



November 2018

Welcome to the November 2018 newsletter. Any contributions or ideas for future editions please email to: newsletter@gwentbeekeepers.co.uk

Things to Think About

This Month's Meeting

This month's meeting is our AGM followed by a talk "25 Years of Bees for Development" given by Nicola Bradbear. The AGM is at 2.15 pm on Saturday 17th November 2018 at Goytre Village Hall. A copy of the agenda is included later in this newsletter.

Selling Goods at Future Events

Dan Baxter is co-ordinating our activities at the various shows and events that we attend during the year. At the events we plan to sell a range of beekeeping goods that you might be producing such as candles, soap, lip balm etc. Or perhaps you make skeps or some other equipment. The goods will be sold at your asking price plus a small uplift. If you are busily producing anything that you would like to sell through this route, please contact Dan on danielnbaxter@icloud.com

WBC Hives for Sale

Sadly William Stewart and his beekeeper partner Murray Macfarlane have had to sell their bees as William and his wife Valerie are moving to Essex in December. They have 4 complete WBC hives with floors, supers and brood boxes, smoker, honey extractor, settling tank, feeders etc. for sale. If you are interested, please contact William at willerie@btinternet.com

In the News

Honey yields at four-year high, after warm summer months increased bees' activity

Honey yields have hit a four-year high, as the record-breaking summer increased bees' productivity by a third.

Hobbyist beekeepers in Britain produced an average of 30.8lb (14kg) of honey per hive this year, compared with 23.8lb (10.8kg) in 2017, a survey found.

The yield is the highest since 2014, but still considered small compared to averages a few decades ago, according to the British Beekeepers Association's annual survey. It said that 50 years ago, beekeepers could expect close to 100lb of honey per hive.

Keepers and keen gardeners are now encouraged to plant more flowers which feed pollinators in the hope honey yields will continue to grow.

The increase this year is part of a "weird" and seemingly inexplicable four-year cycle of lucrative honey yields traced back to 2010, the BBKA said.

But it is unlikely to reduce the price of honey from small-scale beekeepers as they seek greater returns for their labours.

Wales had the greatest improvements in honey yields, which nearly doubled from last year's average per hive to 31.4lb (14.2kg).

Calwyn Glastonbury, who keeps more than 60 colonies in the Usk Valley, south east Wales, said: "Spring blossom came and went exceptionally quickly this year, which was a worry at the time, but the long, warm summer more than made up for it and was great for our honeybees."

Early weather woes, including the Beast from the East in Spring, were countered by soaring temperatures during the joint hottest British summer on record.

Diane Roberts, from the British Beekeepers Association, said: "There have been some very bad years, like 2012 when we had a very long winter, so again that's a weather effect. But we had, in 2014, a very similar figure for our honey to 2018, and again in 2010, so you're seeing, weirdly, a four year cycle."

In 2012 beekeepers produced just 8.1lb (3.7kg) per hive on average, but in 2014 the yield was 32.9lb (15kg). In 2010 the figure was 31.2lb (14.2kg) per hive.

This year's yield should not be cause for celebration among thrifty consumers however, Mrs Roberts said, as hobbyist keepers stick with charging upwards of £5 per jar.

She added: "A lot of beekeepers think we should be charging more because it takes a long time to produce a jar of honey. This was a good year for lots of people. It takes a whole year, a whole cycle to produce that honey."

The annual survey revealed beekeepers believe the public can help honey production by planting more nectar and pollen producing flowers, shrubs or trees.

Avoiding pesticides, reporting sightings of invasive Asian hornets which prey on honeybees and leaving an area of the garden to grow wild are also encouraged.

Honey production has fallen on average since the Second World War as agricultural practices change and bees have less suitable plants to feed on.

Margaret Wilson, chairwoman of the BBKA, said: "Honeybees and all our wild creatures need food to eat and that can only come from what we plant and grow, so gardening and agricultural practices are incredibly important."

Reproduced from an article by Lewis Pennock from Daily Telegraph online news 22nd October 2018.

This Month's Article

Study captures drumming of the honeybee 'wake-up call'

Scientists have recorded the honeycomb vibration of the honeybee 'wake-up call' for the first time – when the insects drum on the comb to prompt others bees in the hive to start getting busy.

The Nottingham Trent University team used simultaneous video and accelerometers embedded into the honeycomb of hives to monitor a very specific vibrational signal generated by the honeybees.

