Dr Shona Blair 13 Lambert St Erskineville 2043 Ph: 0422 977 510 Email: shonaeblair@gmail.com Dr Lamorna Osborne PO Box 1014 Gymea 2227 Ph: 0419 731 684 Email: lmosborne13@gmail.com SECRETARY/TREASURER: Kate McGilvray PO Box 833 Mudgee 2850 Ph: 02 6373 1435 Email: info@nswaa.com.au Website: www.nswaa.com.au

BRANCHES	PRESIDENTS		SECRETARIES	
Central Tablelands	Mal Porter	02 6337 5383	Debbie Porter	02 6337 5383
Hunter Valley	Col Wilson	02 4930 4950	TBA	
North Coast	Barry Watts	02 6689 5359	Col Maloney	02 6663 7051
Northern Tablelands	Brian Woolfe	02 6732 3168	Allyssa Staggs	02 6723 1361
Riverina	David Mumford	02 6959 2519	John Smith	02 6926 2227
Southern Tablelands	James Kershaw	0400 370 481	Tara Er	0414 527 481
Sydney	Paul Drew	02 9887 1175	Tanya Ananin	0414 501 198
Tamworth	Ray Hull	02 6760 3634	Norm Maher	0447 603 245
Western Plains	Bryn Jones	02 6887 2638	Lisa Mumford	02 6887 2638

AUSTRALIAN HONEY BEE INDUSTRY COUNCIL (AHBIC)

Chairman: Ian Zadow Mob: 0429 433 125 Executive Director: Trevor Weatherhead Ph: 07 5467 2265 PO Box 339, Tintinara SA 5266

Mailing address: PO Box 4253, Raceview QLD 4305

Ph: 08 8757 2435 Email: immjzad@bigpond.com Email: ahbic@honeybee.org.au Website: www.honeybee.org.au

HONEY BEE RESEARCH & DEVELOPMENT COMMITTEE (HBRDC)

Ms Margie Heath, Project Manager, RIRDC PO Box 4776, Kingston ACT 2604 Ph: 02 6271 4145

Email: Margaret.Heath@rirdc.gov.au Website: www.rirdc.gov.au

AUSTRALIAN QUEEN BEE BREEDERS ASSOCIATION (AOBBA)

Secretary: Mrs Paula Dewar, 157 Lake Moogerah Road Kalbar QLD 4309 Ph; 07 5463 5633 Email: aqbba@bigpond.com

CROP POLLINATION ASSOCIATION (CPA)

Secretary: Mr Stephen Targett, PO Box 325 Narrandera NSW 2700 Ph: 0428 649 321 Email: wally.56@hotmail.com

HONEY PACKERS & MARKETERS ASSOCIATION (HPMAA)

Secretary: Mr Ross Christiansen Email: ross@superbee.com.au



PRESIDENT'S REPORT



The unseasonal warm weather which has been nice but has seen trees flowering out of season (Yellow box some Iron Barks and such) which make the season ahead look like it could be short on honey production.

Our Industry is being squeezed and threatened from all sides. Your Association Executive Councillors have been working very hard to try and fight back, to help commercial beekeepers in NSW to maintain their livelihoods – often to the detriment of their own businesses.

Constructive and helpful input from Members and Branches is always welcome. But please remember, we are all volunteers with businesses to run or other demanding jobs. It is great when members are passionate and engaged, but it can be very disheartening when after hours and hours of unpaid work on behalf of the Association, all we receive as "thanks" are complaints or demands that we should be "doing something".

The current political environment is more complicated than it has ever been, and we are working tirelessly, to the detriment of our other commitments, to try and get a fair go for our beekeepers.

So please, take to time to inform yourself about what has been happening by doing things like reading your *Honeybee News* and come along to Conference to participate in so many crucial conversations about your Industry.

FORESTRY CORPORATION AND BEE SITES AUCTION

Despite numerous meeting, letters, phone calls and emails from us to government Ministers and Corporation staff, the NSW Forestry Corporation went ahead with the auction of a number of bee sites in southern NSW.

We have categorically stated, again and again, that this course of action could devastate our industry in the long run, making it almost impossible for many family beekeeping businesses to stay afloat.

As we feared, because a few beekeepers were able to drive up the prices to extremely high and unsustainable levels, the Forestry Corporation and Minister for Primary Industries, Niall Blair, have labelled the auction a "small-scale trial" rather than the original announcement that it would be a "one-off".

We are very worried that this is the thin end of the wedge, and that it will open the floodgates to higher and higher costs for bee sites on both public and private land.

See one of the press releases we prepared in this edition of the *Honeybee News*, which at the time of printing had been picked up by *The Land* newspaper 4 June, and rest assured, we will continue the fight on this crucial issue.

CONFERENCE 2015

Make sure you come to Conference, participate in discussions and have your say. Whether you love or hate Sydney, that's where we needed to set Conference this year because of the AHBIC AGM.

Biosecurity Motion at Conference

The proposed Biosecurity Code of Practice and National Bee Biosecurity Program will be further discussed at the 2015 NSWAA Conference (see this edition of *Honeybee News* for more information).

The following very important motion will be put to a ballet at Conference:

That the New South Wales Apiarists' Association Inc. supports the adoption of the Biosecurity Code of Practice (Version 1.0 April, 2015) as a mandatory requirement for Australian beekeepers, and supports the implementation of the National Bee Biosecurity Program (May, 2015).

<u>Have your say - Q&A with your Executive</u>

This year the NSWAA Executive Council will be holding a panel session open to all members. You are invited to come along and talk to your Executive about any ideas, concerns and provide feedback.

Time: 6-7pm

Date: Wednesday 1July

Venue: Penrith Panthers Event Centre

Cost: Free

RSVP: info@nswaa.com.au

Pre-Conference Biosecurity Session

All beekeepers are invited to attend a Biosecurity Session on the afternoon before the 2015 Conference.

This will be a very informative session providing essential information, and the opportunity for you to ask questions.

You will hear about biosecurity matters including state and national surveillance programs, where to find biosecurity information that is useful for you, practical information on incorporating good practices into your apiaries and the National Bee Biosecurity Program and Code of Practice.

The NSWAA Executive, NSW Department of Primary Industries and Plant Health Australia have worked together to provide this session, and there will also be participation form the Australian Honey Bee Industry Council, Department of Agriculture, as well as experienced beekeepers and scientists.

Time: 1pm-5.15pm Date: Wednesday 1 July

Venue: Penrith Panthers Event Centre

Cost: Free

RSVP: info@nswaa.com.au

So please come along and participate at both these sessions.

EXECUTIVE MEETING

Our most recent Executive meeting was held in Orange, 20 May. We invited several previous participants of the Marcus Olden Leadership Course as observers, and were pleased to welcome two who were able to attend, James Kershaw and Brett Bingley.

We hope that providing these young beekeepers with the opportunity to see the work of the Executive, and to learn more about the details of the challenges we're all facing, will mean the Association will have some excellent Executive Councillors in the future. It was very encouraging to see engagement from young beekeepers who are already participating in various activities to help the whole of industry.

At our May meeting we discussed and worked on a number of things, including:

- Strategies for trying to secure fair access to public lands such as National Parks, State Forests and Travelling Stock Routes
- The finalisation of our position paper Apiary sites on public lands (see more about this below)
- ❖ National Bee Biosecurity Program and Code of Practice
- Conference planning
 - Including the pre-Conference Biosecurity Workshop and Executive Q&A sessions
- ❖ AHBIC activities
- Updates from the NSW DPI
- Draft Business Plan for the NSWAA based on member input from the 2014 workshop
- ❖ The ongoing relevance and management of Honeyland
- Bee Week event at Orange

POSITION PAPER – Apiary sites on public lands

This document has been developed with significant help from Dr Doug Somerville, and it has been produced as another tool we are using to argue for the importance of fair access to floral resources on public lands.

Each member will receive a hard copy and a number of extra copies have been sent to Branch presidents. A copy is also available at: www.nswaa.com.au.

MEMBERSHIP OF THE NSW APIARY INDUSTRY ADVISORY COMMITTEE – Call for Expressions of Interest

The NSWAA Executive Council will be appointing a NSW Apiary Industry Advisory Committee, pending the support of the NSWAA membership for the Biosecurity Code of Practice and the National Bee Biosecurity Program.

The role of the Committee will be to assist in the implementation of this Code and Program in NSW by overseeing the work program of the NSW Bee Biosecurity Officer. See full details in this edition of *Honeybee News*.

HONEY BEE WEEK IN ORANGE

Congratulations to Karla Hudson from Superbee for organising the fantastically successful NSW Bee Week Field Days and Honey Festival 2015, which was held in Orange 22-23 May. Well over a thousand people attended, and the feedback form the general public was fantastic.

The exhibitions and stalls were great, generating lots of interest, and the talks were very well attended as well.

Thank you to all those who participated and helped look after the NSWAA and Honeybee News stands, told the public about beekeeping through live bee shows in the

Beezeebo, set up and pack up and in generally stimulating the public interest in bees and beekeepers.

Particular thanks to the presenters Nick Annand, Shona Blair, Kate Bracks, Nural Cokcetin, Liane Colwell, Megan Halcroft, Lamorna Osborne, Bruce White and Bill Winner, and thanks Nural and Shona for chairing the sessions. Also thanks to Bruce White who was the MC, and presented at the live bee shows. Other bee show presenters were Mal Porter. Those that held down the fort at the *Honeybee News* and NSWAA stand, included Margaret and Bruce Blunden, Raelene Michie, the Jones family, Porter families and the Executive Councillors who pitched in where needed.

SOCIAL MEDIA, E-NEWS AND OUR WEBSITE

Thanks to Jaye Hughes who started our Facebook page. Councillor Shona Blair is now managing that page. If there is anything you think could be posted on the Association's Facebook page, please send it to Shona:shonaeblair@gmail.com.

Similarly, if you have some feedback on the website or think there is some information that should be added, please contact our Secretary info@nswaa.com.au.

The Executive has also launched an electronic newsletter, called *The e-Bee*. Members who supplied an email address on their membership forms will be receiving this electronic newsletter.

Casey Cooper STATE PRESIDENT

2015 CONFERENCE ACCOMMODATION

The Association has reserved a number of rooms at the Mercure Hotel Penrith (formerly the Chifley Penrith) Cnr Mulgoa & Jamison Rds, Penrith, adjacent to Penrith Panthers World of Entertainment, less than 5km from Penrith & 50 minutes from Sydney

All attendees must book directly with the venue

Email: reservations@mercurepenrith.com.au, Website: www. mercurepenrith.com.au, Phone: 02 4721 7700

When booking please quote the following code to have rooms released from our bulk booking: **NSW Apiarists' 444701**

NEW MEMBERS

A warm welcome to the following:

Randwick Martin Baker Tarnyer Clift Kelvin Liane Colwell Redfern Geoff Honey Turramurra Jean Pierre Mercader Sutton Grange Eric Smith Hillsdale VIC Ryan Spargo Chinderah Lucy Staughton Gunnedah Manfred Wille Hanging Rock

CONGRATULATIONS

Congratulations and Best Wishes to Pat & Wendy Roberts who celebrated their 50th Wedding Anniversary on the 22 May 2015.

May they have many more special years together.



Bee smarter

See us at the NSWAA Bee Trade Show at Penrith Panthers 2 & 3rd July, 2015



Get Sorted quickly and efficiently with a utility multi-purpose loader from Avant Equipment Pty Ltd.

We supply and support AVANT and AUSA range of Compact Loaders, Telehandlers and Rough Terrain Forklifts.

Manufactured in Europe to the highest specifications, these machines are rugged, reliable and well designed for access, safety and ease of maintenance. Work smarter not harder.





- Easy to use
- High-clearance, all wheel
- Lightweight and compact
- Easy transport / storage
- 100+ attachments
- Backed by a family firm in business for 38 years



ACT NOW

It will be the best addition to your business

Free Call - 1800 686 411 or Ph- 02 42726853

www.avantequipment.com email - sales@avantequipment.com

- Easy finance options
- Models also available for lease
- Excellent finance rates and payments customised to suit your seasonal income
- Prompt delivery anywhere in Australia

Avant Equipment Ptv Ltd





AUCTION OF BEEKEEPER SITES UNFAIR & IRRESPONSIBLE POLICY, SAY NSW APIARISTS

A sudden change in direction by the Forestry Corporation of NSW in the method of allocation of state forestry sites to the state's beekeepers threatens to further destabilise an already-vulnerable industry, as well as the numerous agricultural enterprises that depend upon it.

In an abrupt change of policy, the Forestry Corporation chose to allocate beekeeping access permits to 24 currently-vacant sites near Batemans Bay via an online auction, which was held on 27 May 2015. Permits for all 24 vacant apiary sites offered were sold, with prices averaging \$1311.33 per year (for five years), and reaching a top of \$3500 per year (for five years).

Under the previous long-established allocation process, beekeepers could apply for a permit to access vacant sites for a fee of about \$90 per year (renewable yearly).

Second-generation beekeeper Mr Neil Bingley, who is an Executive Councillor of the NSW Apiarists' Association, was horrified at the prospect of the auction as well as its outcome.

"It's not that we don't think we should pay to access these public resources. Of course we should pay. We want to pay a reasonable price, and negotiate a fair and equitable fee structure," he said. "The issue is that this new auction method tends to inflate the price of access to completely unsustainable levels."

Mr Bingley's concern was obvious as he explained the likely impacts for the individual beekeepers who were successful in last week's auction.

"Let's look at the beekeeper who's just paid \$17,500 (\$3,500 per year for five years) for access to one particular site. I know that country well because my family has kept bees in the area for generations. It's spotted gum country which means it is only going to flower once every 4-10 years. In a really good winter flowering year – which is never guaranteed, especially with droughts and prescribed burns and so on – the potential value of honey for that site would be approximately \$15,000 gross, at best."

"At worst, there won't be any decent flowering events at that site during the five-year permit period, and the beekeeper gets nothing for his \$17,500 investment. And that's just one of many sites a beekeeping operation needs to remain viable. This auction system just doesn't make any economic sense from the beekeepers' viewpoint. The two or three local beekeepers who were forced by the auction process to compete against each other and thereby drive prices up, have probably compromised the future of their business."

And that's bad news for an industry whose dwindling numbers means they're already struggling to provide the pollination services that the state's agricultural enterprises need to succeed. Globally, it has been estimated that one in every three mouthfuls of food relies on honeybee pollination. In Australia, around two-thirds of our agricultural output benefits from honeybee visits.

The President of the NSW Apiarists' Association, Mr Casey Cooper, outlined the scale of the pollination problems facing the state's growers.

