

**BEE HEALTH ADVISORY FORUM (Bhaf)**  
**42<sup>nd</sup> MEETING – Thursday, 8<sup>th</sup> December 2022**

**MS Teams**  
**10:30 – 13:00**

**Attendance**

Belinda Phillipson (BP) - Chair	Department for Environment, Food & Rural Affairs (Defra) – Bee Health Policy (BHP)
Louise Mount (LM)	
Shaun Cook (SC)	
Kathleen Carroll (KC)	Welsh Government – Bee Health Policy
Rebekah Clarkson (RC) - minutes	National Bee Unit (NBU) – Animal & Plant Health Agency (APHA)
Cristina Ruiz (CR)	
Peter Davies (PD)	
Nigel Semmence (NS)	
Jon Haycock (JH)	Veterinary Medicines Directorate (VMD)
Rob Nickless (RN)	Bee Farmers' Association (BFA)
Wally Shaw (WS)	Welsh Beekeepers' Association (WBKA)
John Bowles (JB)	
Anne Rowberry (AR)	British Beekeepers' Association (BBKA)
Jane Medwell (JM)	
Martin Smith (MS)	Bee Disease Insurance (BDI)
Norman Carreck (NC)	Science Advisor – Sussex University
Giles Budge (GB)	Science Advisor – Newcastle University
Kirsty Stainton (KS)	Science Advisor – Independent
Adam Leitch (AL)	National Diploma in Beekeeping (NDB)
Ben Jones (BJ)	Fera Science Ltd.
Chris Hartfield (CH)	National Farmers' Union (NFU)
Raluca Herascu	Scottish Government
Claire Gill	

**Apologies received from:**

Julian Parker	Animal & Plant Health Agency (APHA)
Luis Molero	Scottish Government
Tom Williamson (TW)	DAERA, Northern Ireland Executive
Tim Andrews	Defra – National Pollinator Strategy
Paul Simpson (PS)	
John Heard	Bee Farmers' Association (BFA)

**1. Welcome and introductions**

The online meeting began at 10:35.

BP let the Forum know that Frank Petherbridge has moved on to another directorate within Defra and wished him well in his new role.

Jon Haycock is covering the Forum on behalf of the Veterinary Medicines Directorate (VMD) whilst Tahira Kauser (the current incumbent) is on a secondment.

Cristina Ruiz and Pete Davies attended as temporary Head of the National Bee Unit and National Bee Inspector respectively whilst Julian Parker covers another role within the Animal and Plant Health Agency.

Minutes of the 41st meeting had been published on BeeBase following email agreement.

### **Review of outstanding Actions:**

Action 40-1 'CH to update the 'Farming for bees' leaflet with the feedback received and bring back to the Forum'. CH provisionally agreed to the deadline of March 2023.

Action 40-2 'BBKA/WBKA to ask associations for mentoring experiences and send case studies by the end of September.' LM is expecting to receive case studies shortly. LM will provide an update to the Forum in March.

Action 41-2 'RC to send out a bespoke table of actions for each Forum member which they can then update ready for review at the next meeting.' This action remains ongoing.

Action 41-5 'RC to organise a face-to-face meeting at BBKA's head office in Stoneleigh.' This action was closed as attendees had agreed to a virtual meeting. BP emphasised the importance of having a substantial item to discuss should we choose to do a face-to-face meeting.

Action 41-6 'RC to agree a convenient date in February for the science meeting.' The date has yet to be agreed. RC to send out further dates in order to reach agreement. .

## **2 HBP 2030 Update**

RC described how she was working towards a system where Forum members could provide updates on HBP 2030 actions directly into a shared file. SharePoint is the preferred sharing platform but by default only provides access to Defra employees. RC's possible solution required obtaining work-based domain email addresses from attendees which could then be used to set permissions in a shared folder.

MS offered to host the document on a sharing platform used by his company if that would be of help. Although he acknowledged that due to government security procedures this was unlikely to work.

