
BUZZWORD



Beekeepers' Society of South Australia Inc.

www.bees.org.au

NEWSLETTER

Edition 117

April 2023



Correspondence to:

The Secretary
 Beekeepers' Society of SA Inc
 PO Box 283
 Fullarton SA 5063

email: office@bees.org.au

Many thanks to those who provide articles for the newsletter.

Contributors:

Bob Beer
 Susan Speck

BUZZWORD

(The Beekeepers' Society Newsletter)
 Articles are always being sought by the editor for inclusion in the newsletter. Please feel free to email or write in and provide any interesting experiences about the management of your hives.

If you wish to discuss any aspect of the newsletter please contact:
 Barbara Horwood, editor, on 8296 8478
 email: horwoodmb@internode.on.net

WEBSITE:

www.bees.org.au



See us on **FACEBOOK**. Go to www.facebook.com/beekeeperssa/

You can view a host of interesting material, photos and comments - you can "like" us and leave a comment of your own.

Equipment/Extractor Officers:

Susan Lonie	(South)	0417 811 067
Trisha Blanks	(Central)	0437 713 790
Gavin Pearce	(North)	0411 850 679

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2022-2023 Office Bearers:

President:	Paul van Eyk
Vice-President	Trisha Blanks
Treasurer/Membership:	Richard Martin

Secretary: Adrian Makarowsky 0432 952 659
office@bees.org.au

Education Committee Members:

Trevor Greenfield
 Aphrodite Noikou
 John Silverblade
 Monica Du Plessis
 Gavin Pearce

Co-ordinators:

Website:	James Field
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Librarian:	Sue Speck
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Committee Meetings

Third Monday of each month, 7 pm, at Kensington.

General Meetings

General meetings are held at Burnside Civic Centre Hall, 401 Greenhill Road, Tasmore on the **SECOND MONDAY** of each month at **7.30 pm**

Supper is available (gold coin donation).

General meetings are held in person at the Burnside Civic Centre under current COVID-19 restrictions.

Livestream meetings from past months can be viewed via the BSSA website or Facebook.

Beginners And Intermediates Education Starts at 6.30 pm (Before the start of monthly General Meeting)

Teaching sessions commence at 6.30 pm for beginner beekeepers to participate in an hour of question-and-information exchange prior to the start of the main monthly general meeting. Participants need to register in advance. More information inside.

BSSA Apiary Site

The BSSA hives are located at:
Selgar Avenue, Clovelly Park - about 200 metres west off South Road and behind the Tonsley Hotel.

Department of Primary Industries (PIRSA)
Project Coordinator, Apiaries:
Michael Stedman - 8429 0872

Samantha Grund – PIRSA Bee Biosecurity Officer

Subscriptions

Subscriptions are due as from 1st July each year. The membership fee for the financial year commencing 1 July 2022 is:

\$65 single

\$30 junior

\$100 family (2 adults + 2 children or 1 adult + 3 children). Any additional child/member costs \$20.

Membership application and renewal forms can be downloaded from the link found on the Beekeepers' Society of SA website (www.bees.org.au)

Queen colours

Last digit of the year

0 or 5: Blue

1 or 6: white

2 or 7: yellow

3 or 8: red

4 or 9: green

Field Days

Practical aspects of beekeeping will be demonstrated on a number of occasions during the year. Please refer to Buzzword Field Days page and the BSSA website for details. ***The field days are a must for all new beekeepers.***

Mentor List

A mentoring service is available to our new beekeepers who would like assistance at home. Please contact the BSSA secretary for more information.

BSSA Swarm List

If any BSSA member is interested in having their name as a swarm collector listed on the BSSA website please contact Trisha Blanks

(BSSA Secretary).

EXTRACTORS AVAILABLE FOR USE BY MEMBERS

A reminder that three extractors, uncapping trays and wiring gigs are available for use on loan to financial members.

Contacts:

Susan Lonie (South)

0417 811 067

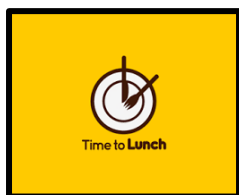
Trisha Blanks (Central)

0437 713 790

Gavin Pearce (North)

0411 850 679

They must be returned in a clean and undamaged state. Please report any concerns/damage



MEMBERS' LUNCH

All members are welcome to join the regular lunch group which will meet at the Rising Sun Hotel, Bridge Street, Kensington on the 2nd Thursday of each new season, ie Summer, Autumn, Winter and Spring. The next lunch is scheduled for **Thursday, 8 June**.