"In July and August this year, for example, the almond industry alone is going to need three-quarters of all the hives we've currently got in NSW. They are 100% dependent on bee pollination to get any crop," said Mr Cooper. "But providing these intensive pollination services knocks the bees around, and they don't make good honey while they're pollinating almonds or most other commercial crops."

"That's why we beekeepers must have more reliable access to good native floral resources, like the ones on lands managed by the Forestry Corporation of NSW, if we're to continue to provide these essential pollination services to the agricultural sector."

"Every year the need and demand for pollination services across NSW's agricultural sector increases – not just almonds, but other crops such as apples, cherries and beans - but our ability to provide them seems to be constantly under attack, thanks to thoughtless changes in policy like this latest one from the Forestry Corporation," Mr Cooper added.

"According to the Integrated Forestry Operation Approvals agreement, the Forestry Corporation is explicitly required to consult with their key stakeholders – including beekeepers – before any major policy changes," he said. "But in this case there was no consultation at all."

"They said that they thought an auction would be a fair and equitable system, but this is clearly not the case," Mr Cooper concluded. "The Forestry Corporation should acknowledge that this auction process has not resulted in a fair or equitable outcome. On behalf of all its members, the NSW Apiarists' Association requests that the Forestry Corporation make good on its commitment to consult with us. We look forward to negotiating a better process that will deliver for the Corporation, for beekeepers, for growers and for NSW as a whole."

For further information:

General media enquiries: Suzanne Long, 0429 600 746, suzanne@turnthetide.com.au Mr Neil Bingley 0428 487 105 - Mr Casey Cooper 0428 233 551

The NSW Apiarists' Association will be holding its annual conference in Sydney on 2-3 July 2015. More information available here: http://www.nswaa.com.au/news-and-events/annual-conference/



Rough Terrain Forklifts

Visit our new website www.hummerbee.com to learn about all of our other available models:

XRT XL XT_{2WL}

The proven beekeeping rough terrain forklift...

TURBO

Move your hives faster and more reliably with the Hummerbee Turbo. With over a 900 kg rated lift capacity and compact design, the Hummerbee is the perfect addition to your bee business. Its overall length is only 2438 mm, so it can fit sideways on your truck for ease of transport. Also, with a weight of under 1900 kg, it is easy on your axles too. There are a variety of options available to tailor the machine to your needs.

A & O FORKLIFT

шшш.hummerbee.com 800 - 943 - 8677



TEST TO KEEP OUT KILLER BEES A DOUBLE BOON FOR AUSTRALIAN HONEYBEE INDUSTRY

MEDIA RELEASE - 28 April 2015

A genetic test that can prevent the entry of 'killer' bees into Australia and worldwide spread has been created by researchers at the University of Sydney and their collaborators at York University.

The news is of critical importance to Australia, which produces an estimated \$4 to \$6 billion of farm and garden crops that rely on honeybee pollination.

Australia faces the paradoxical problem of needing to import bees resistant to a pest that threatens to devastate Australia's bee population but being unable to do so while the risk of introducing 'killer' bees still exists.

"Having a tool that can identify desirable and undesirable bee subspecies will be of value to breeding and conservation programs throughout the world," said Dr Nadine Chapman from the School of Biological Sciences at the University of Sydney.

She is lead author of an article on the research published in Molecular Ecology Resources on 21 April (paper attached).

"Pollination of crops by honeybees adds many billions of dollars to the world economy, so any strategy that can prevent losses is an important contribution to food security."

Before publication the work won Dr Chapman a CSIRO Biosecurity Flagship Award.

The looming threat to Australian honeybees comes from the Varroa mite, present in all bee-keeping Countries except Australia. It devastates colonies by sucking bees' blood and spreading blood-borne diseases.

School of Biological Sciences' researchers, working with the United States Department of Agriculture, have previously found that no Australian honeybees have resistance to the mite and it could destroy bee stocks within a couple of years.

"The answer is to import Varroa-resistant bee semen and queen bees so we can breed resistance into our bee stocks as a form of 'inoculation' that could protect our bees," said Dr Chapman.

"Until now this option has been restricted because Australian beekeepers are only able to import bees from the small number of countries that are free of 'killer bees', which originated in Africa.

"As the name implies, killer bees, (as Africanised bees are commonly called), are highly aggressive and are considered unacceptable for beekeeping. It is assumed that they would replace our current honeybee populations in the key beekeeping regions."

Dr Chapman worked with Professor Ben Oldroyd from the School of Biological Sciences and with researchers at York University in Canada, the US Department of Agriculture and the Agricultural Research Council in South Africa.

The researchers developed a test that identifies how much of three main ancestral lineages - Eastern European, Western European and African - are present. To lower the risk of killer bees coming to Australia, those with high African ancestry will be denied entry.

"Using this test Australia will be able to import honeybees, including Varroa resistant bees, from countries where killer bees are present."

Dr Chapman is now working on making the genetic test more affordable and plans to work with the United States Department of Agriculture to develop a protocol for the importation of Varroa- resistant bees from the US, where Africanised bees are present.

Australia's bee importation regulations are currently being reviewed by the Department of Agriculture.

Australia's Rural Industries Research and Development Corporation supported this research.

Media enquiries: Verity Leatherdale 02 9351 4312, 0403 067 342 verity.leatherdale@sydney.edu.au

LETTER TO THE EDITOR

Fellow members

On the 27 May Forestry Corporation of NSW auctioned 24 bee sites on the South Coast, these sites varied from near inaccessible to being a reasonable resource. Several of these sites had a few beekeepers willing to "pay whatever it took" to secure a site with little regard to the potential consequences to the rest of our industry. The extraordinarily high prices paid are unsustainable, unaffordable and will no doubt have flow on effects to the whole Australian Beekeeping industry.

Most beekeepers realise the enormity of the looming battle that we face in maintaining our floral resource at realistic prices, not prices that will force many out of public lands and the ultimate demise of family businesses built over many generations, not to mention interruptions to pollination services which has the potential to seriously impact on food security and the economy.

The Forestry Corporation seem intent at gaining increased revenue from our small but vital industry with little or no regard to the potential impacts to family businesses and those wishing to enter into commercial beekeeping.

Your industry needs your support, without it we will be ignored by Government at all levels.

If you are passionate towards the industry you have chosen to enjoy and gain your livelihood from then PLEASE find time to attend this year's State Conference at Penrith Sydney on 2 & 3 July.

Concerned Apiarist

Neil Bingley

BIOSECURITY CODE OF PRACTICE & NATIONAL BEE BIOSECURITY PROGRAM

The proposed Biosecurity Code of Practice and National Bee Biosecurity Program will be further discussed at the upcoming 2015 NSWAA Conference.

This crucial initiative is the industry's best chance of tackling our significant biosecurity threats. Of course, this is not the solution to all of the problems industry is facing, but it is the first step we need to take.

Both the Biosecurity Code of Practice and National Bee Biosecurity Program have been developed over the past two years following extensive consultation with industry, including AHBIC, State Associations and non-member beekeepers.

It is critical that industry gets behind this initiative and supports it. For this reason, the NSWAA will be putting up the following motion at conference:

That the New South Wales Apiarists' Association Inc. supports the adoption of the Biosecurity Code of Practice (Version 1.0 April, 2015) as a mandatory requirement for Australian beekeepers, and supports the implementation of the National Bee Biosecurity Program (May, 2015).

More information about the Biosecurity Code of Practice and National Bee Biosecurity Program can be found on the AHBIC website: http://honeybee.org.au/programs/code-of-practice-and-national-bee-biosecurity-program/

Membership of the NSW Apiary Industry Advisory Committee – Call for Expressions of Interest

The NSWAA Executive Council will be appointing a NSW Apiary Industry Advisory Committee, pending the support of the NSWAA membership for the Biosecurity Code of Practice and the National Bee Biosecurity Program.

The role of the Committee will be to assist in the implementation of this Code and Program in NSW by overseeing the work program of the NSW Bee Biosecurity Officer.

This Biosecurity Officer will be funded by NSW's portion of the relevant honey levy, and the NSW DPI will be contributing significant in-kind support by providing essential infrastructure including office space, transport, computer, etc.

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 PH: 02 6887 2202 FAX: 02 6887 2255

AUSTRALIAN DISTRIBUTORS

The Cost Effective Queen Shipping & Introduction System

The Advisory Committee will not be responsible for the daily management of the role, but rather for appointing an appropriate person to the role, and setting and monitoring the strategic directions of the role. The Committee will likely meet formally 2-3 times a year.

To ensure the position is responsible first and foremost to the beekeeping industry in NSW, the Committee will include the following representatives:

- One (1) NSWAA Executive Councillor
- Two (2) Independent Industry stakeholders (including at least one commercial beekeeper
- One (1) Amateur Beekeeping Association member
- One (1) NSW DPI representative

So we are calling for nominations for independent industry stakeholders.

If you are interested in nominating, please send the following to our Secretary (info@nswaa.com. au) by 30 June:

- Your name
- Contact details
- A brief statement on why you want to join the committee, and what you would be able to contribute.



Plastic Beehive Components Made in Australia by Max Cane Apiaries

FULL DEPTH FOUNDATION SHEETS

- Made in Australia for Australian conditions
- Top quality food grade high impact polystyrene
- Excellent tensile strength and impact resistance
- · Natural cell size
- · Mitred bottom corners
- 6mm engagement tongue

Std colour Black, Natural, Beige and Red Other colours available with large orders (5000+)

Also available:
Beetek Plastic Frames (Made in NZ)
FD & WSP Black and White

Contact:
MAX CANE APIARIES
9 McGibbony Crt, Ararat, Vic, Australia
Ph 03 53 522 995 Mob 0427 501 551



At Ausure Insurance Brokers Goulburn we understand the issues that Apiarists face in their day to day business.

We are able to offer covers that protect your business including Australia Wide theft and vandalism cover for your hives including honey and bees along with all other insurances including property, business interruption, liability, transit and motor vehicles.

As an exclusive offer to NSW Apiarists' Association members we can offer a 5% discount on all policies.

Please call Leigh Layden on 02 4822 1320 leigh.layden@ausure.com.au

Leigh Layden & Blue Oval Insurance Pty Ltd T/As Ausure Insurance Brokers Goulburn are Authorised Representatives of Ausure Pty Ltd T/As Ausure Insurance Brokers AFSL: 238433

Bus Trip

We would like to invite you to join us on a bus trip visiting a popular Sydney shopping outlet followed by a two-course lunch, main plus dessert, at South's Juniors then a tour of Sydney's beaches including The Gap and Bondi as well as other iconic beaches.

The bus will depart from and return to Penrith Panthers, the Conference venue.

If you would like to attend, please make your payment to: NSW Apiarists Association Sydney Metropolitan Branch via Cheque or Direct deposit:

BSB 062-596 Account number 10071378

Reference Bus + your name Payment required by Friday 26 June 2015.

Send your remittance to Tanya Ananin via

Email sydneybranch@nswaa.com.au

Post PO Box 189 Plumpton NSW 2761

Or Fax 02 9677 9711

Be prepared for a fun day!!



Bus Trip

- Friday 3 July 2015
- \$55 per person
- Departing 8:30am
- Shopping Birkenhead Point (10:00-12:30pm
- Lunch included at South's Juniors - main and dessert
- Visit beaches around Sydney including The Gap
- Return to Penrith (approximately) 4:30pm
- Pay by Friday 26 June

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

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

FRAMES Mahurangi NZ Premium Quality

For Plastic and Wax Foundation

BEE BOXES

WEATHERTEX Lids & Bottom Boards

QUEEN EXCLUDERS
FRAME FEEDERS
QUEEN CELLS

AFB

TEST KITS

Quick and easy to use Results in just 3 minutes

SWARM ATTRACTANTS

APITHOR for Small Hive Beetle

NOZEVIT

HIVES CAN BE TREATED FOR LESS THAN \$1

Healthy bee colonies build brood faster in the Spring, and will winter extremely well when their intestinal integrity is intact. By using all natural Nozevit as a food supplement for intestinal cleansing for internal ailments.

i.e nosema

For All Your BEEKEEPING SUPPLIES

Email: honeybee100@skymesh.com.au

Phone: 02 4930 4950

NSWAA BEE TRADE SHOW EXHIBITORS

ALL AUSTRALIAN CANDLE MAKING

AUSTRALIAN HONEYBEE PTY LTD

AVANT EQUIPMENT PTY LTD

BLUEBEES PRODUCERS

BROWNS BEES AUSTRALIA

COTTESBROOK HONEY

DALRYMPLE VIEW PTY LTD

DUNC'S HONEY

ERCOTEK LTD

ENSYSTEX AUSTRALASIA

EZYLOADER

FEED BEE

HUNTER REILLY-(HIVE DOCTOR LTD)

HORNSBY BEEKEEPING SUPPLIES

HUNTER VALLEY APIARIES

LOCKWOOD BEEKEEPING SUPPLIES

NSW DPI

NUPLAS PTY LTD

SPITWATER NSW

STERITECH

VALLEY INDUSTRIES

WFI



WHEN

2 & 3 JULY 2015

WHERE

PENRITH – PANTHERS 123 MULGOA ROAD PENRITH NSW



ECROTEK WINE & CHEESE EVENING



DELEGATES

CONFERENCE REGISTRATION INCLUDES ENTRY TO TRADE SHOW

NON DELEGATES

ENTRY AVAILABLE ONLY

2** JULY BETWEEN

2 - 4PM @ \$10 P/PERSON

OR

WINE & CHEESE EVENING

5.30PM @ 15 P/PERSON

PRE-PURCHASE REQUIRED

Scales and Labels



■ Laboratory Balances: 0.001g - 3kg
■ Create brand awareness

■ Bench Scales: 3kg - 30kg

■ Platform Scales: 30kg - 600kg

■ Pallet Scales: 600kg - 6,000kg

- Trade Approved Scales
- Label Printing Scales



- Cost-effective labels
- Create & print your own labels
- Ingredients & nutritional information
- Leading supplier of labels Roll Labels, Sheet Labels, Gloss Labels, Matt Labels, Paper Labels or Poly Labels
- You name it, we make it!!









eddei www.wedderburn.com.au grantw@wedderburn.com.au

29 Branches Australia and New Zealand wide Call Grant or Adam (02) 4954 6411 for your nearest branch





BEEKEEPING SUPPLIES ABN 27 009 052 155

72 Munibung Rd Cardiff 2285 NSW Australia

Suppliers of Beekeeping and **Honey Processing Equipment**

Boxes, Frames and all Woodware Excluders - Welded Wire and Plastic Stainless Steel Extractors Honey Tanks and Pumps

Weathertex - Covers and Bottom Boards, Special sizes available

Veils, Gloves, Overalls, Bee Suits and Jackets, Hive Tools, Brushes Hats, Smokers, Knives, Pails, Jars etc. all your beekeeping needs

We have a very extensive selection of books on all aspects of beekeeping

We buy and exchange wax for foundation. Good prices paid

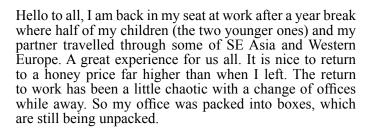
MAIL ORDER IS OUR SPECIALITY - PHONE FOR A PRICE LIST Ph: (02) 4956 6166 Fax: (02) 4956 6399

NICK'S NEWS

Nick Annand, Livestock Officer (Bees), NSW Department of Primary Industries, Bathurst

Ph: 02 6332 8034

Email: nicholas.annand@dpi.nsw.gov.au



NSW DPI in Bathurst has relocated from the Agricultural Research Station, which is now being leased to Charles Sturt University, to the first floor of the Land and Property Information building located at 346 Panorama Avenue, Bathurst. The location is far inferior to the previous office with no place to keep the department's bees which are still at the old location. Not sure how long they can remain. With the relocation my landline number has also changed to 6332 8034 and we no longer have a fax machine.

