Healthy Bees Plan

Summary note of 3rd Meeting of the Science and Evidence Advisory Group (SEAG)
14th September 2010 - Nobel House, London

Present:

Mike Brown	Member
Giles Budge	Member
Stephen Martin	Member
Liz McIntosh	Project Manager
Belinda Phillipson	Secretary of Group
Wally Shaw	Member
Mark Tatchell	Chair

Apologies from other members - David Aston, Norman Carreck, Robin Dean, Bernard Diaper, Chris Hartfield, Francis Ratnieks

1. Welcome and introductions

The Chair welcomed the Group. Tony Harrington, the Director of Policy and Regulation at Fera dropped in and emphasised the importance of stakeholder support for the proposed business plan.

Summary and actions from the last meeting

The Chair introduced the summary and actions from the last meeting.
Actions 1 and 2: See agenda item 3.

Actions 3 and 4: Belinda Phillipson has modified the workplan and produced a more detailed breakdown of the deliverables which was circulated with the other papers for the third meeting.

Actions 5 and 6: Giles Budge, Bernard Diaper and Belinda Phillipson had liaised to discuss whether the information collected for the insurance claims could be used as a metric for indicator 4. This information is collected by the Bee Inspectors so it was suggested that this could be done more routinely to collect a wider data set. This was noted on the Indicators paper which was then sent to the PMB.

Action 7: The Contingency Plan was updated and circulated to SEAG. Comments received have been addressed and the plan is expected to be published shortly.

Action 8: No information has been sent about current areas of bee research but this is to be considered under agenda item 6.

Action 9: This has been superseded by the work carried out by the PMB sub-group developing a costed package of priority proposals for inclusion in the business case which has been circulated to SEAG for comment.

Action 10: Completed.
The summary of the second meeting was agreed.
ACTION: Belinda Phillipson to send summary of 2nd SEAG meeting to the Devolved Administrations, and will arrange for the summary to be posted on BeeBase.

2. Current state of play with respect to the new Business Case

Liz McIntosh outlined the work to date with stakeholders to develop the new business case which had kicked off with a stakeholder workshop in July, including members of SEAG. Various drafts of proposals for next 2-3 years of implementation (from April 2011) had been circulated to the Project Management Board and the 3 working groups, including SEAG during August. In response to a question from Stephen Martin, Liz McIntosh confirmed that the proposals listed in the various drafts of the package were not in priority order. The Chair said that in the absence of any comments, Liz McIntosh would assume that everyone was content with the document.

Liz McIntosh said that a progress report on the first two years of implementation would be included in the Business Case. However some of the work had not yet been completed, for instance complete analysis of the results from the Random Apiary Survey (RAS). As the full data were not available, one of the key outputs from the first two years would not be ready ('a more statistically robust and informed monitoring and control regime which adequately identifies and addresses the risks').

Liz reported that the scope of the business case was therefore only tentative at this stage and would be confirmed following input during the autumn from senior officials in Defra and Ministers. One option, for example, could be for an interim case for 2011/12, seeking funding to retain the additional inspectors (who were recruited in the first two years), and for the position to be reviewed in late 2011 when the RAS results are available and a review of policy and inspectorate completed, leading to a new business case for 2012/13 and beyond.

Liz McIntosh said the PMB subgroup, who had worked with her over the summer to develop the proposals for the Business Case, were keen for it to also include an application for research funds. They had already identified some research needs which SEAG discussed briefly. The Chair pointed out that at the 2nd SEAG Meeting it was agreed that priority threats are those yet to arrive in the UK and priority research needs should reflect this which was not consistent with the list of priority needs identified by the PMB subgroup. Identifying priority research needs was one of SEAG's deliverables. It should be noted that although research priorities could be identified, these may not be the type of research that Defra can fund (Defra supports applied research to address policy questions, and this excludes near-market research). The Chair suggested that a list of priority research needs could be included in the business case provided it is couched in suitable terms to indicate that Defra would not be expected to fund it all. The Group also had a brief discussion about alternative funds and other ways of funding research.

ACTION: Belinda Phillipson to canvass opinions about priority research needs by email and then arrange a teleconference with some SEAG members to discuss. From this a priority list can be drawn up which would be reported to the PMB.

ACTION: SEAG to consider innovative ways of funding research.

3. Presentation of results from the Random Apiary Survey

Giles Budge and Mike Brown circulated a 1 page document highlighting the provisional findings from the Random Apiary Survey (RAS). Mike Brown gave a historical perspective saying that the RAS was carried out to provide an evidence base to

understand the incidence of pest and diseases as part of assessing future inspection programmes, in response to the NAO report.

