



BEE HEALTH IMPROVEMENT PARTNERSHIP (BHIP)

OUTSTANDING ACTION LOG and QUARTERLY REPORTS

MEETING OF: 7 SEPTEMBER 2021

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Outstanding Actions:

Outstanding Action Points from previous meetings

No.	Description	Owner	Update	Status
4	LM to draft new 'Good practice for selling nucs' guidelines & standards and will circulate for comment.	LM	Not started. Part of the on-going discussion with the NBU regarding the use of BeeBase and updating existing guidance.	Ongoing
8	MG to invite LM to next BFA meeting.	MG	LM will be invited to the next meeting but unsure when that will be.	On hold
9	MG to consider to invite Robert Field to speak to the BFA members, with emphasis on EFB control plan group, on his biosecurity and compartmentalisation methods.	MG	Robert Field can do it but not before October 2020. MG to take this forward.	Ongoing
32	Graeme to explore SRUC ability to create media content to aid the delivery of Varroa training.	GS	Graeme not available at the moment but it was agreed to keep this open.	On hold
34	Fiona to complete Varroa mapping in Scotland	FH	Work in progress, stalled during summer.	Ongoing
35	Luis to speak to Cristina and ask if she would like to attend the next meeting for introductions / Jackie to issue calendar invite.	LM & JQ	Cristina unable to attend meeting on 7 th September 2021 but should be invited to the next quarterly meeting.	Ongoing
36	Luis & Fiona to pursue with SG and SASA colleagues as to what work is ongoing with the UN Climate Conference in Glasgow and if bee health will feature.	LM & FH	Nothing from SASA but update provided by SG.	Closed

New Action Points from last meeting on 7th September 2021

No.	Description	Owner	Update	Status
37	Following the AGM in October, MG to report back any feedback from bee farmers on the impact the ban of imports of packages has had.	MG		Ongoing
38	SG Policy to confirm what import inspections have taken place.	AK & LM		Ongoing
39	Luis/ Alison to look at how we can improve communications after an outbreak and what information we can include. Linsey to add to the list of SBA articles an article for April / May 2022 on what to do if you receive a disease notification email.	AK / LM LW		Ongoing
40	Luis/ Alison to contact APHA and NBU to check how work is progressing to make Beebase more representative of Scottish Beekeepers.	LM / AK		Ongoing
41	Alison to seek clarification from solicitors on wording in the legislation for treatment of infected colonies.	AK		Ongoing

Quarterly Reports on the Outcomes of the Honey Bee Health Strategy

Each organisation's update on the key activities completed/ delivered for each of the four delivery outcomes of the Scottish Honey Bee Health Strategy.

Outcome 1. Education, Training and Knowledge Transfer

Scottish Beekeepers Association (SBA)

Completion of basic beekeeping certificates and intermediate practical exams for the first time since 2019 (due to COVID restrictions on in-person events).

Ongoing development of the Magentrix platform for membership management and 'online bee academy'.

SASA

Currently no in-person training or talks with beekeepers are planned.

Emma Back (SASA bee team molecular support) provided an online lecture to Durham University 3rd year Bioscience students on the use of molecular methods to support honey bee disease management.

Scottish Government

From May to September our program of talks was reduced in order to focus on the delivery of bee health inspections and statutory controls on notifiable diseases. Yet we have delivered the following talks:

- a. Environment network: Honey Bees and the environment. 16th July.
- b. SRUC webinar: talk to crofters. Initiation to beekeeping. 30th of June.
- c. SGRPID, Galashiels office: Honey bees and the role of the bee inspectorate. 26th of August.

This season we set up with the objective to continue to develop the re-structuring of the bee health team.

From the team that we inherited when I took post in 2019 with only 2 part time inspectors and 2 full time inspectors we now have a very promising team of bee inspectors and policy colleagues.

