



National
Bee Unit



Animal &
Plant Health
Agency

National Bee Unit Southeast Annual Review 2022

The 2022 Season

The season began early with some beekeepers reporting heavy winter losses. In most cases, evidence pointed towards Varroa as the leading factor. This is a reminder that we need to be vigilant regarding Varroa, especially with the long brooding seasons that we are increasingly experiencing where mites can expand to high numbers and to some extent even recover following late summer/early autumn treatments.

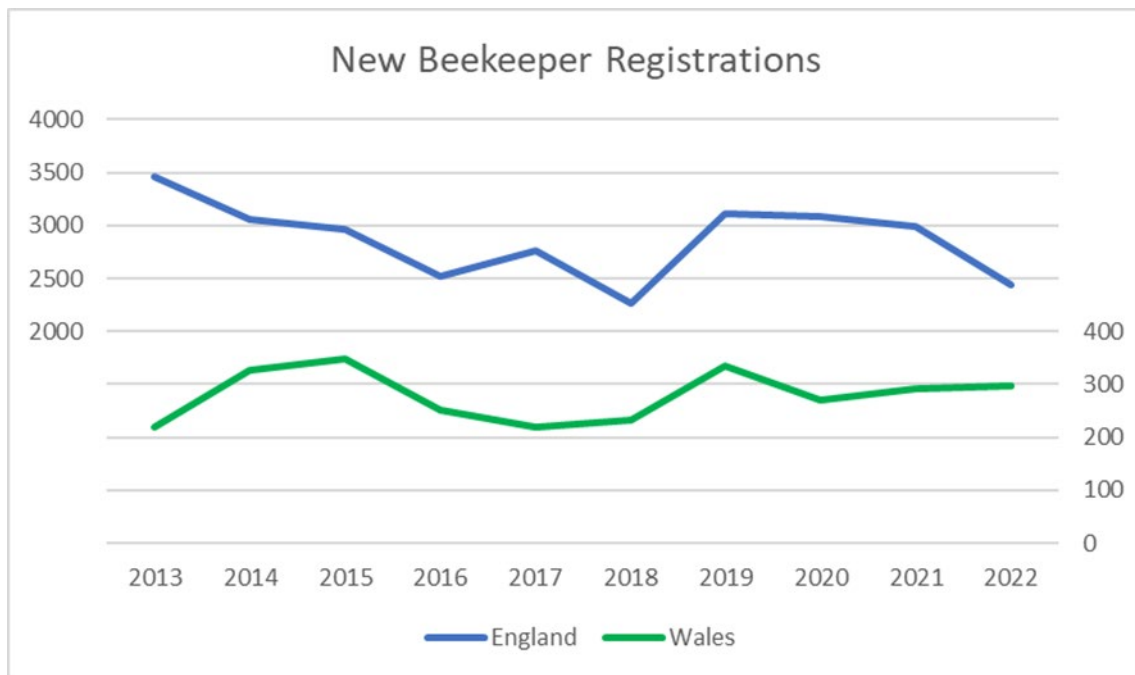
The spring started well with warm dry weather that enabled the colonies to expand and start to produce a spring crop with the inevitable start of swarming. The warm dry weather continued into summer where prolonged dry spells were a warning of things to come.

The Southeast recorded the driest July since records began back in 1835 with only 10.5mm of rainfall. The grass had turned brown weeks before, shrubs and trees started to drop leaves and grass fires a plenty started to stretch the fire service. In some cases, Inspectors had to take special precautions to carry out disease controls with the risk of fires spreading beyond our fire pits, diseased colonies had to be double bagged into biohazard sacks and sent for incineration.

The heat also took a toll on the inspectors. During periods of excessive heat, the inspectors were reminded of the potential for heat exhaustion both for themselves and the beekeepers that are often keen to be present for the inspections. In some cases, inspections needed to be rescheduled to avoid these periods.

Despite the very dry conditions, most beekeepers reported record crops of honey. However, in some areas during August, the nectar had largely dried up providing a problem for the beekeepers who wanted to remove the honey crop. Having little or no nectar through the door and brood boxes empty of stores meant feeding or leaving supers on the hive during treatments was the only option. In some cases, inspectors reported colonies on the verge of starvation after the honey had been removed.