**Action 1:** RC to confirm work-based domain emails to set up a BHAF sharing area by 22<sup>nd</sup> Dec 2022.

Online courses with Menter a Busnes© have been reviewed by the NBU and all four modules are in the process of being translated into Welsh. The courses will be available for intermediate level beekeepers in March. RC will keep the Forum updated and ask for their support to signpost intermediate beekeepers to this new resource in 2023.

RC explained that we are working towards another education procurement exercise for delivery from April 2023 over the next three years. RC highlighted that there was a risk to delivery due to demand on procurement specialists for work related to the avian influenza (AI) outbreak.

AR asked if inspectors could be kept working on AI in the 2023 beekeeping season? CR expressed that it was unlikely and the NBU could ringfence resources for critical tasks if required.

RC asked the Forum if they wanted to update her on HBP 2030 implementation plan actions they have progressed or anything that they are concerned about.

AR explained how the BBKA had concerns about the levels of Foulbrood and asked how are hot spots areas prioritised? AR also requested an update about whether NBU would start the 2023 season fully staffed? CR explained that these concerns should be addressed in the next agenda item.

### **3 2022 NBU Update**

CR and PD provided a detailed update on the 2022 season:

- Hybrid working had been implemented successfully and was now the new normal.
- Face to face events including beekeeper engagement events had returned but were now run alongside virtual events too.
- The inspectors had gained valuable experience with Asian hornet (AH) in visits to Jersey.
- Recruitment campaigns had been run successfully.

#### **Resources**

- The regional bee inspectors (RBIs) for Wales, Western, South West, Central and South East regions are relatively new in post.
- Recruitment campaigns for RBI and Seasonal Bee Inspectors (SBIs) that ran in November were successful. There are still some vacancies remaining, so another campaign will be run imminently.

#### **Surveillance**

Overall inspections have decreased in 2022 compared to 2019 (pre-pandemic) by 22%. There are several reasons for this: heatwaves across the summer, recruitment controls across the earlier part of the year and many of the inspectors being new in post. However, inspectors have been able to do other activities as well as inspections such as bee health days.

#### **Disease**

- Inspections were carried out for 3031 different beekeepers, involving 4745 apiaries.
- There were 339 apiaries where disease was found (EFB or AFB).
- Inspectors found and treated 609 colonies with EFB and 29 with AFB as compared to 834 colonies with EFB and 54 colonies with AFB in 2021.

GB said it was useful to hear about the reasons for reduced numbers of inspections during 2022. He asked for confirmation that sites were re-inspected following a confirmed case of EFB. PD said that follow-up inspections were carried out as a priority and his understanding was that this was the case in all regions.

#### **Whole apiary shook swarm (WASSW) trial**

- The trial now has data from 2021 onwards and will continue into the 2023 season.
- None of the apiaries where WASSW has been used have shown reoccurrence of disease.

PD thanked BDI for funding a third year of whole apiary shook swarms when EFB was found.

MS explained because a fair proportion of colonies found late in the season were too small to do a shook swarm on, these must now be inspected in spring 2023 to have enough data.

MS asked about a contact for the scientific analysis of the data for the WASSW project. NS confirmed he should be the initial point of contact. BJ also said that Fera science would be willing to collaborate.

#### **Imports/Exports**

- Imports: The number of consignments has decreased while the number of individual queens has increased compared to previous years.
- 12 export applications had been received.
- One illegal shipment from Poland was found and subsequently destroyed at Dover.

MS asked how many queens are being imported into Ireland and how many come from Europe via Northern Ireland to the UK. His concerns were regarding self-sufficiency and queen rearing in the UK. Records from 2022 showed that 5488 queens were imported into NI from Europe and it

is thought that many of these queens will have then been moved to GB. In comparison a total of 19302 queens were imported into GB.

### **Other surveillance**

- VMD took 96 samples of honey and inspected them for suspect compounds. No suspect compounds were found.
- 4 'Wildlife Incident Investigation Scheme' (WIIS) cases were submitted– the results for these are still pending.
- There are currently 51 enhanced and 147 voluntary sentinel apiaries. New volunteers are still wanted.

