

**Summary Note of the Bee Health Advisory Forum
12th Meeting – 4 December 2014
Nobel House, London**

Present:

Richard Watkins (Chair)	Department for Environment, Food & Rural Affairs (Defra)
James Smith	
Kevin Beattie	
Gay Marris	Animal & Plant Health Agency (APHA)
Marie Holmes	
Mike Brown	
Katherine Roberts	Food & Environment Research Agency (Fera)
Tim Lovett	British Beekeepers' Association (BBKA)
David Aston	
Margaret Ginman	Bee Farmers' Association (BFA)
Wally Shaw	Welsh Beekeepers' Association (WBKA)
John Bowles	
Bob Smith	National Diploma in Beekeeping (NDB)
Steve Sunderland	Scottish Government
Jane Jones ☎	Welsh Government (WG)
Les Eckford ☎	

Apologies:

Chris Hartfield	National Farmers' Union
Andy Wattam	Animal & Plant Health Agency
Mike McGuinness	
John Mellis	Bee Farmers' Association
Louise Mount	Department for Environment, Food & Rural Affairs
Denise Burgh	Veterinary Medicines Directorate (VMD)
Ken Basterfield	National Diploma in Beekeeping
Dan Basterfield	International Bee Research Association (IBRA)

1. Welcome and introductions

The Chair welcomed attendees to the 12th meeting of the BHAF, including James Smith of Defra who was visiting to meet members of the Forum, Katherine Roberts of Fera who was appointed as NBU research Co-ordinator and Kevin Beattie of Defra who was appointed as Bee Health Policy Advisor.

2. Update on IPI dissemination event

Margret provided the below update to the Forum from the IPI dissemination event held 21st October 2014.

1. Modelling systems for managing bee disease: the epidemiology of EFB

Dr Giles Budge and Mike Brown from the NBU together with Dr Samik Dattafto. Warwick University told how the aim of this project was to improve control strategies for bee diseases. Dr Budge spoke of the large database of historical information available due to the NBU's inspection service.

2. Unravelling the impact of varroa mite on the interaction between the honeybee and its viruses

Dr David Evans talked of the presence of high levels of varroa being associated with DWV and said his research had demonstrated that a single type of recombinant (hybrid) DWV accumulates in the pupae.

3. Impact and mitigation of emergent diseases on major UK insect pollinators

This project took a broader view of the pathogens affecting bees with particular reference to nosema ceranae and DWV. They investigated whether these two elements were the cause of poor health in honeybees but also evaluate their role in bumblebee health.

4. Can bees meet their nutritional needs in the current UK landscape?

This work led by Geraldine Wright at Newcastle a University would be of particular interest to bee farmers. The project was designed to look at the macronutrients requirements of honeybees and bumblebees. Geraldine found bees did not survive very well if fed on a diet of too much protein. An important result, was that to enhance colony survival it was important to provide bees with separate sources of protein and carbohydrate so they can regulate their intake themselves.

5. An investigation into the synergistic impact of sub lethal exposure to industrial chemicals on the learning capacity and performance of bees

This was led by Chris Connolly from Dundee University and focussed on the interaction of dietary protein and sub lethal doses of neonicotinoids. They also asked whether there were contributing factors from beekeeping practices.

6. Sustainable pollination services for UK crops

Professor Simon Potts told the meeting of the £125 value per hectare of pollination on field beans. However, the values were different for apples, good pollination was worth £37million pa for gala and cox apples alone. There was £6m of untapped profit for gala apples if pollination was right.

7. Urban pollinators: their ecology and conservation

Jane Memmott from Bristol University led this. She compared urban areas to farmland Areas and highlighted the importance of planting the right flowers in city areas.

8. Linking agriculture and land use change to pollinator populations.

Professor Bill Kunin from Leeds University stressed the importance of listening to bee farmers. "They know the best places to put their hives," he told the audience.

9. Investigating the impact of habitat structure on queen and worker bumblebees in the field.

This was led by Dr Claire Carvell and was designed to improve understanding of land management on bumblebee foraging and colony dynamics.