Giles Budge went on to explain that currently inspections are risk based so initial inspections are targeted to high risk points and follow up inspections are carried out close to pest or disease findings. Therefore inspections are not random and disease incidence could be over or under represented. The RAS will measure the basic level of pest and disease incidence. The number of samples to be collected will give a 99% confidence of finding 0.1% disease prevalence where an apiary is considered to be a single unit. The sampling year was 1 June 2009 to 31 May 2010.

Giles Budge highlighted one of the key provisional findings that priority (risk based) inspections over-estimated the levels of disease, compared with random samples. Therefore the prevalence of AFB and EFB in the honey bee population across England and Wales appears lower when calculated using data from random inspections, than when using data from priority inspections. There are still some unanswered questions such as how many priority inspections were missed ? How many new beekeepers are there within the risk areas ? The majority of the analysis involves screening for known pests and diseases but some of the samples will be used for non-targeted screening (pyrosequencing) and Giles welcomed any input that group members may have on which species should be investigated.

However the full analysis for known pests and diseases will have to be completed and further questions addressed before this information can be used for the business case, and any review of policy and inspection services. For instance Giles Budge pointed out the results suggest disease levels were very low, 0.17% for AFB and such low levels of disease will be very difficult for beekeepers to spot. In addition how should training and education of beekeepers be maintained when disease levels were so low? However, a key early conclusion was that current targeted inspections were efficient as they picked up approximately the same number of cases as random sampling.

The Chair suggested that it should be possible to analyse the data by setting the required rate of detection and determining the number of inspectors needed to achieve this rate. Wally Shaw stressed that bee inspectors do much more than just looking for statutory diseases. Giles Budge asked how statistics on disease could be linked to overall bee health? Stephen Martin said that in future inspections could be organised in a different manner with a mixture of priority (risk based) and random inspections. Mike Brown informed the group that Hampton principles already require inspections to have a random element. Giles Budge indicated that in future inspections could be prioritised in a different manner.

Summing up the discussion, the Chair concluded that the results from RAS were a very powerful data set which could be used to ask several key questions. Results from the first year had been obtained from a large number of samples so the findings were unlikely to change by an order of magnitude following analysis of samples from the second year but the second data set would provide increased confidence.

Liz McIntosh said that it probably made sense to maintain an interim position on the draft data for the purpose of the Business Case, ie, continue with the assumption that a policy and inspection review should be delayed until late 2011 when the final RAS results and analysis were available. The Chair suggested that SEAG could consider and identify options once the analyses of the results from RAS were complete.

ACTION: Liz McIntosh to determine the most appropriate action for the Business Case.

ACTION: Belinda Phillipson to circulate the 1 page summary of provisional RAS findings.

4. Review of the output from the subgroup on Biosecurity

Belinda Phillipson outlined what had been discussed by the subgroup during the teleconference on Friday, 27th August, 2010. The subgroup agreed that the following definition of Biosecurity covered all the essential aspects and could be used as working definition which could be modified in the future as necessary.

'Effective biosecurity aims to (i) minimise the risks from exotic pests, diseases and other threats to honey bees being introduced into the UK and (ii) minimise the risk of pests and diseases being moved between apiaries, by use of appropriate measures and good practices.'

SEAG had a brief discussion about whether the unit should be apiary or colony but as bee movements between colonies can't be restricted, it was agreed that the unit should be apiary. The subgroup discussions focussed on (i) sales/movements of bees within the UK and (ii) imports. Amongst other things the subgroup agreed to explore development of an assurance scheme.

The Chair was involved in an assurance scheme and said that there are a number of options including self certification. He also suggested that any scheme developed for the sale of bees should not be a passport positive release type scheme. Honey buyers and retailers could be encouraged to only buy honey from people who take part in the assurance scheme. The Chair suggested that good practice from other sectors, for instance agriculture, can be considered to ensure that quality increases and disease levels decrease.

ACTION: Belinda Phillipson to circulate the summary of subgroup discussions to the rest of SEAG for comment.

ACTION: Liz McIntosh to consider with PMB a recommendation from SEAG to include funding to develop an sales/biosecurity assurance scheme as part of the business case.