September through October saw the grass return to green, shrubs and trees started to recover, which led to a big ivy flow that the bees were grateful for. At the time of writing, a very warm autumn has meant a second spring has arrived in some parts of the UK with bees regularly out collecting pollen where they can. Let's see what the winter has in store for us.



Trends in new beekeeper registration in Wales and England for the last decade (2022 data to end of October).

It is important for beekeepers to remember that being a member of a beekeeper's association does **not** automatically mean that you are registered on BeeBase, the National Bee Unit's website and database, beekeepers need to access our website and independently register themselves. If, in the past, you have been inspected by the National Bee Units bee inspectors then your details will automatically be on BeeBase, but please keep your apiary locations updated. If you have lost your BeeBase password, there is a forgotten password link on BeeBase. You can register online www.nationalbeeunit.com or by contacting the NBU office on 0300 3030094 / nbu@apha.gov.uk or by contacting your Seasonal Bee Inspector.

Registration is free and all your details are kept confidential. You can receive email alerts when foulbrood or exotic pests (including Asian Hornet) are found in the surrounding area of your apiaries. You can also receive notifications of important observations that bee inspectors are making in the field, like starvation alerts and unusually high varroa levels. Your registration also benefits the wider beekeeping community by allowing inspectors to know where to look for disease or pests so that outbreaks can be quickly brought under control.

The NBU team update

The National Bee Inspector Cristina Ruiz was on maternity leave from January and returned to the National Bee Unit in October. Her maternity leave was covered by Dhonn Atkinson the Regional Bee Inspector for the Northeast region. The National Bee Unit office welcomed Samantha O'Toole in June to provide programme support alongside Diane Gillibrand.

In the Southeast region we said goodbye to a wonderful and respected member of the team, Kay Wilcox, on her retirement back in May. Many of you would have had the pleasure of meeting and working with Kay over the years, as well as a Seasonal Bee Inspector, Kay was the Regional Inspector for a little under two years. She will be very much missed by the team but the legacy of her wisdom will carry on.

In April we welcomed a new member of the team and were joined by Lisa Jenkins. Lisa has hit the ground running in every sense and already feels like a longstanding member of the team. Many of you will have already met Lisa if you are from Kent or surrounding areas. She has already had a very busy season with plenty of foulbrood, exotic pest surveillance and Asian hornet monitoring within her area. At the time of writing, we have just finished a recruitment drive and hope to have one more team member to bring us up to full capacity for the 2023 season.

You can use your postcode to search on the contacts page of BeeBase to check for your local Seasonal Bee Inspector who can be contacted on the numbers below from the beginning of April until the end of September. During the winter period of October to March please direct all enquiries to the RBI.

Regional Bee Inspector (RBI)	Area (2022 proposed)	Contact
Dan Etheridge	South East Region	+447979119376
Seasonal Bee Inspectors (SBI)		
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
Lisa Jenkins	Kent & East Sussex	+447810094088
Julie Parker	North London	+447769933191
Isaac Mullane	East Hampshire	+447552262787

Beekeeper and hive numbers

There are currently 6,834 beekeepers in the Southeast region registered on BeeBase. Between them they have 30,584 colonies in 8,615 apiaries, which is an average of 4.5 colonies per beekeeper and 3.5 colonies per apiary.

Almost 9,000 beekeepers updated their details on BeeBase during the 2021 hive count. There are currently more than 46,000 beekeepers registered on BeeBase, meaning that around 20% participated. The Hive Count provides a very useful indication of the number of managed colonies in the UK and helps to ensure that BeeBase records are kept up to date.

Information about numbers and location of hives is very important for the National Bee Unit and Scottish Government inspectors in terms of preparing and planning for outbreaks of disease and exotic pests. Please take the time to complete the 2022 hive count which will go live on the 1st of November and finishes on the 31st of December.

Inspections

This year Inspectors in the Southeast visited a total 886 apiaries and inspected 4,167 colonies. Inspectors have also carried out 11 honey samples for the Veterinary Medicines Directorate and attended several reports of poisonings. In all cases these colony deaths were attributed to either parasitic mite syndrome (PMS) caused by Varroa (more on this below) or chronic bee paralysis virus (CBPV).