It is imperative that intending participants contact Bob Beer in advance (0413 208 835)



FIELD DAYS

(Practical Beekeeping)

HIVE INSPECTIONS PROGRAM OF MANAGEMENT FOR THE BSSA HIVES

Honey extraction as required

The BSSA hives are located at **Selgar Avenue, Clovelly Park** – about 200 metres west off South Road and behind the Tonsley Hotel

Saturday	13 May Time: 1 pm
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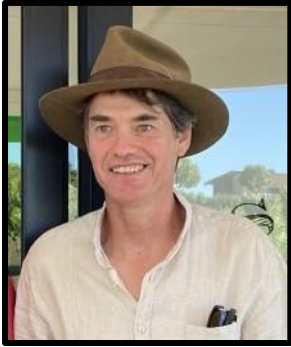
Information is available on the BSSA website

All participants must have at least long sleeves, long-leg trousers and a head veil. Attendance is limited to 15 persons. Sessions run for approximately 2 to 2-1/2 hours.

Bookings can be made only through the BSSA secretary or Bob Beer at beersbees@bigpond.com or mobile 0413 208 835. Cost - \$10 (members); \$20 (non-members).

VOLUNTEERS REQUIRED to assist new beekeepers on field days. Contact BSSA secretary if you are interested.

President's Report



Dear BSSA members,

I hope everyone is enjoying the autumn weather, and getting a chance to prepare hives for the winter, take a little honey and enjoy the sunshine.

After helping Bob

Beer with the Pest and Disease field day on Saturday 15 April I encourage all BSSA members to take advantage of the warmer days to do a thorough hive inspection - most importantly covering AFB, EFB, hive beetles and doing a sugar shake for varroa.

Combining weak or queenless hives is advisable so that you have strong colonies going into winter, as is removing honey supers. This reduces the space the bees need to keep warm.

Weaker hives can also be moved into a 5-frame nuc or alternatively use some form of bee friendly insulation [divider] to replace empty frames and reduce the hive space. Feed if necessary - a 2:1 sugar syrup [sugar to water ratio] ensuring that a 10-frame brood box has at least 4 frames of honey - two on either side of the brood nest to sustain the colony over winter and allow for a strong build up in spring.

Bob is always quick to remind me that a brood box bursting with bees will always overwinter better and use less stores than a weaker one or a colony with too much space to keep warm.

A wake-up call with regards to pest and disease management is unfolding on Kangaroo island - the subsequent discovery of American Foulbrood [AFB] on the island after a honey test came back positive last year with a lacklustre response from all parties involved. This has now culminated into a full-blown emergency. The obvious questions remain unanswered. How did it get there? Why wasn't it dealt with

immediately? PIRSA is currently trying to move to a management strategy, even though Kangaroo Island is a sanctuary for the Ligurian bee and current legislation (Livestock Act 1997) stipulates that as a sanctuary any disease outbreak must be eradicated.

PIRSA needs to take a large part of the responsibility along with the local beekeepers. All beekeepers are responsible for the management of their own hives and to deal with any pest or disease outbreak. PIRSA however refuses to share the locations of the affected hives or apiaries, going to lengths to discourage the sharing of information by those beekeepers who have been affected from warning others. This has been PIRSA's SOP (Standard Operating Procedure) for years with regard to AFB and other diseases. My question is: how is this supposed to help beekeepers?

The regulators' [PIRSA] view is that you should do a thorough inspection whether you know there are diseased hives nearby or not. My point is if everyone knows where the diseased hives are, beekeepers would inspect more frequently and thoroughly allowing for better control, treatment and eradication.

I acknowledge beekeepers need to be better educated with regards to disease management, especially AFB and varroa. At some point, as beekeepers in South Australia, we are going to have to manage varroa, but varroa can be managed.

When it comes to AFB destruction of the colony and subsequent treatment [burning, irradiation or wax dipping] of the hive equipment is the only option. When varroa arrives on our doorstep, a large number of hives will be lost due to the varroa mite weakening the colony, making the bees more susceptible to disease and viruses.

