



# LUNE VALLEY COMMUNITY BEEKEEPERS NEWSLETTER DECEMBER 2018



## Club News



### November meeting

Fortunately, beekeepers are a fairly law-abiding group but are, nevertheless, subject to a diverse and growing range of rules and regulations, the implications and potential consequences of which are not always obvious. Fred's talk on Beekeeping and the Law provided an interesting overview of the law on Ownership of Swarms, Neighbours, Data Protection, Insurance, Poisoning, Bee Diseases and Pest Control, Veterinary Medicine, Honey labels and Administering epipens.

## Club Meeting Programme 2018 – 2019

**Wed 5<sup>th</sup> Dec**      **Speaker meeting**      **Scarthwaite Hotel, 7-30pm**  
**Topic: Trees for Bees**      **Speaker: Dr Philip Donkersley**  
Philip achieved his doctorate from Lancaster University three years ago after carrying out his research in the hives of local beekeepers! He is now Senior Research Associate, BioPesticides for Africa at Lancaster University's Environment Centre. Philip has published a number of academic papers on bees. His talk will outline some of his research findings including those from his latest published research paper, *Trees for Bees*, and may even include some data gained from the research project started at the meadow at our club apiary.

### 2019

**Wed 9<sup>th</sup> Jan**      **Social Evening**      **Scarthwaite Hotel, 7-30pm**  
Wine and cheese evening. We shall also be showing *More than Honey*, a 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.

**Wed 13<sup>th</sup> Feb**      **Open Speaker meeting**      **Scarthwaite Hotel, 7-30pm**  
**Topic: Gardening for Bees**      **Speaker: Dr Julia Piggot**  
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.

**Wed 13<sup>th</sup> Mar**      **Speaker meeting**      **Scarthwaite Hotel, 7-30pm**  
**Topic: The hive as a processing centre**      **Speaker: Pete Sutcliffe**  
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.

## Newsletters

I would like to say a personal thank you to those Club members and editors of other Clubs with whom we exchange newsletters, who have commented favourably on this newsletter and said how much they enjoy reading it. Feedback is always much appreciated.

## Bees prefer trees!

Dr Philip Donkersley is the speaker at our December meeting. Here is the abstract from his latest published paper.



“Limited resources and land-use pressures require more efficient conservation strategies, from increasingly limited input. Pollinator declines are threatening food security and natural capital. I present a novel perspective on landscape level pollinator conservation from across multiple scientific fields. I examine the value of landscape structure provided by trees and hedgerows compared with floral strips, and discuss use of computer simulation technologies for understanding how spatial structure impacts pollinators’ ability to forage.

All bees forage on a mixture of both flowering plants and tree species. Honey bees have a detectable preference for foraging on trees, even when sparse. The spatial information provided by trees and hedgerows positively impacts formation of the “cognitive map”, making pollination and foraging more efficient. Woody habitat features like trees and hedgerows provide more efficient resources for pollinators in a number of ways. They are more efficient forage targets due to absolute resource density; tree and hedgerow planting could provide more optimised foraging landscapes for pollinators. Using computer simulation may enable us to study pollinator responses to landscape development at this scale. Woodland development results in non-pollinator ecosystem services, representing a more cost-effective conservation strategy. Moving forward we need to identify the key impediments to its successful implementation.”

The full paper can be downloaded from:

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

## Meditations on the Learning from the Bees conference

Posted on Oxfordshire Natural Beekeeping Group, November 8, 2018 by Paul



“At the end of August the world’s first major international gathering of natural beekeepers, [Learning from the Bees](#), took place in the Netherlands. The atmosphere had a festival vibe and concentrated on healthy bees and improving the environment, rather than the commercial/honey emphasis of most major bee events. The subject that kept coming up was natural selection.

Presentations ranged from research scientists like Professor Tom Seeley (famous for his studies of wild forest bees in America) and Peter Neumann (molecular geneticist, President of [COLOSS](#)) to environmental activists like [Terry Oxford](#) (US pesticide campaigner), Deborah Post and Tom van de Beek (planting/education initiatives in [Holland](#) and Germany), and well known authors like [Jaqueline Freeman](#). There were also artists and poets, reminding us of the impact of bees on human cultures.

