

# National Bee Unit

## 2019 South West Annual Report

### The 2019 Season



Animal &  
Plant Health  
Agency

We probably didn't expect it but it has been another good year for beekeeping in the South West (SW). After a mild winter, there was a very warm spell at the end of February and it didn't get cold again in March, so colonies got off to an extremely strong start this season. This inevitably gave rise to a high number of early swarms. The weather in April and May didn't disappoint, but there was a noticeable June gap and a wet first half of the month so colonies which had swarmed or had been split in May struggled to get their queens back and mated, which inevitably resulted in a higher number of drone laying queens than usual. Those who took off a spring crop of honey found that feeding was necessary where forage wasn't available.

July was warm and dry with a reasonable flow from the clover and blackberry. This produced some good supers of cut comb for those of us who like it. For those beekeepers who took bees to the heather it was generally very disappointing.

Wasps were a problem in some places, but it did vary from location to location, and there were fewer European hornets seen than in the previous year.

Inspectors noted a high level of Varroa in colonies this year. It is important to monitor levels and to be prepared to help colonies with a treatment if necessary; we still find a lot of colonies failing to thrive and suffering high stress levels due to Varroa and Deformed Wing Virus. There was a noticeably high level of Sacbrood Virus seen in colonies throughout the SW.



*Sometimes we do find the impossible - photos Adam Parker*

## The team in SW England

I am very sorry to have lost Martin Hann from the SW team this season. Martin is now working at Buckfast Abbey as part of their beekeeping training initiative. Martin's experience and input to the SW team will be greatly missed.

From April 1st 2020 you can use the post code search on the contacts page of Beebase to check for your local Seasonal Bee Inspector (SBI), who can be contacted on the e-mails and phone numbers below from the beginning of April until the end of September 2020.

Regional Bee Inspector (RBI)	Inspection Area	Contact Details
Simon Jones	Somerset Tel 01823 442228	07775119459 <a href="mailto:simon.jones@apha.gov.uk">simon.jones@apha.gov.uk</a>
Seasonal Bee Inspector (SBI)	Area	Contact Details
Eric James	Cornwall	07979119369 <a href="mailto:eric.james@apha.gov.uk">eric.james@apha.gov.uk</a>
Hazel Vallis	Cornwall & Devon	07775119457 <a href="mailto:hazel.vallis@apha.gov.uk">hazel.vallis@apha.gov.uk</a>
Leila Goss	Devon	07775119453 <a href="mailto:leila.goss@apha.gov.uk">leila.goss@apha.gov.uk</a>
David Packham	Devon	07775119463 <a href="mailto:david.packham@apha.gov.uk">david.packham@apha.gov.uk</a>
Eleanor Burgess	Somerset	07775119465 <a href="mailto:eleanor.burgess@apha.gov.uk">eleanor.burgess@apha.gov.uk</a>
Megan Seymour	Somerset & Avon	07775119475 <a href="mailto:megan.seymour@apha.gov.uk">megan.seymour@apha.gov.uk</a>

During the winter period of October to March please direct all enquiries to the Regional Bee Inspector (RBI).

### Beekeeper numbers

There are currently 5309 beekeepers in SW England registered on the National Bee Unit (NBU) online database 'Beebase'. Between them, they have 23689 colonies in 7167 apiaries – an average of 4.5 colonies per beekeeper and 3.3 colonies per apiary.

The graphs and figures in this report are available on the public pages of Beebase, the NBU website ([www.nationalbeeunit.com](http://www.nationalbeeunit.com)) in 'Bee Pests, Diseases and Maps'. The site also offers several pages of tips, advice and downloadable leaflets on disease control and bee husbandry.

## 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 [www.nationalbeeunit.com](http://www.nationalbeeunit.com), or you can register by contacting the NBU office on **0300 303 0094** or your RBI.



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 Information Commissioner's Office (ICO) website provides guidance on best practice). 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 send me your current membership list so I can ensure our records are as accurate and complete as possible. This is something that will be incredibly important if we are unfortunate enough to find Small Hive Beetle (SHB) in the UK or more Asian Hornets in our region in the coming season.