Bee Health Days and Training.

The lifting of Covid19 restrictions saw the return of bee health days, which are our primary method of beekeeper training. This year sessions focused more on the practicalities of inspecting a colony for disease, and SBIs enjoyed the opportunity to

lead bee safaris and apiary-based sessions. Unfortunately, workload and staff shortages across the country sometimes means that we cannot dedicate as much time and resource to this area of work as we would like. We will be running at least two Bee Health Days across the region in 2023.



Bee Health Day 2022

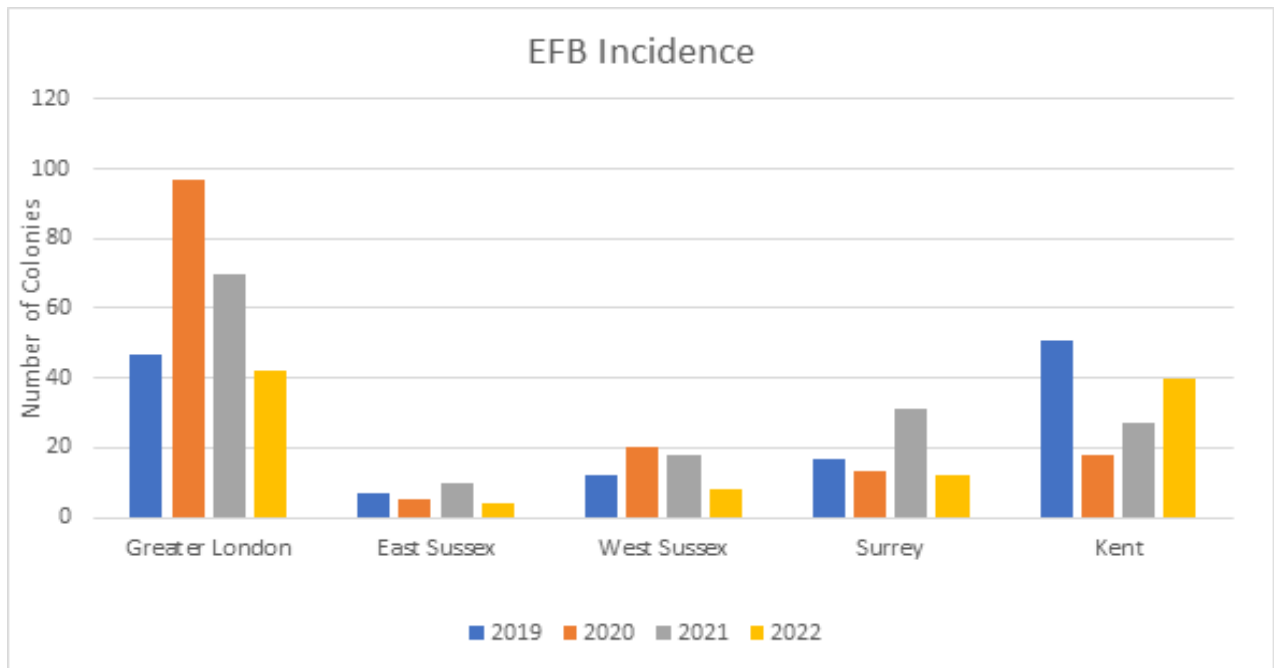
European Foulbrood (EFB)

EFB was diagnosed in 106 colonies across the Southeast region during the season. We responded to this by moving our inspectors around the region to help each other manage the outbreaks. Cases of EFB in Greater London have continued to be well above elsewhere in the region. Although slightly down from 2021, it is always an area of concern, and we continue to put resources where necessary to limit the spread.