The Chair thanked Margaret for the update. It was suggested that projects 4 and 2 were of particular interest to the Forum and Geraldine and David should be invited to a meeting to present further on the topics. Project 9 was also deemed appropriate to keep a watching brief on.

Full details can be found on the IPI website www.insectpollinatorsinitiative.net

ACTION 1: Marie to write to Belinda Phillipson and Willem Roelofs for them to describe the timetable from turning science into practice notes and how BHAF could engage in the process.

ACTION 2: Marie to invite Geraldine Wright and David Evans to the Forum to present on their findings.

ACTION 3: Tim Lovett to forward to Marie the PDF description on IPI projects for circulation to the Forum.

3. Introduction to NBU Research Co-ordinator

Katherine Roberts introduced herself to the Forum as the newly appointed NBU Research Co-ordinator. Katherine had only been in post a month and envisaged taking on elements of Giles Budge's IPI project, in addition to other projects such as Smartbees which would identify crucial facets of honeybee resistance to Varroa and viruses, plus understanding the genetics involved in evolving those traits.

Katherine's background was as a Biologist and specialised in evolutionary ecology. Her PhD was on transmission dynamics of nosema parasites of the honey bee.

The Forum commended having work on varroa and the importance of the bee breeding programme dissemination was stressed, as was the importance of having a national strategy devised to run alongside dissemination which should include speaking to beekeeping memberships before designing models. Katherine replied that the Smartbees dissemination work package was as large as the other work packages and that the funders were keen all members were signed up to that work package. The Smartbees website was nearing completion and this would be updated on BeeBase research and development pages with direct links.

ACTION 4: All – Please forward any further questions to Katherine via Marie Holmes.

4 – Highlight report

The Chair invited comments on the report which had been circulated prior to the meeting.

Risk 2 – Lack of progress with extending range of authorised medicines. Tim updated the Forum on a meeting he attended where that impact of revised veterinary medicines was discussed. It was proposed that directive would become regulation to be complied with rather than encouraged to be observed. The impact of the regulations were some way off as there would be a 3-year period consulting with EU member States plus a transition period. Tim felt VMD were trying hard to consult and were given good exposure during the meetings.

The use of hive cleaners was raised and VMD had contacted and reviewed adverts which appeared to make medicinal claims and advised advertisers needed a license if they were to make medicinal claims and given a grace period to amend/withdraw.

Completed key activities – remove indicators of progress and update of future of Fera from 11th meeting activities.

ACTION 5: Marie to remove indicators and future of Fera from 11th meeting completed activities.

5 – Update on SHB outbreak in Italy

Mike Brown updated the Forum that on September 11 2014, the Istituto Zooprofilattico Sperimentale delle Venezie Italian National Reference Laboratory for Apiculture confirmed the first detection of the presence of Small hive beetle (SHB) in South West Italy, in the port city of Gioia Tauro.

Since its discovery, urgent measures were underway to measure the extent of the outbreak, complete tracings (sales and movements of bees from the area) and eradicate and control its spread in line with EU legislation and safeguards. Measures included the destruction of all colonies where the beetle was found and treatment of surrounding soil in the apiaries.

Since 2011, there had been a substantial level of imports of package bees and queens from Italy into the UK. The National Bee Unit (NBU) had re-inspected all Package bees imported from Italy this year across England and Wales, all negative for SHB. Beekeepers were reminded to remain vigilant when checking their colonies and to immediately report any suspicious sightings to the NBU.

Mike then presented an overview of the SHB and what the NBU were doing, which included:

- Potential pathways to arrival i.e. hitch-hiking freight risk.
- Maps of the Italian outbreak which can be found on the [ANSES](#) website.
- Contingency planning. This was integral and ongoing for many years. Other elements included the HBP, policy review, switch to exotic pest surveillance and were members of EURL EPI team specialist board.
- The NBU had plans specifically on SHB and Asian hornet and regularly (typically twice yearly) conducted field based and office based scenarios. Field based scenarios were ran over 2 days with a genuine practice exercise. It was suggested for the beekeeping associations to be involved in the next desk-based exercise with a particular focus on communications.
- Research has been the NBU's philosophy for many years. Such research included: Sentinel apiary stress testing, modelling spread, Met office interaction, dispersion modelling, R&D, biological and chemical and publications.
- Continued surveillance: 8000 apiary inspections/year which targeted 'at risk' apiaries.