The 'Dorso-Ventral Abdominal Vibration' involves individual bees shaking or jerking to drum a vibration onto the comb or another bee, which then signals to others to start foraging for food or become more active.

This signal was previously only visible to the naked eye by opening up the hive – which can disturb the bees – and had only ever been measured during the day and for very short periods.

Now for the first time the team has been able to monitor the signal for more than a year without disturbing the colony.

They have found that there may be more to it than acting purely as a foraging wake-up call, as the signal is most common at night, when no foraging for food takes place.



The researchers argue that this may be because the bees are returning from a day's forage and issue the signal to prepare for a sudden influx of nectar and pollen. Or it could be the case that colony activation is crucial at night time for reasons unrelated to foraging, they say.

The signal reduces during the winter months when less foraging takes place, and increases significantly just before the bees swarm – when the majority of worker bees leave the hive with the queen to form a new colony.

The study – reported in the Nature Publishing Group journal [*Scientific Reports*](#) – involved continuously recording the vibrational amplitude and frequency in a number of hives over the course of a year, to investigate the long-term statistics of the signal.

This particular signal was recorded in the 'infrasound' range and was measured at 20Hz – an ultra-low wave frequency which is also used by elephants to communicate.

The faint drumming or purring the team recorded could be driven into speakers enabling the researchers to hear it for the first time.

“Bees rest to conserve energy when they don't need to be active, and some will wake the others up when it is time to start work,” said Dr Martin Bencsik, lead researcher and a scientist in Nottingham Trent University's School of Science and Technology.

He said: "As often in research, many new questions arise as well as new answers. We are puzzled by the enhanced occurrences of this signal at night time; there is obviously more to its function than just a foraging activation signal. "

He said: "We now have proof that honeybees induce specific vibrational waveforms into the honeycomb. Now that we have thorough measurements of these, we could artificially drive them into the comb to further challenge our understanding of its functions. There are numerous exciting new pathways to explore, as a result of this work."

Co-ordination of honeybee tasks are achieved through many cues and signals produced by individuals in the colony, often in the form of chemical and vibrational signals. Although the former is well explored, the latter is fairly poorly understood and belongs to a field of science recently coined with the term 'biotremology'.

Last year the same team reported how honeybees give a '[whooping signal](#)' in the hive – possibly as a response to being startled or surprised.

Michael Ramsey, a Nottingham Trent University scientist and the first author on the paper, said: "It is amazing how we can tap into the world of bees' vibrations using this technology. It allows us to experience a honeybee hive as if we were a bee stood on the comb.

"The further application of novel methods such as this for studying animal behaviour will enable scientists to create a more comprehensive understanding of the natural world."

Reproduced from an article from Trent Nottingham University.

For the complete article plus a fascinating video of the bees drumming on the comb go to:

<https://www.ntu.ac.uk/about-us/news/news-articles/2018/10/lets-get-busy!-study-captures-drumming-of-the-honeybee-wake-up-call>

Agenda for AGM

Opening of Meeting by Rhiannon Chandler and introduction to our President Dr Nicola Bradbear

Meeting chaired by Dr Nicola Bradbear

1. Apologies for absence
2. Receive Minutes of AGM of GBKA held on 11th November 2017

a. Matters Arising: 3. Reporting Officers:-

- Chairman's Report - Rhiannon Chandler/Ceri Joyner
 - Treasurer's Report - Russell Flynn
 - Membership Report – Russell Flynn
 - New Beekeeper Training - John Holden
 - Apiary Report - Janet Bromley
 - Swarm Liaison - Ken Key
 - New Apiary Site - John Holden
4. Election of Trustees and Officers - see attached detail
5. Presentation of Awards
Certificates for passing the Basic Exam and BBKA modules.
- June James Award – For dedicated contribution to GBKA
 - Chirnside Cup - For Best Usk Show competitor. Given 1998 for GBKA members who win

the most points at Usk Show
- Chirnside Cup -For Best Novice Beekeeper
 - Honorary Membership - In recognition and thanks for significant contribution to GBKA and Beekeeping
6. AOB

Events for Your Calendar

Beetradex
9th March 2019
Stoneleigh Park
Warwickshire

WBKA
Spring Convention
30th March 2019
Royal Welsh Showground,
Builth Wells

BBKA
Spring Convention
12-14 April 2019
Harper Adams University