

# South East Region Annual Report 2017 National Bee Unit

#### The 2017 Beekeeping Season – An Overview

At the end of March 2017 I was appointed as the Regional Bee Inspector for the South East (East & West Sussex, Greater London, Kent and Surrey). In my first year I have managed to visit several of your apiary sites, speak to you either on the phone, at the National Honey Show or by email and I very much look forward to meeting in the near future those of you who I did not see this year.

I would like to take this opportunity of thanking Diane Steele for all her assistance not only during the handover phase but throughout the season whilst covering West and East Sussex in her "hands –on" field work. The two Inspectors who joined in 2016, Hilary Hayward who covers Surrey, and Mark Patterson, who covers Greater London south of the river, have now completed their first season and many of you will have either spoken to them or had an apiary visit. Brian McCallum has continued to cover north of the Thames, welcomed by old and new beekeepers alike; Kent is ably managed by both Michael Cooper, who has often crossed the border to East Sussex, and Kay Wreford who continues to be kept busy. A big thank you from me to all the South East team for their hard work and support in 2017.

As you will see the level of notifiable disease has increased by 62% in 2017 in the South East and the number of package bee and queen imports has dominated Inspector time. Thankfully nothing was found and more details of import numbers is shown later in the report.

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 fairly warm and dry with higher than average sunshine hours. Apart from one brief cold spell in March, the mild conditions continued into April and colonies seemed to be building well for the winter sown oil seed rape. However, the weather turned cooler and unsettled with north east winds persisting well into May. Early flowering rape in some areas didn't yield well but warmer weather and a mini heat wave towards the end of May suited later flowering rape. "Flaming" June arrived with several days of sun and high temperatures to all regions; as I am sure you will recall, it was very hot working in a Bee suit! After June, the nectar flow slowed down in many regions and by July some of the Inspectors were advising colonies be fed as they were on the brink of starvation.



Queen rearing proved difficult again this year. Some queens were drone layers from the start and others failed in late summer/early autumn. Colonies were strong enough in early May to raise a good number of queen cells from grafts but reluctant to finish cells in queen-right colonies. Mating was also hit-and-miss right through to mid-June due to the unsettled weather. The result was that Inspectors reported a high queen failure rate, apparent after natural swarming as well as in artificial splits.

The Seasonal Bee Inspectors and I encountered beekeepers who said that they did not do their autumn Thymol treatment in August as they saw no signs of Varroa. Unfortunately the result was that Inspectors and I saw and reported a large amount of viral damage in September. Varroa levels build up in late summer in many colonies and with it a noticeable increase in viral damage. 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.

Honey yields for the region were again variable with some beekeepers reporting little or no surplus but others in more favourable locations obtaining up to 70 lbs per colony.

## <u>Update on Asian hornet and Small Hive Beetle in Europe</u>



Early this year surveillance for the Asian hornet, *Vespa velutina*, was resumed and traps deployed in Gloucestershire and North Somerset following last year's discovery and destruction of a nest at Tetbury and individual hornets found in North Somerset. No further hornets have been found in those areas but an insect caught flying inside a large distribution warehouse near Glasgow, Scotland in March 2017 was confirmed as an Asian hornet. It can only be assumed that this hornet had travelled all the way from southern Europe inside a container and flew

out into the warehouse when goods were unloaded. This is a stark reminder that 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. The Scottish incursion could well have been a mated queen emerging from hibernation and if released into the open, may have been able to establish a nest.



All beekeepers are advised to monitor for Asian hornet using a suitable trap. These can be home-made and there are links to a leaflet (and a YouTube video) describing how to make one on BeeBase (see <a href="http://www.nationalbeeunit.com/index.cfm?pageid=208">http://www.nationalbeeunit.com/index.cfm?pageid=208</a>) Monitoring traps are advised in areas away from a confirmed outbreak as regular inspection will allow other beneficial insects to be released unharmed.

Further sightings of Asian hornets have been confirmed this year in the Channel Isles. In Jersey a primary nest was discovered in a bee hive quite early in the year but several more nests in various stages of development have been found there and destroyed right through the season.

Many reports of possible sightings in the UK have been received by the Non-Native Species Secretariat and the NBU during the year. However, only one in late September near Woolacombe in North Devon was identified as an Asian hornet. Once a positive confirmation was made, the NBU Contingency Plan was activated and Bee Inspectors

were deployed in the area including three from the South East Region. Aided by lessons learned last year during the outbreak in Tetbury and perhaps also somewhat easier terrain to survey, the nest was quickly discovered and destroyed. The nest wasn't in a typical position, high up in a tree as in Tetbury, but hidden within a tall hedge. Cutting away the cover revealed a nest of about 50 cm diameter. Surveillance in the area after destruction of the nest has shown no further hornet activity.