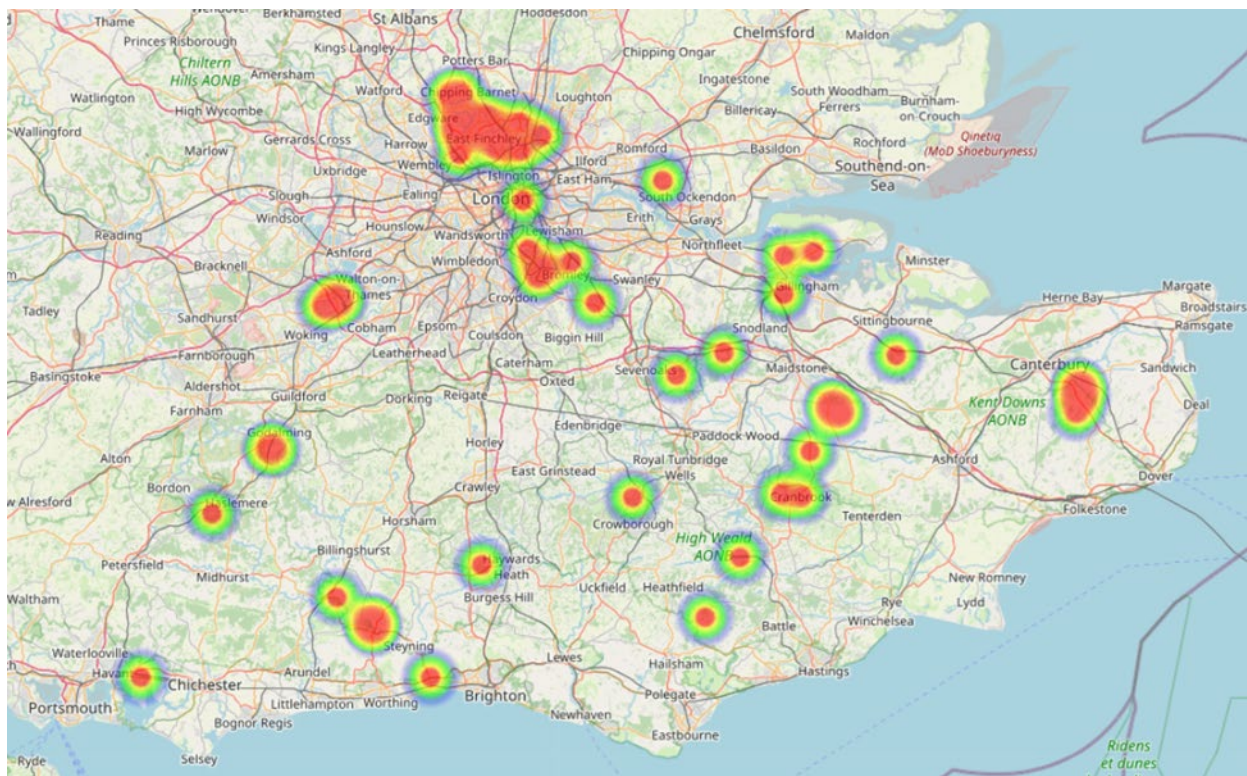
One of the key tools is to strongly encourage registration on BeeBase www.nationalbeeunit.com as we very often come across many new, and sometimes seasoned beekeepers, to be unregistered in these disease hot spots.

Kent had the most notable rise in cases of EFB from 27 in 2021 to 40 in 2022 and although some areas in the Southeast have generally fared a little better than previous years, we are still a region with a lot of disease in comparison to other parts of the UK.