Thank you to Elizabeth Frost for doing a great job filling in the position (and showing me up) in my absence. Hopefully Elizabeth will be back with us ASAP working up at Tocal as an Education Officer - Bees. I understand it is just paper work (visa applications) currently preventing her return.

While mentioning new jobs, it is with excited anticipation that NSW DPI (Biosecurity) is currently in discussions with Plant Health Australia (PHA) and NSW Apiary Association (NSW AA) regarding the employment of a Biosecurity Officer-Bees. This position and others around the country will be funded through the additional money's collected through the increase to the honey levy and support from state agricultural departments. The role is proposed to facilitate the delivery and implementation of the Australian Honey Bee Industry Biosecurity Code of Practise to the beekeeping industry. The strategic direction of the job will be provided through a committee made up predominantly by beekeepers.

The peak industry body for this state, the NSW AA executive is in support of the implementation of the Code on the industry however it still needs support from the beekeeping industry. I understand it will be voted on at the NSW AA conference at Penrith. Obviously this code is only going to work if the majority of beekeepers unite and agree with and act in support of the Code. The Code is an industry driven reaction to the biosecurity problems which do/may cost the industry heavily each year. If you have not read it I suggest you do (available on the AHBIC website).

Remember the code has been developed by beekeepers in the hope of assisting the beekeepers. You as beekeepers have the say on whether it is implemented or not in NSW. It is currently being implemented in other states so hopefully it will have a nation approach.

Please see related article in this addition of HBN regarding calls for nomination for positions on the committee and further information about the possible implementation of the Code. The Code is a major initiative by industry that is



going to impact every beekeeper, hopefully positively, so warrants attention of everyone in the industry.

An industry approach to AFB control has been happening in New Zealand for quite some time. Over the years numerous state conferences have had New Zealanders come over and speak of their approach to AFB management.

The New Zealand goal for AFB is the eradication of the disease from the country. A very high goal but one they are successfully heading towards through beekeeper industry developed and funded programs. If successful this would be a massive achievement and would be the first successful elimination of AFB from a country.

Beekeeping without AFB - imagine that.

To understand what the New Zealanders are doing a series of videos has been developed by Mark Goodwin and Byron Taylor showing what is involved with the NZ program. To view these 13 videos go to YouTube and search under AFB in NZ or type in: https://www.youtube.com/watch?v=ViQp92kPr6Y&list=PL9HvB1TN2_aw36J0MsDTtiqMStqAAuaoi.

In my absence Karen Webster at the Goulburn office proficiently ran the sentinel hive monitoring program for NSW. She also collected and submitted honey samples for the National Residue Survey (NRS) for NSW. For both these tasks I would like to thank Karen for the excellent job she did.

Leading on from some of Karen's work, we recently received a handful of potentially problematic results back from the NRS - Department of Agriculture. The results received were all dealing with high levels of heavy metal contamination, including lead, zinc and aluminium.

Recently the NRS have introduced the concept of Residue Action Limit (RAL). To explain what a RAL is and why they have been introduce is well clarified in an email received from David Cooke, Assistant Director – Exports Division – NRS – Animal Programs, which has been copied below. I have added minor additions for clarification.

RALS:

Currently Food Standards Australia New Zealand (FSANZ) does not have any Maximum Residue Levels (MRLs) set for metal contaminants in honey in the FSANZ Code – Standard 1.4.1- Contaminants and Natural Toxicants.

To cover situations where metal contaminants occur at levels above importing country standards NRS has adopted RALs based on MRLs set in New Zealand which can be viewed at:

http://www.foodsafety.govt.nz/industry/general/animal-products/omars/08-035.htm

For honey the NRS also look at other market standards such as those set in the EU or China as reference points for agricultural or veterinary chemicals not covered in the APVMA MRL Standard. NRS often meet with industry to discuss results and obtain industry feedback.

Some metals in honey have previously been found upon trace back to be due to a number of industry practices e.g. aluminium phosphide treatment of hives, lead paint on hive boxes, lead solder in separator equipment etc. It's important that trace backs are conducted where honey results indicate potential environmental contamination and or market access risk.

NRS is regularly audited by overseas authorities and the trace back reports are an important record demonstrating that Australia has a system in place for investigating residue detections and for showing what follow up takes place e.g. warning letter to producer or education support from a Government or industry source.

It is not about penalising anyone, but achieving root causes and proving effective trace back results, eg: extension information, State advice, industry assistance." End quote.

The RALs set for the three metal contaminants mentioned previously are:

Zinc - 10 mg/kg, Lead - 0.1 mg/kg, Aluminium - 5 mg/kg

NSW DPI will be following up on honey samples that have returned results above the RALs. We will be trying to identify and resolve how the high contamination levels occurred with cooperation from the beekeepers who supplied us with these samples. I would like to emphasise that beekeepers with heavy metal contaminated honey are not in trouble. We want to work alongside these beekeepers to resolve the issues to ensure the high quality of Australia honey for export and domestic markets.

This is an industry problem that all beekeepers need to be aware and be proactive in reducing or removing possible contaminants. One contamination source not mention above by David is the galvanised honey drum or extracting equipment. These are sources of zinc contamination and should be either phased out of use or used only for as short a period of time as possible.

I will finish with a comment by David Cooke:

"These points must be relayed to producers, as everything is international now. The world has shrunk.

Hence, there is a lot at stake at the market access level and not just domestic, as if you fall down on high profile markets, you can be sure all the other regional and international markets will find out and may react negatively."

PROTECT YOUR BEEHIVES WITH WAX!

Paraffin + Microcrystalline wax

Hot dipping with a 50/50 mix of paraffin and microcrystalline is an efficient steriliser and protector against rot.

bulk wax at wholesale prices!!

View the full product range on-line *WAX *moulds *wicks *tea light cups *wicks and more...

www.candlemaking.com.au 02 9653 3600

Personal shoppers welcome at our warehouse in Arcadia, in Sydney's rural north. Always interested in purchasing local beeswax.



Manufacturers of
Wire Queen Excluders
Tobin Escape Board Corners
Gal Lid Covers
Metal Vents
Tobin Hive Tools
Gal Cut to Size

COTTESBROOK HONEY

David and Tracey Parker Fitzgeralds Mt Blayney 2799

Ph: 02 6368 5889 Fax: 02 6368 5989

Email: cotbrook7@bigpond.com

This business was previously owned by EC Tobin and Son

BEE ENGINEERING

MANUFACTURERS OF



NEW PRODUCTS

HONEY & CAPPINGS STAINLESS STEEL

VANE PUMPS 50mm & 65mm VARIABLE SPEED

DEBOXER

HEAVY DUTY HANDS FREE

PLUS UNCAPPING MACHINES
7 DIFFERENT MODELS TO CHOOSE FROM

Phone (08) 9259 0676 Email: bee@bee-engineering.com PO Box 126 Parkwood Western Australia 6147

Valley Bee Keeping Supplies

SUPPLYING ALLIANCE WOODWARE & FRAMES
SPECIALISING IN WIRED & EMBEDED FRAMES
ASSEMBLED, TREATED & PAINTED BOXES
LIDS & BOTTOMS

A FULL RANGE OF BEEKEEPING EQUIPMENT
FOR THE AMATUER BEEKEEPER
HONEY EXTRACTION, STROAGE &
CONTAINERS
NSW AGENT FOR HIVEMIND NZ

MAIL ORDER WELCOME
OR
SHOP ONLINE
www.valley-industries.com.au

70 Whitbread Street, Taree NSW 2430
mark.page@valley-industries.com.au
Phone 6552 8888 Fax 6552 5941 Mobile 0458 522 240



Valley Industries Ltd

"Helping People to Help Themselves"

TIRED OF REPLACING PLASTIC TRAPS?



BEETLE TRAPS

FOR SMALL HIVE BEETLES

BUILT TO LAST

Recommended for use with Diatomaceous earth

- Strong watertight folded aluminium construction.
 Secure spill resistant sliding lid sheds moisture keeping earth dry and working for extended periods.
 - · Easily cleaned and reused again and again.



For all enquiries contact John, Kerry and Sam Hawkins TEL: 02 65671598 EMAIL: billybyang@bigpond.com.au

CHEMICAL FREE

AUSTRALIAN MADE



It doesn't take a genius to tell you about the dangers of AFB & EFB

American Foulbrood and European Foulbrood are two devastating diseases that cause significant issues for beekeepers.

Steritech provides Gamma Irradiation to eliminate both American Foulbrood and European Foulbrood so that treated bee equipment can continue to be used.

Steritech continually works with the beekeeping industry to ensure the service we offer meets their needs.

Contact us to find out how our services can benefit you.

Steritech is a proud and long standing member of the NSWAA

NSW - JAMIE CRIGHTON National Business Development Manager Tel: 02 8785 4400

Email: jcrighton@steritech.com.au

VIC - RAYMOND BRYDEN Sales Executive - Victoria Tel: 03 8726 5566 Email: rbryden@steritech.com.au

QLD - GLENN ROBERTSON General Manager - Queensland Tel: 07 3293 1566

Email: grobertson@steritech.com.au





Annual Beekeeping Conference Special



Assembled and

Wired Frames

\$1.87 each





10/8 Frames Standard Grade Alliance Boxes \$18.70 each



Plastic Beetek Frames Full Depth \$3.80 each



Plastic Beetek Foundation Full Depth \$1.76 each

* Minimum Quantity Criteria Apply

PLACE AN ORDER NOW AND PICK UP ON THE DAY OF CONFERENCE

HORNSBY BRANCH

63-A Hunter Lane, Hornsby NSW-2077



MT. DRUITT BRANCH

Unit 11, 71 Kurrajong Avenue Mt. Druitt NSW-2770



You can also shop online at www.hornsby-beekeeping.com

DOUG'S COLUMN

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



THOSE OTHER BEES

While the honey bee (Apis mellifera) is very well known, there are a range of other bees in our environment that also share the name "bee". Australia has a very large number of natives, but we also have several other exotics that have spread across our landscape. There are also a few bees that exist in other states (Asian bees in Queensland and bumble bees in Tasmania) that have a very strong likelihood of eventually finding their way into NSW.

Honey bees are unequalled around the planet for their ability to yield large honey crops. Some social bees, including the Asian cousins of *Apis mellifera*, are harvested for their honey. The yields are only a fraction of that obtained from *Apis mellifera*.

There is a vast reservoir of knowledge about the keeping and management of honey bees. Their role in agriculture as the primary source of pollination services is due to their ability to rapidly raise large numbers of field bees and the relative ease with which they can be transported around the country side. Honey bees also withstand very cold and hot climatic extremes.

Honey bees are not likely to be displaced as the most important insect in agriculture in the near future, but it is worth taking a look at what else is happening with "bees" in the NSW context.

The African Carder bee (Afranthidium repetitum) was first identified in Brisbane in 2000. It is an exotic bee from Africa. This bee is 5 to 8mm in length and similar in appearance to our native leaf-cutter bees. It is black in colour with thin white to fawn bands across its abdomen, depending on the sex of the bee.

They are considered generalist foragers with possibly a preference for blue coloured flowers. They obtain the name 'carder' bees by their nesting behaviour. They collect plant hairs or plant fibrous material, carrying it back to suitable cavities in bundles to make nests. Several females may nest in the one site. The appearance of the nest is similar to 'carded' wool (woolly appearance).

In a 2008 study the African Carder bee was found to be the second most common bee in the Sydney region. Since then sightings have been confirmed as far as Melbourne (2015), Albury, Rockhampton and Emerald (2014). They were observed in early April in the Blue Mountains, suggesting a long period of activity going into hibernation, quite late compared to many native bees.

Given the distribution of the sightings of the African Carder bee thus far, it is likely this bee will continue to spread and establish across the Australian landscape.

The **Emerald furrow bee** (Halictus smaragdulus) was first identified in the Hunter Valley in 2004. This is an exotic bee with European origins. Its native range includes Spain, Portugal, throughout southern and central Europe into Kyrgyzstan and Afghanistan. Its German common name is interpreted in English as the Emerald furrow bee.

DNA collected from specimens across NSW indicate two distinct maternal lineages, indicating the incursion of this bee did not happen as a result of the introduction of a single bee.

The Emerald furrow bee is, as the name suggests, a metallic green bee 6-8mm long. Little is known about the ecology and behaviour of this bee, but related Australian species are mostly ground nesters. Nests are probably within 100 metres of any sightings on flowering plants.

In a 2004 - 2006 survey, 12 locations were sampled for bees in general in the Upper Hunter region. A total of 639 bees were collected, representing 17 species. Of the total number of bees collected 22% were Emerald furrow bees which, at the time, were the second most abundant bee species collected. A later set of surveys in 2008 and 2009 found the bee across a much greater geographic range than previously known.

The limits of its distribution were then identified as Sydney in the south, Tamworth in the north, Ulan in the west and Maitland in the east. This is a reflection of the survey boundaries rather than the limits of the distribution of the bee. In all probability it has spread well beyond these boundaries.

Given that the Emerald furrow bee is a native of Europe with a similar climate to Australia, in all probability this invasive species has the major potential to spread across large areas of the Australian landscape.

The Asian honey bee (Apis cerana) is a neighbour to our north, inhabiting Indonesia. The sub species "Java" has proven to be highly invasive and has spread throughout Papua New Guinea and the Solomon Islands. In 2007 it was found in Cairns but an eradication attempt failed. This bee is now well established in the Cairns region.

Experience from the Solomon Island invasion of *Apis cerana* is very concerning. The competition to honey bees (*Apis mellifera*) was extremely significant and there is now only a handful of functioning *mellifera* hives left where the *cerana* colonies have invaded specific islands.