Initial laboratory examination and analysis of the nest indicated that this was a fresh incursion from the French Asian hornet population and not directly related to the nest discovered in Tetbury last year. DNA tests on the brood showed that reproduction had reached the stage of drone eggs only. As with other Vespa



species, drones are produced before gynes (virgin queens) and so we can be fairly certain

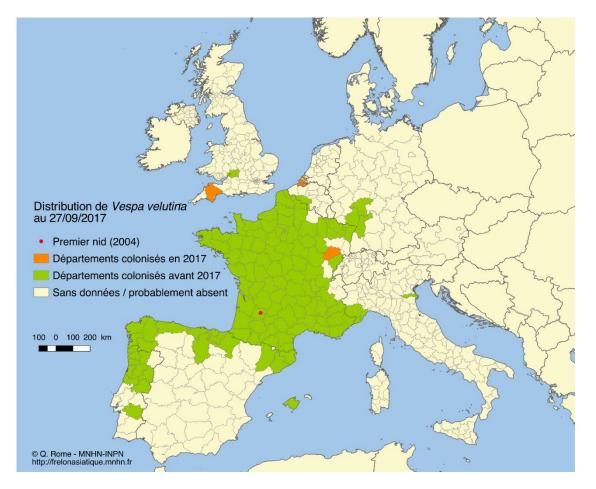


that this nest was destroyed before it reached the stage of releasing queens capable of setting up new colonies next spring.

However, while I was working at the National Bee Unit stand at the National Honey Show we were presented with a live Asian Hornet, in a tube, from a beekeeper who had travelled from Jersey. This was not only illegal but also irresponsible and fortunately we were able to kill the hornet before it was able to escape into the open. As with the report from Scotland earlier in the year, if it had been a queen and escaped it may have been able to establish a nest.

The map reproduced below (updated September 2017) shows the 2016 and 2017 nests and individual hornet incursions within the UK and the continuing spread of Asian hornet in Europe, north into the Netherlands and east across northern Italy.

http://frelonasiatique.mnhn.fr/wp-content/uploads/sites/10/2016/07/Carte-Vespa-velutina-Europe-Q-Rome-MNHN-e1469556132917.png





Please check BeeBase News items for regular updates and the dedicated page at <a href="http://www.nationalbeeunit.com/index.cfm?pageid=208">http://www.nationalbeeunit.com/index.cfm?pageid=208</a> 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 <a href="mailto:alertnonnative@ceh.ac.uk">alertnonnative@ceh.ac.uk</a> and the NBU office or your Regional Bee Inspector.

The image gallery on BeeBase <a href="http://www.nationalbeeunit.com/gallery/index.cfm">http://www.nationalbeeunit.com/gallery/index.cfm</a> 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.

#### **Small Hive Beetle**

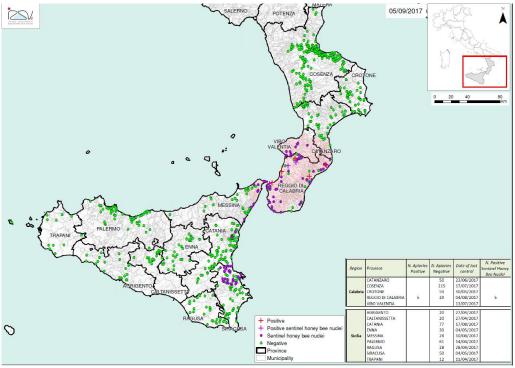
At the time of writing (11<sup>th</sup> December 2017) there have been a total of just 11 apiaries reporting positive for Small Hive Beetle in the province of Reggio Di Calabria in the region of Calabria, southern Italy. Two of these were feral colonies and 5 others were sentinel apiaries set up by the authorities.

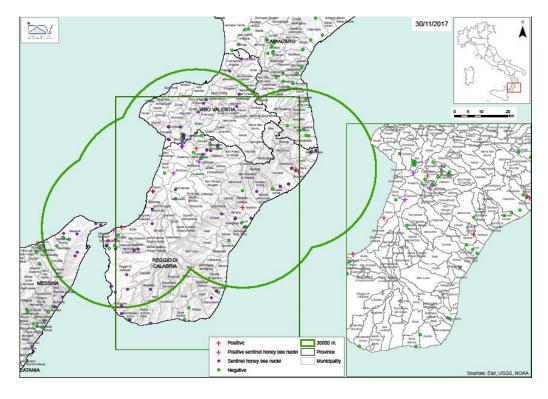
However, the Italian web site has been updated on 30<sup>th</sup> November and it should be noted that nearly all the positives reported in previous years have come from mid-September to December. Surveillance inspections in Sicily (326 apiaries) and in the more Northern Regions of Cosenza, Crotone and Catanzaro (318 apiaries) have all been clear. This indicates that the secondary outbreaks in Sicily in 2014 and Cosenza last year (the latter due to the illegal movement of colonies) may have been eradicated. On the basis of information received from the Italian competent authorities relating to their experience with small hive beetle occurrences in Southern Italy, the Commission Implementing Decision (EU) 2017/2174 of 20 November 2017 has been passed, amending Annex E to Council Directive 92/65/EEC as regards the health certificate for trade in bees and bumble bees such that, in respect of SHB, as well as meeting other measures, honey bee queen exports must originate from an area at least 30 km distance from the limits of a protection zone of at least 20 km in radius around confirmed occurrence(s) of the small hive beetle. The previous 100km exclusion zone remains in place in respect of *Tropilaelaps* sp. mites.