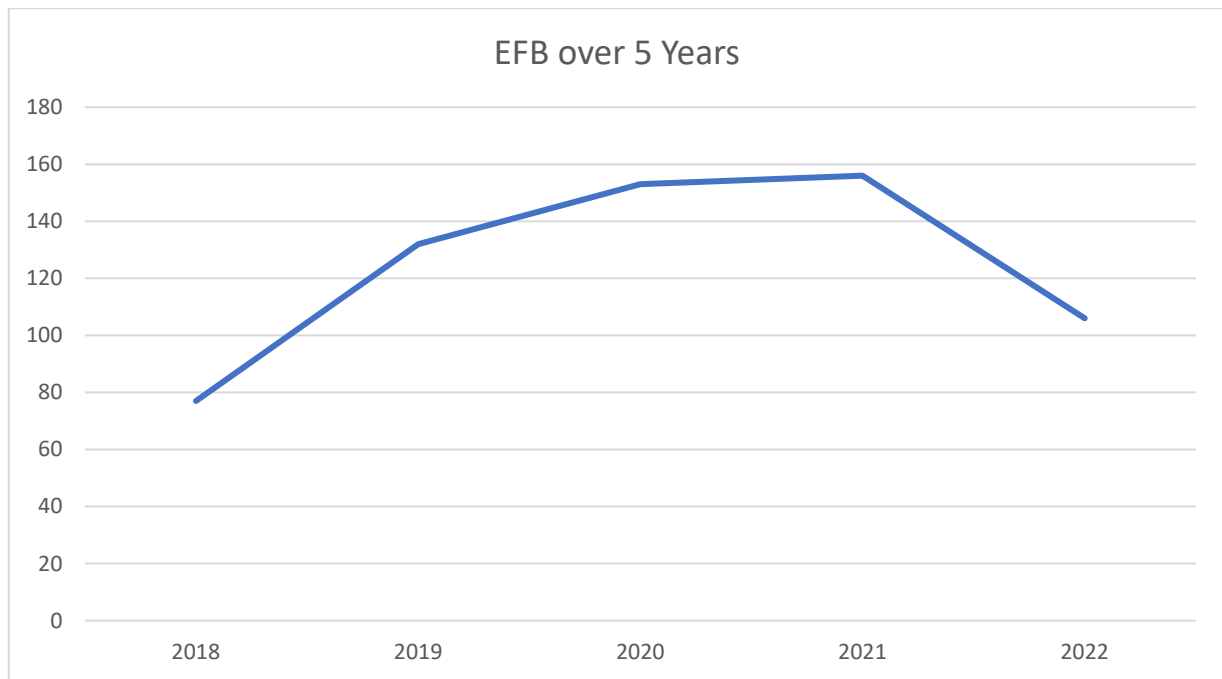
EFB hotspots and any new outbreaks this year appear to be linked mostly to bee movements and beekeeper spread to different apiaries. We highlight the need for all beekeepers to remain vigilant when collecting swarms from unknown sources and to ensure they are following good hygiene procedures to limit any spread of the disease. For example, hiving swarms into a sterilised hive onto new foundation rather than drawn comb. 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.



EFB Incidence in South East Region



European fowl pox outbreaks 2022



EFB levels across the SE region over the last 5 years

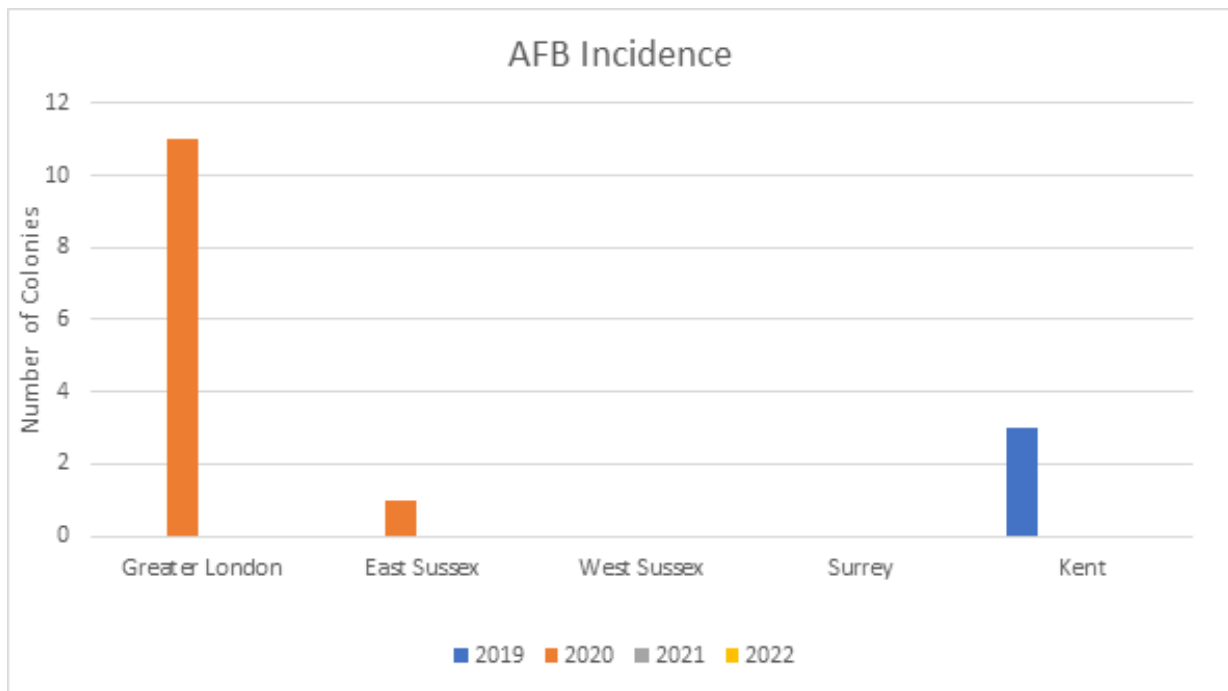
As you will see from the graph levels of EFB in the Southeast region has slightly reduced closer to the levels of 5 years ago, after an increase in 2020 and 2021, which is more in line with our long-term regional average. It is important to do regular bee disease inspections of your colonies in the active beekeeping season and contact your local Inspector if you have any concerns. www.nationalbeeunit.com.