KC wanted to know if there was detailed information on the outcomes of the WIIS cases. PD explained that although samples were taken in April, May and June they were still reported as awaiting analysis. PD said it is rare that bee WIIS samples are positive and rarer still to be associated to an agricultural spraying issue.

GB asked what could those (WIIS) substances be? BJ explained that WIIS screening is a targeted screen and offered to source the list of target substances.

### **DASH**

- 65 current members, with 20 new applicants invited for training in 2023.
- The highlights are the risk-based audit process that has been implemented and the online training trial.

MS asked for clarification on the number of hives DASH bee farmers must have. PD said beekeeper's with less than 50 colonies are not encouraged as the training and inspection regime would cause a disproportionate resource investment for both NBU and BFA members. MS explained how BDI use different schemes for beekeeper's with greater than 40 hives and planned to review this information.

### **Training and Education**

- 84 events were held in 2022, compared to 45 in 2021.
- Educational material had been produced which was distributed on the NBU's social media channels.

### **New and ongoing work for 2023**

- A public version of BeeBase is in development.
- Further social media content will be produced to support the HPB 2030 objectives.
- There will be a study tour to Thailand for some of the NBU inspectors to see Tropilaelaps.
- The Ghana bee health project is taking place. This is a collaborative project with Ghanaian government to promote best practice in beekeeping. It will involve some NBU inspectors contributing to training events.

### **Asian hornet update**

NS provided an update on the 2022 Asian hornet incursions. NS thanked the BBKA for the work of the AH Teams who inform the public to correctly identify and report suspect insects. NS outlined how there is still a long way to go as lots of people misidentify insects. In 2022 over 5000 insects were reported, but only 4 of those were Asian hornets.

GB asked NS about the AH relatedness analysis that was being conducted. NS suggested GB liaise directly with Fera Science Ltd. who were performing the analysis.

MS thanked NS, the NBU and AH teams for the ongoing work on Asian hornet incursions.

PD has observed that AH incursions in England are not like those in Jersey where many hornets may be spotted in an area. AH is also difficult to trap as they often prefer to feed on ivy blossom rather than at the bait stations. So, it can sometimes take days after a positive sighting to find hornets to track.

#### 4 Science Advisor Paper Review: Kirsty Stainton

KS reviewed, Dickel F, Bos NMP, Hughes H, Martín-Hernández R, Higes M, Kleiser A, Freitag D. The oral vaccination with *Paenibacillus* larvae bacterin can decrease susceptibility to American Foulbrood infection in honey bees-A safety and efficacy study. Front Vet Sci. 2022 Oct 17;9:946237. Freely available online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9618583/>

The study looked at trans-generational immune priming (TGIP) in queen honey bees against AFB. The study showed increased survivability of the offspring of queens that were vaccinated, when compared against placebo vaccinated control queens.

KS felt that this was a promising and interesting study as a proof of concept. However, she had several concerns about the study itself.

The results showed a high rate of loss at over 25% of colonies. A high proportion (10 out of 30) colonies had queen failure, which is a much greater rate of loss than would normally occur. Additionally, It wasn't clear what time of year the tests were run, which could have had a large bearing on the results. The paper also did not provide any molecular quantification of the reduction which makes it less obvious to attribute the cause of the results to the vaccine.

BJ was concerned that there was no assessment of the background level of AFB in the control colonies. Also, the methodology does not rule out that larvae which would survive an infection have not been selected.

Overall GB suggested it was a good first step, but the levels of control were not enough to control AFB alone – about 30-50% reduction in AFB was shown in this laboratory study. GB had concerns over bias as the company producing the vaccine was also sponsoring the study. He suggested that the use of statistics was not clear and therefore the variation shown could be attributed elsewhere. GB agreed with KS that this is a good proof of concept though and he has already asked for the data from the researcher and plans to do some analysis. GB offered to share findings with the Forum when they are available.

KC asked if this product was approved in Europe would it be a veterinary medicine? JH advised that it would need to be assessed by the VMD's biological team in the UK but if marketed as a treatment for disease it would be classed as a veterinary medicine.

