# BEE HEALTH ADVISORY FORUM (BHAF)

# 44th MEETING - Thursday, 22<sup>nd</sup> June 2023

10:30 - 11:57

#### Attendance

Belinda Phillipson (BP) - Chair			
Louise Mount (LM)	Department for Environment, Food & Rural Affairs (Defra) – Bee Health Policy (BHP)		
Shaun Cook (SC)			
Kathleen Carroll (KC)	Welsh Government – Bee Health Policy		
Rebekah Clarkson (RC) - minutes	Alatianal Daa Huit (AIDH) Animal O Dlant		
Julian Parker (JP)	National Bee Unit (NBU) – Animal & Plant Health Agency (APHA)		
Nigel Semmence (NS)	licatif Agency (Al TIA)		
Jon Haycock (JH)	Veterinary Medicines Directorate (VMD)		
Julie Coleman	BBKA		
Wally Shaw (WS)	Welsh Beekeepers' Association (WBKA)		
John Bowles (JB)			
Giles Budge (GB)	Science Advisor – Newcastle		
	University (11:00)		
Kirsty Stainton (KS)	Science Advisor – Independent		
Norman Carreck (NC)	Science Advisor – Sussex University		
	(11:20)		
Adam Leitch (AL)	National Diploma in Beekeeping		
	(NDB) (10:45)		
Ben Jones (BJ)	Fera Science Ltd.		
Chris Hartfield (CH)	National Farmers' Union (NFU)		
Tim Andrews	Defra – National Pollinator Strategy		
Lindsey Watt	Scottish Government		

Apologies received from:

Rob Nickless (RN)	Poo Farmore' Association (PFA)
John Heard	Bee Farmers' Association (BFA)
Martin Smith (MS)	Bee Disease Insurance (BDI)
Tom Williamson (TW)	DAERA, Northern Ireland Executive
Anne Rowberry (AR)	Pritich Booksoners' Association (PRKA)
Jane Medwell (JM)	British Beekeepers' Association (BBKA)
Diane Stephenson	DAERA, Northern Ireland Executive
Claire Gill	Scottish Government

Time in brackets records when people joined the meeting after 10:35 due to various issues.

# 1 Welcome and introductions

Belinda welcomed everyone at 10:35 and explained the science paper item would be discussed later than the circulated agenda so GB could join the meeting later.

Minutes from the previous meeting had been agreed over email and published on BeeBase<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> <a href="https://www.nationalbeeunit.com/assets/PDFs/1">https://www.nationalbeeunit.com/assets/PDFs/1</a> About Us/Bee Health Advisory Forum minutes/BHAF-Notes-43rd-meeting.pdf

## **Review of outstanding Actions:**

Mtg			Update
no-			
action		_	
no	Action Detail	Owner	
			Agreed to do
			this in
			person at the
40.4	CH to update the leaflet with the feedback received and		October F2F
40-1	bring back to the Forum	NFU	meeting.
	send out a bespoke table of actions for each Forum		Overdue -
	member which they can then update ready for review at		RC to send
41-2	the next meeting.	RC	out ASAP
			Overdue -
	RC to send links to the SharePoint folder allowing forum		RC to send
43 -1	members to update their progress on actions	RC	out ASAP
	Investigate with the NBU about moving the link to the		Ongoing
	VMD 'Product Information Database' to a more		
	prominent area on BeeBase so that it is easier for		
43-2	people to find.	BP	
	Enquire about any changes to imports and exports of		Ongoing
	honey following the TOM and Windsor agreement from		
43-3	the appropriate Defra policy teams	BHP	
	send out a doodle poll of times between 26th to 28th		Completed
43-4	October 2023, to agree a slot for the next BHAF.	RC	30/03/2023
			Completed
43-5	request agenda items from the Forum in April	RC	04/05/2023

# 2 Mentoring (began 10:44)

A mentoring framework document, which included case studies from WBKA and BBKA had been circulated to attendees prior to the meeting. The document completes action 26 in the Implementation Plan<sup>2</sup>. LM thanked both WBKA and BBKA for their case studies and asked for the Forum's comments. BP hoped the case studies would be useful for beekeepers, to see examples of how mentoring had worked in practice.

JP said it would be useful to see mentees views on the different interpretations of mentoring. WS explained that mentees get more hive years under their belt than beekeepers working in isolation as they get to deal with many different situations. Mentees WBKA work with had benefitted greatly and learned so much more about beekeeping in their area.