Contorted larvae with EFB

American Foulbrood

I am pleased to report that for the second year running there were 0 cases of AFB across our region in 2022 unlike 2020 when 11 cases of AFB were detected in Greater London. This doesn't mean that beekeepers needn't be vigilant for signs of potential AFB infections.



AFB Incidence in South East Region



Classic AFB ropiness test

Varroa

Over the winter of 2021/22 I received a huge volume of calls from beekeepers in our region that had lost large numbers of colonies, and in some cases whole apiaries, where the majority showed the classic symptoms of collapse because of Varroa mites. Almost all cases were due to either not treating at all, or incorrect use of an approved treatment e.g., half dosing or using a Thymol based treatment very late in the year. I also had several calls from beekeepers that actively choose not to treat and hadn't done for 3 or 4 years but had suddenly lost most or all their bees.

I think we forget that Varroa levels are directly related to brood production, and the bigger the colony or the longer brood rearing period, the bigger the mite load. It can be all too tempting to leave the colony/apiary that has been doing so well to its own devices regarding Varroa treatment, but in so many cases I hear about how the strongest colony in an apiary is now a shadow of its former self with just a smattering of

bees remaining. With the extended periods of brood rearing, I have been saying for a long time that in many cases we need to be rethinking our Varroa treatment plan and ask ourselves “is what I am currently doing really working?” One of the keyways to really know (not guess) what our mite levels are is by monitoring. I strongly encourage you to really focus on monitoring your hives to have the best chance of treating appropriately. Control can be achieved by 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 throughout the season will help determine whether an earlier treatment is required.

Varroa acts as a vector for viruses which will reduce the longevity of the bees and so impact on the foraging capability of colonies during the summer. Hives treated too late in the season may result in winter bees being affected by viruses or they may be weakened by the Varroa mites feeding on them. This may lead to colony mortality in the winter or early spring.

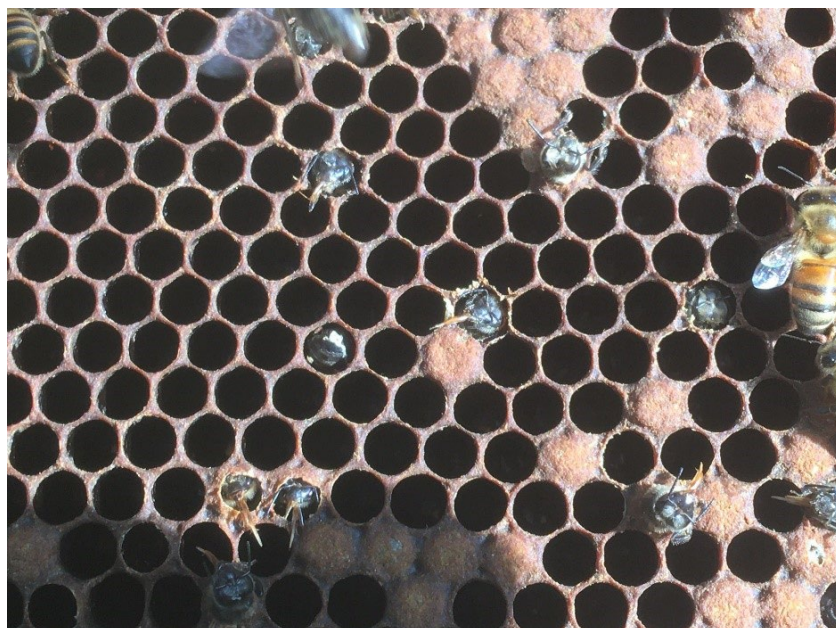
This year the Varroa treatments Bayvarol and PolyVar Yellow are no longer permitted for use in the UK. Formic Pro is also not now authorised for usage with supers present and if a honey supers remain on the hive during treatment that honey may not be used for human consumption. The list of those registered and approved for use by the Veterinary Medicines Directorate (VMD) is available on their [website](#) 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.