The following questions were raised during discussions:

Q) Had the Italian authorities looked at bumblebee nests too? This was doubted and the concentration of efforts would have been on honeybee colonies.

Q) How long had SHB been there? This was unknown but hypothesised to not be long as they had only found adult beetles, with the exception of 4 apiaries where larvae was found with one pupae.

The topography of the infected area was flat and surrounded by mountains. When an infestation was found it was destroyed and the soil treated. Everything within the 20km radius was checked, this backed up the NBU contingency plan which also had a 20km radius check.

Margaret Ginman updated the Forum on what the beekeeping community had discussed through CONBA of which Margaret was Chair. Discussion centred on what beekeeping associations could do which included:

- Maximising benefits of geographical nature of the UK
- Importation of bees – discouraged ban of bees (black market element) but regulated as present

- Primary change of culture towards self-sufficient production of queens and colonies in the UK – perhaps the forum could look at funding queen rearing projects
- Better education of all on the ground.

6 – Update on Asian hornet contingency plan

Gay Marris presented an update on the Asian hornet, key points included:

- Lifecycle and biology (including props)
- Spread
- Non Native Species Secretariat formal risk assessment
- Potential for arrival, establishment and spread
- Impacts – economic, social, environmental
- Response plan – rapid detection,
- Preventing establishment
- Briefing ministers
- Key science fact sheet – literature review
- Videos on nests and destruction methods

The Chair checked whether Wally and Bob's questions posed prior to the meeting had been answered through the presentation which they had.

David requested a simple sheet to send to members who enquired about Asian hornet.

ACTION 6: Gay to forward the existing Asian hornet factsheet to David.

It was asked whether there were any plans for a Kent based contingency exercise? Future exercises were likely to be concentrated on the East Anglian coastal area.

Due to the non-statutory nature of the pest, it was queried whether this was an impediment to the approach? Usual statutory powers wouldn't apply in this situation so searches would have to be conducted with goodwill and cooperation of home/land owners.

To help with managing and assessing R&D Willem Roelofs of Defra Evidence and Analysis team would put out a paper which he would value the input of BHAF.

7 – Update on progress with 2014/15 education projects

There was no time to discuss education projects. Marie requested for reports to be submitted to her. BFA and NDB had reports at the meeting which were handed over. This would be an agenda item at the next meeting so all could keep up to date with each other's activities.

ACTION: BBKA to forward Marie update on progress for 2014/15 education activities.

8- AOB

As we had come to the end of the year's set-dates Marie would Doodle-poll for 2015 dates. If there were any particular discussion topics members would like to see covered during the year please contact Marie.

ACTION 7: Marie to Doodle-poll for 2015 BHAF dates (a blend of York and London for location)

ACTION 8: All – Notify Marie of potential discussion topics for meetings throughout 2015.

Table of actions

Action Number	Action	Person(s) responsible
1	Write to Belinda Phillipson and Willem Roelofs for a description of the timetable from turning science into practice notes and how BHAF could engage in the process	Marie Holmes
2	Invite Geraldine Wright and David Evans to the Forum to present on their IPI funded project findings	Marie Holmes
3	Forward to Marie the PDF description on IPI projects for circulation to the Forum	Tim Lovett
4	Forward any further questions to Katherine via Marie Holmes	All
5	Remove indicators and future of Fera from 11 th meeting completed activities.	Marie Holmes
6	Forward the existing Asian hornet factsheet to David Aston	Gay Marris
7	Send Doodle-poll for 2015 BHAF dates (a blend of York and London for location)	Marie Holmes
8	Notify Marie of potential discussion topics for meetings throughout 2015	All