5. Information note about AFB

Liz McIntosh outlined the background for the note and explained that the bee health legislation was currently being reviewed with respect to the honey packers. The honey associations had developed a draft code of practice which Mike Brown considered was straightforward and which would help prevent spread of disease from their sites. The Chair suggested that this was a good example of developing good practice in response to emerging evidence. He added that if there were to be independent audits of compliance with the code, this was likely to be costly for the honey packers which indicated that they were taking this issue seriously.

6. Research highlights

Giles Budge said there were a number of interesting things that came out of the EurBee conference. This included a presentation by Keith Dellaplane from the USDA, an extension specialist, who regularly interpreted information from the scientific literature for beekeepers. He had described a new website where beekeepers could ask the experts. SEAG agreed that this was very useful but there would need to be sufficient experts to maintain this service. The Chair suggested that links could be included on BeeBase for use by UK beekeepers although the information was likely to be more

applicable to the US. Giles Budge also mentioned results which showed that presence of both Nosema species in colonies had greater impact than either species alone and this could result in starvation. Giles said that he was happy to write about the highlights from EurBee for publication in Bee Craft. The issues of how information from peer reviewed journals was captured for beekeepers was discussed and Stephen Martin said that IBRA had previously tried to make this bridge.

7. Reporting requirements for indicators
Belinda Phillipson said the PMB had asked who was going to collect the data required to measure the indicators. The Group discussed the indicators and agreed that time limits were required and a baseline should be established. It was agreed that the calendar year 2009 should be the baseline. Stephen Martin suggested that data should be collected every two years. Various people need to be contacted to supply this information and exactly what was required should be specified, for instance for husbandry courses what did this cover, courses run by NBU, Associations ?

ACTION: Belinda Phillipson and Marie Holmes to identify the reporting requirements in more detail with input from Liz McIntosh [postscript – and to prepare a first draft of the 2009 baseline data and the 2010 progress data for including in the business case.]

8. Assessing the number of unknown beekeepers
Liz McIntosh said that the PMB had asked SEAG to consider how the number of unknown beekeepers could be assessed. Giles Budge said that some Beekeeping Associations were now sharing their lists of members with the NBU for addition of beekeepers to BeeBase. The NBU could compare the list of association members with the beekeepers in that area (which they were aware of from BeeBase). So this could be used to estimate the number of unknowns.

The Chair asked if we needed to know about beekeepers or colonies, although if we did not know about the beekeepers it would be difficult to identify the colonies. The NAO made the point that it will be difficult to control pest and diseases if there were unknown beekeepers. Giles Budge also said there was turnover of beekeepers. Mike Brown confirmed that there was evidence to show that unknown beekeepers were a source of pests and diseases. Stephen Martin suggested that a third party could compare the association and NBU lists but this would take time and resource and might not be possible because of the personal data issues. The Chair pointed out that the comparison would not assess the number of unknown unknowns but would give an indication of the scale of unidentified beekeepers and this could be used to respond to the PMB. The Group agreed that beekeepers registering on BeeBase was key.

ACTION: Giles Budge and members of the NBU to make comparisons between the lists of beekeepers provided by the associations (having first confirmed that each beekeeper on the lists had agreed for the association to share their details with the NBU) and the beekeepers registered on BeeBase for at least 3 different areas.

9. Date of next meeting
There was no AOB.

ACTION: Belinda Phillipson to circulate doodle poll for the date of the next meeting in January, 2011.

Healthy Bees Project Team
Fera

24th September, 2010

Action Number	Action	Person(s) responsible
1	To send summary of the 2nd SEAG meeting to the Devolved Administrations and get it posted on BeeBase	Belinda Phillipson
2	To canvass opinions about priority research needs by email and then arrange a teleconference with some SEAG members to discuss.	Belinda Phillipson/All
3	To consider innovative ways of funding research.	All at 4th meeting
4	To determine the most appropriate action for the Business Case.	Liz McIntosh
5	To circulate the 1 page summary of provisional RAS findings.	Belinda Phillipson
6	To circulate the summary of subgroup discussions to the rest of SEAG for comment.	Belinda Phillipson
7	To consider with PMB a recommendation from SEAG to include funding to develop an sales/biosecurity assurance scheme as part of the business case.	Liz McIntosh
8	To identify the reporting requirements for the indicators	Liz McIntosh, Belinda Phillipson and Marie Holmes
9	To make comparisons between the lists of beekeepers provided by the associations and the beekeepers registered on BeeBase for at least 3 different areas.	Giles Budge and NBU
10	To select a date for the next meeting and circulate a doodle poll	Belinda Phillipson