AFB is a prime culprit when it comes to hive losses. Varroa-weakened hives are robbed by stronger hives not only spreading varroa but also any other virus or disease the colony has.

As an industry, that is all beekeepers in South Australia, whether recreational, commercial or somewhere in between, we need to take responsibility for dealing with and eliminating AFB prior to the arrival of varroa. If we continue to ignore the growing AFB problem, the end result will be that a lot of beekeepers will have to destroy their colonies and equipment. Many recreational beekeepers will no longer keep bees due to the financial cost of replacing bees and equipment.

As I said earlier we can manage varroa but not AFB. Dealing with these two main issues is going to require cooperation between the beekeeping industry and the regulator [PIRSA]. This will have to include the sharing of information with regards to the location of AFB affected hives, their movements, their quick detection and destruction to prevent and/or reduce any further spread - and hopefully resulting in the elimination of AFB within SA.

With regard to tracking of varroa so that we can slow its spread the same sharing of information is paramount. Historically, there has been a stigma about AFB, so beekeepers have been hesitant to talk about the disease or admit to having an outbreak.

But let's put that to rest, once and for all – anyone's hives can get AFB. "AFB does not discriminate; it can infect colonies that are weak or strong and affects both recreational and commercial beekeeping operations." This is a quote from AHBIC, Managing an Outbreak of American Foulbrood. Author Jessica Bikaun [ne'e Moran]. To help eliminate AFB, the first step is to educate yourself. <https://afb.org.nz/what-is-afb/> <https://www.wheenbeefoundation.org.au/wp-content/uploads/2018/06/Managing-ACFB.pdf>.

I look forward to seeing everyone at the next meeting.

Kind regards,

Paul van Eyk
President BSSA



BEGINNERS AND INTERMEDIATE EDUCATION PROGRAM

**6.30 PM TO 7.30 PM
(BEFORE THE START OF MONTHLY
GENERAL MEETING)**

Planned structured Week 1 – 5 classes commenced on 13 February 2023 and will be repeated from July. Participants need to register for each session. Please contact the BSSA Secretary.

Members may attend five sessions. Non-members will be permitted to attend two sessions before being required to join BSSA. Further information is available on the BSSA website.

ARTICLES OF INTEREST

SIX THINGS TO DO IN AUTUMN



*Article by Arthur Garske,
published in The Australasian Beekeeper,
February 2022*

In autumn there are often honey flows that occur, and it depends on what locality your bees are situated regarding suitable climate and amount of forage availability.

In the suburbs there are parks, creeks, native bushland, and trees planted as street specimens. Often there are ironbark, paperbark, tea trees, bloodwoods, brush box, white box, and others to numerous to mention here.

That is why you need to keep a diary of what flowers and when it flowers, when it yields nectar and when it does not – also when it buds, how long it carries its buds before flowering.

At this time there are species of paperbark which may be flowering, as it is a short-budded tree following rain that happened at the right time. It is yielding and bees are working it; you should notice the increased activity at the hive entrance. So now is the time to start taking off honey so you can begin the process of reducing our hives for winter.

Look at your honey supers which you have prepared the month before when you looked at brood for disease and did the sugar shake. Have an empty box sitting on a lid rim and smoke over top bars and entrance.

Take off the hive lid and start to lift out frames and shake or brush bees off into the box, then place in the empty box sitting on lid. Repeat until you have emptied the super then take off and dump on ground to shake off any adhering bees. You are now down into the next box into which you put all the half-finished combs, which should now be full.

The procedure you carried out in preparation for this is called “under-supering” and is the best way to add new boxes. Lift off the three-quarters full to full boxes, put on an empty box. Lift partly filled box on top. It is usually the two outside combs on either side that are not completely filled so after lifting box on top put the fully capped frames to the sides and the partially filled frames to the middle. This encourages

the bees to come up to the top box to fill the partially filled combs and because they have to travel through the empty box they start to put honey into the middle four frames, filling them as well as the middle frames in the top box.

You then move the full four middle frames in the undersupered box to the outside and put the partially empty frames in the middle. This makes the bees work them quicker as heat travels up through the middle of the hive.