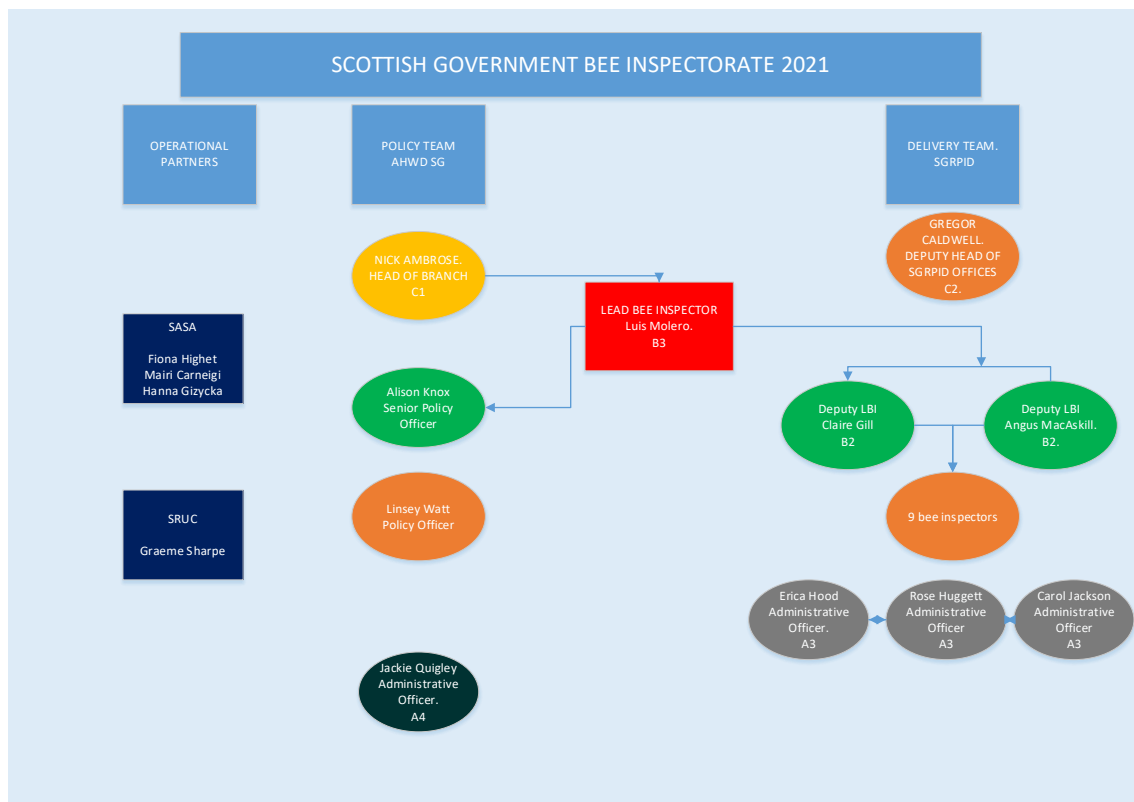
Claire Gill was successful on her promotion board and was named deputy lead bee inspector. With Angus MacAskill they have both lead the North and South teams in Scotland.

We continue to monitor the progress of our inspectors and assess their knowledge, interest on beekeeping, disease recognition ability, handling of bees and attitude.

Our vision is to move to a model where we have regional bee inspectors that will be responsible for the delivery of statutory inspections in their area as well as the established team who have the working capability for inspections of larger / commercial units.

We are working towards a 3 years program for the complete restructure of the bee health team, due to Covid this has been year 1. We believe we have made significant progress and both policy and delivery teams have improved our delivery as per the rest of the report will show.

Scottish Bee Health Team structure as August 2021:



Scottish Bee Health Inspectorate: bee inspectors as of August 2021.

Henderson G (Graham)	Perth	Full 2021 season.
Bennie A (Annette)	Perth	
Kerr A (Ailis)	Inverness	
Mackenzie K (Karen)	Perth	
Siewwright J (Julie)	Elgin	
Barron M (Mitchell)	Inverurie	
Johnstone K (Kenny)	Dumfries	
Laura Baird	Galashiels	New inspectors for 2022
Pye J (Josephine)	Hamilton	
Gill C (Claire)	Golspie	Experienced Bee inspectors.
MacAskill (Angus)	Galashiels	
Nicola Cooper-Slorach	Inverurie	

2. Wider training for the beekeeping community continue to be on hold due to the uncertainty around Covid-19. We are really looking forward to starting our education program as soon as government guidance allow us to do so. As well as the established bee health days we also plan a program of visits to local associations for training on bio-security and disease recognition and management.
3. We have started to review the Scottish Government funded Advisory Activities and outputs from SRUC's bee expert advisor to ensure alignment with the aims of the HBHS and maximise the benefit of this investment of public funds. This work is currently on hold but will resume in due course.

