



South East Region Annual Report 2018 National Bee Unit

The 2018 Beekeeping Season – An Overview

What a season 2018 has been for the South East (East & West Sussex, Greater London, Kent and Surrey) both in terms of weather and NBU Inspections.

As you are aware Brian McCallum sadly retired from the role in February after seven years and, with a DEFRA recruitment “freeze” at the start of April, North London had significantly reduced NBU coverage. Consequently, although I managed to get to visit as many apiaries as I could, there are many of you still awaiting an inspection. Mark Patterson, who covered South London, decided to leave the NBU at the end of September 2018 in order to pursue his personal beekeeping career. I would like to take this opportunity to thank both Brian and Mark for all their hard work and support.

Michael Cooper unfortunately suffered an ankle injury in June and did not return to work until late September. Kay Wreford took the helm and covered as much of Kent as she possibly could. Meanwhile both East and West Sussex were, again, ably managed by Diane Steele and Hilary Hayward continued to be kept very busy in Surrey.

I would also very much to like thank those beekeepers who welcomed and assisted the Seasonal Bee Inspectors who came from various parts of the UK to help us out in the South East.

The weather has a major influence on how well our colonies perform, not just for honey production at a specific time, but also on the vitality and viability of colonies from one year to the next. Late winter was very cold and the land seemed to be continually covered in white with the “Beast for the East” persisting into the start of May. Then the sun appeared and did not stop shining until well into August. Temperatures reached record heights and nectar and pollen flew into the colonies. Many a colony was inspected with several supers filled. As always, there were geographical differences with London colonies not collecting as much nectar as those in Sussex or Kent.

Not only was it extremely hot working in a Bee suit, but in some counties temperatures and dry conditions brought problems for Inspectors doing their job. For one apiary in Kent, it was too dangerous to burn the infected colonies on site so collaboration with our APHA (Animal Plant Health Agency) Colleagues resulted in the South East being the first NBU Region to organise incineration of infected hives and frames.



As you will see below, the level of notifiable disease has not decreased and the number of package bee and queen imports has dominated Inspector time. Thankfully, nothing was found; more details of import numbers are shown later in the report.

Honey yields for the region were up on 2017 and, in the more favourable locations, up to 80lbs per colony were obtained.

Foulbrood Diseases and Inspection Statistics 2018

In 2018, despite being down on Seasonal Bee Inspectors, 2588 colonies were inspected (3809 in 2017) and 620 apiary visits were made (804 in 2017) within the South East Region. Of these apiary inspections 375 (453 in 2017) were carried out as part of the NBU exotic pest surveillance programme, covering imports and apiaries in areas where there is an increased risk of an exotic pest incursion.

2017

Nationally: EFB 493 AFB 74

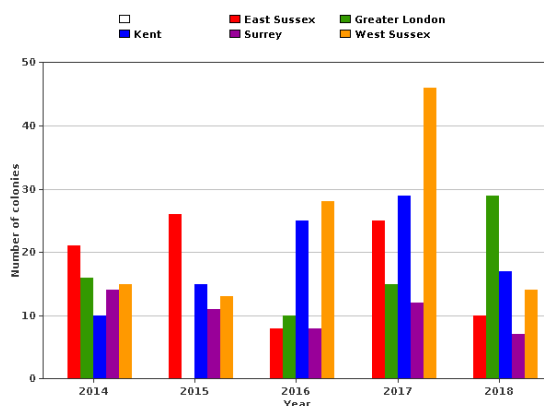
South East Region: EFB 128 AFB 0

2018

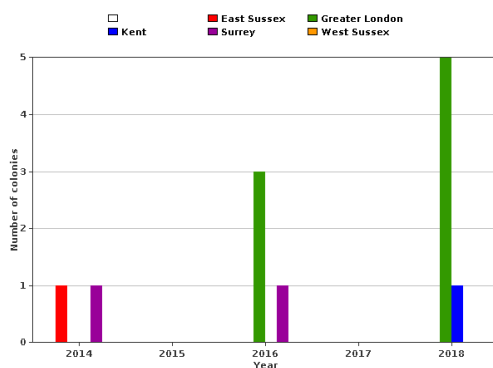
Nationally: EFB 282 AFB 32

South East Region: EFB 77 AFB 6

EFB Incidence in South East Region by County



AFB Incidence in South East Region by County



The locations of foulbrood disease by 10km squares are listed in the following table:

County	10 km Square where EFB Found	Area Name	Number of Positive EFB Diagnoses (including recurrences)	Month Found
East Sussex	TQ30	BRIGHTON	1	April
East Sussex	TQ30	BRIGHTON	2	June
East Sussex	TQ51	N. HAILSHAM	7	May
Greater London	TQ29	BARNET & FINCHLEY	3	August
Greater London	TQ29	BARNET & FINCHLEY	1	September
Greater London	TQ37	S.E. LONDON	1	April
Greater London	TQ37	S.E. LONDON	3	May
Greater London	TQ37	S.E. LONDON	4	July
Greater London	TQ37	S.E. LONDON	8	September
Greater London	TQ38	N.E. LONDON	1	August
Greater London	TQ39	ENFIELD	2	May
Greater London	TQ39	ENFIELD	3	June
Greater London	TQ39	ENFIELD	3	October
Kent	TQ57	DARTFORD	2	June
Kent	TQ57	DARTFORD	2	July
Kent	TQ64	E. TONBRIDGE	1	June
Kent	TQ77	N. ROCHESTER & HOO	1	June
Kent	TQ77	N. ROCHESTER & HOO	3	July



County	10 km Square where EFB Found	Area Name	Number of Positive EFB Diagnoses (including recurrences)	Month Found
Kent	TQ96	E. SITTINGBOURNE	5	September
Kent	TR26	HOATH & STOURMOUTH	1	September
Kent	TR35	SANDWICH & DEAL	2	May
Surrey	SU93	HASLEMERE	1	June
Surrey	SU94	GODALMING	3	June
Surrey	SU96	ASCOT	2	April
Surrey	SU96	ASCOT	1	June
West Sussex	TQ01	PULBOROUGH	3	May
West Sussex	TQ01	PULBOROUGH	2	July
West Sussex	TQ02	BILLINGSHURST	1	April
West Sussex	TQ10	WORTHING	2	April
West Sussex	TQ10	WORTHING	1	May
West Sussex	TQ10	WORTHING	1	June
West Sussex	TQ11	STEYNING	2	May
West Sussex	TQ11	STEYNING	1	June
West Sussex	TQ11	STEYNING	1	August
County	10 km Square where AFB Found	Area Name	Number of Positive AFB Diagnoses	Month Found
Greater London	TQ28	N.W. LONDON	1	September
Greater London	TQ38	N.E. LONDON	2	September
Greater London	TQ39	ENFIELD	2	July
Kent	TQ77	N. ROCHESTER & HOO	1	July

Update on Asian Hornet

There have been nine confirmed Asian Hornet sightings in England in 2018 to date:

- 1) An individual hornet found in a cauliflower by a householder in their kitchen in Bury, Lancashire, confirmed on 13th April. The cauliflower was grown in Lincolnshire but it is thought that it may have been stored with vegetables from France
- 2) Fowey- a dead Asian hornet was found by a beekeeper in his trap and a positive ID was made on 3rd September. Following an NBU surveillance operation, a nest was found in dense brambles within a kilometre of the initial find and destroyed on Sept 6th.
- 3) In Liskeard a single drone was caught in a trap and reported by a beekeeper. ID was confirmed 7th September 2018 but after prolonged surveillance no further hornets were seen in the area.
- 4) A single dead hornet was found in Hull, Yorkshire, confirmed on 9th September, but after an extensive search in the area, it was presumed to have been a single insect inadvertently brought over from France.
- 5) In Fowey, a week following destruction of the nest on September 6th, a few further hornets were caught in traps and within two days a second nest was located in woodland adjacent to the first and, on 20th September 2018, was destroyed. Analysis shows that the two nests in Fowey were primary and secondary nests from the same queen and so the same colony.
- 6) In New Alresford, Hampshire, a householder reported seeing Asian Hornets foraging in his garden in mid-September. The local Seasonal Bee Inspector was mobilised and positively identified them. By careful observation he was able to get some lines of sight and located the nest within a few hours of arriving. It was low down in a bush adjacent to a house a short distance away and the nest was destroyed on 24th September 2018.
- 7) On the coast below Beaulieu also in Hampshire, a householder noticed hornets feeding on fallen apples in her garden and alerted a beekeeper friend who reported them. Within a few days again, on 26th September 2018, a nest was found and destroyed in woodland half a kilometre away.
- 8) In Guildford, Surrey another dead hornet was discovered in a new Mini at a car dealership, but the source of the insect is unknown.



- 9) Finally in Dungeness, Kent, two Asian Hornets were found, both foraging on ivy, one in a garden and the other at the RSPB reserve nearby. After several days of extensive surveillance no further hornets were seen and the operation was wound down, with just a few traps being kept in the area. It is thought that these individuals may have been blown over from France. Both were identified as drones.

