

RESPONSE TO THE BEE HEALTH POLICY REVIEW

Improving Honey Bee Health

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In 2011, on behalf of Defra and the Welsh Government (WG), the Food and Environment Research Agency (Fera) bee health policy team undertook a review of current Bee Health Policy.

The review sought to decide how best to manage pests and diseases in the future so that:

- the optimum policies and interventions are in place
- priorities for future collective action (partnership working) by government and beekeepers are clear
- we are making the best use of current public funding/resources for this programme in order to sustain a healthy honey bee population for pollination.

The review, which took a year to complete, was carried out by a diverse team with representatives from Defra and WG Bee Health Policy, the National Bee Unit (NBU), the Bee Farmers' Association (BFA; commercial) and amateur beekeeping associations (BKAs), and an independent scientist. In January 2013, a range of proposed policy changes were presented for public consultation, with final responses being collated after its close in March 2013. If



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Delivering education and training to beekeeping associations

you would like to read more about these processes, please visit: <https://www.gov.uk/government/consultations/improving-honey-bee-health>.

Revised Policy Options

In brief, the review set out three options for future policies, the recommended and chosen option being *to refine and build on current policies with a renewed commitment to collective action by government, beekeepers and BKAs* ('Option 1').

The objectives of the revised Policy are outlined below.

The future shifts in direction for Bee Health Policies, which will therefore guide the activities of the National Bee Unit when

working in partnership with beekeepers, are covered by the following themes:

- Enabling beekeepers and improving their self-reliance, for example by sharing data and analysis on pest and disease risks with beekeepers; by planning, coordination and delivery of education and training.
- Tackling causes of problems (not just symptoms), eg, improving the response by government, supported by BKAs, to recurrent outbreaks of serious diseases such as European foul brood (EFB).
- Formalising and extending better regulation approaches for the control of American foul brood (AFB) and EFB,

specifically by recognising and rewarding good practice (by reducing inspection burdens). This approach, now already being introduced to some commercial and semi-commercial beekeepers, is known as the Disease Accreditation Scheme for honey bee (DASH). Further information about DASH will be provided in a follow-up article.

- Broadening the focus of government's role to cover other pests and diseases (not just notifiable foul broods) including re-focusing on varroa management (campaigns and training) to reduce colony losses.



Results of a study designed to help beekeepers look after their bees better



A comb showing symptoms of European foul brood

- Managing emerging threats by refocusing on surveillance and early detection and expanding management options for exotic pests, examples of which are given later in this article.

More specifically, Defra's recommended policy changes for each pest and disease under consideration are laid out below:

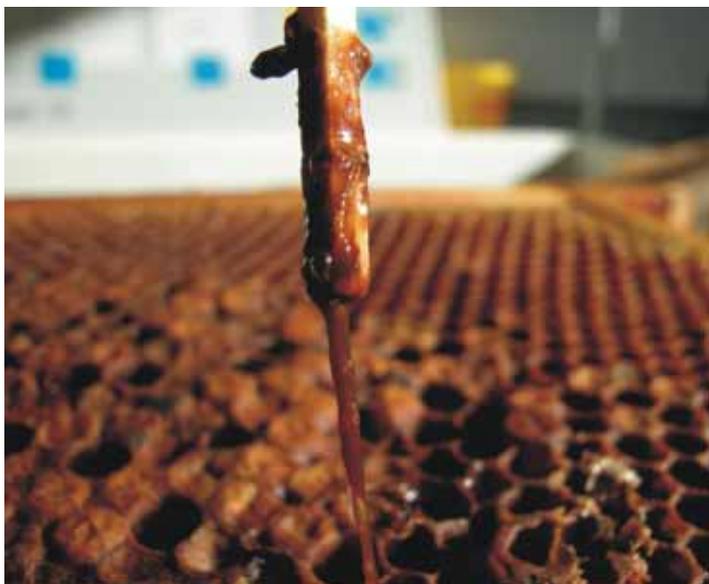
Intended Outcomes from Updated Policy on AFB and EFB

- To lower the incidence of AFB and EFB.
- To avoid losses by beekeepers and, as a result, reduce costs to them from having to

replace colonies lost because of disease.

- In the longer term, reduce costs to tax payers (for AFB and EFB surveillance and control) with opportunities to reallocate resources to other bee health priorities; increased appreciation, value and use of disease prevention (biosecurity and barrier management) by beekeepers.
- To increase appreciation by beekeepers of the importance of AFB and EFB and their role in effective control of these diseases.
- In the long term, if in-field diagnostics can be

The rope test for American foul brood



developed, particularly for confirming the presence of the pathogen *Melissococcus plutonius* (EFB), have evidence of beekeepers using these tools and taking action to reduce risk of symptoms/outbreak.

- No outbreaks of AFB or EFB associated with the sale of bees, particularly starter colonies (nucleus colonies).
- No outbreaks of AFB associated with honey packing plants (where AFB risks may be present due to spores in imported honey).

