National Bee Unit

South East England Annual Report

The 2021 Season

I'd like to start by introducing myself as many of you will not know me. I have been appointed as South East Regional Bee Inspector on temporary basis whilst Sandra Gray fills a temporary promotion elsewhere in APHA and will be back with us in the spring 2022. My interest in bees started well over 20 years ago and up until 2014 most of my time was spent working overseas between New Zealand and the USA. In 2014 I arrived back on British soil to take up a post as Seasonal Bee Inspector covering Berkshire, I then covered Powys in central wales for two years until heading back down south to Hampshire, covering Hampshire and the Isle of Wight for the last 4 years. 2022 will be my ninth year with the National Bee Unit

My thanks go to our Seasonal Bee Inspectors for their efforts in the field and to you for supporting us in our inspection programme during 2021. Our inspections are targeted to maximise our ability to find and control pests and diseases and our work schedules are so much easier for the help you give us in arranging appointments.

Despite an easing of COVID restrictions we have continued to work without beekeepers at the hive in most cases. We have also been restricted in the amount of new beekeeper registration visits, bee health days, bee safaris, and other public events that we have been able to deliver. I hope we can rectify that next year.

The levels of European Foulbrood continue to be a problem for us in the South East region with a particular hot spot in the Greater London Area. It is vitally important that swarm control, careful management of collected swarms, and biosecurity/barrier management remain in the front of mind for beekeepers to manage this.

The beekeeping season began with a reasonable April followed by a very cold and wet May. The worst in living memory as I was told by a 90-year-old beekeeper. In much of the region the bees had gathered minimal nectar, and many beekeepers had to resort to supplementary feeding to avoid starvation but inevitably we did have many reports of starvation at a time of year when forage is normally in abundance. The weather improved throughout late May and June and colonies took advantage and gained strength rapidly as the nectar flow took off with a bang. Many of the stronger colonies had been laying in wait with charged gueen cells waiting for a weather window and many colonies swarmed in a short space of time. Colonies that did not do this seemed to hold off from swarming all together resulting in a relatively low swarm year for most in our area. As a result, we noticed an increase in varroa later in the season as many hives continued to raise brood all season. Issues such as missing queens and poorly mated and drone laying queens were commonplace. July was very hot, and the bees were able to accumulate large honey stores assuming that the beekeeper had given them enough space to do so. Honey harvests were highly variable with reports of everything from exceptionally poor to very good. August continued to be warm and dry, but the main flow was over. In



September and October, the ivy flowered well and was a good nectar source for the bees.

Getting around London has always been a challenge for our inspectors and 2021 was no exception, with changes in emissions and parking regulations, our SBIs have been adapting and using public transport more frequently and there could be a slight change in how some of the central London inspections are carried out in the future. You may be asked to supply the use of a smoker, etc., which will lessen the equipment burden on the SBI and aid them in carrying out their daily work more efficiently and traveling lighter.



Figure 1 Starvation

Complete Starvation:

Here is a photo of starvation taken in late May. The cold and erratic weather was hard for the beekeeper to keep up with. I suspect this was the main reason for the many early losses in the spring of 2021

Photo and quote courtesy of Diane Steele SBI

Changes to the NBU South East Inspector team

The main change to the team this year was myself joining, I have only been with the team since mid-September and time was quite quickly absorbed by the Asian hornet outbreaks in Ascot and Portsmouth (see below). Fortuitously, this did enable us to regularly work together, and I very quickly got to know the members of my team that I hadn't worked with in previous years.

We did run an SBI recruitment campaign in the summer and the South East region has managed to recruit one SBI – Lisa Jenkins, that will be starting with us on March 28th 2022, so we will have a full complement of inspectors going into the new season.

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Regional Bee Inspector	Area (2022 proposed)	Contact
Dan Etheridge	South East Region	+447979119376
Seasonal Bee		
Inspectors		
Stewart Westsmith	Surrey	+447769933172
Danyal Conn	South East London & N Kent	+447584202700
Tom Bickerdike	Greater London West	+447775119464
Diane Steele	West Sussex & East Sussex	+447775119452
Kay Wreford	Kent & East Sussex	+447775119483
Julie Parker	North London	+447769933191

Healthy Bees Plan 2030, Implementation Plan.

