



LUNE VALLEY COMMUNITY BEEKEEPERS

NEWSLETTER JANUARY 2019



Chairman's message

A happy, prosperous and successful beekeeping year to everyone.

I have never been one for making New Year resolutions as such, but I do like to spend some time in the first few days of the New Year making plans for what I would like to achieve during the year. These plans include specific outcomes, methods for achieving them and lists of the resources I am likely to need.

I approach my beekeeping in a similar manner and like to have all the resources I am likely to need firmly in place, or ordered, by no later than the end of March, which is usually still before the bees are out in force in our part of the world. This approach also enables me to identify areas that could cause issues, such as the unavailability of nucs or swarms, a shortage of hives, or a poor mating season, reasonably well in advance, and work out different plans.

To those of you planning to take up beekeeping this season, or keep your bees differently, I would strongly recommend that this is the time to start planning.

Club News



Dr Philip Donkersley, the speaker at our December meeting, delivered a fascinating and thought-provoking talk. Basically, Philip's research has shown that on a space for space basis, a tree or shrub will produce around four times as much pollen as an area of wildflowers.

This is illustrated below where the shaded boxes show the comparative amounts of pollen produced by each. The conclusion, therefore, is that planting a hedge of flowering trees and shrubs will take up a quarter of the space needed by a wildflower meadow, to produce the same amount of pollen. Philip's full paper can be seen at

<https://www.sciencedirect.com/science/article/pii/S0167880918304481>



Philip plans to continue his research in this area and has asked if all members could help by maintaining some records this year of what trees and shrubs are flowering, where they are growing, how long they flower for, and, if possible, what insects are visiting them. Whilst he was speaking, it occurred to several of us that we could use this information to improve the effectiveness of the 1000 metres of new hedge we have at our Club Apiary.

It must be stressed that Philip's research solely related to pollen. Another, similar research project being carried out by the University of Roehampton, is looking into nectar.

Another aspect of Philip's talk featured how bees learn to use natural features, such as hedges, in order to take the most efficient route to foraging areas.

Social Evening

Our next meeting will be a Social Evening on **Wednesday, 9th January**, which will include wine and cheese followed by a showing of "*More than Honey*", a remarkable documentary film made in 2013 by the Swiss filmmaker Marcus Imhoof, which looks into the fascinating world of bees, and showing small family beekeepers and industrialised honey farms. "*More than Honey*" is a film on the relationship between mankind and honey bees, about nature and about our future. It is well worth watching.



We look forward to seeing as many members as possible at our first meeting of 2019.

Club Meeting Programme Spring 2019

2019

Wed 13th Feb	Open Speaker meeting Topic: Gardening for Bees Julia is our Seasonal Bee Inspector. She also runs the Brigsteer Bee Reserve, a private wildlife reserve in the Lyth Valley, Cumbria. The 17.5 acre reserve is made up of limestone pasture, meadow and woods. The woodland is planted with trees used by bees for nectar, honeydew and resin for propolis and the grassland is managed to favour a flower rich flora and to provide nest sites for bumble bees and solitary bees.	Scarthwaite Hotel, 7-30pm Speaker: Dr Julia Piggot
Wed 13th Mar	Speaker meeting Topic: The hive as a processing centre Pete has been keeping bees for over thirty years, is a "Master Beekeeper" and has held a number of senior positions with BBKA and Cheshire BKA. To ensure the colony survives in a healthy state, honey bees collect everything they need from the surrounding area in the form of relatively simple, readily available, natural products. They then process these in sophisticated ways into such diverse items as building materials, miracle foods, antiseptic paints, and store them where necessary for future use. The abilities required for these processes have evolved over millennia to a level of amazing sophistication, but how do they do it? This lecture will describe those processes in a way that helps beekeepers understand the requirements of their colonies better.	Scarthwaite Hotel, 7-30pm Speaker: Pete Sutcliffe

The full summer programme will appear in next month's edition.