Almost 300 delegates from 30 countries attended but sadly 12 Palestinian beekeepers were denied visas by the Dutch. I met Australians, Americans, many Europeans, a Russian, an Indian and some South Africans. Being the first event of its kind, there were no pre-existing cliques and everyone talked to everyone. Great for networking.

One scientist got very emotional on stage, choked up and explained that since publishing an article critiquing conventional hive management he’d had lots of “robust criticism” from conventional beeks. Now he was looking out at almost 300 faces who believed passionately in his conclusions.

It was very clear that there were 3 main groups with very different circumstances represented:

**North Americans:** Massive problems for European honey bees due to the scale of migratory beekeeping, industrialised monoculture farms, higher pesticide use, inbred genetics etc. But as one delegate said, they are trying to prop up the wrong species – they already have a vigorous mite resistant bee which stores prodigious amounts of honey. “Problem? What problem?!”

**Many Europeans:** (Spanish, Dutch, German, others): forced to register hives and treat with miticides by law. Inspectors check these practises are performed; one delegate described themselves as a “semi natural beekeeper”. These delegates felt very isolated and were generally surrounded by hard core conventional beekeepers deeply suspicious of non-standard methods. At least they have a wide genetic diversity.

**Brits, Belgians:** Not forced to treat with miticides, and in Britain at least we are not required to register our hives. Adriaan van Sandwijk from Eastern Belgium told me how a university project to study varroa in his area had been shelved because they could not find any mites in local hives! These countries have steadily increasing mite resistance, although it is not acknowledged by the official beekeeping organisations.

I met too few beekeepers from elsewhere to really form an impression of the Asian/South American etc issues. The Australians seemed to be doing well (no varroa there) and said Small Hive Beetle is only an issue in their tropical areas. A Russian beekeeper had a relaxed attitude about threats to bees – Russian bees are already varroa tolerant and they have plenty of wilderness to thrive in!

Several attendees mentioned they were very moved by finally meeting like-minded people, as back home they were surrounded by many hostile, critical conventional beekeepers. Whereas conventional beekeeping get-togethers are all about honey and buying equipment, there wasn't really anyone here trying to sell stuff to you. There was the odd book for sale and people were demonstrating hive types you could buy from them, but there wasn't that high pressure sales vibe you get at some conferences. Though there were users of everything from log hives to framed things, no one preached or criticised others.

The conference wasn't just about Western honey bees (*Apis mellifera*) but had a broader focus, with participation from conservationists and activists and even artists and poets inspired by bees. I was dubious about some of these at first but in fact this inclusive atmosphere worked really well; attending some of the less scientific events I was struck by how group bonding they were. Looking back, I found myself reflecting more on the emotional insights from people who talked of their bonds with bees, than on the scientific lectures which covered ground I was largely familiar with. You could say I began thinking more about *why* I keep bees around me, than *how*.

Presentations covered the science of natural selection and mite resistance (with big name speakers like Professor Tom Seeley, and Dr Neumann); environmental activism (watch for the name Terry Oxford in future); pollinator/planting/education initiatives in Holland and Germany; art installations on the themes of bees and hives; interactive sessions like Jaqueline Freeman's wordless "Being a Bee" which was a really relaxing way of starting the day; some more philosophical/reflective sessions, and many others – so many they had to have some in parallel. I can't describe them all to the degree they deserve, but the programme is here – [www.learningfromthebees.org](http://www.learningfromthebees.org)

## Insulated Hives

Wild and feral bees often nest in hollow trees, which usually provide between 3" and 6" (7cm-15cm) of insulation. The question is often asked "Is this of benefit to the bees and if so, should we insulate our hives?"



The main benefit of insulation is that it restricts and reduces the flow of heat through the hive walls, protecting the ambient temperature inside the hive from rapid fluctuations such as cooling in winter or heating in summer.

The actual temperature inside the hive, which should not be confused with the temperature of the bee cluster, is dependent on the outside ambient air temperature and the flow of air into and out of the hive.

In hives with wide entrances and/or mesh floors, the flow of air through the hive ensures that the hive's internal temperature closely follows the external air temperature. The rate at which it does so will depend on the rate of air flow. In these circumstances' insulation offers little benefit. In hives with solid floors or mesh floors that can be closed and entrances that can be reduced, insulation can be beneficial in that it can significantly reduce the rate at which the internal hive temperature equalises with the external temperature. But does this matter?

