



National Bee Unit

Eastern Region Report 2019

Overview

The 2019 season started very mild with an exceptionally warm February, which got the bees off to a very good start and kept a lot of beekeepers on the back foot for most of the season. Reports started to come in of swarms at the end of March, this trend continued right through till August.

April saw our first cases of EFB in the Region again unfortunately they are up on 2018 and I will be mentioning that later in the report. May arrived and reports of a very good crop from the Oil Seed Rape and Hawthorn, led into 4 weeks of dearth for the bees, with the longest June gap I can remember for a long time. Unfortunately during this time the inspectors saw several cases of starvation in colonies, where the beekeepers had removed honey from the hives and they had starved. So a gentle reminder, after you take the first honey crop the colonies in the spring, just keep an eye on them as they can quickly die. One beekeeper lost 5 out of 9 colonies, which is a very bad loss, especially in National hives with prolific Queens, make sure each time you remove the honey, they have enough stores to take them through to the next flow of honey. Fortunately in July the weather picked up and most beekeepers reported a decent main flow. I think, due to the dry July and August, the flow from the Ivy in September /October did not happen, and although the bees worked it they got very little honey from it. As a result several beekeepers reported having to feed a lot more than normal, so again I will just say that you will need to keep an eye on stores this winter and don't be fooled by the weight of the hive, as a lot of this will be pollen, any concerns I suggest that you feed the bees fondant over winter.



Photo K. Morgan

Varroa still remains a problem with bees, the bee inspectors are again seeing lots of cases of bad *Varroa* damage. I must emphasise all the research suggests that by the time you see the damage it's too late for the colony and they will struggle to survive. I will include a list of approved varroacides below, so please do your treatment on time and monitor colonies throughout the year.

List of approved varroacides for use in the UK

Product name	National registration no.	Pharmaceutical company producing the product	Active substance	Indication
API-Bioxal, 886 mg/g Powder for In-hive Use	23101/4001	Chemicals Laif S.P.A	Oxalic Acid	Bees (<i>Apis mellifera</i>) - treatment of varroosis (<i>Varroa destructor</i> , parasite of <i>Apis mellifera</i>).
Apiguard Gel	17017/4002	Vita (Europe) Ltd	Thymol	For the treatment of varroosis due to <i>Varroa destructor</i> in honey-bee
Apilife Var Bee Hive Strip for Honey Bees	23101/4000	Chemicals Laif S.P.A	Thymol Menthol Levo Eucalyptus Oil Camphor Racemic	Treatment of varroosis caused by <i>Varroa destructor</i> .
Apistan 10.3% w/w Bee Hive Strip	17017/4000	Vita (Europe) Ltd	Tau	To control varroatosis in honeybee colonies.
Apitraz 500 mg Bee-hive Strips for Honey Bees	20634/4009	Laboratorios Calier, SA	Fluvalinate Amitraz	Treatment of varroosis caused by <i>Varroa destructor</i>
Apivar 500 mg Bee-hive Strips for Honey Bees	48004/4000	Veto Pharma	Amitraz	Treatment of varroosis due to <i>Varroa destructor</i> sensitive to amitraz in honey bees.
Bayvarol Strips 3.6 mg	00010/4090	Bayer	Flumethrin	The product is indicated for the demonstration (diagnosis) and control (therapy) of <i>Varroa jacobsoni</i> in honeybees.
MAQS Formic Acid 68.2g Beehive Strip	40476/4000	NOD Europe Ltd	Formic Acid	Treatment of varroosis caused by <i>Varroa destructor</i>
Oxuvlar 5.7% 41.0mg/ml concentrate for Honey Bees	36234/4001	Andermatt BioVet GmbH	Oxalic Acid Oxalic acid dihydrate	Treatment of varroosis on honey bees (<i>Apis mellifera</i>) due to <i>Varroa mites</i> (<i>Varroa destructor</i>).
PolyVar Yellow 275 mg Bee-hive Strip	00010/4216	Bayer plc	Flumethrin	For the treatment of varroosis in honey bees caused by flumethrin sensitive <i>Varroa destructor</i> mites.
Thymovar 15 g Bee-hive Strips for Honey Bees	36234/4000	Andermatt BioVet GmbH	Thymol	Treatment of varroosis caused by <i>Varroa destructor</i>

Disease Inspections for the Eastern Region 2019

Inspections in 2019 were up on 2018, this in part due to having 3 New Seasonal Bee inspectors, who started on the 1st April, so as a team we managed to do 6148 colonies in 1024 apiaries and we dealt with 129 cases of Foul Brood.