British Farmers Association (BFA)

Our education, training and knowledge transfer continue. Our current knowledge transfer group met in Oxfordshire and, although nobody attended from Scotland this time, results and information was shared openly with all through the Bee Farmer magazine. Our AGM and Open Day - a very popular event for KE - is being held in Devon this year at Quince Honey Farm in October. It is always well attended from all over the UK. We have five newly qualified apprentices under the Rowse / BFA scheme, and their results are stunning - three distinctions, one credit and a five.

NDB

Nothing to report.

Outcome 2. Communication

Scottish Beekeepers Association (SBA)

Continued updates to our members on bee-related health issues, such as foulbrood outbreaks, changes in regulations relating to BREXIT etc.

SASA

Attended the second online British-Irish council meeting on Asian Hornet. An excellent opportunity to share experience, knowledge, and goodwill, with interesting discussions on contingency planning and control products.

Wrote an article on Asian Hornets for publication in the September SBA magazine. Helping to finalise DEFRA's generic plant health Contingency plan which may be useful to policy colleagues while they work on updating the Scottish bee health generic contingency plan.

Scottish Government

1. The Bee Health team continues to produce a monthly feature for the SBA magazine. Items published so far in 2021 include:

Jan-21	LBI annual report
Feb-21	Brexit and Trade of Bees
Mar-21	Policy work
Apr-21	Symptoms of Foulbrood- Fiona Highet.
May-21	Get to know your bee inspector: Angus MacAskill.
June-21	Meet the Policy Team
July-21	Varroa working group progress
Aug-21	Meet the business support team
Sep-21	Look out for Asian Hornet: by Fiona Highet

2. The policy team has been working with BHIP members on the review of the honey bee health strategy 2010. The review is now complete and we have produced a ministerial briefing. We are pending a final seal of approval before it can be published.
3. Following the publication of the 10 years review, we intend to ask the BHIP for their views on a survey that we plan to consult with the beekeeping community prior to the creation of the next Honey Bee Health Strategy, both, for the hobby and commercial sector. This should direct our strategy for the next 10 years. We have started to develop the questions for the survey. Prioritisation for the delivery of bee inspections have meant a delay on the publication. We intend to focus on it with immediate effect.

4. BeeBase: We have initiated a review of the SLA existing with the NBU in terms of use of BeeBase by the Scottish Government. BeeBase is the NBU database for beekeepers. Scottish Government contributes with an annual fee and there are possible improvements in terms of representing the Scottish Bee Health Team and Scottish Beekeepers in a more significant manner.

British Farmers Association (BFA)

A bee farmer member - Jeff Baxter - had a rather nice piece on BBC last week. Following the discussion at the last BHIP we carried a piece on Beebytes in our current Bee Farmer magazine. We hope to carry more science articles in future.

NDB

Nothing to report.

Outcome 3. Surveillance, Diagnosis and Biosecurity

Scottish Beekeepers Association (SBA)

Nothing to report.

SASA

All SASA's bee health diagnostic functions are now available following limited capacity last year. Staffing remains a significant issue but uptake has been light so far. Several beekeepers have reported severe CBPV in colonies this year; this has been raised with David Evans and Giles Budge who are currently researching the topic, and we will investigate the possibility of carrying out some level of surveillance next year.

Finally coming towards the end of a very busy bee inspections season – well done to all involved. Mairi and Hanna have been incredible, information provided by beekeepers and inspectors has been clear, and turnaround has been really good. As of 26/8 197 apiaries have been analysed at SASA (breaking down into many more samples – yet to be counted).

EFB strain typing has been carried out throughout the beekeeping season and further information will be available following the completion of all inspections.

Import samples – good compliance by applicants but volume received over a short period has been a little overwhelming. The required percentage of consignments received have been processed and BLOSS have supported SASA to provide a sub-sampling calculator, allowing us to reduce the number of cages inspected per consignment whilst providing reassurance on the likelihood of picking up a positive case. Molecular methods (rt-PCR) have been used to support identifications of small larvae and eggs present in cages.

We have not had time to commence any form of sentinel/surveillance, but the SBA article should encourage beekeepers to monitor for Asian hornet at apiaries this autumn, and bee inspectors have completed exotic pest inspections for SHB at all apiaries inspected this season.