Although not found or established in NSW, it is expected that this bee will eventually colonise most of the east coast of Australia.

The Alfalfa leafcutter bee (Megachile rotundata) was legally imported into Australia many decades ago. There was a lot of work conducted by the South Australian Department of Agriculture to establish this bee, but it didn't persist. Later, there was a major project by CSIRO in Canberra to establish the bee, but again it appears as though it has not established.

This bee is particularly efficient at pollinating lucerne flowers. While honey bees are attracted to lucerne flowers, the leafcutter bee is regarded as more suited to the job.



Large bumble bees present in Tassie, the shinny one is as a result of entering a bee hive and being mobbed. All its hair and wings have been removed by the resident honey bees. The image doesn't show the yellow band on the tail of the bumble bee.

Bumble bees (Bombus terrestris) have been in Tasmania since 1992. The large earth bumble bee is a native of Europe. They have spread extremely well across Tasmania. Given that they probably started their invasion based on a single fertilised queen it is surprising that they haven't yet been found on the mainland.

These bees form colonies with up to 1,000 individuals, although the average number per colony is likely to be less than this (200-400). A fertilised queen overwinters on her own. She emerges from winter hibernation and begins establishing her colony. At some stage she ceases field duties and becomes the full-time stay-at-home mum.

Bumble bees have been identified as being very efficient "buzz" pollinators. Honey bees do not buzz pollinate. This is an action of the wing movements which causes some plants to release pollen. Tomatoes exhibit this behaviour and are very adapted to bumble bee pollination.

There have been several applications to legally import bumble bees from Tasmania onto the mainland, with no success. In all cases the applications were rejected due to the high invasive risk associated with the bee. Wherever they have been introduced (New Zealand, Israel, Tasmania, Japan, Chile and Argentina) they have established in the wild. They have been listed as a Key Threatening Process under NSW legislation and as a Potentially Threatening Process under Victorian legislation. They have been observed to enter honey bee hives to help themselves to the stored honey.

There are over 1,600 species of **Australian native bees**. The majority are solitary, i.e. do not live in a colony. Quite a few native bees share communal nesting sites. About a dozen are social bees similar to honey bees. The smallest native bees are only 2mm in length whereas the largest bees are 24mm long. A very large number of native bees actually nest in the ground.

Very little is known about the ecology and biology of the majority of native Australian bees. Most of our native bees do not have a common name.

One group of natives relatively common across NSW is the blue-banded bees (Amegilla). They appear in October and disappear in May, entering their winter dormant period. Les Dollin has designed nest blocks that have been very successful in attracting blue-banded bees. (www. aussiebee.com.au)

While there have been a few very in depth studies conducted of this bee, there is still a lot of work needing to be done. They have demonstrated to be effective buzz pollinators of tomatoes, which makes them a potential alternative to bumble bees.

The other group of native bees that have received some research attention include the social stingless bees. It is becoming more popular to own or keep these bees as an interest. These bees at very best will only yield one kilo of honey per year. Most beekeepers of native stingless bees only own one hive. The price for one of these colonies was reported at over \$300.

Most of the species inhabit the sub-tropics but a few species naturally occur along the NSW coastline. *Tetragonula carbonaria* has been found as far south as Bega. *Austroplebeia australis* has demonstrated a remarkable ability to survive extreme temperatures.

Flight commences around 18°C and is maximised at 26°C plus. The *Tetragonula* bees forage in groups, leaving a scent mark on preferred locations.

Brood size can vary. For *Austroplebeia* bees this may range from 2,000 to 13,000 with an average brood size of 5,000 developing individuals. The adults may live up to several months.

The stingless bees mostly forage only short distances from their nests; one to two hundred metres with a maximum of 500 metres. This makes them useful as potential commercial pollinators as their flight range capacity will restrict them to forage in the crops (flowers) near at hand. Even so, one report suggested that you will need three colonies of stingless bees to replace a honey bee colony in its pollination capacity. (www.beebusiness.com)

The stingless bees have an interesting colony reproduction compared to the swarming behaviour of honey bees. They identify suitable cavities within close proximity to their nest and slowly provision them over several weeks. Eventually 10 to 30% of the bees from the mother colony move into the new nest with a new queen bee.

Stingless bee volume preference in tree cavities varies from one to three and a half litres, depending on species. This compares to honey bees which prefer larger volumes ranging from 20 to 100 litres as an ideal nesting cavity. There are some great web sites dedicated to native bees (as quoted in text), worth searching from time to time.

There is a lot happening in our backyards. Do you think you could identify African Carder bees, Emerald Furrow bees, Asian honey bee, Alfalfa leafcutter bees or the large earth bumble bee? At least you are now aware of their existence.

(Acknowledgements: edited Annette Somerville, typed Vicki Saville)

ANNUAL CONFERENCE PROGRAM

Penrith Panthers Event Centre, 123 Mulgoa Road Penrith NSW

	WEDNESDAY 1 JULY 2015 - Jamison Room				
1 - 5.15pm	FREE BIOSECURITY WORKSHOP FOR ALL INTERESTED BEEKEEPERS Topics to cover: Beekeeping resources, bee surveillance, incursion management for the bee industry and the National Bee Biosecurity Program and Code of Practice				
5.30 - 6.30pm	HAVE YOUR SAY - Q & A This year the NSW Apiarists' Association will be holding a panel session open to all members. You are invited to come along and talk to your Executive Council about any ideas, concerns and provide feedback. So please come along and participate.				

	THURSDAY 2 JULY 2015 - Ron Mulock AO Room
9.00am	NSW Apiarists' Association AGM Casey Cooper, President NSW Apiarists' Association
9.30am	AHBIC Report - Activities for the year lan Zadow, Chairman Australian Honey Bee Industry Council
9.45am	NSW Department of Primary Industries Reports Dr Doug Somerville , Technical Specialist Honey Bees, Mick Rankmore , <i>Regulatory Specialist, Apiaries</i> and Elizabeth Frost , <i>Honey Bee Development Officer</i>
10.30am	Official Opening
10.45am	MORNING TEA
11.15am	The changing nature of the bee industry - where is it headed? Trevor Monson, Beekeeper and pollination specialist
11.45am	Forestry policy and web booking system Richard Rienstra, Regional Manager Forestry Corporation of NSW Western Region
12.15pm	Nominations for Executive Council
12.30pm	LUNCH
2.00pm	Genetic testing for Africanised bees Dr Nadine Chapman , School of Biological Sciences University of Sydney
2.30pm	Finding the best honeybee genetics - first steps in a new approach Dr Robert Banks , <i>Director Animal Genetics and Breeding Unit</i> University of New England
3.00pm	The transformation of the New Zealand Beekeeping Association into the 21 st century John Hartnell , <i>Chairman Bee Industry Group</i> Federated Farmers of New Zealand
3.30pm	Implementation of the Code of Practice and National Bee Biosecurity Program Craig Klingner, Chairman Industry Working Group & Ian Zadow, Chairman AHBIC
4.00pm	The role of the new NSW Bee Biosecurity Officer Dr Satendra Kumar , Chief of Plant Industries NSW Department of Primary Industries
4.30pm	General Business



ANNUAL CONFERENCE PROGRAM

Penrith Panthers Event Centre, 123 Mulgoa Road Penrith NSW

	FRIDAY 3 JULY 2015 - Ron Mulock AO Room		
8.30am	REGISTRATION		
9.00am	Australian Almond Board report Brett Rosenzweig, Industry Development Officer Almond Board of Australia		
9.30am	Observing eucalypt growth cycles using satellite data Jonathan Arundel, PhD student University of Melbourne		
10.00am	The New Zealand manuka debate John Hartnell, Chairman Bee Industry Group Federated Farmers of New Zealand		
	Close of nominations for Executive Council		
10.30am	MORNING TEA		
11.15am	Netting of open entrance bee hives for transport - Expert Panel Session Bill Weiss, Lindsay Callaway, Casey Cooper, Brian Woolfe, NSW & Victorian Beekeepers		
12.00pm	New sources and bioactivity of Australian leptospermum honey Dr Peter Brooks, University of the Sunshine Coast		
	Close of voting for Executive Council		
12.30pm	LUNCH		
2.00pm	Overseas skilled workers, the subclass 457 visa and industry training Joanne Kinslor, Principal Solicitor Kinslor Prince Solicitors		
2.30pm	Honey bee and pollination report from the Rural Industries Research and Development Corporation Dr Michael Hornizky <i>Chair</i> , RIRDC Honey Bee and Pollination Advisory Committee		
3.00pm	Results from the national honeybee pathogen survey Dr John Roberts , <i>Postdoctoral Fellow</i> CSIRO Biosecurity Flagship		
3.30pm	Eat honey and bee well, Medicinal Australian honey Dr Nural Cokcetin , School of Biotechnology and Biomolecular Sciences University of NSW		
4.00pm	General Business		
4.30pm	Close		
7.00pm	ANNUAL CONFERENCE DINNER - sponsored by WFI		

Conference program subject to change without notice



A quick thank you for your loyal support throughout the 2014/15 Season

Make sure you see us at one of the following events...

WA Honey Festival	Sunday 3rd May	The Swan Valley, WA
Bee Week Field Day	22nd & 23rd May	Orange, NSW
Tasmanian Beekeepers' Assoc.	29th & 30th May	Smithton, TAS
Victorian Apiarists' Assoc.	10th & 11th June	Bairnsdale, VIC
Queensland Beekeepers' Assoc.	11th & 12 June	Cleveland, QLD
South Australian Apiarists' Assoc.	18th & 19th June	Nuriootpa, SA
New South Wales Apiarists' Assoc.	2nd & 3rd July	Penrith, NSW

Check out our website



Only \$30 dally cary

PavPal*

www.nuplas.com.au





NUPLAS PTY LTD - INJECTION MOULDERS

Tel 03 5032 9199 | Fax 03 5032 9399 | Email sales@nuplas.com.au

Check out our new look. Impressive, right?

Nothing has changed at Nuplas – Same products, same people, same level of service, with a fresh look.

ORDER NOW-PAY LATER!

After an exceptionally good season, the release of new products, increase in product range and our Facebook page, we are anticipating the next season to be even bigger. We highly suggest if you are interested in ordering product, get in early to secure your place. Even the smallest indication will help us, and remember... zero deposit. Yes that is correct....you don't have to pay a cent until you require the goods.

WINTER DEAL SUPERS 3 C

DeliveredEnds 30 June 2015
Min Order 120 Units



AIR UP, AIR DOWN On the Run from the Cab AIR CTI Saves You Time, Saves You Money

Truck go up impossible sand dunes, and tow a trailer. Its just remarkable the difference AIR CTI makes

Ian Oakley-Desert Country

AIR CTI is excellent in sand, is great for traction, and smooths out the rough bits on rocky roads. Also doesn't chop up the tracks in National Parks. And No Loss of Bees whilst Transporting.

Allen Cotton—South Austrelia
Extra Traction
Opens up rougher tracks
Bees Less Stressed
Smoother Ride

Aussie Tough for Aussie Conditions





AIR CTI www.aircti.com PH: 03 5127 6128

The Revolutionary

Sales: 0437 517 423

POLLEN



100% PURE NATURAL POLLEN

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</u> <u>pollination</u>

Pollen available in 5kgs bags

1 x 5 kg bag \$15/kg 4 x 5kg bags 1 Box \$13/kg 20 x 5kg bags 5 Boxes \$12/kg Plus freight

Contact: Browns Bees Australia Terry Brown Ph: 02 6886 1448 Email: brownsbees@gmail.com



BLUEBEES Brood Box Bottom Boards

for 8 to 10 Frame Hives

www.bluebees.com.au

"Prevention is Better Than Cure"

CHEMICAL FREE - Pests become resistant to pesticides, bees suffer, honey & wax are polluted Bluebees Boards curtail chemical use, your honey remains natural!

- Supresses humidity & deprives the Small Hive Beetle (SHB) breeding conditions in the hive
- Facilitates dry & clean hives with strong & healthy bees, best bottom board for pollination
- Empowers bees to hunt & eject interloping pests such as: SHB, Wax Moth & Varroa - (not yet in Australia), as well as debris from the hive



Made in Australia to Professional Beekeeper Standards Winner 2012 - Bendigo Inventor Award for Agriculture and Environment Sustainability

Contact: J-Pierre Mercader (Proprietor) Phone: 0412 541 060 Email: jpm@bluebees.com.au Website: www.bluebees.com.au

rotected by The Australian Federal Government IP Design 14221/2010 & 14222/2010. Extended till November 2020.

NATIONAL HONEY SHOW 2015

The National Honey Show was once again an overwhelming success for Exhibitors.

The Most Successful Exhibitor in Honey Classes (14 to 30) in the open section was awarded to Neil Bingley, and the Most Successful Exhibitor in Small Producers Classes (35 to 43) was awarded to Norman Adrian Webb & John Keith Godwin for the sixth year running. The Best Exhibit in Show was awarded to Bee-U-Tiful Honey who were a first time Exhibitor to the National Honey Show.

In the Commercial Section, Canberra Urban Honey (ACT), Capilano Honey Limited (QLD), Honey Delight (ACT), Mount Warning Honey (NSW) and Norman & Mrs Valerie Pope (NSW) were all awarded medals. These Exhibitors will now have the opportunity to display the prestigious Sydney Royal medal artwork on their products.

Capilano Honey Limited went on to take out the highest honour of the competition, winning The Phillip Carter Memorial Annual Trophy for Champion Commercial Exhibit. This Trophy commemorates over 20 years of service given to the National Honey Show by the Late Mr Phillip Carter.

Congratulations to all of the Exhibitors and to view the results from the Sydney Royal National Honey Show please visit www.sydneyroyal.com.au/honey

As well as the National Honey Show, the NSW Apiarists' Association *Honeyland* stand returned to the Show with Honey tastings in high demand during the 14 days of the Show.

Showgoers were also treated again to view the inside of a working hive with live bee demonstrations taking place at the popular Bee-Zeebo. Attracting good crowds, the daily demonstrations educated showgoers on how a beehive operates and the role the queen bee and her colony play, and gave an insight into the fascinating world of beekeeping.