#### 5 Science meeting Belinda Phillipson

BP thanked everyone who reviewed the list of science projects. BP invited the Forum to share themes that they would like to discuss in the 2023 meeting.

NC suggested **Integrating Varroa management in the UK**. He also suggested inviting Stephen Martin (University of Salford).

KS presents talks to beekeeping associations on *Varroa* and the science behind non-treatment, to encourage beekeepers to make informed decisions on how to approach *Varroa*. She would be happy to share this information in a science meeting. Beekeepers need to be aware *Varroa* mites must be controlled to ensure the health of the colony. We want to discourage beekeepers from 'non treatment' as they need to understand how many mites are in their colonies. Non-treatment is not a strategy.

GB suggested asking worldwide experts e.g., Marina Meixner and others to share their expertise which the other scientific advisers agreed with.

WS provided an alternative view point and described how Anglesey BKA have a colony that has not had *Varroa* treatment for >5 years. The colonies were started from collected swarms or feral nests. Although some colonies have been lost from high *Varroa* levels and deformed wing virus (DWV); most of the colonies have produced an average yield of honey and display no outward symptoms of high *Varroa* levels such as DWV. WS believes that there are several unanswered questions such as can you breed queens that are resistant and do queens have to mate with *Varroa* resistant drones? BP thanked WS for his work in progress and useful findings.

NC said that we need to be cautious about messages in this hugely complex area. There are numerous examples of 'resistant bees', but this could be due to differences in mites rather than the bees themselves.

GB also reminded the attendees that by being bee-centric we forget about the natural selection of mites which can happen at a much faster rate than bees.

NC had contributed to an EU study on non-treatment of *Varroa* and was happy to discuss this topic at a science meeting. He suggested Robert Paxton as a useful contact to speak further on this.

PD offered words of caution, the NBU inspect 30,000 colonies annually and *Varroosis* is the primary cause or contributing factor to colony death and many of these cases are due to beekeepers adopting a non-treatment approach. Beekeepers need to monitor *Varroa* mite levels and use treatments in order to maintain healthy colonies.

BP thanked everyone for their contributions and agreed that *Varroa* management would make for an interesting topic for the next science meeting.

**Action 2:** RC to contact external speakers for the 2023 Science meeting.

## **6 AOB/comms/news**

**NBU Forums (AR).** AR had heard about the well-received Northern Forum and asked if these were held elsewhere. PD replied each region has either had a Forum already or would receive one prior to the next beekeeping season. NBU aim for the content to be a learning experience to disseminate to Associations, but there is often little engagement regionally. BBKA asked for the details of South West and Central Forums and offered to help share invites to encourage more engagement. PD asked for the contact details to be kept up to date by associations so that the invitations reach the right people.

**Action 3:** BBKA/WBKA to request Associations update their contact points.

**NBU attendance at BBKA's Spring Conference 2023.** AR expressed disappointment that the NBU were unable to attend their Spring Conference and asked if there was a way of aligning diaries to avoid conflict with the NBU's technical training. CR explained that unfortunately due to the dates of the Easter school holidays it was not possible to find an alternative week for the training. CR said that the NBU will still have a stand at the event but would not be able to provide a presentation. AR clarified BBKA do support the work of the NBU.

**Apiculture option** update (BHP). LM advised that no further comments had been received regarding the Apiculture options presented in September so there would be no changes to the programme for 2023/24.

**Hive Count.** RC provided an update on the 2022 hive count, the response figure on 06/12/2022 was 10,566, a 27% response rate. This is the highest number of responses to date. RC asked the Forum to remind their members to respond.

**Honey Labelling petition.** AR explained that the BBKA is concerned by products labelled as honey that have not been produced by bees. AR invited the Forum to sign the BBKA's petition which calls on the Government to change the Honey labelling rules, so consumers can easily recognise all countries of origin of the honey contained in a jar sold in the UK.

<https://petition.parliament.uk/petitions/624402/>

**Action 4:** RC to send out doodle polls to confirm the date of the next BHAF meeting to be held in 2023.