Cases of EFB rose in the Region from 38 in 2018 to 129 in 2019 which is a 71% increase and Essex was the worst county with 55 cases of EFB, up from 3 in 2018. This was quickly followed by Cambridgeshire which had 38 cases up from 16 in 2018 a 58% increase. This trend is very worrying as it appears to have spread to neighbouring beekeepers with swarms and robbing. It will be down to the beekeepers to keep an eye on their colonies and to make sure that they carry out at least 3 disease inspections during the active beekeeping season. This means clearing the bees from the combs and to do a detailed examination of their colonies, reporting any suspicious brood abnormalities to their local bee inspector. At this point I will also ask beekeepers to assist their local bee inspector in allowing them to inspect their colonies of bees if asked, and also to understand that we cannot arrange inspections of colonies after 5 pm or at the weekends.

The inspectors also dealt with EFB in Suffolk, Norfolk, Leicestershire, Hertfordshire and Lincolnshire so beekeepers need to be vigilant wherever they keep their bees.

AFB cases were again very low within the Region: three in Essex, all with the same Beekeeper, one case in Norwich, and again one in Suffolk. All these cases were found by the bee inspectors. It is a worrying trend that 95% of all cases of Foulbrood in the Region were found by the inspectors. This emphasizes the importance of attending Bee Health Days that are held in the Regions, and to do thorough disease inspections at least 3 times a year. **European Foul Brood**

