

# THE BUZZ

Newsletter of the British Bee Veterinary Association

## Welcome!

CHRIS PALGRAVE, EDITOR

Welcome to the sixth issue of The Buzz! This month we have something of a Presidential theme. BBVA President, John Hill, highlights the ongoing spread of honey bee pests worldwide and importance of strict biosecurity and quarantine measures. We are also joined by President of the British Beekeepers Association (BBKA), Stephen Barnes, who provides some historical context and updates us on the structure, current activities and future plans of the BBKA, as well as the benefits of membership. John Carr, President of Townsville and District Beekeepers Association (Queensland, Australia), and his colleague Nick Smith, have given us a fascinating insight into the world of the stingless bees.

In our first 'In Depth' feature, BIBBA Trustee and Past-President, Jo Widdicombe, discusses the importance, and challenge, of sustainable bee improvement and the work of the National Bee Improvement Programme (NatBIP). It is a compelling call to action. From the other side of the Atlantic, Dr Britteny Kyle DVM describes the developing field of honey bee veterinary medicine in North America and the formation of the Honey Bee Veterinary Consortium. All lectures from their recent conference can be viewed online for a period of two months.

Giacomo Ciriello introduces us to the important and far-reaching work of Bees for Development, which for almost 40 years, has been promoting nature-based beekeeping as a sustainable livelihood in some of the poorest parts of the world. Closer to home, beekeeping tutor Oliver St. John, discusses the origins and structure of most commonly used beehive in the UK, the Modified National Hive.

Finally, we celebrate the start of autumn with the blackberry in our plant file and review Andy Pedley's excellent guide to Food Safety for Beekeepers on the bee bookshelf.

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## The continuing spread of honey bee pests

JOHN HILL, BBVA PRESIDENT

I have been involved with bees for 17 years and began my beekeeping at a time when Varroa destructor mites were relatively a new and a harrowing experience. Varroa changed procedures completely in that the beekeeper had to make sure his bees did not perish. Varroa has spread around the world over many decades with Australia being the main continent that had kept it out. Unfortunately, Varroa destructor has now entered Australia in New South Wales and the authorities are battling to eradicate it. The chances of stopping it are small.

*Apis mellifera scutellata*, a highly aggressive sub-species of honey bee, normally inhabits sub-Saharan Africa. Colonies were sent to South America under controlled conditions for breeding experiments, but were accidentally released. Known as “African Killer Bees” they have spread throughout Central America to the Southern US states. A catastrophe caused by man.

Small Hive Beetle (*Aethina tumida*), whose normal habitat is sub-Saharan Africa, entered Florida in 1998 and within 2 years had killed 20,000 hives. It has since moved through the central US and is now in Canada. Australia did not manage to keep SHB out and it is now widespread. SHB has been present in Southern Italy since 2014, but has not yet been eradicated. There are fears that it will spread around Europe and to the British Isles through importation of bees and queens, an expanding trade.

The Asian Hornet (*Vespa velutina*), arrived in South West France in 2004 and has spread widely throughout Europe. A tiger of the insect world, it has had a major effect on honey bees and other pollinators dramatically reducing honey production in France. *Vespa velutina* will vigorously defend their nests and therefore are a public health threat.

Not to be outdone, the Giant Asian Hornet (*Vespa mandarinia*), normally found in China, Malaysia and Japan, has turned up in Vancouver Island, Canada and crossed the border into the US. This highly dangerous insect kills dozens of humans in China and Japan every year, yet is highly revered. The US and Canadian authorities have not yet managed to eradicate it.

Tropilaelaps mite was normally confined to the Malaysian peninsula however it is now spreading out towards India and Russia. *Tropilaelaps mercedesae* may be spreading by having rats as a vector host. It is a major honey bee pest in the far east and is more destructive and harder to control than Varroa mites.

Globalisation of trade has meant that it is all too easy for species that have evolved in one part of the world with minimal effect to the local ecology, can cause immense problems in naïve populations in other parts of the world. Honey bees have had their fair share of pests and pathogens spreading widely. It is imperative that strict quarantine rules must apply to safeguard our honey bees and pollinators from invasive and destructive species. It piles more pressure on the survival of bees and pollinators.