Take your two boxes of honey into your shed or premises where you are going to extract the honey, and extract it the same day as it is warm and will come out of the comb easier. Do not leave it for a couple of days before extracting as, despite having sealed it up, hive beetle can heavily infest making the honey not suitable for human consumption.

The boxes of “stickies” (frames that you have just harvested) can be put over an internal cover which is about 10-12 cm smaller than the inside dimensions of a bee box. It can be made out of black plastic sheet or vinyl linoleum, and leave them over winter. If the winter is mild or the spring is early and the bees are short of room they will travel up above the cover and start to use the empty super.

If you don't want to do that, put the stickies above the cover for a week and the bees will come up and dry them out then you can take them off and store them protectively so as you have them ready to use in the spring.

HOW SMALL HIVE BEETLES TRICK BEES INTO FEEDING THEM FOOD RICH IN NUTRIENTS



Article by Christian W.W. Pirk,
The Australasian Beekeeper,
November 2022

Honey bees are useful, not only to humans but to other “free riders” attracted to their stored resources. The small hive beetle (SHB) (*Aethina tumida*) is one of the species which rely on honey bee colonies to reproduce and survive.

The adult beetle lays eggs on bee brood frames, full of honey and pollen. The beetle larvae then eat through these rich food sources.

The consequences for the bee colony can be lethal. The beetle larval activity causes the honey and pollen stores to start fermenting and the beetle larvae prey on the bee larvae and pupae.

Because the small hive beetle is native to sub-Saharan Africa, it has evolved in tandem with bees and is kept in check. It seldom destroys bee colonies entirely, and is considered only a minor pest in the region.

But, during the 1990s, the beetle was accidentally introduced into the US where it encountered honey bees which originated from European populations. These bees didn't share the evolutionary history (of the African bees with the beetle), so the beetle was able to take full advantage of these bees. The beetle caused the death of thousands of colonies and damaged the apicultural industry. It has also spread to other parts of the world and has become a threat to agriculture and biodiversity.

Research into the biology of the beetle and the interactions between bee and beetle has therefore increased in the past 20 years or so.

These interactions between bees and beetles form one of the areas we work on as the Social Insects Research Group at the University of Pretoria in South Africa. Over

the years, we have gained new insights into how the bees and beetles co-exist.

We investigated what the bees were feeding the beetles and showed that it was food rich in protein, which is normally reserved for the queen bee. This research explains how the beetles can survive when “held captive” by the bees, and are able to reproduce as soon as there is an opportunity.

Pirk and colleagues' most recent paper adds to what's known about the interactions between bees and pests, and about communication systems generally.

Guard bee and beetle

Quite early on, we noticed something a little different about the way African honey bees interact with small hive beetles, compared with their European relatives. The African bees are more consistent and persistent in keeping the beetle in check. They chase the beetles off the main comb into areas that restrict their movement, like cracks and gaps. Worker bees then start constructing a “prison wall” out of plant resin and wax around these gaps. Other workers stand guard and keep the beetles confined.

While in captivity, the beetles try to reach the comb where the honey and pollen are, but bees guarding them are constantly chasing them back and trying to grab and bite the beetles with their mandibles.

During these interactions, the beetles' antennae and mouth parts are close enough to touch the bees' mandibles. They mostly make contact with the bees' mandibles, but also the bees' antennae and other parts of the head. Beetles also use their forelegs to touch the bees' mandibles. This is very similar to what bees do to each other when exchanging food – so-called trophallaxis.

Food exchange plays an important role in communication and information exchange processes in a colony. It may have been important in the evolution of sociality. The

beetle taps into this fundamental communication system.

We therefore assumed that something was transferred from bee to beetle, but we weren't sure what. Not all interactions resulted in the guard bee feeding the beetle, but it appeared that beetles got better with practice. We didn't know whether it was an accidental reflex or whether the beetles were "tricking" the bees. Mimicry is widespread among insects, and even trickery can be quite common. The Death's Head Hawkmoth, for example, smells like a bee, allowing it to sneak into the colony and feed on the nectar and pollen.

In a simple laboratory experiment, we brought together bees and beetles in petri dishes for a two-hour interaction. The results showed that the beetles were tricking the bees into feeding them the best quality food.