Following publication of the Healthy Bees Plan 2030 last year, its implementation plan was published in October this year. Over fifty actions have been developed in partnership with industry and stakeholders for beekeepers, bee farmers, bee associations and government to work on together, to protect honeybees from a variety of pests, diseases and environmental threats over the next 10 years.

You can find out more about the healthy bees plan and its implementation here <u>https://www.nationalbeeunit.com/index.cfm?sectionid=41</u>

Beekeeper and colony numbers

There are currently 6,726 beekeepers in the South East Region registered on the NBU's online database BeeBase. Between them they have 30,538 colonies in 8,364 apiaries. Over the past 5 years, the number of new beekeepers in South East Region registering on BeeBase has fluctuated between 379 and 450 in the last 5 years with an obvious spike in 2020

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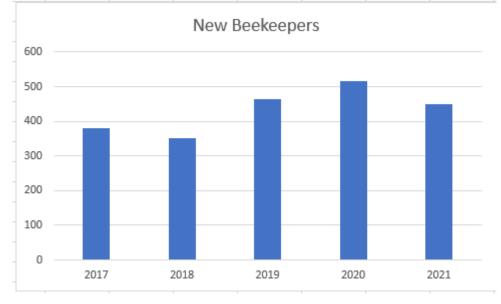


Figure 2 New Beekeepers in South East Region

Our inspectors update BeeBase throughout the season, checking the status of beekeepers who haven't been visited for a long time and removing those who are not keeping bees anymore. Beekeepers can be of great assistance in helping us maintain an accurate database by completing the annual HiveCount census taken in November and December each year.

BeeBase Registration

We often find beekeepers believe that by joining a beekeeping association they have been registered on BeeBase. That is not the case and so we kindly request that anyone running beekeeping courses or otherwise introducing people to beekeeping remembers to show them BeeBase and explain the role of the National Bee Unit.

Registration on BeeBase is essential so that we can identify any apiaries at risk of notifiable disease or an incursion of an exotic pest into the UK and target control measures effectively. Registration is free and your information is completely confidential. 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. Beekeepers can securely access their personal details and inspection records.

You can register on the BeeBase website

(<u>https://nationalbeeunit.com/public/register.cfm</u>) or by contacting the NBU office on 0300 303 0094.

We are happy to receive Beekeeping Association membership lists to compare against BeeBase but you should only send us these details if the requirements of General Data Protection Regulation (GDPR) are satisfied for each member.



Inspections

Our South East Region Seasonal Bee Inspectors completed 1,039 apiary inspections totalling 4,376 colonies this season. This is up from 2020 due to the additional SBI Danyal Conn who joined our team at towards the end of the 2020 season.

Please note that it's a legal requirement to inform the NBU if you know or suspect a statutory, notifiable disease or pest is present in your apiary. Beekeepers can contact their Seasonal Bee Inspector during the summer or their Regional Bee Inspector all year round.

If you can take a photograph, then you can send it to your local inspector by email or text message. Alternatively, call us on the phone and describe the problem. If we can't rule out there being a statutory disease or pest, we will arrange to visit free of charge.

Disease and Pests

Details of disease found this year can be found on the "Disease Incidence" pages of BeeBase (<u>https://nationalbeeunit.com</u>).

European Foulbrood (EFB)

EFB was diagnosed in 146 colonies across the South East Region during the season. We responded to this by moving our inspectors around the region to help each other manage the outbreaks.