# The British Beekeepers Association

STEPHEN BARNES, BBKA PRESIDENT ([WWW.BBKA.ORG.UK](http://WWW.BBKA.ORG.UK))

The British Beekeepers Association (BBKA) was founded in 1874. With the development of Associations in Scotland, Wales and Northern Ireland in the 1950s; it left the BBKA to focus on England. The BBKA is an Association of Associations, consisting of 74 members who represent 28,000 individual beekeepers. Beekeepers are first and foremost members of their local Association - and these are members of the BBKA.

To influence BBKA policy, a beekeeper must first convince their local Association, then the Association can seek to implement a policy via the Annual Delegates Meeting (ADM). In 2020, the BBKA became a Charitable Incorporated Organisation, with the object to “advance the education of the public and beekeepers in the craft of beekeeping and promote the importance of bees in the environment”. The governing body is elected at the ADM and is made up of a President and a Board of 12 Trustees.

The Board takes a strategic view based on directions given by the members through Propositions passed at the ADM. The day-to-day business of the BBKA is managed by a team at the HQ in Stoneleigh. This includes Swarm Call, which puts members of the public with a swarm in touch with the nearest beekeeper, ‘Find a Beekeeping Association Near You’ and a myriad of other services.



LEFT: A BEAUFUL FRAME OF CAPPED HONEY

RIGHT: SCHOOL CHILDREN LEARNING ABOUT BEES AS PART OF THE BBKA 'PRESIDENT'S PROJECT'.

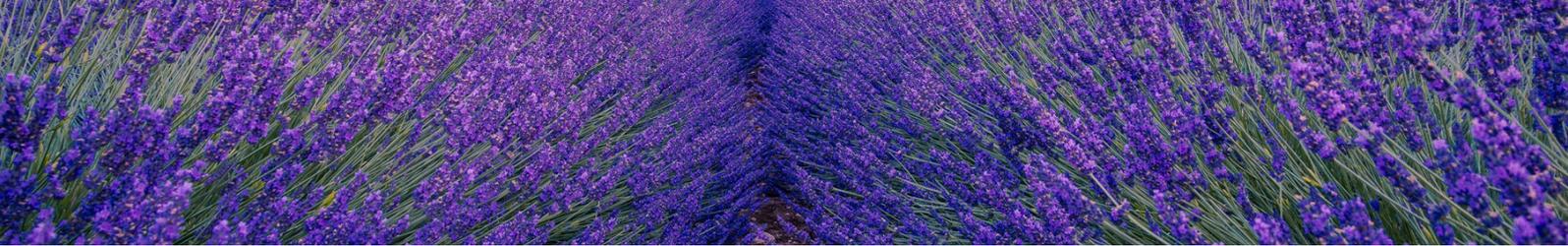
PHOTO CREDIT: STEPHEN BARNES

Membership benefits include £10m Third Party Liability Insurance, a high-quality monthly newsletter and a wide range of educational and training material to support local Associations and individual members. The latest development is an online learning platform which will provide educational material across a wide range of experience levels, from beginners to experienced beekeepers. One thing I have discovered in my 23 years of beekeeping is that there is always something more to discover about bees. I have read many excellent books, but I am yet to find the one that the bees have written or follow!

The BBKA also funds honey bee research, including into disease and treatments. It has joined forces with Bee Disease Insurance Ltd and the C B Dennis Trust to fund new research programmes. This is potentially a very exciting development.

The BBKA supports the National Honey Show which is held at Sandown Racecourse in October and runs the three-day BBKA Spring Convention at Harper Adams University in April. This includes lectures by some of the leading lights in beekeeping, practical workshops and a tradeshow.

Recently, the BBKA has been developing the President’s Project, which provides facilities to educate children in the importance of all pollinators, particularly honeybees. The first visits from schools began this year and have been a great success. Generating interest in beekeeping at an early age is essential to the long-term future of the craft and the environmental importance of all insects.



# In Depth: Sustainable Bee Improvement and the National Bee Improvement Programme (NatBIP)

JO WIDDICOMBE, BEEKEEPER, BIBBA TRUSTEE AND PAST-PRESIDENT

The western honey bee, *Apis mellifera*, is used all around the world for honey production and pollination. Its original range included Europe, the Near East and Africa, occupying diverse environmental conditions which has led to the evolution of about 28 sub-species, each one specifically adapted to its local region.