See <a href="http://www.izsvenezie.com/aethina-tumida-in-italy/">http://www.izsvenezie.com/aethina-tumida-in-italy/</a>



The maps above indicate that SHB is now present right across the region of Reggio Di Calabria with three new positives in two of the eastern provinces.

I would again like to thank all the beekeepers in the South East region and beyond 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 <a href="http://www.nationalbeeunit.com/index.cfm?pageid=125">http://www.nationalbeeunit.com/index.cfm?pageid=125</a> for links to the leaflet, a video and much more detailed information.

#### **Imports 2017**

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 <u>Importer Notification Form</u> 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 <a href="http://www.nationalbeeunit.com/index.cfm?sectionid=47">http://www.nationalbeeunit.com/index.cfm?sectionid=47</a>

The number of queens imported into England, Scotland and Wales from other EU countries continues to rise year on year. Import numbers for 2017 at time of writing are as follows (2016 figures in brackets for comparison):

• Queens imported from the EU 15,210 (13,924)

• Packages of Bees imported from the EU 1,776 (1,924)

• Of which from Italy 1,310 (1,354)

• Nucs imported from the EU 19 (23)

• Full colonies imported from the EU 0 (0)

• Queens from Third Countries 525 (Argentina) (335, also Argentina)



# Foulbrood Diseases and Inspection Statistics 2017

3809 colonies were inspected and 804 apiary visits were made within the South East Region. Of these apiary inspections 453 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.

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

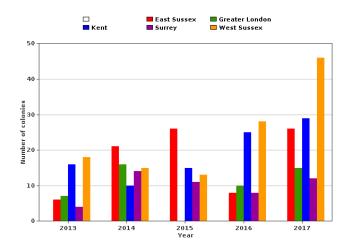
County	10 km Square	Area Name	Number of Positive EFB Diagnoses (including recurrents)	Month Found
East Sussex	TQ30	BRIGHTON	6	April
East Sussex	TQ30	BRIGHTON	2	May
East Sussex	TQ30	BRIGHTON	5	June
East Sussex	TQ30	BRIGHTON	6	August
East Sussex	TQ41	N.E. LEWES	2	April
East Sussex	TQ41	N.E. LEWES	3	May
East Sussex	TQ51	N. HAILSHAM	1	April
East Sussex	TQ51	N. HAILSHAM	1	August
Greater London	TQ26	EPSOM & SUTTON	8	September
Greater London	TQ39	ENFIELD	2	May
Greater London	TQ39	ENFIELD	3	August
Greater London	TQ39	ENFIELD	2	September
Kent	TQ65	W. MALLING & HADLOW	2	June
Kent	TQ94	W. ASHFORD	1	April
Kent	TQ94	W. ASHFORD	1	July
Kent	TQ95	WICHLING & EASTLING	2	July
Kent	TQ95	WICHLING & EASTLING	1	September
Kent	TR05	SELLING & CHILHAM	2	April
Kent	TR15	CANTERBURY	2	August
Kent	TR25	WINGHAM & RATLING	5	May
Kent	TR25	WINGHAM & RATLING	5	July



County	10 km Square	Area Name		itive EFB Diagnoses ng recurrents)	Month Found	
Kent	TR25	WINGHAM & RATLING	1		August	
Kent	TR25	WINGHAM & RATLING	5		September	
Kent	TR26	HOATH & STOURMOUTH	2		May	
Surrey	SU85	FARNBOROUGH	1	July	У	
Surrey	SU93	HASLEMERE	1	August		
Surrey	SU94	GODALMING	5	July	July	
Surrey	SU94	GODALMING	3	Augu	August	
Surrey	TQ04	S.E. GUILDFORD	1	Septen	nber	
Surrey	TQ26	EPSOM & SUTTON	1	October		
West Sussex	SU80	CHICHESTER	3	July		
West Sussex	SU80	CHICHESTER	3	August		
West Sussex	SU90	N. BOGNOR REGIS	3	July		
West Sussex	SZ89	SELSEY	1	July		
West Sussex	SZ89	SELSEY	2	September		
West Sussex	TQ02	BILLINGSHURST	3	April		
West Sussex	TQ02	BILLINGSHURST	2	Ma	May	
West Sussex	TQ02	BILLINGSHURST	3	June		
West Sussex	TQ02	BILLINGSHURST	2	August		
West Sussex	TQ10	WORTHING	7	May		
West Sussex	TQ10	WORTHING	4	August		
West Sussex	TQ11	STEYNING	1	April		
West Sussex	TQ11	STEYNING	4	Ma	May	
West Sussex	TQ11	STEYNING	2	August		
West Sussex	TQ12	S. HORSHAM	2	May		
West Sussex	TQ21	HENFIELD	4	Ma	у	