The experiment

Bees were given a fixed amount of an amino acid called 14-penylalanine before the experiment. The carbon atoms in this amino acid are radioactive, and when they are built into proteins it's possible to follow the transfer of proteins. Finding radioactive labelled proteins in the beetles after they had been in contact for two hours would show that proteins were actually transferred from bee to beetle. Ultimately, it would show that the bees were being tricked by the beetles imitating bee-to-bee food exchange behaviour.

This was exactly what was happening. The bees have glands which produce a protein-rich secretion. The secretion is one of the main components of royal jelly, normally fed to queens and young bee larvae.

The beetles were getting high quality food while "imprisoned". We also saw that female beetles were more successful than males in getting the bees to transfer these protein-rich secretions. Females have higher

nutritional requirements and a higher drive to obtain food because they produce eggs. So, the beetle, confined without access to food, learnt to trick the bees into providing the best nutrition.

Small hive beetles are the only species known to mimic honey bee trophallaxis and to successfully coerce worker bees to share carbohydrates and protein, which are essential for the bee colony's own survival and reproduction.

(Editor's note: why is the small hive beetle named "small"? Answer: It is called the 'small' hive beetle to distinguish it from other beetle pests of bee hives in Africa, known as the large hive beetle

Australian manuka honey producers score legal win over New Zealand producers in Europe, UK

ABC Rural

by national rural reporter Clint Jasper

Posted Mon 23 Jan 2023



Australian manuka honey producers have scored a win over their trans-Tasman rivals after New Zealand producers backed out of legal action aimed at preventing them from using the descriptive word. A group of New Zealand manuka honey producers have been attempting to block their

Australian counterparts from using the word "manuka" in export markets around the world since 2016.

Manuka honey from both countries is sold for hundreds of dollars a kilogram, and is included in a range of medicinal products because of its anti-viral, anti-bacterial, and anti-inflammatory properties.

Australian manuka honey is used in lozenges, throat sprays, and eczema creams, as well as cosmetic products.

The New Zealand Manuka Honey Appellation Society recently backed out of an appeal before the United Kingdom's High Court, as well as similar legal action in the European Union, meaning Australian producers were free to call their product "manuka honey" in those valuable markets.

The UK Intellectual Property Office had previously ruled in favour of Australia.

Both parties are still waiting to hear the outcome of a hearing held in 2021 before the Intellectual Property Office of New Zealand.

The NZ Manuka Honey Appellation Society argues manuka is a Māori word, and has attempted to trademark it in their home country, as well as the USA, UK, EU, and China.

It was seeking exclusive use of the word via a trademark, a move that's been rejected in the USA previously.

The plant that produces the pollen used by bees to make manuka honey, *Leptospermum scoparium*, grows natively on both sides of the Tasman.

The Australian Manuka Honey Association, which has appointed two Māori board

members, has demonstrated the word has been used in Australia to describe the plant and the honey produced from its pollen since the 1930s. It has also abstained from using a macron over the "a" in its branding.

Association president Paul Callander said the legal victory would have significant benefits in the sizeable UK and EU markets.

"This victory provides our industry with a noble precedent against some in New Zealand who are attempting to monopolise the term manuka honey for their own commercial gain," Mr Callander said in a statement.

"Australian growers have every right to use the word to describe their produce as upheld by the UK Courts."

Key points:

- New Zealand manuka honey producers withdraw from trademark dispute in UK, EU
- Australian producers can now sell their product in those markets as "manuka" honey
- Manuka honey can sell for up to \$500 a kilogram

THE DIFFICULT TASK OF CHANGING BEEKEEPING HABITS

Article by Roland Inman

The Australasian Beekeeper, October 2022



Change is that one thing that never seems to fade away and it just gets faster. For thousands of years, we humans have been keeping bees. I don't know when the smoker was developed, but it was seen as important enough to be recorded in Ancient Egyptian burial tombs, along with some jars of honey for the afterlife.

I guess for the next few millennia there was not much to record as changes in beekeeping. The rope skep hive still persists in the collective memory as a symbol of beekeeping, but I have no idea of how to make one and even less interest in doing so.