### Inspections

This year the SW Bee Inspectors visited a total of 882 apiaries and inspected 4055 colonies. This was a rise in the number of colonies inspected compared with 2018. We also carried out 16 import inspections of consignments of queens and packages from other EU countries.

### Imports 2019

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 the NBU office. 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.

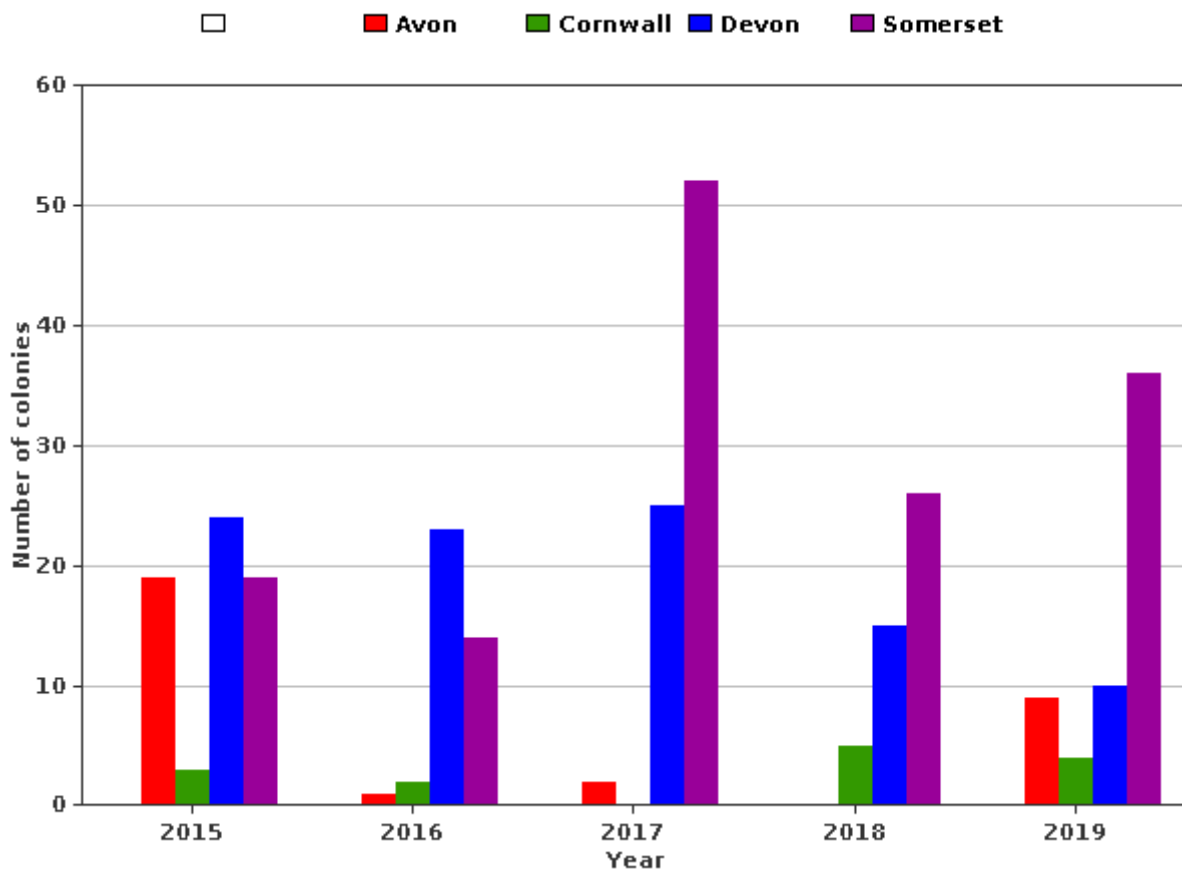
Further details can be found on the Imports/Exports pages of Beebase at <http://www.nationalbeeunit.com/index.cfm?sectionid=47> which will require reference for any changes after Brexit.