Intended Outcomes for Updated Policy on the Exotic Pests Small Hive Beetle, *Tropilaelaps* and the Asian Hornet

To optimise the chances of early detection:

- In the event of arrival (effective implementation of the contingency plan to), eradicate and prevent establishment, if possible.
 - To outline a clear rationale for moving from an eradication policy to a containment policy, (including informing beekeepers).
 - If any of these pests become established, educating beekeepers on how to manage this/these pest/s effectively to minimise impacts on their colonies. This would be subject to ensuring practical advice was available to beekeepers on treatments and husbandry methods.
 - If established, beekeepers manage this pest effectively to minimise impacts on their colonies.
- More specifically*, building on current policy, government and beekeepers working together on a package of additional

measures to increase the chances of early detection and eradication of exotic pests and, if unsuccessful in preventing establishment, to provide robust advice to beekeepers on effective management. The following are examples of measures that may be taken to ensure this:

- Step up raising awareness so beekeepers (and others) are able to identify and detect exotic pests leading to early notification of arrival.



The small hive beetle, *Athena tumida*

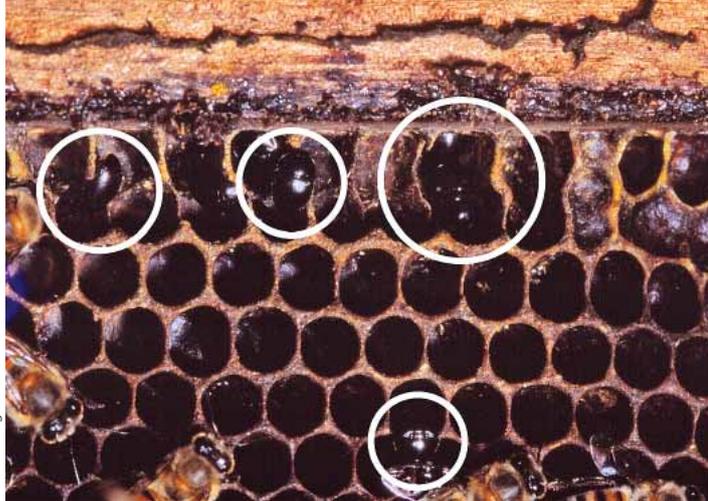


Tropilaelaps spp.



The Asian hornet, *Vespa velutina*

- Expand network of sentinel apiaries at risk points and also at other sites to increase likelihood of detecting introductions at non-risk sites.
- Expand exotic pest surveys.



Small hive beetles on the comb of a colony of *Apis mellifera scutellata* in Tanzania. The bees control the beetles by containing them in a 'prison' made from wax

- Raise beekeepers' awareness of number of incursions/outbreaks (trigger points or thresholds) which are likely to guide decisions about moving from an eradication policy to longer term management/containment.
- Exercises to test contingency and response plans including training of beekeepers who would assist the response (disease liaison contacts).
- Develop and/or clarify additional treatment and management options for eradication and containment.
- Provide robust advice to beekeepers on how to manage this pest if it becomes established, taking into account evidence on how best to influence beekeepers' behaviour.

Intended Outcomes from Updated Policy on Varroa

- To renew the commitment by government, working with beekeeping associations, to improve beekeepers' management of varroa.
- To reduce colony losses and associated costs to beekeepers.
- To ensure the effective use of authorised treatments.
- No veterinary medicines

or illegal residues found in honey.

The Implementation Plan

In order to realise the intended outcomes of the policy review (as outlined above), an Implementation Plan is being drawn up for 2014. This important document sets out the specific objectives of the review, describing how and when these will be met and clarifying how all the partners

will work together. The Plan will be presented and agreed at the Healthy Bees Plan Bee Health Advisory Forum.

The objectives of the Implementation Plan fall under five broad categories, namely

- Communications
- Training
- Foul Brood Detection and Control
- Biosecurity and Contingency Planning
- Evidence and Analysis.

As already stated, the Plan has yet to be finalised but contributions have already been made to some of the objectives, others are underway and others are yet to be implemented.

Work Underway

One of the objectives already contributed to under the Plan is the update of advisory leaflets, in particular: *Managing Varroa, Foulbrood Disease of Honey Bees and Other Common Brood Disorders, The Small*

Hive Beetle, a Serious Threat to European Apiculture, Common Pests, Diseases and Disorders of the Adult Honey Bee, and Tropilaelaps, a Parasitic Mite of Honey Bees.

These are all available as pdf files on BeeBase: <https://secure.fera.defra.gov.uk/beebase/index.cfm?pageid=167>

Sentinel Apiaries

Finally, underpinning research is an important element of the bee health work and the NBU has recently secured a new grant to 'stress test' Sentinel Apiary (SA) networks. The objectives are to find out how robust the current network is and how increasing or restructuring the SA network would increase the likelihood of the NBU detecting an exotic pest sooner, to improve our chances of successfully eradicating any incursion.

For those of you who do not know what Sentinel Apiaries are, briefly, they are apiaries across England and Wales where beekeepers have agreed to monitor for certain exotic pests such as the small hive beetle, *Tropilaelaps* mites and the Asian hornet, using traps provided by the NBU.

More information about the exotic threats we face is available on BeeBase. The Asian hornet pages are full of information on *Vespa velutina*, including details of the design of traps and the Sentinel Apiaries. Additional information can be found in the exotic pest advisory leaflets and in previous articles on the publications pages of BeeBase: <https://secure.fera.defra.gov.uk/beebase/index.cfm?pageid=166>

We have given a brief overview of the plans and priorities for the next few years. Keep a weather eye on BeeBase for updates. 

Varroa destructor feeding on a honey bee larva