2019 Courses and Open Meetings

Gardening for Bees by Dr Julia Piggot

Wednesday, 13th February 2019, Scarthwaite Hotel, 7-30pm

In addition to being our Seasonal Bee Inspector, Julia runs the Brigsteer Bee Reserve, a private wildlife reserve in the Lyth Valley, Cumbria. The 17.5 acre reserve is made up of limestone pasture, meadow and woods. The woodland is planted with trees used by bees for nectar, honeydew and resin for propolis and the grassland is managed to favour a flower rich flora and to provide nest sites for bumble bees and solitary bees.

Alternative Beekeeping for Beginners

If you have ever thought of owning a colony of honey bees, then this two-part course is for you!

Part 1: Sunday, March 10th 2019, Scarthwaite Hotel, 9-30am to 4-00pm

This inter-active workshop focuses on responsible, low intervention, bee-centric approaches to beekeeping and will cover everything you need to know and consider **before** taking up beekeeping. Comprehensive notes, refreshments and lunch are included.

Part 2: Sunday, 5th May 2019, Club Apiary, Ashton Road, Lancaster, 10-00am to 3-00pm

Meet the bees! This practical session will introduce you to active colonies of bees housed in a variety of different types of long hive and provide you with the opportunity to handle bees for yourself under expert guidance. Refreshments and full protective equipment will be provided, although **you will have to provide your own wellies**.

Bee Tradex 2019

Saturday, 9th March 2018, Beetradex 9-00am to 4-30pm

Hall H3, Stoneleigh Park, Warwickshire, CV8 2LG

This is the largest, independent trade exhibition of beekeeping equipment in the UK and attracts over 2500 beekeepers. A diverse range of free lectures run from 10-00am to 3-00pm.

Admittance is £5 if booked in advance, or £6 on the day.

www.beetradex.co.uk/registration/



Sustainable Bees and Queens



There is growing concern amongst beekeepers of all abilities and experience about the ever-increasing importation of bees and queens. This is on several grounds, including the possibilities of introducing pests, diseases and pathogens, aggression in subsequent generations and the unsuitability to our fickle climate.

Defra has recently conducted a Queen Replacement Survey that shows the majority of beekeepers prefer home-reared queens but need help to produce them. In addition, many Bee Clubs are unable to produce enough bees for their beginners and queens to head them.

In response to the obvious need, the Bee Improvement and Bee Breeders Association (BIBBA) are staging a series of one day regional events. These are to help and encourage everyone from the small-scale beekeeper upwards and Bee Clubs to produce bees and queens from local stock, by using simple techniques that may be little more than a variation of what many beekeepers already do and at little or no cost: Topics include:-

- Why raise queens?
- Addressing perceived problems in producing queens in the U.K.
- Overwintering bees and queens.
- De-mystifying queen rearing.
- Simple queen rearing methods.
- Simple and efficient ways to produce nuclei.
- Suggested methods for BKAs to supply bees and queens to members/beginners.
- Methods for small and larger quantities.
- Benefits of teaching apiaries.
- Queen rearing facility in teaching apiaries.
- Queen rearing as a collective exercise.
- Producing bees and queens, yet still getting a good honey crop.
- Including queen rearing and bee improvement in BKA teaching programmes.
- Reducing winter losses.
- Other events that provide relevant tuition.

It will be helpful to beekeepers of all abilities, from beginners to the most experienced, as well as club officials, beekeeping teachers, apiary managers, and demonstrators. The all-day event (10.00am-4.00pm) costs £10/head (around 30% of the price of one queen and 5-10% of a nuc!). Refreshments will be provided, but **please provide your own lunch**. Booking must be made in advance.

The nearest event to us will be held on Saturday, 9th February at the Frodsham Community Centre, Fluin Lane, Frodsham, WA6 7QN. For more information and to book a place visit: <https://bibba.com/sustainable-bees-queens/>

Is your honey raw, pure or organic?

Many honey adverts describe their honey using the words "raw", "pure" or "organic", but what do these terms mean and do they comply with all the relevant legislation? Unfortunately, there do

not appear to be any precise definitions of what each term means and interpretation of the legislation seems to be left to local Food Inspectors. However, the following explanations might be helpful.



Pure honey seems to mean any honey that does not contain any additives but may have been pasteurised and finely filtered.