The skep hive is just too inefficient compared to the Langstroth dimensioned hive that was invented in 1852 – its appearance must have been earth-shaking at the time. Imagine being a traditionalist in those days, with perhaps a couple of decades of experience of weaving your hives from whatever fibre you could lay your hands on. It might have been flax, cotton, hemp, or maybe even sisal.

You had worked the material and become proficient at creating dome-shaped handmade structures for bees. But, now, here were wood-framed “slats” that went in a timber box of square proportions, and precisely dimensioned. In almost the blink of an eye, there appeared a metal queen excluder that could only be used with these new-fangled hives.

This must have added insult to injury to traditional keepers of bees, as the vastly increased output of these new hives lowered the cost of the honey to the public. The lands of milk and honey still existed; the honey just became cheaper and the apiarist a lot richer.

True you might ruin your back, but even then eventually there would be available a truck, and assisted moving of hives, allowing keepers to chase the liquid goldrush, season by season. In the United States this was expanded so that hives could be flown to

parts of Africa during the American winter to chase even more honey.

And then ... well, this time came changes of a distressing nature. Pests and ailments which had once been far away, on the other side of the planet, started hitching a ride to where the action was happening in hives and beekeeping in the rest of the world.

This wasn't new by any stretch. The wasp had stowed away on the good ship *Isabella* and arrived at Sydney on 9 March 1822. It's been with us ever since. Other pests have arrived, including American and European foul brood.

I used to think that small hive beetle was about as bad as it got in terms of beekeeping pests in Australia. Eradication of this small invader is essentially impossible, and there is an ever-increasing number of larger and more efficient SHB killing traps and devices.

Then came the mite – varroa mite. I am hoping that my thinking ahead in buying and importing European mite-resistant hardware is not needed. The mite seems to be unusually effective in hitching a ride or being transported via migratory beekeeping operations. A bee that only has a flying radius of just 4.5 km managed to get from Newcastle to Narrabri, a 402 km journey, in less than a week, demonstrates this problem.

While I have every confidence that this current eradication effort against the varroa mite will be successful, we must not delude ourselves that mite-resistant hardware is a change that we don't have to make. If the varroa mite is eliminated this time, when will the next time come?





Article by Dr Ana Carrucan
The Australasian Beekeeper, Dec 2022

You've been dreaming of keeping bees for ages, and you have decided upon what kind of hive you want, from the many types available to beekeepers: Langstroth (8-frame or 10-frame), flow hive, long Langstroth hive, Kenyan top-bar hive, or Warre hive, and the list goes on.

Now, you're wondering, as you gaze admiringly at your bright new bee suit, shiny new smoker, and gleaming new hive tool: should you have one hive or two?

There are many reasons to give consideration to having a single hive or two hives, and there are arguments for and against. In this article I'll be explaining some of the reasons that you might consider how many hives are right for you and your lifestyle.

Most beekeepers start beekeeping with one hive. After all, the hive boxes and frames, and other hardware, are a significant financial investment, and you might think it's going to be a waste of money getting more than one hive straight away, especially if beekeeping is something you decide isn't for you after all.

Having one hive means you need less space in your garden, it's more time-efficient conducting inspections, and less work managing the actual beekeeping tasks required for hive management, not to mention it costs less to set up than having two hives.

You can really get to know a specific colony of bees, their behaviours and responses to the local environment, and not feel that you are putting too much pressure on local floral resources, particularly if you are in an urban environment where there may be numerous backyard hives.

On the downside, the observations you make of your single colony, and their performance in your local environment, is an experiment in isolation of any other factors – you have no hive with which to compare your bees' vigour or health. Your colony might actually be really strong, and doing really well (when compared to hives nearby), or they may be struggling for want of a new queen, lack of forage, or poor siting, but you won't be sure as your single hive of bees are a case in isolation.

If something happens to your single colony, such as the queen is killed accidentally during an inspection, you can be in a pickle trying to save that colony in a hurry. Having two hives means that you could transfer a frame of brood from the "sister hive" to the queenless hive, and allow that hive to raise a new queen, for example.