JM/AR from BBKA both sent notes to confirm that the framework case studies are anonymised at their members' request. LM confirmed the case studies would be anonymous. BP had been impressed by BBKA's recent articles on mentoring<sup>3</sup>.

**Action 1:** Publish the mentoring Framework on BeeBase before the next meeting (RC).

## 3 Healthy Bees Plan 2030 Implementation Update (began 11:02)

<sup>2</sup>https://www.nationalbeeunit.com/assets/PDFs/4 Bee Health Improvement/HBP 2030/Implementation plan English.pdf

<sup>&</sup>lt;sup>3</sup> Hodges, E., Hudson, M., Courtman, K., Glassborow R. (2022) 'The Role of a Mentoring Officer'. BBKA News Incorporating the BBJ, p.383.

RC apologised for not circulating the Excel document containing actions for forum members to update, as outlined in action 41.2, and confirmed that this would be sent in the next two weeks.

RC asked the Forum for any of their highlights during the last quarter. The Forum agreed to focus on the Training Programme theme in the face-to-face meeting in October.

**Action 2:** Forum members to present an update on their training programmes at the face-to-face meeting in October.

## 4 Asian Hornet Update (began 11.17)

JP gave an update on the 5 Vespa velutina reports to date during 2023:-

- 1. Northumberland, Northumbria confirmed 11 April– single hornet captured
- 2. Folkstone, Kent reported 13th April single hornet photographed
- 3. English Channel, offshore from Dorset, reported 17th April single hornet photographed 10th April
- 4. Ashford, Kent confirmed 23 May- single hornet captured
- 5. Canterbury, Kent confirmed 31 May- single hornet captured

JP explained that the NBU is well prepared for further incursions. Over winter we updated our standard operating procedures from lessons learned last year and improved our bespoke track and trace app which is used to record sightings, traps, and information electronically. We carried out incident commander training at the spring technical training and have a strong compliant ERMAS audit submission (emergency readiness management assurance scheme). Additionally, NS has prepared a gap analysis which has been used to select bee inspectors to send to Jersey to improve identification and tracking skills. We've also improved FOB (Forward Operating Base) facilities with access to welfare vans and improved the equipment. The Asian hornet contingency plan has been refreshed and is available on BeeBase<sup>4</sup>. The nest destruction product 'Vulcan P5' was tested last year and has proven itself to be reliable for *Vespa velutina* nest destruction.

NS highlighted recent high Asian hornet reporting figures from Europe and described how Guernsey did a spring trap every 500m along its coastline and had caught high numbers of queens compared to previous years.

AL reflected the numbers are scary! He asked if the trapping on the NE of Jersey is new and if England should set up a line of traps to safeguard against European incursions? NS explained that current traps are not selective enough and the implications for by-catch would be detrimental to our native pollinators. Wick-bait stations have found to be very effective to attract Vespa velutina without by-catch in Jersey. NS said he had just written an article on Asian hornet which would be published in BBKA News in August.

AL asked if the cause of the increased *Vespa velutina* populations was known, e.g. improved overwintering conditions or better food availability? JP said, we can only speculate, and it was difficult to draw conclusions.

GB asked what method is used by Fera Science Ltd to understand whether analysed samples are queens? NS clarified that mesoscutum width (Ohl and Thiele 2007)<sup>5</sup> is used

<sup>&</sup>lt;sup>4</sup> https://www.nationalbeeunit.com/assets/PDFs/2\_Diseases\_and\_Pests/Asian-Hornet/2023-01-03 Asian hornet contingency plan Public version English-AC.pdf

<sup>&</sup>lt;sup>5</sup> Ohl M, Thiele K (2007) Estimating body size in apoid wasps: the significance of linear variables in a morphologically diverse taxon (Hymenoptera, Apoidea). Mitteilungen aus dem Zoologischen Museum Berlin 2: 110–124. https://onlinelibrary.wiley.com/doi/abs/10.1002/mmnz.200700003

and is the most reliable method, as the condition of hornets was quite variable, making dry weight unreliable. BJ agreed.

BP Fera have recently published a paper on research on Asian hornet diets by analysing the contents of their gut<sup>6</sup>

We are also interested in population genetics and suggested this could be a topic at a future BHAF. AL agreed that this would be interesting to hear more about.

#### **5 Science Advisor Paper Review** (began 11:30)

GB reviewed Binney *et al.*'s paper<sup>7</sup> on the genomic analysis of the population structure of *Paenibacillus larvae* in New Zealand. The study is a useful comparison for a similar country to GB. However, there are several key differences, New Zealand's main aim is to eliminate AFB by reducing its incidence in managed honey bee colonies by 5% each year. New Zealand has compulsory registration and every colony is inspected as a minimum once a year.