The Sydney Royal Easter Show will take place from 17-30 March next year. If you are interested in entering or would like more information on the National Honey Show please contact Elaine Rogers on 02 9704 1449 or email erogers@rasnsw.com.au



A BEAUTIFUL DISPLAY OF PRIZE WINNING EXHIBITS AT THE NATIONAL HONEY SHOW







Images courtesy of Rick Stevens

Honey Containers

Col Baker & Associates ABN: 68 768 503 674



Clear plastic pails with tamper evident lid Sizes available: 3kg, 1kg (pails) & 500g (jar)

3kg pail - \$1.35 Ea. (Box of 300) (Box of 150)

1 kg pail - \$0. 81c Ea.(Box of 256) 500g jar - \$0.40c Ea. (Box of 200)

All prices include GST

Prices are ex Lismore - Northern NSW

Contact: Col Baker - 0409 580 298 Email: ck.baker@bigpond.com Steven and Jodie Goldsworthy
38 - 40 Hammersley Road
Corowa NSW 2646
Phone: (02) 6033 2322
Mobile: 0419 559 242
info@beechworthhoney.com.au



MAKING HARD WORK EASIER













Healy Group - Manufacturers & Distributors Tel (02) 9525 5522 - info@healygroup.com.au www.healygroup.com.au (HEALYGROUP)



Laurie and Paula Dewar

T/as DEWAR APIARIES

2157 Lake Moogerah Rd Kalbar Q 4309 Phone 07 54635633

Email: <u>beebuild@optusnet.com.au</u> <u>dewarqueens@optusnet.com.au</u> ABN 69 758 923 328



Bee Build

Complete Pollen Replacement

DUE to increased demand Bee Build now has Irradiated Pollen included.

Available in 10 Kg 20 kg 25kg bags \$91* \$176* \$220*

(Discounts apply to bulk orders)
Bee Build without Pollen upon request only.

Bee Boost

A Probiotic especially formulated for honeybees \$ 44 * (500gms)

1-2 teaspoons per hive depending on hive strength

Bee Build Protein Sausages

High Protein Pattie containing Bee Build and Pollen packed in a Sausage Case.

We recommend that you only use patties if SHB is under control. If not - use Bee Build powder dry. Protein Sausages come in 500gm and 1 kg packs.

500gms \$ 12 * 1kg \$ 23 * 3kg \$ 60*

Discounts apply for bulk orders.

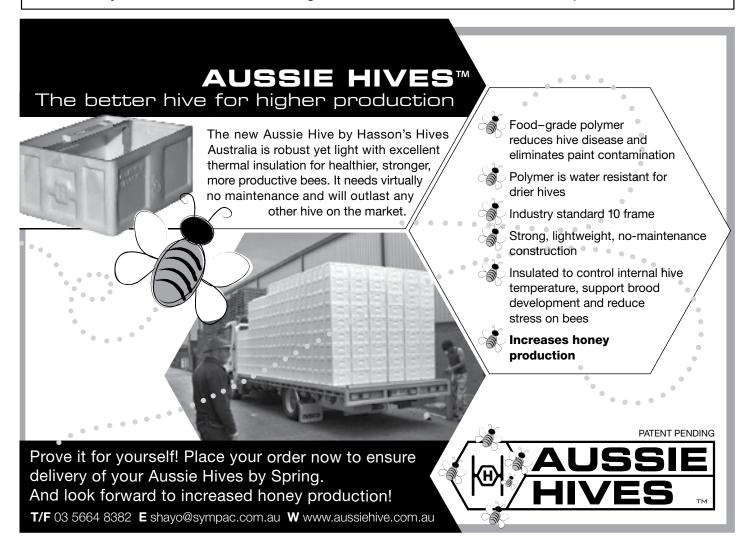
Also available from good Beekeeping Suppliers

Al Breeder Queens

All Queens tested for Rapid Response Cleaning Gene Hygienic Behaviour Price on application

Queen Bees: 1-10 \$ 25 * 11-49 \$ 20 * 50+ \$ 18 * Queen Cells: \$ 6 * ea Queens reared from 100% Hygienic stock- Orders now taken for next season-these prices to apply. *Please note: postage/freight additional. GST included

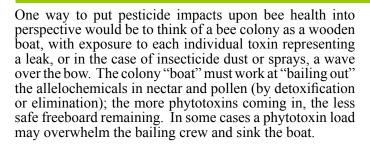
As of 1 July 2015 10% of all sales will go to Bees Downunder-for Varroa Preparedness Research



SICK BEES

Colony Collapse Revisited **PART 18F2** THE LEAKY BOAT ANALOGY

by Randy Oliver - ScientificBeekeeping.com



In the above analogy, you can see that exposure to manmade pesticides is not a black or white situation—we must always keep in mind how much freeboard the boat had left prior to being exposed to the additional toxin.

Practical application: so when we think of bee colonies and toxins of any sort, we must always keep in mind the amount of "bailing" that the colony is already doing to keep up with the leaks prior to its exposure to any new toxin. And anything that adds to colony stress will likely make that colony more susceptible to damage by the addition of yet another toxicant.

On the other hand, the exposure of bees to some allelochemicals may prepare the crew for "bad weather"by consuming plant toxins, the bees may upregulate their detoxification enzymes, kind of like the crew getting stronger by "practicing." May Berenbaum found that bees that consumed propolis extracts exhibited an enhanced capacity to detoxify mycotoxins [1].

Why Would Bees Collect Toxic Pollen?

There are two foods that foragers bring back to the colony nectar and pollen. However, the evaluation of the "safety" of these two food sources is entirely different. In the case of nectar, there is a multi-step "homeland security" type of screening process to minimize the intake of toxins into the hive. First, the individual forager samples the nectar, and may reject it should it find the taste repellent, since many phytotoxins are bitter or irritating. Then on the flight home, should the forager become sickened by its nectar load, it may die in the field, or intentionally sacrifice itself by committing "altruistic self removal." Once back in the hive, the forager must then find a mid-aged receiver bee to take its nectar load, which provides yet another checkpoint against toxic nectar, since the receivers would likely be averse to taking any nectar that had previously bothered them. So the colony appears have effective mechanisms in place to protect it from poisonous nectar.

Surprisingly, no such sort of screening appears to happen in the case of pollen! Bees are well known to collect pollens toxic enough to kill the colony (as with California Buckeye in my area). Since pollen foragers do not ingest the pollen that they gather, they have no way of knowing whether it is toxic or not. Excellent studies by Pernal and Currie [2] demonstrated that foragers do not appear to discriminate between pollens due to nutritional content, but rather by



particle size and aroma. My own experimentation supports the importance of odor.

Since it would be non adaptive for bees to collect toxic pollen, one would suspect that natural populations of honey bees would evolutionarily "learn" to avoid any toxic pollens in the local habitat based upon their odor, or to inherit the genes that caused them to favor pollens that were on the "proper odor list".

So what happens when we move bees outside of their natural range, such as to the Americas, Australia, or New Zealand? There they would be exposed to completely novel pollens, such as those from corn (maize), soybeans, melons and squash, sunflowers, cotton, blueberries, and cranberries (all of New World origin). The European honey bee may not be well adapted to either the nutritional composition of these pollens, nor their allelochemicals.

Not surprisingly, when researchers inspect the actual pollen loads of foragers from hives placed adjacent to these New World crops, they often find that the bees eschew those pollens in favor of those from plants of Old World origin growing within flight range (either weeds or crop plants). I suspect that the bees may simply not be "wired" to recognize the New World pollens as food. Perhaps not surprisingly, some of them are also of notably poor quality as bee feed.

Consider corn pollen. In a number of studies, corn (maize) is often found to be one of the major pollen sources used by honey bees [3,4], and in the U.S., bees eagerly gather the pollen of sweet corn. Yet US beekeepers have told me that bees winter poorly on corn pollen.

These anecdotal reports are supported by recent research by Höcherl [5], who found that bees experimentally fed maize pollen produced less brood and had shorter longevity as adults than those fed mixed pollens. Maize pollen is generally high in protein, but when I compared its amino acid composition to the ideal of deGroot [6], its nutritive value was limited by its low ratio of tryptophan. However, that does not explain why bees so eschew the pollen of field corn. Bromenshenk [7], who recently surveyed 116 colonies across the Corn Belt during the tasseling period, found that foragers preferentially seek out any other sort of pollen than that of field corn—a substantial proportion of colonies collected no corn pollen, and overall, the median percentage of corn in trapped pollen was only about 10%. This finding means that foragers will fly over fields of field corn in full tassel in order to find weeds in flower. So what's up with that?

What could possibly make bees so dislike field corn pollen that the foragers would avoid gathering such an easily available and abundant food source? Hungry foragers will gather sawdust (Fig. 1), so it can't just be the lack of nutritional value.



Figure 1. Bees collecting sawdust at my home yard on a sunny morning in January, when there was little natural pollen to be had. There was far more activity at a feeder of dry pollen supplement that I had set out.

Could it be that allelochemicals in field corn pollen is *repellent* to foragers? When I searched, I was surprised to find that the pollen of some varieties of corn "burns" the leaves of plants that it falls upon [8], perhaps due to its high content of phenylacetic acid (PAA). I couldn't find toxicity data of PAA [9] to bees, but it makes me wonder whether some of our cultivars of field corn are somewhat toxic to bees?

Almond pollen

One demonstrably toxic pollen of great interest to me is that of the almond tree (Fig. 2), which contains high concentrations of amygdalin (normally metabolically degraded to benzaldehyde and cyanide—also both toxic). Yet bees thrive on almond pollen, despite the fact that in some cultivars the concentration of amygdalin approaches that of acute bee toxicity [10]. What concerns me is that no one has studied whether the necessary detoxification of amygdalin hampers the bees' ability to simultaneously detoxify other pesticides.



Figure 2. Almond pollen and nectar is loaded with the toxic and bitter cyanogenic glycoside amygdalin, yet honey bees thrive on it. The bee is apparently preadapted to detoxify this class of chemicals since they are commonly produced by a number of European fruit trees in the rose family.

Despite its apparent toxicity, bees thrive on almond pollen, presumably because of their co-evolutionary adaptation in the Mediterranean region to the even more toxic ancestor of the cultivated almond.

Colony-to-Colony Variation

One can easily observe the colony-to-colony difference in response to the toxic organic acids and essential oils used for varroa control. The exact same dose applied to a number of hives will elicit vastly different responses. Some colonies appear to barely notice the chemical, whereas others may pour out of the entrance, suffer serious mortality, or even abandon the hive. This fact makes it difficult to define the "toxic dose"!

We must also keep in mind that not every colony in an apiary is foraging on the same plants. All one need do is to put pollen traps on each hive to observe that each colony can be foraging on completely different flowers, and perhaps in totally separate areas. The exposure of two side-by-side colonies to toxins, whether natural or synthetic, may be 100% different!

We tend to breed generic, highly productive bee stocks. In natural settings, though, honey bees were much more locally adapted, fine-tuned to the toxins of the local flora. On that subject, I found a fascinating and thought-provoking paper by Després [11], from which I'll share some excerpts:

Over 400 million years of coevolution with plants, phytophagous [plant-eating] insects have developed diverse resistance mechanisms to cope with plant chemical defences. Because insects face a geographical mosaic of chemical environments, from non-toxic to highly toxic plants, the costs associated with resistance traits vary with the probability of encountering a toxin...



FRAMES
FULL DEPTH
WSP
IDEALS
HONEY COMB
QUEEN CAGES

BOXES LIDS CLEARER BOARDS BOTTOM BOARDS RISERS & MORE

Contact: Phil Kethel 15 Crawford Close Bellingen NSW 2454 Ph/Fax: (02) 6655 1385 Mobile: 0428 960 917

Email: philkhydescreekww@bigpond.com



I've heard anecdotally that in certain areas, locally-adapted bee stocks can better survive exposure to the local toxic flora (such as Buckeye in the Sierra foothills) or the dark fall honey that can cause winter losses in nonadapted stock. Atkins [12] also pointed out that "Some hybrid strains of bees are more resistant to certain plant poisons than purer strains." This subject certainly deserves further investigation!

Bee Genetics or Gut Endosymbionts?

But is it actually the genetics of the bees that makes the difference, or the genetics of their symbiotic fungi and bacteria? Honey bees harbor a distinctive microflora in both their guts and in the beebread [13]. In the beebread, the symbiotic fungi may be the more important for producing detoxification enzymes [14]. This hypothesis is supported by the finding by vanEngelsdorp [15] that pollen containing high levels of a fungicide apparently goes "toxic," whereupon the bees seal it off.

I mentioned in my last article that pesticide detoxification appears to take place largely in the Malpighian tubules and ileum of the gut. A recent study by Martinson [16] found that these organs appear to be specifically constructed to provide a home for symbiotic bacteria—perhaps those critical for the detoxification process. These bee endosymbionts may be more important than we've realized:

Insect fungal symbionts (as well as bacterial symbionts) are well recognized as providers of nutrients for their insect hosts. The rationale behind this is that the insects are feeding on nutrient-poor resources, and need the microbial symbionts to provide a balanced diet. The effects of the presence of toxins in these food materials has been relatively overlooked, yet in many cases there is just as much need for detoxification as there is for nutrient provision [17] (emphasis mine).

It could be that a colony's ability to handle pesticides is dependent upon the health and species composition of this gut community. And what do we beekeepers often do? We treat our colonies with antibiotics to kill bacteria! Now I'm not about to claim that antibiotics are "bad" for bees—many beekeepers report that Terramycin (oxytetracycline) works like a "tonic," similar to the manner in which poultry seem to benefit from antibiotics. Indeed, the Moran lab [18] found that terramycin-resistant bacteria were common in the guts of commercial bees, but rare in colonies in which there was no history of antibiotic use.

But what happens if we introduce a novel antibiotic? The authors noted that tylosin was registered for use by beekeepers starting in 2005 (and is widely applied in excess), just as CCD reared its ugly head. Vásquez [19] found that the beneficial gut flora that they tested were more susceptible to tylosin than to tetracycline. I had checked with Dr. Jerry Bromenshenk at the time of his first survey of potentials factors in CCD, asking whether there was any correlation with the use of tylosin—but none stood out.

But there is more to the story. Nectar contains not only plant allelochemicals, but also bacteria and fungi which can grow in the sugar-rich solutions and produce toxic metabolites. Once bees consume nectar, their symbiotic gut bacteria suppress the growth of these potentially harmful nectar microorganisms. Vásquez [20] collected some 55 bacteria and 5 fungi from flowers, and found that the most common bee endosymbiotic bacterium was also the most potent in inhibiting the growth of all the flower microorganisms. Her findings suggest that the typical

feeding of Tylosin in fall by commercial beekeepers may suppress these important gut endosymbionts, with unknown consequences.

Practical application: I'm not going to try to make a case against antibiotics—I use them myself when called for. However, I will suggest that it would be wise to save them for when we really need them, rather than using them prophylactically across the operation.