## Disease and Pests

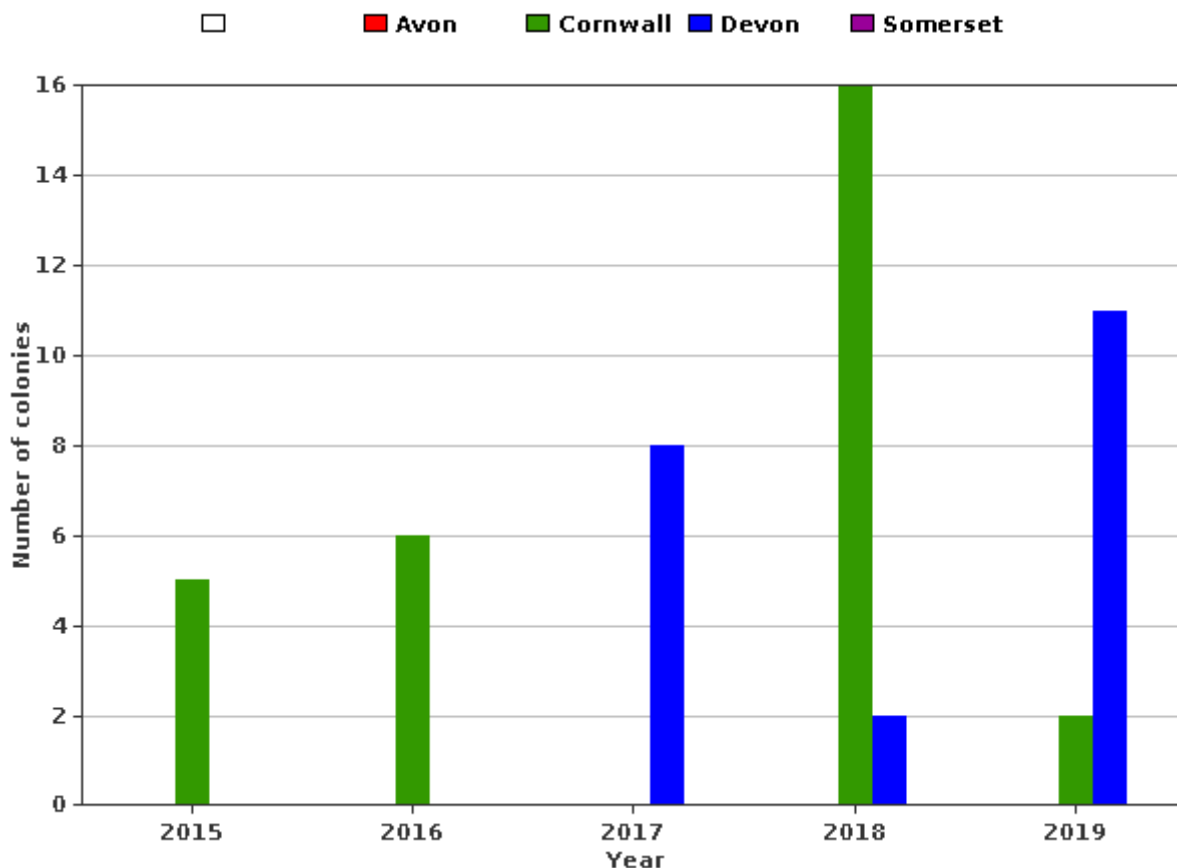
### Notifiable diseases: European Foulbrood (EFB) and American Foulbrood (AFB)

This season, foulbrood was diagnosed in 34 apiaries, affecting 72 colonies, compared with 2018 when 28 apiaries were diagnosed affecting 66 colonies. There has been a slight increase with higher numbers of EFB in Somerset and Avon and an increase of AFB in Devon.

### Regional trends of EFB – by county in South /west England



## Regional trends of AFB – by county in South West England



Further details and mapping can be found on the disease incidence pages of BeeBase at [www.nationalbeeunit.com](http://www.nationalbeeunit.com) . It is recommended that these are checked regularly to see if there is any foulbrood disease close by.

### Varroa

In order to maintain strong vigorous colonies, the NBU advice is to monitor and control Varroa 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 again there have been no additions 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 '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 are 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>

The Beebase website has pdf links to numerous free fact sheets including the 'Managing Varroa' booklet.