#### **EFB Incidence in South East Region by County**



#### **2016**

Nationally: EFB 426 AFB 132

South East Region: EFB 79 AFB 4

#### 2017

Nationally: EFB 493 AFB 74

South East Region EFB 128 AFB 0

As you can see from these numbers there has been a 62% increase in European Foulbrood diagnoses in the South East as opposed to 16% nationally.

Further details and mapping can be found on the disease incidence pages of BeeBase at <a href="https://www.nationalbeeunit.com">www.nationalbeeunit.com</a>. It is recommended that these are checked regularly to see if there is any foulbrood disease close by.

### **BeeBase Registration and Association Membership Lists**



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 <a href="https://www.nationalbeeunit.com">www.nationalbeeunit.com</a>, 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**

There have been some additions recently to the Varroa treatments available in the UK. The list of those registered and approved for use by the Veterinary Medicines Directorate (VMD) is available on their web site:

(http://www.vmd.defra.gov.uk/ProductInformationDatabase/Default.aspx)

together with the SPCs giving full details of use. For the full list select 'Bees' on the drop down list of Species in the product search link. Apivar is the most recent addition and Apitraz has now become available in the UK. Both of these are strips containing Amitraz as the active ingredient. Now that they are on general release they may be obtained from UK beekeeping suppliers and will no longer require a veterinary prescription. Oxuvar, an oxalic acid based treatment applied by the 'trickle' method was also approved late last year but is currently without a UK distributer.



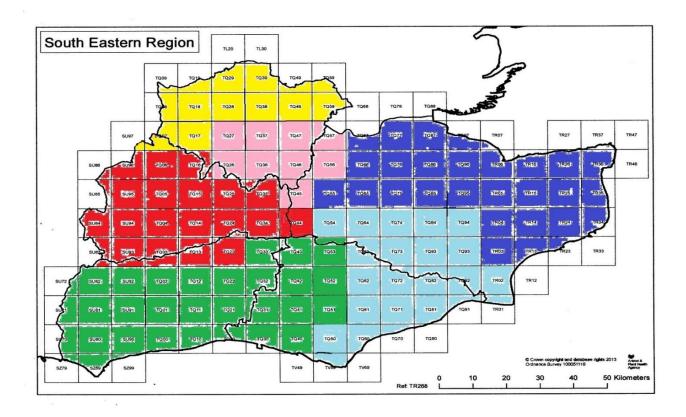
#### **Education and Training for 2018**

In the South East Region I would like to offer Bee Health Days at County Level where a number of inspectors will run a bee health and disease day with 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 exceed 100 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 Kent BBKA and am at the early stages of organising A Healthy Bee Day in the county of Kent for 2018. Please do contact me if you would like to consider a Healthy Bee Day for your county in the future.

# South East Inspectors and 2018 Season

The map shows the Region and areas covered by our South East Inspectors at the start of this year.





Seasonal Inspectors only work April – September and outside this time please contact me. The new season will start on 2<sup>nd</sup> April 2018 and from that date you can contact the team as follows:

Michael Cooper	michael.cooper@apha.gsi.gov.uk	07775 119437
Hilary Hayward	hilary.hayward@apha.gsi.gov.uk	07900167409
Brian McCallum	brian.mcCallum@apha.gsi.gov.uk	07775119478
Mark Patterson	mark.patterson@apha.gsi.gov.uk	07900223241
Diane Steele	diane.steele@apha.gsi.gov.uk	07775119452
Kay Wreford	kay.wreford@apha.gsi.gov.uk	07775119483

Finally I would like to wish you all a very Happy Christmas, good wintering and very Best Wishes for a Happy Beekeeping 2018.

Sandra Gray Regional Bee Inspector –South East Region Tel. 01787 211465 or mob. 07775 119430.

E-mail Sandra.gray@apha.gsi.gov.uk

#### Head Office:

National Bee Unit, The Animal and Plant Health Agency (APHA), National Agri-Food Innovation Campus, Sand Hutton, York. YO41 1LZ

Tel: 0300 303 0094

Email: <a href="mailto:nbu@apha.gsi.gov.uk">nbu@apha.gsi.gov.uk</a>

Website: <u>www.nationalbeeunit.com</u>