Varroa map update ongoing, work stalled due to domestic issues. Two groups of beekeepers have contacted us regarding a controlled movement of 'probably varroa free' colonies to varroa free areas. Work is ongoing to support these beekeepers as they carry out monitoring and treatment under isolation to see if these colonies are (or can become) varroa free.

Scottish Government

	2018	2019	2020 1 st season	2021 Up to 27 th of August. (2 nd season)
Inspected Colonies	3767	4117	8401	11308
AFB colonies	0	10	8	9
EFB colonies	59	193	180	114
Inspected Apiaries	208	200	410	456
AFB apiaries	0	5	5	9
EFB Apiaries	37	61	76	57
Inspected Beekeepers	65	58	101	122
AFB Beekeepers	0	1	2	5
EFB Beekeepers	14	13	21	20

- The increase on the number of inspected colonies is overall testimony of the exceptional improvement on data capture by the new business support team led by Rose Huggett.

There are currently 6 beekeepers signed to the EFB control plan, they are required to report inspections of all their colonies twice a year.

We have tightened up procedures to ensure that the EFB plan is adhered to with beekeepers reporting their inspections and the Business Support team adequately data capturing the inspections.

The team has worked incredibly hard this year and through increasing resources and efforts the figures reflect the exceptional effort made by all.

Due to Covid restrictions and SG working rules, the team have adapted to ever changing demands. The commitment, positive attitude and good team dynamics have been key for the success of the season. All team members have had an important role to play, from Jackie keeping us in the road with equipment, hotels and support, Business Support with data capturing and administration to our policy colleagues covering all policy queries whilst we were out in the field. I would like to use the opportunity to thank the entire team.

The increase on inspections has obviously been translated to a higher number of samples being sent to SASA. Our colleagues in SASA once again have been an outstanding support and key element on our delivery. The service provided has been praised by numerous beekeepers with samples and diagnosis mostly returned within hours of us delivering samples to the lab. Thank you to Fiona, Mairi and Hanna.

- The increase on the number of apiaries inspected can be attributed to changes we have introduced in our inspection prioritisation matrix and efforts by the team. We have now implemented an inspection prioritisation matrix and have weekly meetings to prioritise inspections. We have shifted our focus from the 6 commercial beekeepers in the EFB plan to a wider surveillance and disease control program by ensuring that the EFB control plan is adhered to and the signatories are taking responsibility and are accountable for their own inspections.
- We have doubled the number of beekeepers that we have visited during the season. This is due to the new ways of working and division of the team into sub-teams taking ownership of regional activity, coming together for larger units and commercial beekeepers. We strongly believe that this would allow us to have a wider presence across Scotland, improve engagement with the beekeeping community and improve on our disease detection and control capabilities.
- The increase on numbers of AFB across Scotland is disappointing however, our inspections and research into the strain typing following the finding of AFB has led us to arrange follow-up visits in England and Wales and once again highlights the importance of inspecting bees and ensuring that equipment is sterilised correctly before moving to different areas.

The outbreaks of AFB took priority in our inspection and all infected colonies have been destroyed. We have not found any cases of disease spread however we plan to continue with the surveillance in 2022 to ensure that cases continue to be kept under control.

- Despite the decrease on the number of colonies affected by EFB, the number of affected beekeepers has remained similar to 2020. The decrease on positive colonies is mostly attributed to a lower level of infection on beekeepers on the EFB control plan. Those beekeepers have been taking stricter, and costly measures to control disease within their apiaries such as complete cull or shook swarming of infected apiaries. We look forward to seeing this trend continuing in 2022.
1. We have completed 2 post import inspections and have encountered a high level of compliance from our Scottish Importers with the new rules, with all of them, except one that made a mistake, sending cages to SASA for inspection as per legal requirements.

Third country imports into England, Scotland and Wales.