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



*The worst effects of Varroa - parasitic mite syndrome (PMS) and deformed wing virus - photos from Beebase*

### **NBU Contingency Exercise 2019**

Running contingency exercises in England and Wales are a key performance indicator in the Bee Health Programme and this year the NBU, in liaison with Welsh Government, ran a contingency exercise in July to tackle a simulated outbreak of *Aethina tumida*, Small hive beetle (SHB), from a forward operating base (FOB) at Welsh Government Offices, Llandudno Junction. At the FOB an incident command system (ICS), based on that used by emergency services was used, involving set roles of incident commander, sector commander, and command support. The two day exercise was designed to test procedures both in command and field activities, specifically –

- FOB operation with daily briefings, monitoring of field activity and handover procedures where spans of control and command are maintained.
- Daily reporting from FOB to NDCC (National Disease Control Centre) to LGD (Lead Government Department).
- Liaison with local beekeeping associations and beekeepers with apiaries in the area, booking and monitoring inspections in the field and reacting to unfolding events as a result of the inspections.

A total of 129 colonies in 28 apiaries were inspected during the exercise, requiring specific inspection procedures following the contingency plan for Small Hive Beetle,

details at <http://www.nationalbeeunit.com/index.cfm?pageid=206>. Feedback was collected from participants and the major conclusions recorded for future implementation.

## **Exotic Pest Surveillance**

In South West England we carried out 297 inspections specific to exotic pests in 2019, targeting a combination of identified risk points and random sites. It is natural, after recent high profile incidents, for the beekeeping community to focus on the threat from Asian Hornet, but we must not drop our guard in relation to the other pests. SHB can be transported into the United Kingdom unintentionally through international trade via bee imports, food products and even in soil when they are in the pupation stage. Although bee imports are prevented from areas where SHB are known to be present, other trade and movement continues.

We have 16 Voluntary Sentinel Apiaries (VSA) and 4 Enhanced Sentinel Apiaries (ESA) in the SW. VSA's are situated within areas considered 'at risk'. A volunteer beekeeper at that location agrees to monitor their colonies specifically for exotic pests. As well as a visual inspection, floor debris from the designated hives are sampled twice a year and tested for any trace of SHB and Tropiclaelaps mites. All postage costs, equipment and paperwork is supplied free of charge to the beekeeper who then collects and sends samples for analysis at the NBU laboratory in York.

The SW ESA's are located around the high risk points of Avonmouth and Plymouth docks. They are visited by their appointed SBI in April, June and September. The colonies are inspected for disease and exotic pests. Floor scraping samples are taken and sent for analysis. SHB traps are also provided for placement in colonies at both VSA's and ESA's.

I would like to thank those beekeepers who currently carry out this work and support the NBU in their exotic pest surveillance.

## **Asian Hornet**

In 2019 three Asian Hornet nests have been located and destroyed by the NBU, following sightings by members of the public. The first one was near Tamworth, Staffordshire on 6th September.

On 4th October a further nest was destroyed following the confirmed sighting of an Asian Hornet near Christchurch, Dorset and a second nest was destroyed nearby on 11th October. Leila Goss and Eleanor Burgess from the SW team joined the Southern team to help with the surveillance.

In addition there have been two confirmed individual sightings of Asian Hornets. The first was on 3rd July of a female Asian Hornet in New Milton, Hampshire, based upon visual examination, the hornet was likely to be a queen. A further sighting was reported by a member of the public to the south west of Ashford, Kent, on 9<sup>th</sup> September where a single hornet was captured, surveillance continues in both areas. The NBU have sent out an alert to encourage all beekeepers and members of

the public to watch for Asian Hornets in their apiaries, on fallen fruit and on flowering plants such as ivy.

We ask beekeepers and the general public to remain vigilant and report any suspect sightings using the iPhone and Android app 'Asian Hornet Watch', by filling out an online report form or by emailing [alertnonnative@ceh.ac.uk](mailto:alertnonnative@ceh.ac.uk) .

- 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](mailto: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 identification of an Asian Hornet can be found on the Bee Base guide or on the Non Native Species Secretariat (NNS) Asian Hornet ID sheet.