Summary (so far)

Confused? Me too! We are still very much on the learning curve about bee responses to toxins! Let's review some points to keep in mind:

- When we use the word "pesticides" or "toxins" we should realize that those terms include the plethora of natural plant allelochemicals to which bees are exposed via nectar, pollen, and propolis, and toxic bacterial and fungal metabolites in nectar and pollen.
- At extremely low doses (parts per trillion), most plant allelochemicals and synthetic toxicants are likely merely "background noise" of little or no biological relevance.
- At <u>very low doses</u> many toxins clearly have beneficial hormetic effects, perhaps by initiating certain immune response cascades; or stimulatory effects (as do the natural alkaloids caffeine and nicotine).
- I'll spare you the math [21], but when I calculated out the amount of plant alkaloids that would be consumed by an individual bee in pollen or nectar, and compared it to the oral lethal dose as determined by Detzel, bees appear to be commonly exposed to what should be lethal levels of plant alkaloids.
- It is typically only under certain environmental conditions that colonies show signs of poisoning from natural flora (I don't normally notice Buckeye poisoning to any great extent). **Oh duh!** [22] However, any sort of stress on those plants, or lack of dilution by "safe" nectar or pollen, could suddenly shift the balance and allow for the natural "poisoning" of colonies.
- We have virtually no idea as to how important bee breeding and colony endosymbionts are in relationship to the bees' ability to detoxify allelochemicals or synthetic toxicants.

To return to my leaky boat analogy, colonies foraging on toxic pollen or nectar may not have much freeboard left. Add to that environmental pollutants, poor nutrition, or parasite load and such colonies will be unable to tolerate any additional manmade toxicants. On the other hand, a colony enjoying good nutrition and maintaining a robust broodnest may be able to recover from a pesticide spray.

Practical applications:

- Learn if you have known toxic flora in your vicinity
- Keep locally-adapted bees
- Don't count on corn, sunflowers, vine crops, blueberries or cranberries for nutrition
- Mitigate the effects of toxins by supplemental feeding to promote broodrearing
- Use antibiotics with caution

Next

Next I'll add the contribution of manmade pollutants and pesticides to the picture.

Acknowledgements

As always, I am indebted to Peter Borst, and to my wife

Stephanie for her forgiveness for my long hours, and her help with the final edit.

References

- [1]http://www.ars.usda.gov/is/br/ccd/ ccdprogressreport2010.pdf
- [2] Pernal SF, Currie RW (2002) Discrimination and preferences for pollen-based factors by foraging honey bees (*Apis mellifera* L.). Anim Behav 63(2): 369-390. Pernal SF, Currie RW (2001) The influence of pollen quality on foraging behavior in honeybees (Apis mellifera L.). Behavioral Ecology and Sociobiology 51(1): 53-68.
- [3] Keller I, et al (2005) Pollen nutrition and colony development in honey bees – Part II. Bee World 86: 27–34.
- [4] Malerbo-Souza, DT (2011) The corn pollen as a food source for honeybees. Maringá, 33(4): 701-704. http:// www.scielo.br/pdf/asagr/v33n4/20.pdf
- [5] Nicole Höcherl, N, et al (2012) Evaluation of the nutritive value of maize for honey bees. Journal of Insect Physiology 58: 278–285.
- [6] deGroot, AP (1953). Protein and amino acid requirements of the honeybee Apis mellifera. Physiologia Comparata et d'Ecogia. 3: 195-285.
- [7] Bromenshenk, JJ and C Henderson (2012) In press.
- [8] Anaya, AL, et al (1992) Phenylacetic acid as a phytotoxic compound of corn pollen. Journal of Chemical Ecology 18(6): 897-905.
- [9]http://toxnet.nlm.nih.gov/cgi-bin/sis/search/ a?dbs+hsdb:@term+@DOCNO+5010
- [10] London-Shafir, I, et al (2003) Amygdalin in almond nectar and pollen – facts and possible roles. Plant Syst. Evol. 238: 87–95.
- [11] Després (2007) Op. cit.
- [12] Atkins, EL (1975) Injury to honey bees by poisoning. *In* The Hive and the Honey Bee, Dadant.
- [13] Martinson, VG, et al (2011) A simple and distinctive microbiota associated with honey bees and bumble bees. Molecular Ecology 20: 619–628. http://www.danforthlab. entomology.cornell.edu/files/all/martinson etal 2011.pdf
- [14] Gibson, CM and MS Hunter (2010) Extraordinarily widespread and fantastically complex: comparative biology of endosymbiotic bacterial and fungal mutualists of insects. Ecology Letters 13: 223–234. http://ag.arizona. edu/ento/faculty/hunter/PAPERS/Gibson Hunter 10.pdf
- [15] vanEngelsdorp, D, et al (2009) "Entombed Pollen": A new condition in honey bee colonies associated with increased risk of colony mortality. J of Invert Pathology 101: 147–149. http://ento.psu.edu/pollinators/ publications/Entombed
- [16] Martinson, VG, et al (2012) Establishment of characteristic gut bacteria during development of the honeybee worker. Appl Environ Microbiol. 78(8): 2830-2840. http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3318792/
- [17] Dowd, PF (1992) Insect fungal symbionts: a promising source of detoxifying enzymes. Journal of

- Industrial Microbiology. 9: 149-161. http://naldc.nal. usda.gov/download/24916/PDF
- [18] Tian, B, et al (2012) Long-term exposure to antibiotics has caused accumulation of resistance determinants in the gut microbiota of honeybees. mBio 3(6): http://mbio.asm. org/content/3/6/e00377-12.full.pdf+html
- [19] Vásquez A, Forsgren E, Fries I, Paxton RJ, Flaberg E, et al. (2012) Symbionts as major modulators of insect health: lactic acid bacteria and honeybees. 7(3): ONE http://www.plosone.org/article/ info%3Adoi%2F10.1371%2Fjournal.pone.0033188
- [20] Vásquez, A, et al. (2012) Symbionts as major modulators of insect health: lactic acid bacteria and honeybees. PLoS ONE 7(3): http://www.plosone. org/article/info%3Adoi%2F10.1371%2Fjournal. pone.0033188
- [21] Typical food consumption by a nurse bee is about 10mg of pollen per day. Detzel quantified the alkaloids in lupine pollen at about 50µg/g, so a bee consuming 10mg of pollen would be exposed to 0.5µg of alkaloids. The LD_{50} for typical alkaloids (in syrup) was about $1/10^{th}$ that amount.
- [22] As I'm reading these words to Stephanie for review, it occurs to me that this likely happened to my own colonies this year when the blackberry bloom failed to materialize! We didn't notice severe Buckeye poisoning, but the colonies sure didn't do well. It's amazing to us that I can write an article, but have to read it aloud to realize that it may apply to me!

These articles were originally published in the American Bee Journal. All of Randy's bee articles be found at: www. Scientificbeekeeping.com. If you find these articles of use. Randy appreciates donations to fund his efforts.

CROP POLLINATION AGM/CONFERENCE

Date: Tuesday 30 June 2015

Venue: Hunter Room Penrith Leagues Club 123 Mulgoa Rd Penrith NSW

> Cost: \$65 pre-register \$75 on the day includes lunch

See: www.aussiepollination.com.au

Speaker's topics include: Hivemind, NT pollination issues, Canola pollination update and a video conference with the President of the European Professional Beekeepers Association. More speakers TBA.

> Stephen Targett, Secretary Email: Wally.56@hotmail.com Mobile: 0428 649 321

BEES HUNGRY FOR ACCESS TO NSW PUBLIC LANDS

MEDIA RELEASE - 22 April 2015

Help is now available for New South Wales beekeepers trying to negotiate access to public land – a vital source of pollen and nectar for the bees that provide essential pollination services to agriculture.

Around 70 per cent of Australian honey production comes from native flowers, many of which are prolific on public lands, but access is increasingly being restricted in state forests and national parks because European honey bees are not considered native to Australia.

A fact sheet has been developed to identify the registration, permit and/or licensing requirements for beekeepers seeking access to public lands in NSW, as well as the restrictions and criteria for interstate movement of hives and equipment.

The fact sheet will not only help beekeepers better understand the rules and regulations that impact where they can place their hives, but will also allow them to be better informed when seeking permission for the relocation or movement of hives in locations that require government agency approval.

It's one in a series of fact sheets, and a full report, developed through the Honey Bee and Pollination RD&E Program, which is funded by the Rural Industries Research and Development Corporation (RIRDC) and Horticulture Innovation Australia Limited (HIA).

Beekeeper and spokesman for the Program's Advisory Panel James Kershaw says given half of NSW (43 million hectares) is dedicated public land, the importance of continued access cannot be understated.

"Access to an array of native plant species is crucial to maintaining colony vigour as beekeepers must relocate their hives according to both the flowering times of particular species and seasonal conditions.

"Beekeepers face an increasingly complex and challenging environment when negotiating access to these resources, so this project was designed to provide greater knowledge of the policies that affect beekeeping across NSW," he said

Beekeeping in NSW is regulated by the *Apiaries Act 1985 No.6* which specifies that all beekeepers must be registered through the NSW Department of Primary Industries before hives can be placed on any public (or private) land.

NSW DPI has developed a *Beekeeping Code of Practice* for NSW, while Keeping Bees on Forested Lands – A Code of Practice is available on the NSW Apiarists' Association website.

Each type of public land has different management objectives and licencing requirements, and there are differences between states for terms such as 'national park', so beekeepers are operating in a complex environment.

Mr Kershaw says given the level of complexity, beekeepers should take full advantage of the research in order to ensure their operation's sustainability.

"If the bees are not in good health, it's harder to put their pollination services to work, and many horticultural and agricultural products rely on European honey bee pollination," Mr Kershaw said.

To download the NSW factsheet or the full report, Compatibility of Management Objectives on Public Lands with Beekeeping, or for more information about the Honey Bee and Pollination RD&E Program, go to www.rirdc.gov.au/honeybee-pollination.

Media contact: Kaaren Latham 02 8204 3852

FULL-TIME BEEKEEPER ROLE

We are seeking a person with beekeeping experience. This is a full-time position.

Our season from late July 2015 till May 2016. Based in South East QLD at Rochedale.

This position involves all aspects of beekeeping in a modern honey production business.

Proven ability to work as part of a team very important. We are close friendly family business.

You must not be afraid of hard heavy work and long irregular hours which involves a lot of time in the bush. Camping will be required as well as a full and clean driver licence, good work ethic, reliable.

A competitive remuneration package will be negotiated recognising the successful candidate's skills and previous experience.

We will also have a 3 bedroom family home available from December as part of the package located in the suburb of Rochedale near the city and all facilities.

We need someone who fits this description:

- At least two (2) year beekeeping experience (but am happy to train the right person)
- Thorough knowledge habits of bees
- Manual Driver License (HR) or car license with the confidence to get HR essential.
- Ability to work flexible hours
- Skills identifying bee diseases

Please include your CV and any references. And if you got what it takes, we more than happy to offer you support and training to become a Team Leader or 2 IC.

Applicants for this position should have Australian residency or a valid Australian work permit.

Please email all CV's to farmgatehoney@live.com

NSW BEE WEEK FIELD DAYS & HONEY FESTIVAL 2015 - ORANGE





AUSTRALIAN QUEEN BEE LINE

ABN 63 181 851 647 21 Leewood Drive, Orange NSW 2800

1. Selling Italian and Carniolan Queens

1 - 10 ------ \$25.00 each plus postage 11 - 49 ------ \$22.00 each 50 - 99 ------ \$21.00 each Over 100 (in total) --- \$20.00 each 200 and over ----- discounts apply



Terms: Payment prior to dispatch

2. Buying Honeycomb in a frame - Please call for the price

For Orders or Enquiries contact Charlie & Brenda Casido / Mely Ph: (02) 6369 0565 Fax: (02) 6369 0575 Mon-Fri 9:00AM to 5:00PM

Email: ozqueenbeeline@optusnet.com.au or australianqueenbeeline@yahoo.com.au Web: www.australianqueenbeeline.com

Before & After Office Hours P/F (02) 6360 4113 Mobile 0434353301

SPITWATER

(Advertorial)

HOT WATER HAS THE ADVANTAGE

Spitwater, the largest manufacturer of industrial pressure cleaners and heaters in Australia offers a **portable hot water unit** able to accurately heat water to a desired temperature. Specifically modified in the Spitwater SA branch in Adelaide, this unit is ideal for beekeepers of all sizes.

"During recent years we have worked closely with Beekeepers to develop a better way of heating honey plants" says Michael Hooper, designer of the **Spitwater Bee Machine**, and a Director of Spitwater SA, "As a result we have designed a unit based on three factors – temperature control, water flow and performance."

"In a normal boiler, steam is created under pressure at around 110-120 degrees Celsius with a water consumption of approximately 100 litres per hour (LPH). The initial point of contact in the separator is at a temperature far greater than needed to melt wax therefore discolouration occurs," Michael Hooper continued.

"With our unit a maximum temperature of **98** degrees Celsius is achieved but we have a water flow of up to **1200** LPH, (depending on your system I.D. size). This allows us to use a lower temperature to achieve the same effect," Michael Hooper added.

The **Spitwater Bee Machine** consists of a Diesel-fired heating cylinder with a stainless steel heating coil. A peripheral recirculation pump is able to handle an inlet water temperature of **95 degrees Celsius and a flow of 1200 LPH**. All of this is connected to a 60 litre stainless steel reservoir tank with a ball cock float. A digitally controlled burner keeps the temperature within 2 degrees Celsius of what is set by the user.

On start-up, the unit it can reach operation temperature in less than three minutes and can be **continually run for up to ten hours** before refuelling is required.

Field tests have produced impressive results. Fuel consumption is approximately **1.9 LPH** and power consumption is **2.9 amps.**

The added benefit of this unit enables the user at the end of the day to wash down the plant with hot water that has been recycled all day heating the honey plant. When not recycling but only washing down, the unit will automatically fill via the ball cock valve.

"We now have a number of units successfully operating throughout South Australia and New South Wales and the feedback we are receiving from these customers is excellent," Michael Hooper concluded.

See the Spitwater Bee Machine on display at the NSWAA Trade Show at Penrith Panthers on the 2 & 3 July, 2015.

For more information please contact: Milo Gajin Phone: 02 8788 6200 Fax: 02 9725 2631 Mobile: 0402 052 990 Email: milo@spitwaternsw.com.au

BEEKEEPING APPRENTICESHIPS

There will be a trade stand at NSWAA Conference Penrith July 2015 for NSW State Training Services. This is to showcase what financial help is available for beekeepers to take on staff.

The total amount of money available to NSW beekeepers who take on a trainee is an untapped resource available to many beekeepers of which they are unaware. The NSWAA agreed to have a stand at the Conference to help members with the paperwork for this. One of the Australian Apprenticeship staff is a beekeeper and he signed up 12 trainees in other areas in an hour 2 weeks ago to take advantage of this money. So having someone at the Conference who knows what they are doing will make it easier for beekeepers to access this money.