The process of finding Asian Hornet nests, after a positive identification is confirmed, conforms to a Standard Operating Procedure whereby a Forward Operating Base (FOB) is established at a suitable location in the area e.g. APHA offices or a fire station. The operation is closely monitored by the NBU and Defra policy with daily reports reaching right up to the cabinet office and Lord Gardiner. Bee inspectors are deployed with traps and bait stations around the area with the aim of establishing lines of sight of the hornets returning to their nest after foraging for food. This requires good observation, patience and tracking skills, but is rewarded when they can be plotted on a map with the lines converging on the nest location. Even when the nest location has been narrowed down considerably, if the area is densely wooded it can still be very difficult to locate it in a thick tree canopy. This year we have trialled infrared photography, drones and radio tracking to enhance our capabilities but success has prevailed with human lines of sight above all else.



Nests destroyed this year have been sent to FERA for analysis, the results of this work will be released in due course. We are again reminded that the Asian hornet (and other exotic pests) could arrive almost anywhere in the UK given the vast volume of traffic and goods arriving in the UK from across the channel and other countries where exotic pests are endemic. Further sightings of Asian hornets have been confirmed this year in the Channel Isles. In Jersey, by the 4th October, 52 nests in various stages of development had been found and destroyed right through the season. Since the destruction and removal of the nests in Cornwall and

Hampshire, no further Asian hornets have been seen foraging in the areas or caught in traps. However, it is possible Asian hornets could reappear in the UK next spring and beekeepers, along with members of the public are urged to report any suspect sightings through the following routes:-



- The 'Asian Hornet Watch' app is available to download free from the Apple and Android app stores
- Members of the public can also report sightings by email to alertnonnative@ceh.ac.uk. Please provide a photo along with where you found it and a contact number to reply to.
- Reports can be sent via the online submission form on the Non-native Species Secretariat website, again with a photo.
- Details on the appearance of an Asian hornet can be found on the Bee Base guide or the NNSS Asian hornet ID sheet.

Please check BeeBase News items for regular updates and the dedicated page at <http://www.nationalbeeunit.com/index.cfm?pageid=208> for further information including the Asian hornet i.d. sheet, videos and useful links. Any suspect sightings of the Asian hornet should be reported to the Native Species Secretariat at alertnonnative@ceh.ac.uk and the NBU office or your Regional Bee Inspector.

The image gallery on BeeBase <http://www.nationalbeeunit.com/gallery/index.cfm> contains several pictures of Asian Hornet and Small Hive Beetle as well as other pests and pathogens and general beekeeping topics. All images are subject to © Crown copyright 2010 but may be used free of charge in any format for non-commercial research, private study or internal circulation within your organisation. When reproducing images, please associate the phrase "Courtesy the Animal and Plant Health Agency (APHA), Crown Copyright" alongside each image.

N.B. A dead insect is much better than a missed photo, so catch the hornet if possible and freeze it or knock it down with anything to hand! Remember, our best defence against the Asian hornet is to quickly detect any arrivals and prevent them from establishing; monitoring traps are the best way to help aid detection. The traps can be home-made and there are links to a leaflet (and a YouTube video) describing how to make one on BeeBase, see <http://www.nationalbeeunit.com/index.cfm?pageid=208> Monitoring traps are advised in areas away from a confirmed outbreak, as regular inspection will allow other beneficial insects to be released unharmed.

Now that the trees have far fewer leaves, any nests should be easier to spot. Please report any large suspect nests through the routes detailed above.



Small Hive Beetle

As of 26th. October 2018, four cases of infestation by *Aethina tumida* have been identified this year in the province of Reggio Calabria in the South of Italy, the province where it was originally found in 2014. Three sentinel apiaries were confirmed positive (purple crosses on maps below) two of which were situated in the protection zone of 30 km. The first one was confirmed on August 1st. in the municipality of Palmi where adults and a larva were detected. The second sentinel apiary was confirmed positive on August 7th. in the municipality of Brancaleone situated approximately 15 km away from the protection zone on the south-east coast of the province of Reggio Calabria. Adults of SHB were detected. The last sentinel apiary was confirmed positive in Rosarno on September 4th. This sentinel apiary was infested with adults and larvae. It was situated approximately 12 km away from the outbreak confirmed in Laureana Di Borello – see next paragraph.