Since 1859, with the first recorded imports of exotic sub-species into Britain, beekeepers have continued to add foreign strains to our local stock. Sometimes different sub-species were deliberately crossed to reap the benefits of hybrid vigour, Brother Adam of Buckfast Abbey pioneering the technique in this country. It is a method commonly used in plant and animal husbandry and can normally be repeated at will to achieve positive results.



In the case of the honey bee, however, difficulties arise because of their more complex mating system, namely, the fact that the queen mates with multiple drones from the surrounding area. Bee breeders can produce the desired crosses through instrumental insemination, or isolated mating stations, but once these hybrids are introduced into the local environment, control over future matings is lost, resulting in a randomly hybridised population.

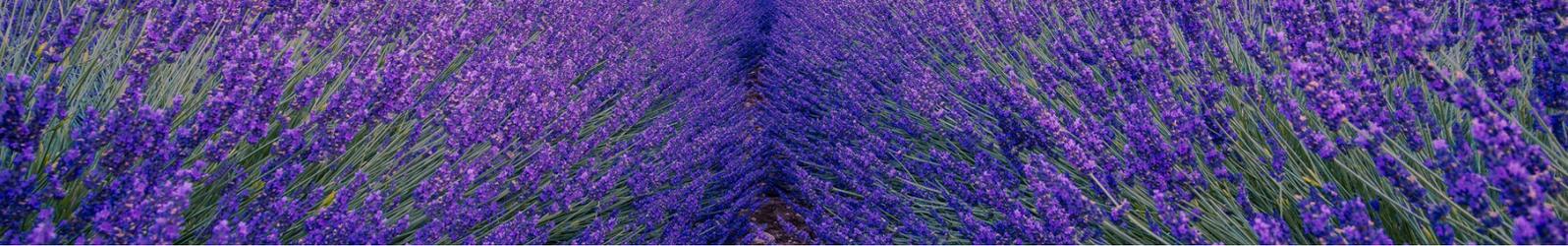


EUROPEAN DARK HONEY BEE (*APIS MELLIFERA MELLIFERA*) QUEEN SURROUNDED BY HER RETINUE OF ATTENDANT WORKERS

Whilst genetic diversity is important to the welfare of a species, the introduction of unsuitable or ‘maladapted’ genes can weaken a strain. A randomly mixed population becomes difficult to select and improve, as offspring do not breed true. Due to the vast number of imports of queens over the last 160 years, our background population of honey bees is now extremely variable. Consistency in the quality of stock cannot be found which can add to the attraction of making further imports, but these, in turn, compound the problem and remove any hope of developing a locally adapted population.

The National Bee Improvement Programme (NatBIP) has been launched by BIBBA (The Bee Improvement and Bee Breeders Association) to offer a way out of the vicious circle that we find ourselves in. Its aim is to provide an alternative to imports, with their associated biosecurity risks, and to allow the sustainable improvement in the quality of our bees. It favours the development of a hardy, locally adapted honey bee population that has the qualities that the beekeeper wants.

**Continued**



## Sustainable Bee Improvement, continued

The system is based on natural and artificial selection of our bees. It is designed to gradually develop some consistency into our stock, whilst maintaining genetic diversity. Starting with the bees in our area, the main rule is to avoid adding exotic sub-species, either through imports or the offspring of recent imports. The effect of natural selection on our bee population, without the constant addition of exotic genes, will shape the population, genes not suited to the bees' survival, in our conditions, being gradually lost from local populations.

This process helps to develop a hardy and locally adapted bee, but beekeepers require other qualities as well as survival. Other requirements may include such qualities as docility, low-swarming, productivity, and good health. Artificial selection, by the beekeeper, for these qualities is achieved through keeping records of the performance of each colony as assessed at each inspection. A picture is soon built up of which queens are best for producing further offspring from, and which queens should be replaced.\*



EUROPEAN DARK HONEY BEES (APIS MELLIFERA MELLIFERA) AT THE HIVE ENTRANCE

Ultimately, it is about improving the quality of the whole population whilst maintaining genetic diversity within that population. Daughter queens produced from selected 'breeder queens' will produce good drones regardless of what drones these queens mate with, as drones are produced from unfertilised eggs. \*\* Over time, through the production of daughter queens, and by monitoring the quality of local colonies in the area, we can ensure that most drones in the area are from good queens and the quality of matings will improve. Beekeepers may have to work together in order to make an impression on the number of good drones in an area and this can be the key to success. By repeatedly rearing new daughter queens from our chosen queens a contribution to the local drone population is made. By re-queening poor quality colonies we can help to eliminate poor drones in an area.