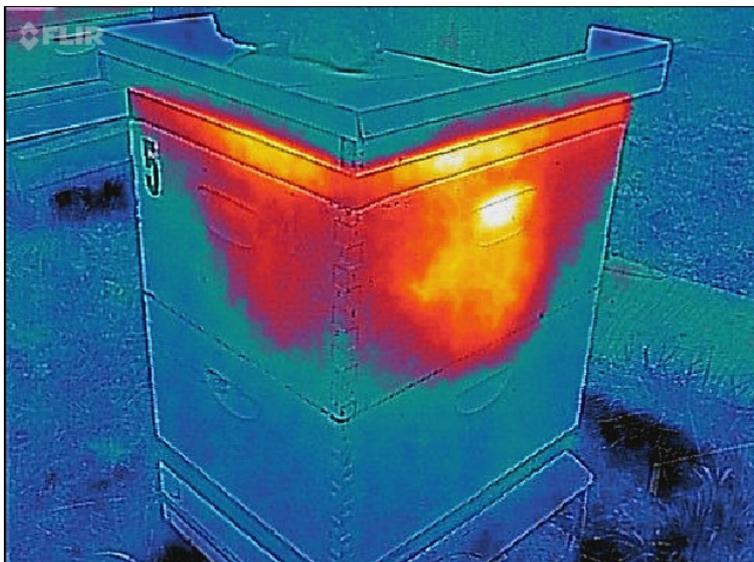
A rapid rise in temperature can sometimes reach the point where wax comb begins to soften and collapse before the bees have time to bring the hive temperature down. Members reported several cases of this during the season. Equally, a rapid reduction in temperature can result in a winter cluster being isolated from its vital food supply and subsequently starving to death.

Whilst there is yet to be any conclusive research on this topic, we have certainly noticed that the colonies in our Club Apiary at Nazareth House, housed in insulated hives, over-winter noticeably better than those in conventional hives.

## How do honey bees survive the winter?

Insects generally survive sub-zero environmental temperatures by evolving one of two strategies. Some are freeze tolerant, meaning that they can survive the freezing of their body fluids. In contrast, those species that die if frozen must evolve seasonal adaptations that prevent freezing of their body fluids in winter, such as various antifreezes that make them freeze avoiding. However, honey bees are neither freeze tolerant nor freeze avoiding. They die of hypothermia if their body temperatures are lowered to approximately 7 degrees C. In fact, they are endotherms. Like humans and other mammals, they control their body temperatures by producing internal heat, mainly by shivering their flight muscles. In addition, they huddle together into a large mass

that conserves the heat produced by the individual bees. Individuals within the cluster move in and out between the centre and the outside edge of the cluster. This combination of endothermy and clustering keeps their body temperatures well above freezing right through the winter.



This infra-red photo shows the temperature of the cluster being much higher than the internal hive temperature.

In one experiment, when the air temperature around the cluster was kept at 5 degrees C, bees at the centre of the cluster had body temperatures of 35 degrees C and temperatures of individuals on the outside edge were approximately 19 degrees C. The centre of the cluster generally stays between 30 and 35 degrees C. However, one very serious problem for maintaining endothermy at low

temperatures is that it becomes very energetically costly, requiring large amounts of food, which is one of the main reasons why so many colonies fail to over-winter.

## Lost to Beekeeping

By Pam Ayres

I miss my lovely wife, she's gone, I've lost her that's for sure,  
Bees have tampered with her brain; she is besotted, she's a bore,  
She talks a different language; it's all gibberish to me,  
With her Modified Commercial and her WBC.

She's working in the shed, I am a very lonely chap,  
She's making up the frames, going tappy-tappy-tap,  
I get no smile of greeting as she nails another batch,  
Her mouth is full of gimpy pins. They might go down the hatch!



Every time I see my wife I think I'm going to choke,  
She is permanently trapped in an engulfing cloud of smoke,  
We'd apples on the branches once, that's how it used to be,  
Now great swarms of honey bees are swinging from the tree.