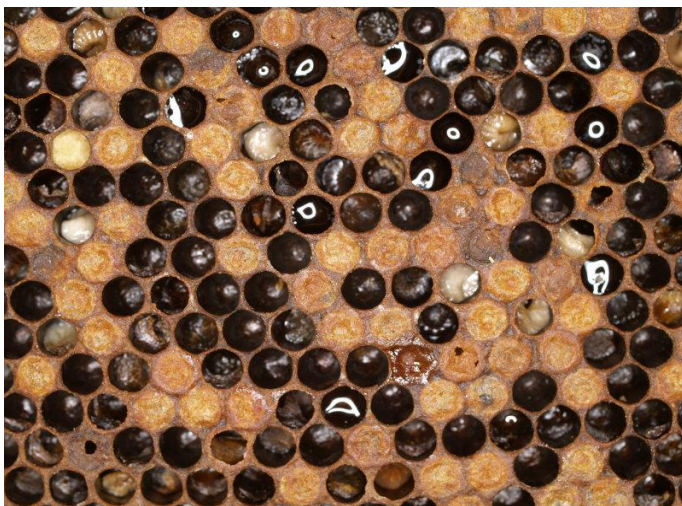
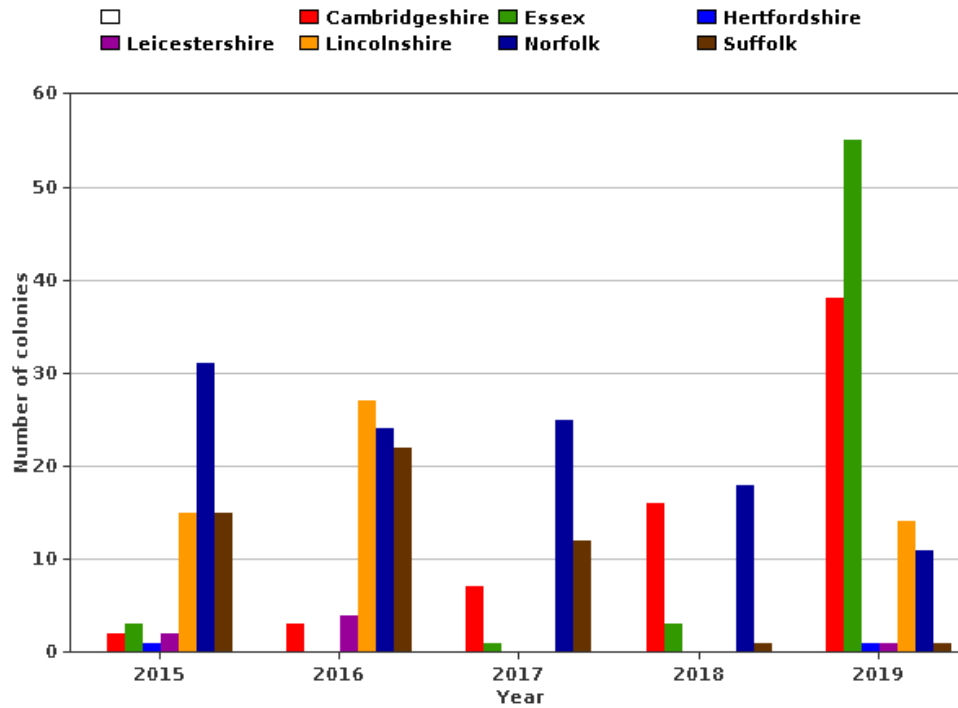
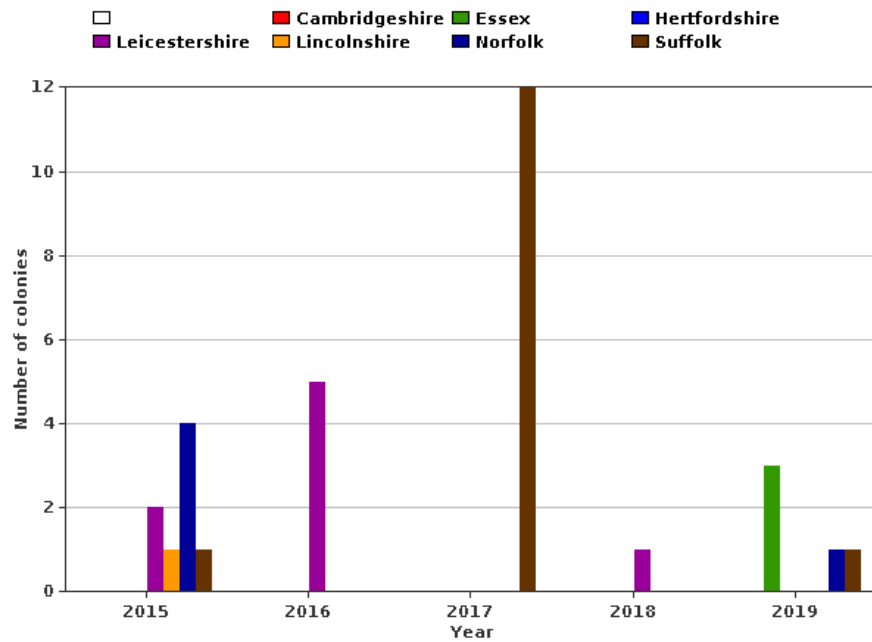


Photo APHA Leaflet

Regional trends of EFB- by county in the Eastern Region



Regional trends of AFB- by county in the Eastern Region



OS 10km squares where EFB has been found in 2019

Sq No	Area	County
TQ29	Barnet	Hertfordshire
TL44	Triplow	Cambridgeshire
TL45	South Camb	Cambridgeshire
TL46	North Camb	Cambridgeshire
TL47	Haddenham	Cambridgeshire
TG02	Guestwick	Norfolk
TG12	Alysham	Norfolk
TG12	Norwich North	Norfolk
TM29	Hempnall	Norfolk
TG30	Hassingham	Norfolk
TM39	Kirby Cane	Norfolk
TM03	Dedham	Essex
TL 50	Chipping Norton	Essex
TL 40	Epping	Essex
TQ 58	Ronford	Essex
TQ 68	Orsett	Essex
TQ 59	Brentwood	Essex
SP 39	Fenny Drayton	Leicestershire
SK92	Grantham	Lincolnshire
TF02	Bourne	Lincolnshire
TM25	Chersfield	Suffolk

OS 10km Squares where AFB has been found in 2019

Sq No	Area	County
TL81	Witham	Essex
TG21	Norwich North	Norfolk
TM 25	Chersfield	Suffolk

Further details and mapping can be found on the disease incidence pages of BeeBase at www.nationalbeeunit.com. It is recommended that these are checked regularly by beekeepers to see if there is any foulbrood disease close by their own apiary sites.