To avoid Varroa mites becoming resistant to specific chemicals it is good policy to rotate your treatments on a regular basis. There’s a legal requirement that the use of any treatments is recorded, and these records must be kept for a minimum of 5 years. Full details can be found on this link -

<http://www.nationalbeeunit.com/index.cfm?sectionid=110>

BeeBase has pdf links to numerous free fact sheets including the ‘Managing Varroa’ advisory leaflet.

<http://www.nationalbeeunit.com/index.cfm?pageid=167>



Collapsed colony - typical signs of late-stage Parasitic Mite Syndrome (Varroosis)



Typical view of a colony decline due to Varroa, bees just petering out to nothing often leaving plenty of stores and a smattering of brood.

Exotic Pest Surveillance

As well as NBU inspectors carrying out specific exotic pest surveillance inspections (for Small Hive Beetle and Tropilaelaps mites), we also have a group of volunteer beekeepers who have apiaries near risk points and who specifically monitor their honeybee colonies for these exotic pest species on behalf of the NBU. These 'Voluntary Sentinel Apiary' (VSA) holders represent a valuable front-line defence against exotic pest incursion.

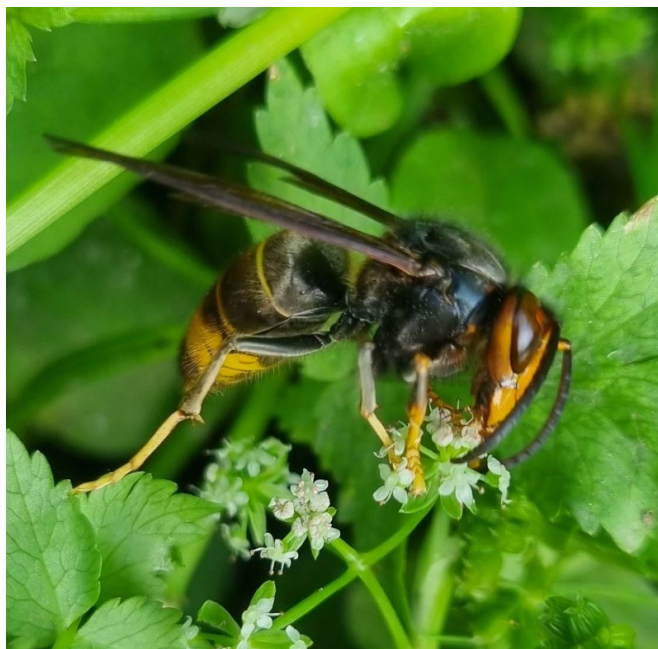
Risk points include freight ports, plant importers, airports, crude hive product importers, honey and queen importers. The distribution of VSAs both near risk points and at random sites maximises the likelihood of early pest detection. VSA holders are provided with a monitoring and sampling kit and regularly examine their colonies according to standard protocols. Samples of hive debris are tested twice in each season for the presence of Small Hive Beetle (SHB) and Tropilaelaps mites.

We are always looking for new recruits and would be happy to hear from any beekeepers who would like to join the scheme. In addition, by agreement with the beekeeper, NBU inspectors monitor selected 'enhanced sentinel apiaries' 3 times each season near each of the main freight ports and high-risk areas within the region.