Country of origin	Number of consignments imported	Batched number of queens	Batched number of nuclei	Batched number of packages	Batched number of colonies	Number of samples examined	Number of samples with Varroa	Number of samples with Small hive beetle	Number of samples with <i>Tropilaelaps</i>	Number of consignments inspected
Argentina	1	250	0	0	0	1	1	0	0	1

Austria	1	7	0	0	0	0	0	0	0	0
Cyprus	2	25	0	0	0	1	0	0	0	0
Denmark	16	664	0	0	0	4	0	0	0	6
Greece	27	2016	0	0	0	6	2	0	0	7
Italy	18	5572	0	0	0	10	5	0	0	11
Malta	11	3050	0	0	0	3	1	0	0	3
Romania	12	1010	0	0	0	1	1	0	0	2
Slovenia	19	590	0	0	0	8	2	0	0	9

Imports were subject to a large amount of debate this year with packages being imported into GB from Italy through Northern Ireland. Imports of packages of honey bees into GB from third countries is not allowed by domestic regulations. The EU is now a third country in trading terms following Brexit, so import of packages from the EU were also banned. However NI remains part of the same SPF trading zone within the EU, meaning that import of packages of honey bees from the EU into NI is allowed.

Through the Northern Ireland Protocol, NI has unfettered access to GB, meaning that all goods in free circulation in Northern Ireland can move directly to GB without any barriers. We have seen not only packages of honey bees, but also a large number of queen bees being imported into GB through Northern Ireland.

Brexit and the Northern Ireland Agreement are negotiated by DEFRA and Scottish Government doesn't have a seat on the special committee. We briefed Scottish Ministers on the concerns we had regarding this trade through Northern Ireland. Our position remains that we would prefer to allow the import of packages of bees into Scotland as previous to Brexit, this way, we would at least have control of the trade and we would be able to complete post import checks as we did previously rather than relying on Northern Ireland colleagues to carry out these checks.

Our colleagues in Northern Ireland and the NBU inform us of the following figures:

- 321 bumble bee packages imported into Northern Ireland in 2021.
- 1350 notified bee packages imported into Northern Ireland in 2021.
- Approximately 6,000 honey queen bees imported into Northern Ireland in 2021. The majority from Italy and other prominent importing countries as Hungary and Greece.

Northern Ireland colleagues have tried to check the majority of these imports, but it has not always been possible. The National Bee Unit has tried to work with importers moving bees from Northern Ireland to England and to inspect those packages on arrival, but this has been done in voluntary basis as there is no legal requirement to notify movements from Northern Ireland to GB.

Worth noting that we never inspected 100% of imports but 50% of imports from Italy and 25% from other countries.

2. We have taken part on the British and Irish Council Asian Hornet taskforce meetings. We are currently reviewing our Asian Hornet contingency plan. Three SG Bee Inspectors will be visiting Jersey in September to carry out further training with Jersey officials and volunteers on Asian Hornet Track and Trace. Our aim is to ensure that we have a sufficient, well trained pool of bee inspectors in the case of an incursion into Scotland.
3. We have worked with SASA on Varroa reporting and EFB strain typing projects.
4. We have been approached by the Food Standards Scotland regarding honey fraud and honey quality testing. We welcome FSS' work and have offered to support them with any beekeeping and advice required. We will update the group on progress.

British Farmers Association (BFA)

Nothing to report.

NDB

Nothing to report.

Outcome 4. Research and Development

Scottish Beekeepers Association (SBA)

Support given to provide access to membership for citizen science sampling for a PhD at Aberdeen University (Dr Alan Bowman) looking at pesticides in urban and rural environments.

SASA

AFB strain typing primers and probes successfully set up and used to support bee inspectors with the finding of disease this year. This has provided valuable evidence to help establish the source of infections.

Limited extra time for R&D in the lab – Emma has focussed on providing strain typing and import diagnostic support.

Aberdeen PhD student (Linnet) has identified volunteer beekeepers in suitable locations for her project and has 36 apistrips in Scottish colonies this summer, which will absorb any chemicals present in the hive. These strips were developed as part of InsigniaBee, an EU collaborative project. Analysis of apistrips will be carried out at SASA later this season, hopefully by Linnet if lab regulations allow. We are very grateful to all the beekeepers who have offered their help with this project.

Scottish Government

- We continue to work with SASA colleagues on possible research needs to improve honey bee health in Scotland.
- We have been collecting bee samples for SASA colleagues in order to study subclinical incidence of EFB and developing new testing methods which in our view are critical for our success on controlling EFB.

British Farmers Association (BFA)

We took part in a multi-active forum as part of the pan-European B-Good project. A full report on this should be available soon.

NDB

Nothing to report.

End of report