EUROPEAN DARK HONEY BEES (APIS MELLIFERA MELLIFERA) ON THE COMB

The aim of the Improvement Programme is not to put the clocks back but to move things forward, from the difficult position that beekeeping finds itself in, developing a population that breeds true and is best adapted to local conditions. In some areas, the Programme may be based on a pure strain of *Apis mellifera mellifera*, the Dark European honey bee, whilst in others the bees may best be described as 'near-native' as some genes from other sub-species will remain. The aim is that colonies breed true and that bee populations continue to evolve to be the best suited to their area. Even with environmental and climatic changes, over time, the system allows ongoing evolution, as the best performing bees under the prevailing conditions are repeatedly selected.

\* An example of a downloadable record card is available in the [NatBIP Guide](#) on the BIBBA website.

\*\* 'Breeder queen' is merely a term for any queen we select to produce any number of daughter queens from. These daughter queens can be relied on to produce good drones regardless of matings and offer a key to bee improvement.



# The developing field of honey bee veterinary medicine

DR BRITTENY KYLE DVM, HONEY BEE VETERINARY CONSORTIUM

The honey bee is not a species that has been traditionally under veterinary purview in Canada and the United States. In fact, when I attended veterinary school in the early 2000s the only mention of honey bees was in a lecture on the utility of honey for treating wounds. Yet honey bee health is not great right now. Our beekeeping industry is experiencing high levels of colony losses every year, particularly during the overwintering period.



**HONEY BEE  
VETERINARY  
CONSORTIUM**

In recent years veterinary professionals are searching for educational opportunities regarding honey bee medicine. It is not because of the health status of our bees however, but because of antimicrobial resistance (AMR). Aligning with efforts put forth by the WHO and OIE to slow the development of AMR, the United States introduced the Veterinary Feed Directive (VFD) in 2017. The VFD was not created because of honey bees and beekeeping, but it has had a large impact on the industry. Prior to the VFD, beekeepers could purchase antimicrobials over the counter from their local bee supply companies, three of which are medically important from a human health perspective. With the VFD in place, beekeepers now need to find a veterinarian willing to see bees, develop a veterinary-client-patient relationship, and obtain a prescription or VFD in order to purchase these drugs. These antimicrobials are commonly used by beekeepers here to either control or treat the honey bee bacterial diseases. In 2018, Canada introduced new legislation surrounding access to antimicrobials that largely had the same effect.

The problem was veterinarians had not been trained to examine, diagnose, and treat honey bees. So in 2017, a small group of veterinarians got together and formed the Honey Bee Veterinary Consortium (HBVC) in order to fill this knowledge gap. Since that time our membership has grown from a handful of individuals to over 300 members from around the world. One of our main missions is to provide quality education about honey bee medicine. This began as a yearly conference with our fifth one held at the end of August. The 17 different lectures from 13 different speakers covered both beginner and advanced topics and were available to watch virtually live. They are available on-demand for a period of two months. Anyone interested in bees is welcome to register to watch them! <https://events.anr.msu.edu/hbvc>.



In addition to the conference, HBVC is working hard on a number of other educational opportunities. We have a student board that meets regularly to discuss and plan student-led initiatives. We also have student chapters at a handful of veterinary schools across the US. Coming out later this year will be a certification program for veterinarians to develop the required competencies for working with honey bee patients and beekeeper clients. The program will cover seven different modules and require veterinarians to complete 150 hours. We have come a long way in a short time and it is wonderful to see the collaborative effort of veterinary professionals, honey bee experts, and industry members to develop the field of honey bee veterinary medicine.



## Bees for Development

GIACOMO CIRIELLO, PROJECT MANAGER



Most beekeepers in the UK keep their bees in their garden and regard their beekeeping as a fascinating and hugely enjoyable hobby. For those who do beekeeping in rural and remote areas of poor countries, it means being able to keep the children in school, to buy food for the family, and to fix the roof. It can be that extra bit of easy income that makes a big difference, or even a sustainable livelihood in its own right – built with minimal capital investment, plus skills, determination and creativity. Bees are freely available in the environment and beekeepers can make all the equipment they need.