Raw honey is simply honey that has not been pasteurised, finely filtered to remove any pollen, heated significantly above 35°C or processed in any way. It is just pure honey as extracted from the comb. Most honey sold in supermarkets is pasteurised, which involves heating the honey to about 63° C. This helps improve its shelf life, but also kills the beneficial yeast and enzymes found in raw honey. The temperature of a beehive is about 35°C, and many 'raw' honeys are heated slightly to about 38°C, but this is not enough to kill the beneficial enzymes in the honey.

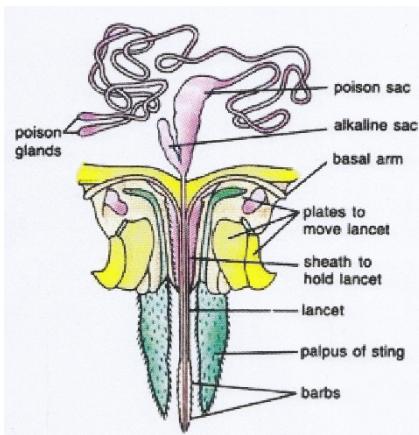


To be classed as organic, honey must be produced through organically acceptable processes. These include:

- Siting apiaries on certified organic land that must not be treated with weed killers etc. The beekeeper must keep a map showing the location of all his/her apiaries.
- Hives and frames must be made of natural, untreated timber.
- Hives must not be painted, but may be treated with linseed oil.
- Hives must have been organically managed for at least 12 months during which time the wax must be changed to organic wax.
- Not more than 10% of the hives in an apiary can be replaced/increased using non-organic queens or swarms, provided that organic wax from organic hives is used. In this case the 12 month conversion period does not apply.
- Foundation and comb must be of organic wax, except when an apiary is first converted and organic wax is unavailable.
- For a radius of 4 miles around the apiary, nectar and pollen sources must be "essentially" either organic or wild/uncultivated. This area must not be subject to significant sources of pollution such as from motorways, urban centres, dumps, incinerators, etc.
- Any feeding must be organic honey or organic sugar and this may only take place between the last honey harvest and 15 days before the first nectar flow.
- Homeopathic and herbal treatments and natural acids such as lactic, formic and oxalic and thymol may be used without restriction.
- If other medications, especially those requiring veterinary prescription, are used, the wax must be replaced and there must be a withdrawal period of one year.
- Drone culling is permitted even though it disturbs natural colony activity.
- Artificial insemination as part of queen rearing is allowed but wing clipping is prohibited.
- There are no requirements about honey extraction and bottling beyond the normal measures to ensure separation and product integrity.

Bee Venom

Most people know two things about honey bees – they produce honey and they sting!

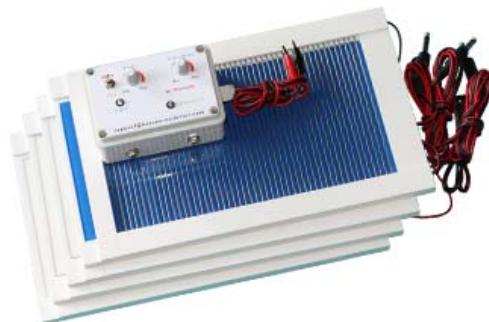


Bees produce their venom in their venom glands, schematically described in the diagram. The bee venom is secreted in a branched acid gland (above) and in the alkaline Dufour's gland (below), in the whole bee venom, both secretions are mixed. New born bees do not sting. Venom synthesis begins after two or three days, while the maximal production rate is reached when bees are two to three weeks old. Older worker bees produce less venom. One sting contains about 100 µg of dry bee venom. Drones do not have stings. Whilst bee queens have venom, its maximum quantity is that of newly emerged queens, in order to facilitate their fight for survival against competing queens.

The sting consists of three parts: a stylus and two barbed slides (or lancets), one on either side of the stylus. The bee does not push the sting in but it is drawn in by the barbed slides. The slides move alternately up and down the stylus so when the barb of one slide has caught and retracts, it pulls the stylus and the other barbed slide into the wound. When the other barb has caught it also retracts up the stylus pulling the sting further in. This process is repeated until the sting is fully in and even continues after the sting and its mechanism is detached from the bee's abdomen.