A new outbreak, not in a sentinel apiary, was confirmed on August 2nd in the municipality of Laureana Di Borello (red cross on maps) in the protection zone of 30 km. SHB were in a swarm which was infested by adults and larvae. It has to be noted that not all the inspections scheduled in the rest of the Calabria region and in Sicily have yet been reported when this news was published.

The clear status of Sicily remains unchanged, where no new cases have been discovered since 2014. No new outbreaks have been discovered in the province of Cosenza, situated in the North of Calabria since September 2016. The regular reappearance of cases in the infested zones since 2014 show that SHB remains present in these zones.

The surveillance plan implemented in 2018 follows the monitoring scheme put in place in the previous years. Surveillance is ongoing in SHB free areas such as Sicily and the rest of Italy to guarantee the free status of these areas. Changes were brought in to the monitoring scheme, notably a reduced number of apiaries to be inspected in the protection zone was implemented (corresponding to an expected prevalence of 10% with a confidence interval of 95% instead of an expected prevalence of 5% applied the previous years). This reduction, along with the establishment of sentinel apiaries situated in strategic locations (i.e. on the coast in front of Sicily, along the Ionian Coast, along the frontiers with Vibo Valentia and Catanzaro, in Vibo Valentia) suggest a gradual achievement of the objectives of the control of SHB spread and a containment of the infestation in the protection zone.

Note: the Commission Implementing decision (EU) 2017/370 of March 1st. 2017 removed Sicily from the list of areas subject to protective measures in relation to SHB in Italy and extended the period of application of certain protective measures until 31st. March 2019.



I would again like to thank all the 16 beekeepers in the South East region who actively volunteer through the Sentinel Apiary Programme to help with the NBU exotic pest surveillance in the UK.

The Italian experience does suggest that early detection and immediate action before SHB becomes established may enable a small localised outbreak to be eradicated. Once again I would encourage all beekeepers to make themselves aware of the signs of SHB and monitoring techniques as described in the NBU leaflet, 'The Small Hive Beetle – a serious threat to European apiculture'. See the dedicated pages for SHB on BeeBase <http://www.nationalbeeunit.com/index.cfm?pageid=125> for links to the leaflet, a video and much more detailed information.

Imports 2018

Import or export of bees, (including queens, packages and colonies) is permitted only if accompanied by an Official European Union (EU) or Third Country health certificate issued by the competent authority where the bees originated. It is a **legal** requirement that you notify the **National Bee Unit** of imports of bees from outside the UK. You can do this by completing the [Importer Notification Form](#) and posting, faxing or emailing it to us. Alternatively, if self-registered, you can log in to the Beekeeper pages of BeeBase and click the 'Import Notifications' link from the left hand index. It is of course illegal to import bees, queens or any bee-related products from within the SHB exclusion zone around the affected areas in southern Italy. Further details can be found on the Imports/Exports pages of BeeBase at <http://www.nationalbeeunit.com/index.cfm?sectionid=47>

The number of queens imported into England, Scotland and Wales from other EU countries continues to rise year on year. Import numbers for 2018 at time of writing are as follows (2017 figures in brackets for comparison):

- Queens imported from the EU 15,944 (15,210)



• Packages of Bees imported from the EU	996	(1,776)
• Of which from Italy	61	(1,310)
• Nucs imported from the EU	974	(19)
Of which from Italy	915	(0)
• Full colonies imported from the EU	52	(0)
• Queens from Third Countries	525	(525 Argentina)

BeeBase Registration and Association Membership Lists

The South East Region has 6059 current beekeepers, 7546 apiaries and 26,274 colonies registered on Beebase.

I would like to remind everyone how essential it is that all apiaries are registered on BeeBase so that we can identify any at risk of notifiable disease or an incursion of an exotic pest into the UK and target control measures effectively. Self-registration is free via the link at www.nationalbeeunit.com, or you can register by contacting the NBU office on **033 303 0094** or your Regional Bee Inspector.



All beekeepers registered on BeeBase with a current email address will receive an automatic email alert if disease is found within 3km of the registered apiary. If you are self-registered, please ensure that you keep your apiary records up to date or contact me if you are unsure. Self-registration is recommended as it also gives beekeepers secure password protected access to personal details and inspection records.

Your association can send us their list of members if they wish, but can only do this if they satisfy the requirements of the Data Protection Act. The easiest way to do this is to amend the membership renewal form to contain something similar to the following phrase;

“Please note that a condition of membership is your agreement to membership details being held on a computer. This information will be used for the efficient running of the association by its officials, for the distribution of the BBKA magazine, for BBKA Insurance, for Bee Disease Insurance, and passed to the Regional Bee Inspector for inclusion on BeeBase to aid them in the control of notifiable bee diseases”.