*Bait station with feeding Asian Hornet.  
photos F Gellatly*



*Nest- Portelet Bay in Jersey*



## Surveillance of Small Hive Beetle (SHB) in Italy in 2019



*Small Hive Beetle (Aethina tumida) adult and larval stages - photos Beebase*

On the 18<sup>th</sup> June 2019, the presence of SHB was again confirmed in eastern Sicily, in an apiary located in the municipality of Lentini in the province of Syracuse. Two adults of SHB were detected in two different colonies, this apiary had been under surveillance since May 2019 as on 2<sup>nd</sup> May, the authorities had intercepted a movement of 64 colonies from Sicily without any accompanying documents at the port of Villa San Giovanni on the Italian mainland.

The colonies were sent back to the apiary of origin in Sicily. Several inspections were subsequently carried out in this apiary to look for SHB. During one visit 13 colonies of unknown origin were discovered and SHB was detected in two of them. Epidemiological investigations showed that these 13 colonies had been stolen on 9<sup>th</sup> June in the protection zone of Reggio di Calabria located on the mainland.

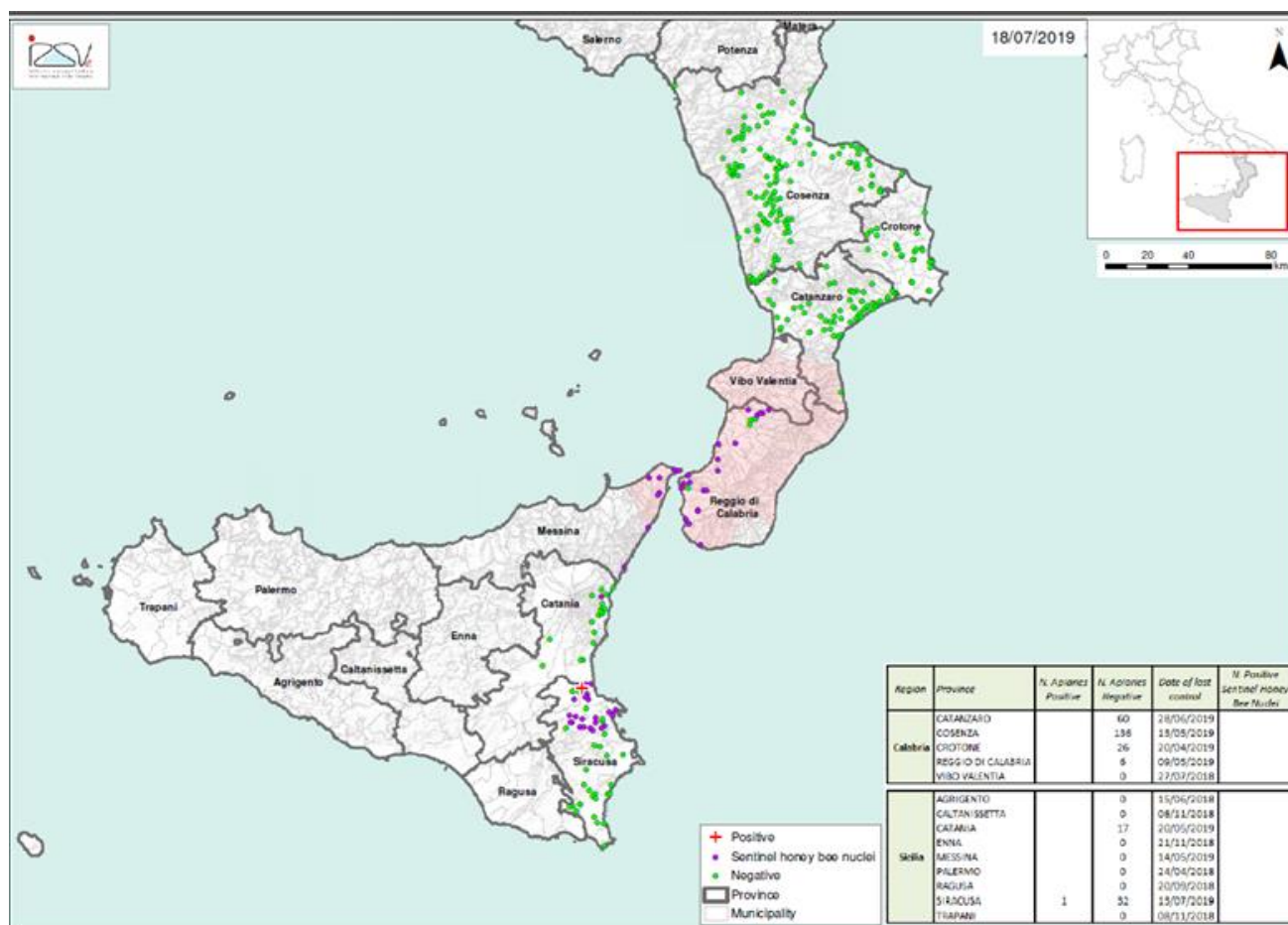
SHB had only been detected once in Sicily prior to this outbreak, on 7<sup>th</sup> November 2014. SHB adults were detected in a migratory apiary in the municipality of Melilli, located approximately 35 km away from Lentini. At the time, the epidemiological investigation had shown that the colonies were present in Gioia Tauro between April and August 2014. Gioia Tauro is the municipality of the Calabria region where the first detection of SHB appeared. Following this outbreak, surveillance was subsequently carried out every year with inspections in selected apiaries and sentinel apiaries.