But how to get started? In the UK we can browse catalogues, choose from countless courses and books, become members of groups and associations. What about in Amhara, Ethiopia, or in Afram Plains, Ghana? The best, and probably only option, is to come along for a hive-making workshop organised by one of the local partner organisations working with Bees for Development.

We started in 1993 as an organisation to deliver free and reliable information, and this aspect of our work remains at our core. Our full range of information services can be accessed through our online Resource Centre ([resources.beesfordevelopment.org](https://resources.beesfordevelopment.org)). Here you can find all issues of Bees for Development Journal and how to subscribe. You can search our online library, access our manuals, guides, how-to videos, and fact sheets. Users' enquiries are answered by our team of specialists. There is no other organisation in the world that will answer enquiries from beekeepers in Bangladesh, Barbados and Burundi all on the same day!



TIRINGO ENDASHAW  
DEBRANTA KEBELE, ETHIOPIA

We have worked with so many beekeeping associations and groups over the years it is impossible to mention them all. Currently we are particularly proud to be working closely with our partners in Ethiopia, Ghana, India, Uganda and Zimbabwe. We support them in providing excellent and effective practical training to those that can most benefit from the extra income beekeeping brings. Together we work to link up remote producers to high value markets, to restore degraded land into forests teeming with biodiversity, to empower farmers to reduce their use of pesticides while increasing yields, to ensure this generation of leaders have their priorities straight, and to open the possibility of keeping bees for women, people with disabilities and even the most marginalised.

Beekeeping becomes accessible for all when it is based on nature – that is when bees are free to swarm and take care of themselves, when simple hives are built with available natural materials, and where bees have access to a wide range of different flowering plants in an unpolluted environment. The Nature-based Beekeeping that we advocate means less work for the beekeeper, healthier honey bee populations and excellent harvest of clean, precious honey and beeswax.

To find out more about our work and impact, please visit [beesfordevelopment.org](https://beesfordevelopment.org) and sign up to receive our monthly e-News. We run beekeeping Courses in the UK, and also have a beautiful shop in Monmouth and online – revenue from this supports our work, and as a charity, we do of course always welcome donations.

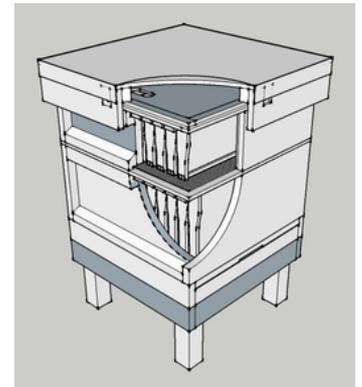


# The Modified National Hive

OLIVER ST. JOHN, BEEKEEPING TUTOR, PLUMPTON COLLEGE

The National Hive is the preferred hive for most beekeepers in the UK. Its design was part of a British Standard created in 1946 which was subsequently revised in 1960 giving us the Modified National Hive as it is often referred to. The National Hive was based on the popular WBC Hive and was originally proposed due to post-war timber shortages. The British Standard was withdrawn in the mid 80s.

The ‘National’ usually comes flat pack from a number of UK suppliers. Most beekeepers prefer self-preserving Cedar as the timber of choice although pine (fir) and ply are other, cheaper options. High density polystyrene hives are now available along with National-based hybrids such as the Beehaus by Omlet. Like most hives worldwide, a National Hive is formed of a floor, a brood box, some supers and a roof. The floor contains the entrance for the bees to come and go. They will bring in pollen and nectar to the brood box which is where the queen is busy laying eggs in honeycomb which the bees draw out on sheets of wax foundation set into removeable timber frames. The wax foundation is imprinted with a honeycomb pattern and is usually reinforced with stainless steel wire to support it in the frames.



SCHEMATIC REPRESENTATION OF THE MODIFIED NATIONAL BEEHIVE - CUTAWAY TO REVEAL BROOD AND SUPER FRAMES, QUEEN EXCLUDER AND CROWN BOARD  
BY IGF2 - OWN WORK, CC BY-SA 4.0,  
[HTTPS://COMMONS.WIKIMEDIA.ORG/W/INDEX.PHP?CURID=55771035](https://commons.wikimedia.org/w/index.php?curid=55771035)



THE MODIFIED NATIONAL HIVE

Honeybees make a surplus of honey – this is initially stored near to where the queen is laying but will, as the season progresses, be stored in supers above the brood box. Supers are slightly smaller in height than the brood box with 10 or 11 removeable frames– this is to save weight as a super frame full of honey can weigh 1.5kg so the usual ten would equate to a not inconsiderable 15kg. Supers can be cleared of bees using nifty one-way valves for bees – supers are taken away, the frames removed and uncapped (a sticky business!), and the honey spun out in a centrifuge which is referred to as an extractor. To prevent the queen laying eggs in the supers a queen excluder sits on top of the brood box – the worker bees can pass through the mesh but the slightly larger queen cannot.