EFB Incidence

National Bee Unit

Figure 3 EFB Incidence in South East Region

Cases of EFB in Greater London have continued to be well above elsewhere in the region due to high numbers of beekeepers, high apiary density, and the collection of swarms that then spread the bacteria into new apiaries. Although slightly down on 2020 it is always an area of concern and we continue to put resources where necessary to limit the spread. One of the key tools is to strongly encourage registration on BeeBase as we have encountered many new, and sometimes seasoned beekeepers, to be unregistered in these disease hot spots. It is so important for the disease control effort to have everyone on our list and to be able to carry out sufficient surveillance. Surrey had the most notable rise in cases of EFB from 13 in 2020 to 31 in 2021 and although some areas in the South East have generally fared a little better from previous years, we are still a region with a lot of disease in comparison to other parts of the UK. EFB hotspots and any new outbreaks this year appear to be linked mostly to bee movements and beekeeper spread to different apiaries. We highlight the need for all beekeepers to remain vigilant when collecting swarms from unknown sources and to ensure they are following good hygiene procedures to limit any spread of the disease. If you are buying bees then you are encouraged to seek advice about where they are from and we are always keen to inspect any bees brought into the region.

American Foulbrood (AFB)

I am pleased to report that there were 0 cases of AFB across our region in 2021 unlike 2020 when 11 cases of AFB were detected in Greater London.

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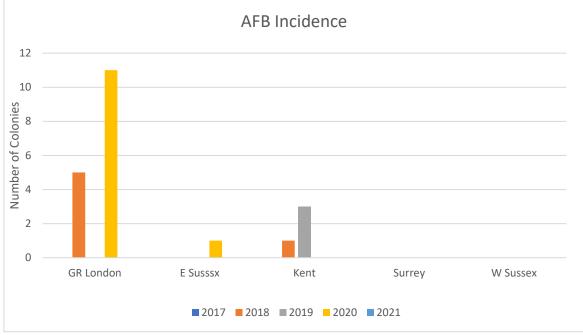


Figure 4 AFB Incidence in South East Region

Varroa

Varroa continues to be a challenge and is responsible for many colony losses each year. Its severity varies each year due to factors such as the differences in swarming and other natural brood breaks.

Inspectors have found that beekeeper knowledge about varroa and its management is poor. This has likely been exacerbated by the restrictions on beekeeper training caused by the pandemic. We advise beekeepers to regularly monitor mite levels as part of the management of their colonies and to act if they reach damaging levels. Control can be achieved by using biotechnical methods and/or authorised products as directed by the manufacturer.

Authorised treatments are carefully assessed to ensure maximum efficacy so please ensure you are following the instructions when you use them. We often find treatments being used at the wrong dosage, at times when the ambient temperature is not within range, or when honey supers are present on the hive when the product does not allow this. You will see that the Veterinary Medicines Directorate Product Information Database (<u>https://www.gov.uk/check-animal-medicine-licensed</u>) contains a new authorised varroa product, Formicpro 68.2g Beehive Strips for Honeybees. Remember, there is a legal requirement that the use of any medicines is recorded, and these records must be kept for a minimum of 5 years.

Exotic Pest Surveillance

The National Bee Unit carried out 114 apiary inspections on 336 colonies specific to exotic pests in South East Region this year, targeting a combination of identified risk points and random sites. Exotic Pest Surveillance (EPS) inspections check for the presence of Small



Hive Beetle (SHB), Tropilaelaps mites, and Asian Hornets (AH) as well as being a normal brood inspection looking for foulbrood. Given the continued presence of Small Hive Beetle in Italy this year and the continued spread of Asian Hornet in France and surrounding countries the importance of exotic pest surveillance work cannot be overstated.

We have 19 Voluntary Sentinel Apiaries (VSA) in the South East Region. A volunteer beekeeper is identified near a risk point and they monitor their colonies for exotic pests. Floor debris is sampled twice a year and sent to the FERA lab to be checked for Small Hive Beetle and Tropilaelaps. In addition, we have 11 Enhanced Sentinel Apiaries (ESA) in South East Region. Our inspectors monitor the selected apiary 3 times each season near each of our high-risk points. I'd like to thank the beekeepers who currently support us in these important activities.