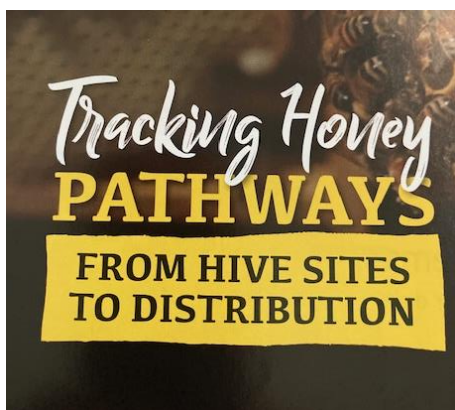
Sometimes a colony may not survive a year, but if you had two colonies going into winter, and one doesn't make it (for whatever reason), you can take the larger, stronger colony and then split it come spring (which also helps for swarm management!) so you have two colonies again.

So, what to do?

It's up to you, but if you can afford the hardware for two hives, this is a good option for your beekeeping. If you wish to manage

a single hive, due to time constraints, or even space restrictions in your garden (or local laws requirements), then by all means keep a single hive, and enjoy your bees!

Whichever way you choose, it's better to focus on being a good beekeeper with the number of hives you have – never over-commit. Beekeeping, like any other management of livestock, is governed by laws relating to care and biosecurity, and this should be top of mind when you acquire your hive or hives.



**Article by Dr Liz Barbour
From The Australasian Beekeeper,
February 2022**

Work by the CRC for Honey Bee Products has brought the Australian honey industry quality assurance program into the digital age.

There is a growing appreciation of the importance of honey bees and their contributions to food security, along with

increasing number of beekeepers. Australia needs new tools and systems to ensure we maintain our exemplary bee health and production of quality honey bee products.

B-QUAL, established by the Australian Honey Bee Industry Council in 1999 as a traceability tool, is an independently audited quality assurance program. It provides businesses with product integrity, quality assurance, regulatory compliance, industry best practice, and supports biosecurity, for ease of access to domestic and export markets.

In 2018 there were allegations, subsequently disproven, of adulteration of Australian honey. The episode harmed the industry and highlighted the need for an improved traceability system. The CRC for Honey Bee Products established a partnership with B-QUAL Australia to create a new online system.

“In the past B-QUAL was paper based, meaning it was time-consuming to interrogate and to trace back into the supply chain,” says Professor Sharon Purchase, the CRC’s partnership leader from the University of Western Australia.

As well as tracking honey batches to their origins, the digital system brings many additional benefits. It is a secure platform for business data management, for audit purposes and business benchmarking.

“Australia is vast. Each region is so different. To continuously improve, beekeepers may want to compare their productivity with other beekeepers working in the same region. B-QUAL lets them do this,” says Professor Purchase.

“The ability to trace Australian honey sources will also inherently increase biosecurity benefits for the industry by way of tracking disease or pest outbreaks through biogeographical regions,” says Mr Don Muir, B-QUAL director.

The B-QUAL system will provide an early warning system to detect new incursions of

bees from overseas which could introduce potentially devastating pests and diseases. Surveillance is important to ensure any biosecurity incursions are detected and dealt with swiftly to protect the industry.

During consultation on the B-QUAL digitisation, industry representatives suggested that smaller beekeepers would benefit from a digital system that would help with their traceability and beekeeping practices. This led to the creation of B-Trace. The program involves self-auditing so is cheaper, and records biosecurity observations that are critical for maintaining Australia's bee health.

Membership of B-QUAL has doubled since the formation of the partnership between the CRC for Honey Bee Products and B-QUAL Australia.

The CRC partners are working on extending the B-QUAL system to include a new function that details honey chemistry to capture information on the provenance of honey. This will provide consumers with the assurance that every time they purchase Australian honey they are getting what they paid for – a unique, high quality product. It will also provide Australian beekeepers with a competitive advantage as Australian honey is pure, geographically diverse and sourced from healthy bees.

Beekeepers will be able to download data to study apiary site honey yields over time, and to explore climate effects such as temperature and rainfall.

The B-QUAL system also includes a honey bee flora reference library. By accurately recording flowering history, and nectar and pollen production, beekeepers are creating an invaluable resource that will help their business in the future.

THE BEE-FRIENDLY GARDEN



What plants are good for bees in autumn?

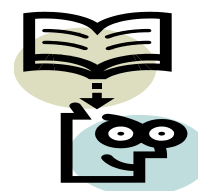
Autumn Flowers

Sunflowers (*Helianthus*): There's not much to say about the sunflower, except the bees love it and if you have chickens you can also feed the sunflower seeds to them as a treat once they're ready.