Back to the hive, there is a ceiling above the boxes called a crown board and this, in turn, sits under the heavy roof which is usually covered with a metal cap. All the parts of the hive sit on top of each other – the bees help to keep it together by gluing the joints together with propolis (plant resin).

Oliver runs hive building workshops at the National Honey Show and BBKA Spring Convention.

BIBKA FOUNDED



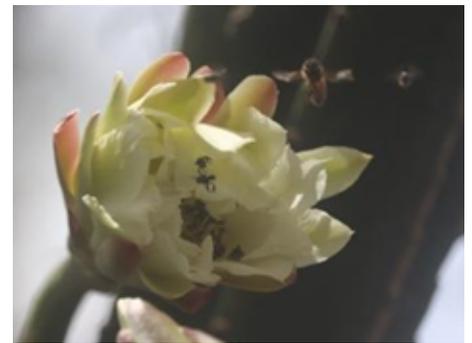
# Bees in Australia

JOHN CARR AND NICK SMITH, PRESIDENT AND MEMBER, TOWNSVILLE & DISTRICT BEEKEEPERS ASSOCIATION, QUEENSLAND

In the UK, there are over 250 species of bees and while a few species of bumblebees are farmed, it is the European honeybee, *Apis mellifera*, which provides the honey to sweeten our lives. In Australia, there are approximately 1700 species of bees – albeit it is continent island. We are blessed with not only *Apis mellifera*, but with a cornucopia of other Apidae species, the significant ones are in the Meliponini family, the stingless bee. Yes, stingless bees! There is a sting, but it's too short. They make up for it by being able to bite with powerful mandibles, but at most this is annoying.

This group of social species collects large amounts of pollen and are extremely important as a source of honey for many people in the Equatorial zones around the world. The species of Meliponini which are being farmed commercially in Northern Queensland are *Tetragonula hockingsi* and *Tetragonula carbonaria*, followed by *Austroplebeia australis*.

Being stingless, these species are great for schools where the kids can be introduced to keeping bees without the risk of injury.



APIS MELLIFERA AND TETRAGONULA HOCKINGSI COLLECTING POLLEN FROM A CACTUS FLOWER. THIS HELPS TO INDICATE THE SCALE OF THE TWO SPECIES.

## The stingless bees

It is very difficult to see the difference between the two species and *T. hockingsi* is used as an example.



QUEEN. IN THE HIVE THERE ARE ALSO A NUMBER OF PRINCESSES WAITING TO TAKE OVER IF THE QUEEN FAILS!



WORKER



DRONE – NOTE THE EXTERNAL GENITALIA

## The hive

Like the European honeybee these stingless bees live in a cavity. In the wild these bees live in hollow old trees. Using the basic principles where the brood is separated from the honey and pollen reserves.



NATIVE STINGLESS BEEHIVE



FARMED STINGLESS BEE OATH BOX

Continued



## Bees in Australia, continued

### The brood area

The brood appearance is an easy way to distinguish between these two species of *Tetragonula*. The management of the brood is one major difference between *Tetragonula* and *Apis*. The egg is laid and provided with all the food reserves it will require. The cell is capped immediately after the queen lays.

### Where are the pollen and honey reserves?

Instead of making hexagonal honey cells – these bees make wax pots to store their honey and pollen, more like UK Bumblebees. Stingless bees use propolis, a mixture of tree resin and wax to build pots and cells. The honey has a distinctly different taste.



T. HOCKINGSI BROOD MASS MORE LIKE A BALL.



HONEY STORAGE POTS



T. CARBONARIA – BEAUTIFUL FIBONACCI SPIRAL SHAPE



POLLEN STORAGE POTS

Townsville & District Beekeepers Association welcome members from abroad to join the club! We have several foreign members from Europe, Asia and Africa. <http://www.beesnorth.com.au>.