These lists are very useful to us as they allow us to identify new beekeepers and to update contact details for existing beekeepers. **Secretaries** – if you currently have this in place, please email me your current membership list, so I can ensure our records are as accurate and complete as possible. This is something that will be exceedingly important if we are unfortunate enough to find Small Hive Beetle in the UK or Asian hornet in our Region in the coming season.

Update on Varroa Treatments

This year again there have been additions to the Varroa treatments available in the UK. The list of those registered and approved for use by the Veterinary Medicines Directorate (VMD) may be found at:

<http://www.vmd.defra.gov.uk/ProductInformationDatabase/Default.aspx> together with the Summary of Product Characteristics giving full details of use. For the full list select 'Bees' on the drop down list of species in the product search link.

Oxybee Powder and Solution by DANY Bienenwohl is the most recent addition to become available in the UK, the active ingredient being oxalic acid dihydrate, an oxalic acid based treatment applied by the 'trickle' method.

NBU advice for strong, vigorous colonies is to monitor and control varroa appropriately using biotechnical methods and authorised products as directed. Varroa treatments should be targeted before colonies start to produce their 'winter' bees but monitoring of Varroa levels during the season will help determine whether an earlier treatment is required. Viral damage, which is associated with varroa as they are such good vectors for viruses, will seriously reduce the longevity of the adult bees and so impact on the foraging capability of colonies with a high Varroa infestation level in the summer period. Treated too late in the season, so that the winter bees are affected by viruses or purely weakened by the mites feeding on them, is frequently the cause of colony mortality in the late winter and early spring.

Education and Training

This year in the South East Region we ran a very successful Bee Health Day in Kent. Thanks go to Bob Smith, the beekeepers of KSRC and Mid Kent branch of KBKA who all assisted the South East Region Inspectors to deliver an educational day looking at diseased EFB and AFB combs, authorised Varroa treatments and Asian Hornet identification and reporting.



As I said in my Annual Report last year I would like to offer Bee Health Days at County Level, as in Kent. A bee health and disease day provides the opportunity to see both EFB and AFB at close quarters as well as looking at colonies for abnormalities and exotic pests. We can only offer these days when the County is confident that attendance will be 60 or more as, increasingly, the call on inspector time means that resources are limited.

I do not want to repeat these events year after year in the same area but instead move around the region as this will allow a proper coverage to beekeepers. I am pleased to say that I have been approached by Guildford BBKA and am at the early stages of organising a Healthy Bee Day in the county of Surrey for 2018. Please do contact me if you would like to consider a Healthy Bee Day for your county in the future.

This year I hosted a South East Region Forum in Guildford, the speakers were:

- Kirsty Stainton – Senior Scientist in Bee Health at Fera Science Ltd who spoke about the work done on EFB and AFB MLST sequencing
- David Rudland a Bee Farmer and former Seasonal Bee Inspector who gave an overview of the Bee Farmer Apprenticeship scheme
- Nigel Semmence, Contingency Planning & Science Officer, Bee Health Advice Service, National Bee Unit who spoke about the UK Asian Hornet Contingency to date

Again, I am planning to host another South East Region Forum and as with Healthy Bee Day I do not want to repeat these events year after year in the same area but instead move around the region as this will allow a proper coverage to Associations.

South East Inspectors and 2019 Season

As I explained at the beginning of this report we have Seasonal Bee Inspector vacancies in North and South London. At the time of writing recruitment is underway and I am



pleased to confirm that Thomas Bickerdike will be working as Seasonal Inspector for the North London area from 1st April 2019.

The Seasonal Bee Inspector for South London has not been confirmed at the time of writing but I will notify you once an appointment has been made .

Seasonal Bee Inspectors work April to September only so, outside this time, please contact me. The new season will start on 1st April 2019 and from that date you can contact the team as follows:

Michael Cooper	michael.cooper@apha.gov.uk	07775119451
Hilary Hayward	hilary.hayward@apha.gov.uk	07900167409
Diane Steele	diane.steele@apha.gov.uk	07775119452
Kay Wreford	kay.wreford@apha.gov.uk	07775119483

Please note, my email address has changed to Sandra.gray@apha.gov.uk , from March 2019 any emails sent to the 'gsi' version will not be received. This also applies to the Seasonal Bee Inspectors

Finally I would like to wish you all a very Happy Christmas, good wintering and very Best Wishes for a Happy Beekeeping 2019.

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