What are we talking about? Basically up to a total \$26, 000 per apprentice between the employees and the trainee.

There are also school based apprenticeships available for 4/12 units HSC which family members can access e.g. sons / daughter of existing beekeepers. Taking them on, the employer can access \$750 plus retaining them as an employee \$750. One (1) day at TAFE one (1) day at work and 3(three) days at school (could be Forklift truck / food packaging etc as part of Cert 3 in rural operations.

They can get a living away from home allowance even if they are living with another family member. It just has to be hour and a half away from home measured by public transport.

Many of the members of the Association do take on family members but so far have been completely unaware of the money available to them and their employee. \$77 per week living away from home allowance if the apprentice has to go and live with someone to do his training. It can even be a relative that the trainee stays with.

There is also funding of \$1,500 for taking on an adult apprentice as well as \$1500/\$2500 completion funding for the employer, available for part time as well as full time trainees.

In addition the employee can access \$8,000 (in the first year) and \$6,000 in the second year loan to buy equipment such as laptops, mobile & Wi-Fi to enable them to study and for equipment to do their training.

This is important information for our State beekeepers - "We need more beekeepers"

There will also be education about using the cert 3 & 4 in Rural Operations for beekeepers as unfortunately Beekeeping CERT 3 & 4 haven't got smart and skilled eligibility in NSW (Yet).

Lamorna Osborne NSW Executive <u>and</u> Martin Ratcliff **State** Training Services South Western Sydney NSW Department of Education and Communities

Tel: (02) 46332807 Fax: (02) 46332819 Mobile

04773834821

Email: martin.ratcliff@det.nsw.edu.au



HEAT YOUR HONEY PLANT FOR LESS THAN \$30.00 A DAY!!!*



SELF CONTAINED HOT WATER RECYCLING SYSTEM

- Thermostatically Controlled
- · Running at 98° +/- 2°
- Wash Down Hose & Gun
- Diesel Fired, Economical to Run
- Simple & Reliable! 10 plus years of field service

ENQUIRIES TO:

495 GRAND JUNCTION ROAD WINGFIELD SA 5013 Ph: (08) 82440110 Fax: (08) 8244 0156

Email: info@spitwatersa.com.au

130 GIPPS ROAD, SMITHFIELD NSW 2164 Ph (02) 9725 4211 Fax (02) 9725 2631 Email: info@spitwaternsw.com.au

Based on a 10 hour working day*

AUSTRALIAN HONEY BEE INDUSTRY COUNCIL

Executive Director: Trevor Weatherhead Phone: 07 5467 2265 Mailing Address: PO Box 4253 Raceview QLD 4305 Email: ahbic@honeybee.org.au

FOR THE LATEST NEWS GO TO THE AHBIC WEBSITE: www.honeybee.org.au

AHBIC - MAY UPDATE

LATEST ON BEE BIOSECURITY PROGRAM AND CODE OF PRACTICE

The Industry Working Group (IWG) members, Ian Zadow, Craig Klingner and Sam Malfroy have attended a couple of State conferences and are scheduled to give presentations at the remaining conferences over the next month.

Please make sure you read the latest version of the Code of Practice. There is also a version there with tracked changes so you can see where the changes have been made to the previous version. Details are on the AHBIC website.

ASIAN BEE DETECTION IN BRISBANE

It has been reported to me that I may not have made the comments in the April newsletter re the varroa found on the Asian bees in the Brisbane interception as clear as I should have.

The varroa that were found were dead having been killed by the fumigation. So this means our Australian beekeeping industry's freedom from varroa has been kept intact.

B-QUAL BOARD VACANCY

After many years of sterling service Bill Winner has submitted his resignation from the B-Qual Board. I am sure that all would like to thank Bill for the time he has devoted to this position over the years.

This now means there is a vacancy on the Board. Expressions of interest are invited from anyone who feels they would like to contribute to our industry by being on the B-Qual Board.

Please contact Trevor Weatherhead, B-Qual Secretary, by email at ahbic@honeybee.org.au or phone 07 5467 2265.

APIMONDIA

Apimondia is not far off now. Details, including the latest newsletters, can be found at http://www.apimondia2015.com/2015/eng/main.jsp. You are encouraged to attend.

It would seem that they are short on abstracts and thus papers for presentation. If there are researchers in Australia who believe they have some good information to present, please go to the website and look at the abstracts section.

PROPOSED AUCTION OF BEE SITES IN NSW

The auction has proceeded. It is seen that these auctions are not, in the long term, a benefit for our industry here in Australia.

AHBIC CONSTITUTION REVIEW

The Australian Honey Bee Industry Council (AHBIC) Executive has prepared a review of the AHBIC Constitution and is circulating all member bodies with this document.

There will a Special Resolution moved at the upcoming Annual General Meeting to be held at Penrith on Saturday 4 July 2015.

The New South Wales Apiarists Association is following up with Forestry Corporation of New South Wales on this issue and will be putting out information.

The current system that is used in allocating sites has been a tried and proven system which gives some security to beekeepers. An auction system will give no security and has the potential to drive beekeepers out of our industry. This to the detriment of the horticulture and agriculture industries.

ANNUAL GENERAL MEETING

AHBIC will be holding its AGM on Saturday 4 July 2015 at the Penrith Panthers Leagues Club at 123 Mulgoa Road, Penrith. This will follow the NSWAA conference on 2 -3 July.

This year the format will be different to other years. Up until lunch time there will be media training for the AHBIC delegates and this will not be open to observers. After lunch delegates will move into the formal part of the AGM and observers will be welcome to attend.

AHBIC can offer lunch and attendance at the afternoon business session for any observers. If you wish to avail yourself of this offer please contact the AHBIC office. See contat details above. This year there are vacancies for the Deputy Chairperson and two Executive members.

PLANT HEALTH AUSTRALIA

Plant Health Australia has released its Annual Operational Plan for 2015-16. It can be seen at: http://www.planthealthaustralia.com.au/wp-content/uploads/2015/05/Annual-Operational-Plan-2015-16. pdf

CATEGORISATION

Comments on the papers that AHBIC sent out have been received back from the affected parties. These have been examined and the final papers have been prepared taking into account these comments. These documents are just going through a final check before being sent out. Then the Categorisation meeting will be called.

HONEY MONTH

Many activities have been held during May in conjunction with Honey Month. There will be reports in next month's newsletter and also posted on the AHBIC website. Thank you to all those who have been involved.

FEDERAL BIOSECURITY BILL

The new Biosecurity Bill has been passed by the Federal Parliament. It is expected to come into effect in about 12 months' time.

NEW SECRETARY FOR QBA

The QBA has a new Secretary, Elise Whittaker. Elise has had some experience with beekeeping being the daughter of the retired Apiary Officer in Queensland, Peter Warhurst. We welcome Elsie into the industry fold.

PHA MEETING

AHBIC recently attended a Plant Health Australia (PHA) meeting in Melbourne. At that meeting there was an Issue Resolution Group (IRG) set up to look at some issues that

have arisen regarding owner re-imbursement costs in the event of an incursion. AHBIC will be represented on this IRG as an issue has been identified in relation to whether pollination contracts would form part of the owner reimbursements. This issue had been previously raised through Exercise Acari.

PROPOLIS RESEARCH

I have been contacted by a company which is having some research on propolis carried out at a University here in Australia.

The aims of the research are:

- 1. To find out how Australian propolis is different to imported propolis,
- 2. To find any advantage Australian propolis has over imported propolis,
- 3. To eventually create the market of Australian propolis and help local beekeepers sell their propolis at a competitive price against imported material.

What they need is:

- 2 sponsors from each state of Australia, including Tasmania, each sponsor will provide 4kg of propolis from his own apiary (4 kg ideally since the research will run for another 2 years; I think 2kg is the minimum quantity)
- the propolis should be the raw material, not treated by heating or washing (e.g. to remove the beeswax)
- the sponsors will fill out an information form provided by the research team that includes the dates and sites of collection, major tree and honeybee species, rough quantity collected from different hives etc. (they can post whatever quantity they collect along with the information sheet to the research people every month or every 2 months)

If you are interested please contact Nancy Wang at beehives@vdirect.com.au

PROPOSED RELOCATION OF RIRDC

AHBIC has received a letter from Minister Barnaby Joyce stating that he was proposing to relocate the Rural Industries Research and Development Corporation (RIRDC) to Albury-Wodonga.

AHBIC had been approached on this matter previously and AHBIC had replied at that time that we could see no advantages to our beekeeping industry by relocating RIRDC.

In reply this time AHBIC pointed out that AHBIC is funded by voluntary contributions from beekeepers and honey packers and we need to be prudent in the spending of our funds. As an exercise the cost of airflights from Brisbane to Canberra and return as compared to Brisbane to Canberra to Albury to Brisbane showed that even with the cheapest fares available AHBIC would be up for an extra \$400 and this did not take account of any extra accommodation as a result of having to make the trip to Albury.

It was pointed out that when we go to Canberra we are able to make visits to many organisations, Government Departments and other agencies. By shifting RIRDC to Albury-Wodonga these economies are not available.

The other worrying aspects was that the Minister said that RIRDC would need to fund the relocation. This would mean that there would need to be the allocation of levies collected to make this possible. This would then mean that there would not be as much money available to fund our research projects. Other organisations that are being proposed for relocation are the Grains Research and Development Corporation to Wagga Wagga, Fisheries Research to Hobart and the Australian Pesticides and Veterinary Medicines Authority to either Armidale or Toowoomba.

HONEY LEVY REFORMS

Amendment Regulations to implement the honey levy reforms have been made at the 30 April 2015 Federal Executive Council meeting.

These have now been registered on the Federal Register of Legislative Instruments and will all commence, as AHBIC's submission requested, on 1 July 2015.

The instruments can be viewed on the ComLaw site at the links below. Their ComLaw ID numbers are also provided.

- Primary Industries Levies and Charges Collection Amendment (Honey) Regulation 2015 – F2015L00614
- Primary Industries Levies and Charges (National Residue Survey Levies) Amendment (Honey) *Regulation 2015* – F2015L00615
- Primary Industries (Excise) Levies Amendment (Honey) Regulation 2015 - F2015L00617
- Primary Industries (Customs) Charges Amendment (Honey) Regulation 2015 – F2015L00618

Thank you so much for your help and cooperation along the way and congratulations on the successful reforms. I wish you and the industry every success with your planned biosecurity programs.

Debbie Hoad

Policy Officer, Onshore Biosecurity and Response Sustainability and Biosecurity Policy Division National Biosecurity Policy & Response Branch Phone 0 2 6272 2057 Department of Agriculture

18 Marcus Clarke Street, Canberra ACT 2601 Australia GPO Box 858 Canberra ACT 2601 Australia

B-QUAL Industry Owned Quality Assurance



- Train at home
 - Audit every two years*
 - Group Accreditation
 - Practical quality assurance designed by beekeepers for beekeepers
 - Industry trained auditors
 - Free assistance hotline
 - International recognition
 - Packer premiums*
 - Conditions Apply

For all enquiries call 1800 630 890 or go to www.bqual.com.au



Supporting Aussie Beekeepers Since 1953





For more than 60 years Capilano Honey has grown from a small beekeeping cooperative into Australia's and one of the world's largest honey packing companies. Domestic and international demand for Capilano branded honey is very strong and we are actively seeking to expand our supplier network, sourcing quality honey and beeswax from new and existing beekeepers. Capilano Honey does not require suppliers to be shareholders in order to conduct business, so give us a call to discuss your interest in supplying Capilano.

Contact: Ben McKee

Managing Director Phone: 1800 350 977 Fax: (07) 3712 8285 Email: b.mckee@capilano.com.au

Contact: Bill Winner

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

Contact: Michael Bellman

Branch Manager, Western Australia Phone: 1800 350 977 Fax: (08) 9271 1025 Email: m.bellman@capilano.com.au

Australia's favourite honey, naturally!

www.capilano.com.au



HONEYLAND 2015 REPORT

A special thanks to all the wonderful volunteers who helped at *Honeyland*. NSW Apiarists' Association members, NSW Amateur Beekeepers' Association and North Shore Beekeeping Association members as well as other volunteers, mostly friends and relatives.

This year a blend of experienced volunteers and first timers. It was pleasing as Coordinator to see the cooperation between the volunteers with a special thanks to the two youngest volunteers Leham & Tim Beattie from Gilgai. Sadly a number who wanted to volunteer I had to say no as tickets are limited.

Each year the turnover has been increasing but the wholesale and retail prices were increased and the stock is not the same each year. For the first time *Honeyland* was able to offer Pay Pal with a minimum purchase of \$50.00.

Decoration of *Honeyland* was done by Bruce and Margaret Blunden and Lynn White. Posters were designed showing the flora that the honey for sale was produced from, the honey described and two pyramids of small bottles of the floral and show special honey.

Thank you to Association Secretary Kate McGilvray for handling all the contracts with the RAS and processing the invoices and printing the sign on/sign off rosters.

A special thanks goes to the honey packers or individual beekeepers who donated honey: Superbee, Beechworth, Shirley and Ian Stephens, Capilano, Bryn Jones and Warren Williams also to those who packed the Associations branded honey: The Bingley family, Jodie Burley and Kieren Sunderland and to all the beekeepers, packers or companies that the association was also able to purchase stock from to sell at *Honeyland* on consignment.

Thank you to Neil and Brett Bingley and Matt Kershaw for helping set up and pull down *Honeyland* a significant input. Thanks also to Neil and Brett Bingley for picking up stock from Superbee and the Kershaw's for acting as a depot for stock from Beechworth.

The promotion bag once again proved to be very popular containing honey, bee pops, honey popcorn and promotional material. The yellow bag had the logo of the honey packers who donated honey.

For the first time we introduced a Kids Bag specially printed with bees on one side, it contained honey popcorn, bee pops, Capilano colouring book, information on bees and beekeeping and from Superbee a magnetic bee, bee pencil sharpener, wooden bee clip, bee pencil and a bee magnifying glass.

Special thanks to Ashfield Manor for looking after all the country volunteers accommodation.

To the Executive and specially the show committee members Rob Michie and Shona Blair and my wife Lynn for all the typing goes my thanks.