I see a stealthy creature in the dingy undergrowth!  
I catch a flash of metal and I swear a mighty oath,  
"A terrorist!" I cry and leap up brandishing the poker,  
To see my wife emerging with a hive tool and a smoker.

My spouse was cool and fragrant; once we cuddled and we kissed,  
Before she took the veil and called herself an apiarist,  
She drops her suit and doesn't care what anybody thinks,  
It may be smoke or sweatiness, but either way she stinks!

I miss her company; we don't do anything together,  
She takes her bees to Scotland; they go camping in the heather,  
Then, when they come back again, her one and only topic,  
Is honey Caledonian and glories thixotropic.



When buying birthday presents I am overwhelmed with gloom,  
She's not a gal contented with a bottle of perfume,  
Her needs are very complex. Can I find? Can I afford?  
A solar wax extractor, straining tank and Snelgrove board?

Autumn is upon us; bleakly now the leaves are lost,  
The hives are cosy in the cold no matter what the cost,  
Varroa has been taken on with remedies assorted,  
Mice are disappointed; Woody Woodpecker is thwarted.

My wife's on the extractor and the house looks like a slum  
She makes me wind the handle which in turn rotates the drum,  
Thickly in the warming tank we watch the honey pour,  
With hands stuck to the table and with feet stuck to the floor!

Now from our endeavour, see the product, see the fruits,  
Of summer days spent sweltering in reeking gloves and boots,  
By tanks of golden honey we are richly reimbursed,  
I'd give my wife a cuddle ... if she had a shower first!"



*Courtesy Reigate Beekeepers BeeNews*

Busy bee pupils are in the honey at Ingleton



PUPILS at Ingleton Primary School are in the honey.

In the spring the school was loaned a hive by parent Mike Evans. It has been located in the school grounds and members of the school's gardening club, along with the help of Mr Evans, have been

monitoring its progress.

They have now harvested their own honey after assisting in removing it from the combs, filtering it and putting it into jars.

A competition was held to produce a label and Hazel Gowland's winning design now adorns the 40 jars produced.



Pictured, from left, are Lily Cottam, Amy Verneulen, Lily Dixon, Nathan Brooks and Fin Johnson. Photo: JON GRANGER

Youngest keepers get a buzz out of bees

A SOUTH Lakeland school has the youngest qualified beekeepers in the country - aged eight.

Pupils at Heron Hill Primary School, Kendal, have been managing and maintaining four hives with the first bees arriving in spring 2017.

Seven children from the school have now taken and passed a programme of exam and study

modules set by the British Beekeeping Association to earn their junior certificates. And two former pupils from Kirkbie Kendal School and one from Queen Elizabeth School, Kirkby Lonsdale, returned to the primary school to study and take the exam.

The children had to keep a beekeeping diary, complete a beekeeping project of their

choice, complete a hive inspection and carry out a number of other projects.

The successful primary school children were Mason Brooks, Fin Johnson, Lily Cottam, Tyler Ogilvie-Booth, Lily Dixon and Amy and Mia Verneulen. The two from KKS were Bobby and Lauren Gorst and the QES pupil was Amy Woodhouse.

## 2018-19 Courses and Open Meetings

### Gardening for Bees by Dr Julia Piggot

Wednesday, 13<sup>th</sup> 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 10<sup>th</sup> 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, 5<sup>th</sup> 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.

## Queen Bee



My research continues!

Best wishes for a happy and peaceful Christmas.

Fred Ayres, Editor & Chairman, December 2018



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## **The Lune Valley Long Hive** An innovative but simple long hive



### **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.

**Only £295**

**Only obtainable from Lune  
Valley Community Beekeepers**

# **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, 13<sup>th</sup> 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](http://www.lunevalleybeekeepers.co.uk)**

**Charity No: 1167725**

# ALTERNATIVE BEEKEEPING FOR BEGINNERS

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

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

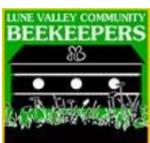
**If you have ever thought of owning a colony of honey bees but have been deterred by not knowing exactly what is involved, or how much time it might take, then this course is for you! This inter-active workshop focuses on responsible, low intervention, bee-centric approaches to beekeeping and will cover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



**Part 2: Sunday, 5<sup>th</sup> 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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