WE ARE GRATEFUL FOR THE GENEROUS SUPPORT OF OUR SPONSORS:





## Plant File: Blackberry (*Rubus fruticosus*)

CHRIS PALGRAVE

September is a month of purple-stained fingers and scratched forearms. Synonymous with autumn, blackberries (brambles) are one of nature's most generous bounties; versatile and delicious, whether fresh from the hedgerow, baked into comforting deserts, cooked into compotes, preserved as jam, fermented into wine and mead, or even steeped in whisk(e)y or vodka.

Of course it is not only us who benefit from the unruly arching briars, laden with deep-purple fruit. Blackberries are an important source of food for numerous of birds and mammals. You will also see bees and other insects sucking juice from plump berries, late into the year, when there are few remaining flowers to provide nectar. The majority of blackberries are 'floricanes', fruiting on the previous year's canes. So, while you can remove old canes that have already fruited, if you are growing them in a garden or allotment, care must be taken not to prune out this year's growth.



HEARTY BLACKBERRY CRUMBLE



EARLY SUMMER BLACKBERRY FLOWERS

It is easy to get carried away with the fruit, however perhaps even more importantly, the blackberry produces abundant nectar from myriad delicate pale pink-white flowers. For many beekeepers, the arrival of the blackberry blossom is a moment of anticipation and considerable relief, as it often marks the end of the the nectar dearth ('June gap') between the last of the spring flowers and the first of the summer. In fact, in many parts of the the UK, blackberry now provides the majority of the summer nectar flow.

## Blackberry trivia...

British folklore dictates that blackberries should not be picked after Michaelmas Day (29th September), as the Devil is said to have sullied or spat on them. This may be because Satan was thought to have landed in a blackberry bush after being cast out of heaven. Brambles were often planted on graves to stop sheep grazing, or perhaps to keep the dead in... Long bramble canes/briars can be split and made into strong cordage; amongst other things, this was traditionally used to bind together the straw coils of skep beehives.



TRADITIONAL STRAW SKEPS BOUND WITH BRAMBLE CORDAGE



## The bee bookshelf: Food Safety for Beekeepers

CHRIS PALGRAVE

The majority of beekeepers are hobbyists with a small number of colonies. Most process honey in their domestic kitchens, although some have a purpose-built 'honey room'. Did you know that the legal requirements differ between these two arrangements? Did you know that even if you sell only a few jars from your house or at the village fete, you automatically become a Food Business Operator - and with it comes responsibilities and obligations?

Andy Pedley has 30 years experience as a beekeeper and 46 years as an environmental health officer. He is exactly the right person to have written this clear, concise, informative guide. He takes a practical step-by-step approach to producing high quality, safe honey and meeting the necessary legal requirements - while dispelling a few myths along the way! He covers hive construction/maintenance as well as handling and transporting supers. He discusses feeding bees, treatments and other potential contaminants, before addressing extraction, bottling, labelling and selling. He also provides guidance on record-keeping and putting into place a management system. Although his focus is understandably on honey, Pedley also touches on other hive products (beeswax, pollen etc), signposting to specialist resources where appropriate.

This is a well-written, richly-illustrated, accessible guide produced with the small-scale beekeeper in mind. It is essential reading for all new beekeepers and those wishing to refresh and update their knowledge. Food Safety for Beekeepers (2022) is published by [Northern Bee Books](#) (£17.00).

## The British Bee Veterinary Association

The British Bee Veterinary Association (BBVA) was launched in 2015 in response to an increased demand for bee knowledge and expertise within the veterinary profession. We host multiple educational events each year and attend a number of veterinary conferences. The BBVA also runs the very successful [Bee-Friendly Practice Scheme](#).

For more information on membership or becoming a Bee-Friendly Practice, please visit: [www.britishbeevets.com](http://www.britishbeevets.com). All previous issues of [The Buzz](#) are available on the BBVA website.

## Editor: Chris Palgrave

Chris is a beekeeper and veterinary surgeon living with his family in the Exe Valley in Devon. He is a member of [Exeter Beekeepers](#) and writes regularly for the veterinary and beekeeping press, including a monthly column in [BeeCraft](#) magazine. Please send any comments, suggestions or contributions to [buzz@britishbeevets.com](mailto:buzz@britishbeevets.com).

### Food Safety for Bee Keepers

Advice on legal requirements and practical actions



Andy Pedley MCIEH