As no new case had been discovered in the two years following this positive find, a Commission Implementing decision of 1<sup>st</sup> March 2017 had removed Sicily from the list of areas subject to protective measures in relation to SHB in Italy. A phylogenetic analysis was carried out on the specimens detected in June 2019. The results showed that the genetic profile of the specimens was similar to the one of other specimens previously isolated in the Calabria region but different from the genetic profile of the specimens isolated in the previous outbreak confirmed in Sicily in November 2014. It confirms that the outbreak was due to an illegal movement of colonies from the

protection zone of Reggio di Calabria and not a consequence of the spread of SHB in Sicily.

The infected apiary was destroyed on 23<sup>rd</sup> June 2019 and the soil was treated with a permethrin solution. A protection zone of 5 km radius around the site was set up and inspections are being carried out in the 54 apiaries registered in the zone.

No new outbreaks have been reported in the protection zone of Reggio di Calabria, the original outbreak site on the mainland, since November 2018 when the last detection occurred in a sentinel apiary. No new outbreaks have been reported in the province of Cosenza (situated in the North of Calabria) since September 2016. It has to be noted that surveillance is ongoing in Italy and not all the scheduled inspections have been carried out and reported, for the moment.



*The 100 km surveillance of SHB in Calabria and Sicily, dated 18th July 2019*

## Beekeeper Training

In partnership with the local Beekeeping Associations we ran three 'Bee Health Days'. The one in Somerset was at the Ansford Academy near Castle Cary. The Cornwall Bee Health Day was held in the Environment and Sustainability Institute on Exeter Universities Penryn Campus and the one in Devon was hosted by the Tiverton Branch at Uplowman village hall.

The Inspectors also had a presence at the Somerset Lecture Day in February and Cornwall's 'Bit of a Do' (BOAD) in September.



Comb workshop at Devon's Bee Health Day – photo Simon Jones



Megan Seymour taking Devon beekeepers out to the practical training in the apiary – photo Simon Jones

We have also run a number of 'Bee Safaris' this season which continue to be very popular.

I would like to thank all of the local association secretaries/training officers who helped us to manage the programme of Bee Health Days across the SW. We are also very grateful to the local beekeepers who allowed us to use their apiaries for demonstration purposes.

In 2020 the SW team would like to run our usual Bee Health Days around the region as well as more Bee Safaris. If you are thinking of running one of these events then please contact me or your local SBI as soon as possible as we get booked up very quickly and there are a limited number that we can run during the active season.

## **Finally**

Lastly, I would like to take this opportunity to thank all of the Inspectors in the SW Region for their help and support over the year. Thanks are due also to you, the beekeepers, for co-operating with our Inspectors when they are requesting access to your colonies. Please be vigilant, check for brood disease and look out for Asian Hornets, if you don't look for it, you won't find it. It's a good excuse to spend a bit more time in the apiary, just watching!

I wish all beekeepers out there a very enjoyable 2020, let us hope that we have another good year!

## **Simon Jones**

Regional Bee Inspector, South West England

*(Avon, Somerset, Devon, Cornwall, Scilly Isles)*

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

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