Which geranium is best for bees?

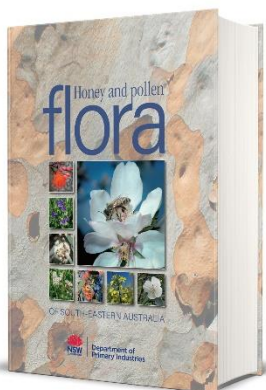
Most of the geraniums are popular with bees, and those with **violet and blue flowers** are favoured the most. Geraniums are easy to grow and are generally unfussy about soil conditions.



BOOK CORNER

The BSSA website includes a list of recommended books and new additions to the library, including the following:

New to the BSSA Library



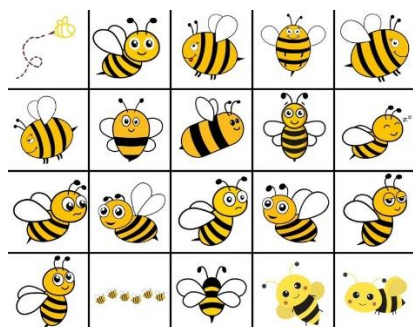
HONEY AND POLLEN FLORA OF SOUTH-EASTERN AUSTRALIA

Understanding the biology of flora and its value to honey bees is core knowledge for successful beekeeping. Bees feed on nectar and pollen. No food equals no bees!

Beekeepers need to know the floral resources around them, and the nutritional value of those resources to bees to keep their bee colonies healthy.

This publication focuses on the value of plants to nectarivores, and honey bees in particular. The result of over 30 years of research, it distils both scientific knowledge and the opinions of hundreds of beekeepers into a reference work that will be the cornerstone of floral understanding in apiculture for years to come.

(Review by Tocal College, NSW)



RECIPES



Spiced Caramel and Almond Mini Loaves

200 g unsalted butter, chopped
200 g white chocolate, chopped
2/3 cup firmly packed brown sugar
1 cup hot water
2 tablespoons honey
2 teaspoons vanilla extract
2 large eggs, at room temperature
1 cup self-raising flour
2 teaspoons cinnamon
1 teaspoon ground ginger
1 teaspoon ground cardamom
2 cups almond meal

Preheat the oven to 160 C fan-forced. Grease the holes of an 8-capacity mini loaf tin and line the base and sides of each cavity with baking paper.

Place the butter, chocolate, sugar, water, honey and vanilla into a large heavy-based saucepan. Stir the ingredients over medium-low heat with a silicone spatula for 5 minutes, or until the chocolate melts and the mixture is smooth.

Set aside for a least 20 minutes to cool, then transfer to a mixing bowl.

Add the eggs to the chocolate mixture one at a time, and beat in well using a hand-held mixer or whisk.

Sift in the flour and spices and mix until well combined.

Fold in the almond meal until well combined.

Fill each cavity to three-quarters full.

Bake for 30 minutes, or until a wooden skewer inserted into the centre comes out clean. Leave in the tin to cool completely.

Rose cream cheese

500 g cream cheese, at room temperature
100 g unsalted butter, chopped, at room temperature

1 cup icing sugar, sifted
½ teaspoon rosewater
2 teaspoons lemon juice
3-4 drops pink food colouring
1 cup thickened cream, whipped

Using a hand-held mixer or a stand mixer fitted with the paddle attachment, beat the cream cheese, butter, icing sugar, rosewater and lemon juice on high for 2-3 minutes, or until pale and fluffy.

Add the food colouring until the desired colour is achieved, stirring to combine.

Gently fold in the whipped cream until combined and then cover and set aside until needed.

Assembly and decoration

Large piping bag (with star nozzle if available) – or ziplock bag with end cut to allow squeezing through hole

1 cup crushed pistachios
40 g Turkish delight, chopped into cubes
3 fresh figs, sliced into wedges

Pipe the rose cream cheese in swirls onto each mini loaf. Adorn each cake with crushed pistachios, a scattering of Turkish delight and segments of fresh fig.

REALLY ... ?



A full page of bee-inspired products featured in The Advertiser "Home" Magazine of Saturday, 4 March. What a buzz!!