Most insect venoms are chemically complex and honey bee venom is no exception, including at least 63 different compounds. The chart gives a broad overview of the major components and compares honey bee venom with several other common stinging insects.

Honey bee venom is widely used in beauty products and alternative medicines. However, collecting honey bee venom can be challenging! Most collectors use a piece of kit which comprises of a number of panels, a control box and a transformer enabling the device to work either from a mains supply or batteries. Each panel is made of plastic mat with stainless steel wires, beneath which there is 3mm glass plate. An electric current is passed through the wires which stimulates the bees into stinging the mat, depositing their venom on the glass plate underneath. The bees do not lose their stings nor die in the process. The venom is allowed to dry and then collected.



This is not without its risks. A number of incidents have been recorded in which whole apiaries have become so agitated by the smell of bee venom in the air that clouds of bees have stung everything in sight.

So, if you are tempted to try this process, you are strongly recommended to do so well away from your home, other people and animals.

CHEMICAL COMPONENTS OF INSECT VENOMS

Insect venoms can vary significantly in their composition. They commonly contain a complex mix of proteins, peptides, and enzymes, as well as smaller molecular weight components. This graphic aims to give a broad overview of some of these components.

The circle surrounding each component is colour coded to indicate whether it is present in bee, wasp, hornet, or ant venom.

Note that this represents a general overview, and venoms will vary from species to species.



Best wishes for a successful beekeeping season.

Fred Ayres, Editor & Chairman, January 2019

The Lune Valley Long Hive

An innovative but simple long hive



Only £295

**Only obtainable from Lune
Valley Community Beekeepers**

Essential features:

- Designed by bee-centric beekeepers for bee-centric beekeepers
- Comfortably houses one colony of bees without the needs for additional supers or brood boxes
- Can be used with 14 x 12 frames (recommended), standard brood frames or top bars
- Has a removable floor tray which can act as a biological sump or a debris board for varroa counts
- Has 2" thick wooden walls which provide five times more insulation than a standard hive
- Roof space is ventilated and has space for a jumbo feeder
- Has a metal roof
- Is manufactured locally, especially for LVCB
- Is constructed from pine wood to reduce the cost but will need an external preservative
- Despite its high specification, it is economically priced whilst offering exceptional value for money.

Open Meetings and Courses Programme 2019

It would be very helpful if members could print off the following notices and put them on local notice boards.



Gardening for Bees

by Dr Julia Piggot

**7-30 pm, Wednesday, 13th February
Scarthwaite Country House Hotel
Crook O'Lune, Lancaster LA2 9HR**

Whether you have a small patio, or a large garden, growing flowering plants is an effective way to help Britain's bees and other pollinating insects, such as butterflies, hoverflies etc. Pollinating insects need food, water and shelter. They love plants which are rich in nectar and pollen. Nectar contains sugar for energy, whilst pollen contains protein and oils – forming a balanced diet.

Cost £7 including refreshments.



**For further details or to book a place visit
www.lunevalleybeekeepers.co.uk**

Charity No: 1167725

ALTERNATIVE BEEKEEPING FOR BEGINNERS

**Part 1: Sunday, 10th March, 2019
9-30am to 4-00pm**

**Scarthwaite Country House Hotel
Crook O'Lune, Lancaster LA2 9HR**

If you have ever thought of owning a colony of honey bees but have been deterred by not knowing exactly what is involved, or how much time it might take, then this course is for you! This inter-active workshop focuses on responsible, low intervention, bee-centric approaches to beekeeping and will cover all you need to know to start keeping bees.



**Part 2: Sunday, 5th May 2019, 10-00am to 4-00pm
The Apiary, Nazareth House, Ashton Road, Lancaster LA1 5AQ**



Meet the bees! This practical session will introduce you to active colonies of bees housed in a variety of different types of long hive and provide you with the opportunity to handle bees for yourself under expert guidance. Full protective equipment will be provided, although you will have to provide your own wellies.



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