Researchers created a whole genome sequence of P. larvae using cultures. GB reflected that the updated AFB family tree/ phylogenetic tree still had a few big jumps suggesting there is still some data missing. The spatial analysis of strain types provided in the paper suggests movement of hives by beekeepers could be the main cause of disease spread in NZ. GB thought that the paper demonstrates how AFB is 'a tricky beast to deal with'.

Despite compulsory registration of beekeepers and a programme focused on eliminating AFB the levels of disease were still slightly higher than the UK. BP reflected that despite compulsory registration they aren't looking closely at beekeeper movements which the paper shows could be the main factor in the spread of the disease.

WS spoke about his experience in NZ in 2006, where despite mandatory registration around 25% of beekeepers were still not registered. BP suggested there had likely been considerable enforcement action in the intervening time.

BJ asked GB if he saw value in using multi locus sequencing typing (MLST) to inform risk based on distance for beekeeper inspections. GB thought that it had the potential value and suggested discussing it outside of the meeting.

BP thanked GB for selecting the paper which had produced an interesting discussion.

#### 6 AOB/comms/news 12:15

6.1 GB shared that Newcastle University had made a successful bid to become the UKs only contributor to a new Horizon Europe funded project called "Beeguards". The project is very wide ranging, but the Newcastle component will investigate pest and pathogen spread under climate change and how climate shocks can impact honey bee health.

## 7 Forward Look (began 12:30)

#### 7.1 Planned events

<sup>6</sup> Stainton, K.; McGreig, S.; Conyers, C.; Ponting, S.; Butler, L.; Brown, P.; Jones, E.P. Molecular Identification of Asian Hornet *Vespa velutina nigrithorax* Prey from Larval Gut Contents: A Promising Method to Study the Diet of an Invasive Pest. *Animals* **2023**, *13*, 511. <a href="https://www.mdpi.com/2076-2615/13/3/511">https://www.mdpi.com/2076-2615/13/3/511</a>

<sup>&</sup>lt;sup>7</sup> https://www.frontiersin.org/articles/10.3389/fmicb.2023.1161926/full

<sup>&</sup>lt;sup>8</sup> https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/org-details/99999999/project/101082073/program/43108390/details

- National Meadows 1<sup>st</sup> July<sup>9</sup> KC shared how she planned to attend an event in the Vale of Glamorgan. Meadows events were being supported by Welsh Government 'cut and collect'<sup>10</sup> seeds funding. BP described 'no mow' practices were improving forage in her local area.
- Bees Needs Week 10<sup>th</sup>- 16<sup>th</sup> July<sup>11</sup> RC reminded the Forum of a 'prekeeping quiz' asking questions about honey bees during bees needs week. The quiz will provide answers and signpost people to resources about bees. The quiz will fulfil action 23 in the implementation plan 'develop a pre-keeping product'.
- Wales Nature Week 22<sup>nd</sup> 30<sup>th</sup> July<sup>12</sup> organised by the Wales Biodiversity Partnership was designed to encourage people to discover and enjoy flora and fauna.
- **Asian Hornet week** 4-8<sup>th</sup> September. BBKA/NBU planning a meeting to coordinate comm's.

## 7.2 Proposed Agenda items

RC asked the Forum if they had any suggestions for future agenda items. VMD had offered to provide a presentation on available Veterinary Medicines and the current process.

7.3 Future meetings

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No	Dates/info	Location		
45	Wednesday 25 <sup>th</sup> October 10:00 – 14:00 this will be a hybrid meeting.	Sandown Park		
46	Thursday 7 <sup>th</sup> December 2023 10:30 - 13:00	Virtual - MS Teams		
	Wednesday 14 <sup>th</sup> February 2024 13:30- 16:00	Virtual - MS Teams		

BP thanked everyone for joining the Forum at this busy time of year and wished everyone a good summer.

## 8 Meeting closed 11:57

<sup>9</sup> https://meadows.plantlife.org.uk/national-meadows-day/

<sup>10</sup> https://www.gov.wales/road-verges-and-amenity-grasslands-supporting-wildlife#93665

<sup>&</sup>lt;sup>11</sup> https://www.gov.uk/government/publications/bees-needs/bees-needs-campaign#bees-needs-week-2023

<sup>12</sup> https://www.biodiversitywales.org.uk/Wales-Nature-Week