Yellow-legged Asian Hornet (*Vespa velutina nigrathorax*)

This year has seen continued low levels of confirmed Asian Hornet sightings in the UK with just one Asian Hornet nest found by NBU inspectors in a sycamore tree in the Rayleigh area of Essex on Friday 30th of September, which was subsequently destroyed. This followed reports from a beekeeper in the area who had identified Asian Hornets entering their greenhouse where they were rendering wax. The nest was large,

approximately 40cm in diameter, local beekeepers were made aware through the Asian Hornet Teams (AHTs) and monitoring has continued in the area. Single Asian hornets were also photographed and reported via the Asian hornet watch app in Chelmsford in Essex and Dover in Kent. No further insects were seen but local Asian Hornet Teams have been alerted and are continuing to observe forage and monitor insects in the area.



Chelmsford Asian hornet.



Rayleigh Asian hornet nest

- Download the free Asian Hornet Watch iPhone or Android app
- Familiarise yourself with what the hornets and similar insects look like
- Keep a look out on late summer flowering plants such as ivy where the hornets (and other insects) forage on the flowers.
- Report suspect sightings using the 'Asian Hornet Watch' app, or by filling out an online report form, or by emailing alertnonnative@ceh.ac.uk.

Imports and exports of honeybees

Third Country rules now apply to import and export trade between the UK and EU member states. Movements of honeybees from Great Britain to Northern Ireland are treated as exports and so are also subject to these rules. Import rules do not apply to movements of honeybees from Northern Ireland to GB.

Imports

Honeybees imported from a Third Country must have an appropriate Export Health Certificate (EHC). The health certificate 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 must notify all imports in advance via the IPAFFS system. From 1st November 2022, the health certificate for imports from EU countries must be uploaded onto IPAFFS (Import of Products, Animals, Food and Feed System) so that it can be viewed online. There is no longer a requirement for the original paper EHC document to accompany the consignment. Original documents will remain valid but, by providing an original document, this does not remove the requirement to upload an electronic version. Imports from countries other than EU member states must enter via a Border Control Point (BCP). For now, imports from EU member states will continue to be checked at destination by a Bee Inspector on a risk basis; this approach is expected to change in 2023, with the exact date to be confirmed.

Exports

If you intend to export bees, you must ensure that the destination country permits imports from GB and that you can comply with their import conditions. It is the exporter's responsibility to do this. If you export your bees to any country without the correct certification, the consignment may be rejected/destroyed by the destination country. If the consignment required an inspection prior to export, the NBU would not be able to issue a certificate retrospectively. From January 2022, Export Health Certificates for exports to EU countries must be signed by an Official Veterinarian (OV). For countries outside the EU, whether an OV is required to sign the EHC is determined by the authorities in the country of destination, so it is important for the exporter to check the requirements with them.

Exporting to EU countries

Only queen bees can be exported to EU countries. To export queen bees, you must obtain an Export Health Certificate and arrange for it to be signed by an OV. The OV must carry out a health inspection at the apiary before the certificate can be signed, and exporters should expect that there will be a charge for the services of an OV. The health certificate template can be found on GOV.UK, along with Notes for Guidance and information on how to contact an OV. The OV will confirm whether a National Bee Unit inspector also needs to be present to support the OV at the health inspection. There is no separate charge for a bee inspector to be present. The OV can find information about how to contact a Bee Inspector on BeeBase or contact the National Bee Unit at (nbu@apha.gov.uk). For exports to EU countries, a signed health certificate is valid for 10 days. To keep up to date with the latest guidance on importing and exporting live honey bees, please visit the following link <https://nationalbeeunit.com/index.cfm?sectionid=47>

Finally

I would like to say a huge thank you to all the Seasonal Bee Inspectors in the Southeast region for all of their hard work in 2022 and for all the help and support they gave me during my first season as RBI, particularly over the period when I had my back surgery. Their dedication to improving and maintaining bee health across the region is exemplary and I am proud to be part of such a wonderful team.

I'd like to wish you all a successful and trouble free season in 2023 and please remember the NBU are here to help <http://www.nationalbeeunit.com/>.

Dan Etheridge,

Regional Bee Inspector – Southeast England

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**National Bee Unit
Animal and Plant Health Agency (APHA)**

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Think you've seen an Asian Hornet? Report it!



Report through the Asian Hornet Watch app or www.bit.ly/asianhornetreport



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