MARK THESE DATES IN YOUR DIARY NOW: 17 - 30 MARCH 2016 SYDNEY ROYAL EASTER SHOW

Bruce White Coordinator of Honeyland 2015

VOLUNTEERS

Tanya Ananin, Juanita Di Angello, Mary-Ellen Burke, Andrew Beattie, Leslie Beattie, Tim Beattie, Leham Beattie, Bruce Blunden, Margaret Blunden, David Cowling, Beatrice Chew, Cate Burton, Shona Blair, Neil Bingley, Vicky Bingley, Janice Conlan, Mick Conlan, Robyn Crosland, Nural Cokcetin, Seda Cokcetin, Liane Cowell, Carl Cooper, Casey Cooper, Lyle Clinton, Bill Dick, Paul Drew, Irwyn Doherty, Rosemary Doherty, Heidi Dokulil, Doyle Egelhoff, Tara Er, Michael Fogarty, Jenny Farrell, Yolanda Gifford, Kevin Haswell, Keryn Hutton, Melanie Hofsters, Gavin Gibson, Mike Godec, Wayne Hammond, Bruce Hughston, Lee Hughston, Linda Jones, Ken Jackson, Laurie Kershaw, Therese Kershaw, James Kershaw, Matthew Kershaw, Robert Moran, Meredith Martin, Heather McLewain, Geoff Manning, Tamara Mantchakidi, Glen McConnell, Rob Michie, Reg Marsh, Kay Moore, Su An Ng, Margaret O'Shea, Lamorna Osborne, Matthew Oliver, Kathy Porsche, Doug Purdie, Ray Pfeil, Mark Page, Mal Porter, Debbie Porter, Frank Rodrigues, Meg Redwin, Martin Ratcliff, Warwick Smith, Ted Sisian, Tara Saxton, Jeff Smith, Debbie Smith, Brenden Smith, Nikki Smith, David Smith, Lurline Tanner, Suellen Weiss, Bill Weiss, Anobel Walters, June Wright, Enid Whitby, Eric Whitby, Linda Willemsen, Dave Wilson, Wendy Wilson, Bruce White, Lynn White, Matthew White, Rachael White, Andrew Wight, Brian Woolfe, Heidi Worsley, Warren Williams.

Executive Members

President: Casey Cooper, Vice-President: Neil Bingley Rob Michie, Shona Blair, Lamorna Osborne

The Executive Members did more than one day as did many of the volunteers.

BEE ZEEBO

A special feature of the *Honeyland* package at the Sydney Royal Easter Show is the live bee demonstration.

The Bee Zeebo which belongs to the Sydney Branch of the NSWAA attracts a large public crowd.

Four times a day 10.30am, 12.30pm, 2.30pm and 4.30pm experienced beekeepers open a double hive and explain to the public the inner workings of the colony, the role of the Drone, Queen and Workers.

As well as the role bees play in food security being the foundation of agricultural production by providing a valuable pollination service

We encourage new beekeepers to join a local association to become educated in beekeeping; importantly the public can ask questions.

An out of control motorised scooter bumped into the Bee Zeebo and the side of *Honeyland* one day, fortunately no one was injured - bees or people!

A special thanks to Sydney Branch members Peter Ives and Paul Drew for suppling the docile bees and to all the volunteers as listed below who gave demonstrations in the Bee Zeebo:

Anthony and Leham	Gilgai	1
Paul Drew	Ryde	5
Michael Fogarty	Marayong	2
Wayne Hammond	Woodstock	3
Bruce Hughston	Wanaaring	3
James Kershaw	Bungendore	1
Geoff Manning	Bentley	5
Reg Marsh	Burradoo	1
Lamorna Osborne	Gymea	2
Mal Porter	Yetholme	7
Doug Purdie	Darling Point	2
Jeff Smith	Glen Innes	1
Bruce White	Castle Hill	23

BeeAware

Stay up-to-date with the latest news and information about beekeeping and pollination



Subscibe to win

Subscribe to the BeeAware e-newsletter before 3 July 2015 and go into the draw to win a book of your choice. Winners can choose one of the following RIRDC publications:

- Australian Beekeeping Guide (R. Goodman, 2015)
- Fat Bees Skinny Bees (D. Somerville, 2005)
- Bee Friendly (M. Leech, 2012)
- Pollination of Crops in Australia and New Zealand (M. Goodwin, 2012)

Five copies of each book are available to win

BeeAware monthly e-newsletter updates include:

- Bee news and events from Australia and around the world
- Information on honey bee pests and diseases
- The latest research on crop pollination
- Pollinators and pesticides in agriculture
- Alerts of new pest detections and incursions affecting honey bees.

To subscribe, go to beeaware.org.au/subscribe









BEEKEEPER FIELD DAY

Saturday 12 September 2015 Tamworth Agricultural Institute (DPI) 4 Marsden Park Road, Tamworth NSW 2340

Organized by the Tamworth Branch of the NSW Apiarists' Association in collaboration with Doug Somerville, NSW Department of Primary Industry Advisory Officer.

If you have an interest in beekeeping you are very welcome to attend this FREE Field Day. No matter how many hives you own.

AGENDA

9.00 - 9.15am	Welcome - Ray Hull
9.15 - 9.45am	Opening and inspecting a hive
9.45 - 10.30am	Nutrition - Keeping your Hive
	Healthy
10.30 -11.00am	Morning Tea
11.00 - 11.45am	Regulations
	 Registration
	• Notice of Disposal of Hives
	 AFB Notification
	 Abandoned & Neglected
	Hives
12.30 - 1.30pm	BBQ Lunch - Gold coin
_	donation
2.00 - 3.00 pm	Pests and Diseases in Honey
	Bees
	 American Foul Brood
	 European Foul Brood
	 Chalk Brood
	 Small Hive Beetle
3.00 - 3.30 pm	Getting the most from your
	wood ware, assembly and
	preservation
	 Hive bodies
	• Frames

Further info Contact:

Close & Thanks for Attending

President: Ray Hull Ph: 02 6760 3634 Secretary: Norm Maher Ph: 0447 603 245

APIARY COTS

Lids and bottoms

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

If it's stainless, we can make it!

Horizontal Extractors 36 - 192 frame

Wax Melters

Capping Spinners

Reducers & Conveyors

Large Radial Extractors

Centrifuge - Heat Exchange

We also custom build to your requirments



PO Box 187, 1994 Finley Rd, TONGALA VIC 3621 Phone: 03 5859 1492 Fax 03 5859 1495 Mob 0407 547 346 www.prestigestainless.com.au



Prices include GST:

1 - 10	\$28.00 each
11 - 49	\$25.50 each
50 - 100	\$23.50 each
OVER 100 (in total)	\$23.00 each
200 and over - Discount	s apply

Package bees available September to March

Terms: Payment prior to delivery/pick-up

FOR ORDERS OR ENQUIRIES CONTACT: WARREN & ROSE TAYLOR / ROWENA

1800 024 432 FREE CALL from anywhere in Australia (Call from anywhere in Australia for the price of a local call)

IF UNANSWERED: (02) 6368 3788

Or write: 58 Marshalls Lane, Blayney, NSW 2799 Email: aqbe@bigpond.com / Fax: 02 6368 3799

CLASSIFIEDS

FOR SALE

Various equipment owned by Paul Griffiths, Wangaratta. Cowen Twin Extractor, Beequip Uncapper, Reducer, Honey Pump, Honey Sump, Boiler, two stainless steel tanks on stands, Wax Melt tank, supers, frames, excluders, escapes, honey bottoms, nucs, lids, 44 gallon drums, saw benches and various tools. Contact: Anthony 0411 640 658

FOR SALE

Douglas Bee Loader \$5,000

Phone: 0428 434 081 or 0401 675 718

FOR SALE

- Beequip Uncapper, with Deboxer
 Cook & Beal 128 Frame Honey Extractor with Feeding

Conveyor Boxing Out Racks
Cook & Beal Honey Centrifuge 4 Vane
Pender Honey Pump Stainless Steel Honey Sumps For further information please call Laurie 0428 628 731 or James 0400 370 481

FOR SALE

Penrose Uncapper Good condition - \$500 Phone: 0423 645 427

WANTED

Centrifuge & Heat Exchange

Phone: 0428 434 081 or 0401 675 718

WANTED

Looking to buy 100-500 hives Please Contact: 0425 245 850

SA BEEKEEPING **SUPPLIES**

2 Gawler River Rd, Lewiston SA 5501

Food Grade Plastic Foundations Full Depth - W.S.P - Manley Mahurangi Frames to suit 8Fr & 10Fr W/Wire excluders Beautifully made Heavy Duty Hive-locks Discount on pallet lots

Gary & Cynthia Brown

Ph/Fax: (08) 8380 9695 Mob: 0429 806 609

Email: beekeep2@bigpond.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\$50.00, 2 years US\$96.00, 3 years US\$138.00 Digital Edition price US\$16.00

Please inquire for airmail - VISA, MasterCard accepted For more information or free sample copy, write to: 51 South 2nd 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: \$78 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 \$88.00) For further information please contact: The Secretary, SAAA 1 Parma Street, Pt. Broughton SA 5522 Phone: (08) 8635 2257 Email: secretary@saaa.org.au

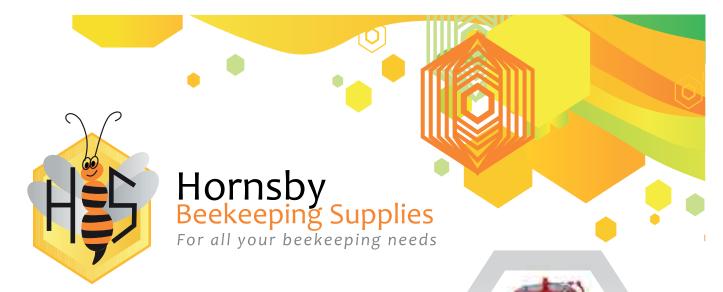
THE AMATEUR BEEKEEPER

Bi-monthly newsletter for THE AMATEUR BEEKEEPERS' ASSOCIATION INC. Editor: Robyn Alderton Ph: 0401 897 730 Email: robyn.alderton@live.com.au

THE NEW ZEALAND BEEKEEPER

Magazine of the National Beekeepers' Association of New Zealand - www.nba.org.nz Subscriptions: Jessica Williams PO Box 10792 Wellington 6143 New Zealand Phone: 04 471 6254 Fax: 04 499 0876 Email: secretary@nba.org.nz

Advertising: Leonie Young Ph: 03 455 4486 Fax: 03 455 7286 Email: sales@southcityprint.co.nz



- Assembled boxes and frames
- ••• Beetek plastic frames and top feeders*
- ••• Beetle traps
- ••• Books
- ••• Boxes and frames (Alliance)
- ••• Extractors (electric and manual)
- ••• Foundation (plastic and wax)
- ••• Hive Tools (10" and 12")
- Honey tanks and strainers
- Jenter rearing kits*
- ••• Sherriff protective clothing*
- ••• Smokers (Italian and Kelley)
- ••• Wire and plastic queen excluders etc

Beetek *longer lasting* Full Depth Frames and Foundation *sheets!!**

- ••• Food grade resin
- ••• Highest quality manufacture
- ••• Strength and reliability
- 20 years of innovation and service to the industry
- The choice of professional beekeepers

BULK PRICES AVAILABLE!

* Exclusive rights of import in Australia



HORNSBY BRANCH

63-A Hunter Lane, Hornsby, NSW 2077 Tel: (02) 9477 5569, Fax: (02) 9477 7494

Trading hours

Mon - Fri 9am 'til 5pm, Sat 9am 'til 4pm

MT. DRUITT BRANCH

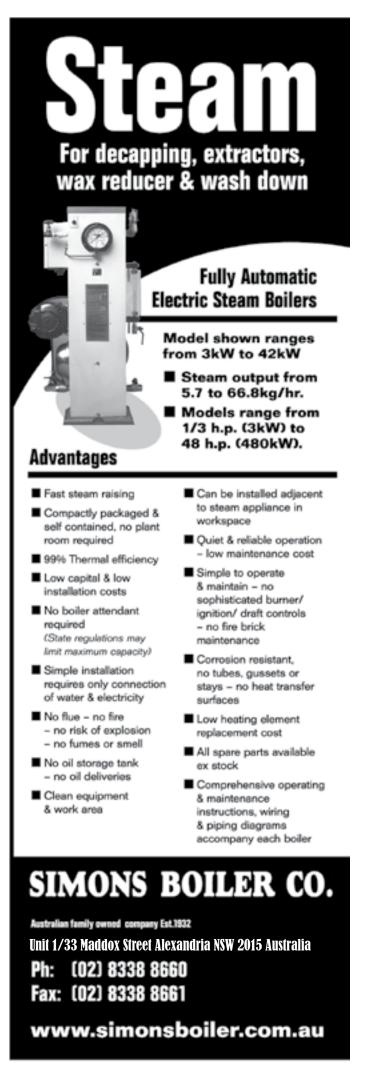
Unit 11, 71 Kurrajong Ave, Mt. Druitt, NSW 2770 Tel: (02) 9625 5424, Fax: (02) 9625 7589

Trading hours

Mon – Fri 10am 'til 6pm, Sat 10am 'til 5pm

You can also shop online at

www.hornsby-beekeeping.com



ADVERTISERS

AIR CTI	26
Apiary Cots	43
Aussie Hives	29
Australian Queen Bee Exporters	43
Australian Queen Bee Line	35
Ausure Insurance Brokers	12
Avant Equipment	7
Bee Aware	42
Bee Engineering	17
Beechworth Honey Pty Ltd	28
BeePlas Australia	11
Bindaree Bee Supplies	2
Blue Bees Producers	26
B-QUAL Australia Pty Ltd	39
Browns Bees Australia	26
Burnett Bee Keeping Supplies	31
Bus Trip - Conference	12
Capilano Honey Ltd	40
Col Baker - Honey Containers	28
Cottesbrook Honey	17
Crop Pollination AGM/Conference	33
Covey Queens	2
Dalrymple View Apiary Supplies	27
Denmar Apiaries	2
Dewar Apiaries/Bee Build	29
Healy Group	28
Honey Down Under	2
Hornsby Beekeeping - Conference Specials	19
Hornsby Beekeeping Supplies	45
Hummerbee Forklifts	9
Hunter Valley Apiaries	13
Hydes Creek Woodworks	31
JZs BZs Queen Cages	11
NSWAA - Bee Trade Show	14
NUPLAS - Plastic Hives	24/25
Penders Beekeeping Supplies	15
Prestige Stainless	43
SA Beekeeping Supplies	44
SCHÜTZ DSL	48
Silver Bullet Beetle Traps	18
Simons Boiler Co	46
Spitwater	37
Steritech Pty Ltd	18
Superbee	47
Valley Industries Ltd	18
Wedderburn	15
www.candlemaking.com.au	17

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 T. 02 6851 1155 KARLA HUDSON M. 0421 620 419 - E. karla@superbee.com.au BEN SMITH M. 0427 524 151 - E. ben@superbee.com.au

WE HAVE NEW IBC'S FOR SALE TO OUR SUPPLIERS AT \$325 (INCL).

We can deduct the price directly from your honey delivery,
so you can take them home when you drop off the honey!

PAYMENT IN 30 DAYS OR LESS