Small Hive Beetle (SHB)

Information from the National Reference Laboratory for Apiculture in Italy below, updated in September 2021, shows surveillance for Small Hive Beetle in Sicily with no positives found again this year. Meanwhile in the Calabria region on the mainland, two positive apiaries and five positive sentinel nuclei have been found, their website documents a total of 37 adult beetles found this year.



Figure 5 Small Hive Beetle in Sicily and Calabria during 2021

Yellow-legged Asian Hornet (Vespa velutina nigrithorax)

The National Bee Unit has developed an iPAD based track and trace application that supports our track and trace field techniques. We ran field training for the application during the summer where all the team were able to attend.



On 6th October, a beekeeper in the Ascot area of Berkshire filmed live insects near a hive and captured a sample. They reported the sighting using the using the Asian Hornet Watch app. The sighting was confirmed, and a nest was found in a poplar tree and killed on Monday 11th October. The nest measured approximately 35cm in diameter, the largest nest found to date in England. Monitoring continued in the area supported by local Asian Hornet Teams (AHTs) and when nothing was seen or caught for 7 days the team was stood down.

On 29th October, another sighting accompanied by clear photographs was reported on the Asian Hornet Watch App. The NBU team was onsite by 2pm that afternoon and the nest was found in a Norway Maple Tree shortly after noon on Saturday 30th October.



Figure 6 Asian Hornet Nest (Ascot)



Figure 7 Asian Hornet Nest (Portsmouth)

If you have a smartphone please make sure you download the free Asian Hornet Watch app for iPhone or Android and familiarise yourself with what the hornets and similar insects look like. If you don't have a smartphone you can email <u>alertnonnative@ceh.ac.uk</u> or contact the NBU.

Imports and Exports

The UK is now considered a Third Country by the EU and similarly all EU member states are now considered a Third Country by the UK, so Third Country rules apply for both imports and exports.

Import of Honey Bees

Honey bees imported from a third country must be accompanied by an appropriate export health certificate (EHC) from the Third country. This must be issued by the Third Country's Competent Authority or their Official Certifier. Currently only the import of Queens (in cages with attendant workers) is permitted under Third Country rules, except from New Zealand where the import of packages of bees is also permitted.

Importers wishing to import bees from a listed third country must comply with the import requirements. Importers must notify all imports in advance via the IPAFFS system (Import of Products, Animals, Food and Feed System). Imports from countries other than EU member states must enter via a Border Control Point (BCP).



Until March 2022 imports from EU member states will be checked at destination by a Bee Inspector on a risk basis.

The Northern Ireland Protocol sets the principle of unfettered access for Northern Ireland businesses to Great Britain. NI beekeepers may continue to export packages and colonies to the UK. There will be no border checks on consignments despatched from Northern Ireland.

Export of Honey Bees

Honey Bees exported to a third country must be accompanied by an appropriate health certificate. This is issued by the NBU once the bees to be exported have been inspected and confirmed free from serious notifiable pests and diseases.

Currently only the export of Queens (in cages with attendant workers) is permitted under Third Country rules to EU and Northern Ireland.

As Northern Ireland is treated as though it still resides within the EU, movements of bees to Northern Ireland must now be accompanied by a health certificate and the full Third Country export procedure must be followed. In the same way, only queens may be exported to Northern Ireland. The export of colonies and packages to Northern Ireland are no longer permitted.

To keep up to date with the latest guidance on importing and exporting live honey bees please visit the following link

(https://www.nationalbeeunit.com/index.cfm?sectionid=47).

Finally

Although I may not get to meet many of you before Sandra Gray return in the spring, please do not hesitate to contact me or one of the South East Region Seasonal Inspectors should you require help and advice.

With best wishes to you all.

Dan Etheridge

Regional Bee Inspector, South East England (Graeter London, Surrey, West Sussesx, East Sussex, Kent)

National Bee Unit Animal and Plant Health Agency (APHA)

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Help us to look out for Asian hornet! Download the Asian Hornet Watch app for detailed guidance on identification and to quickly report potential sightings.

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APHA is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Government and Food Standards Agency to safeguard animal and plant health for the benefit of people, the environment and the economy.