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, 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 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”.

The Eastern Team

Within the Region this year we have been fortunate to have a full complement of inspectors. The 3 new inspectors: Regina, Simon and Alexandra, have made a very good impression both with inspection numbers and the diagnosis of Notifiable diseases, but have also helped out on Apiary Safaris, and Bee Health Days.

This year we will unfortunately see the retirement of Fred Daynes, who over the last 10 years, whilst with the Inspectorate, will have visited a great number of beekeepers. Not only in Cambridgeshire, the area he covers, but he has also helped out in most of the other Eastern counties. Notably in Norfolk helping around Norwich

with a major EFB outbreak several years ago and this year in and around Cambridge and in Essex. So I would like to take this opportunity, along with the vast number of beekeepers, to thank Fred for his devotion to the job and his help and knowledge that he has passed on to the beekeepers in his time as an Inspector. He will be greatly missed, and we wish him a long and happy retirement.



Photo by Peter Heath .Eastern Team. left to right myself (Keith Morgan), Jonathan Baynes, Regina Nickel, David Burns, Fred Daynes, Ian Nichols, Simon Oglesby, Alexandra Grau, and Peter Folge .

2020 Seasonal Bee Inspectors contact details from the 1st April 2020:

Alexandra Grau - Leicester and Rutland

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Simon Oglesby - Lincolnshire

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Regina Nickel - Norfolk

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Ian Nichols - Essex

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Tel: 07557178416

Education and Advisory Services



Photo by Ian Nichols: David Burns about to demonstrate to beekeepers how to inspect colonies at the Hertfordshire Bee Health Day

Within the Region we ran 5 very successful Bee Health days in Hertfordshire, Essex, Lincolnshire, Cambridgeshire and Bedfordshire, and we helped with the West Norfolk Beekeepers day and on several safaris and beekeeper meetings. So far I have two Bee Health Days booked for 2020. Apart from Hertfordshire, where the event is held at a university, I intend running all the Bee Health days during

weekdays. We have done this with the Essex Bee Health event and has seen no reduction in numbers wishing to attend.

I will encourage all associations within the Region to run Bee Health Days at least every other year. These provide the chance for old and new beekeepers to get a more 'hands on' knowledge of both the notifiable diseases and the potential exotic threats we now face, and to handle bees with the emphasis on disease recognition. Attendees receive updates on approved Varroacides, see Notifiable and Non-Notifiable diseased frames and, last but not least, meet the Inspectorate and fellow beekeepers.

Asian Hornet

In 2019 three Asian Hornet nests have been located and destroyed by the National Bee Unit, 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. The latter is likely to be a primary nest, related to the nest destroyed the previous week. Genetic analysis will be carried out to investigate relatedness between the nests.

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 9th 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 .

The 'Asian Hornet Watch' app is available to download free from the Apple and Android app stores.

Please provide a photo along with the location of where it was found 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 the NNSS Asian hornet ID sheet.

In July, we were very lucky to be able to send SBI David Burns to Jersey as part of one of three NBU teams. He went to gain 'hands on' experience of tracking and tracing Asian Hornet nests in an urban environment. Whilst in Jersey David, together with Mark McLoughlin, worked alongside the Jersey Hornet Group. Their area had several nests, allowing them to trap, mark and trace Asian Hornets.

David gained an invaluable amount of experience whilst in Jersey. If we have a similar problem with Asian Hornets in the Eastern Region in future years, he will be able to pass on that experience to others.

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

On the 18th June 2019, the presence of *A. tumida* (SHB) was again confirmed in eastern Sicily, in an apiary located in the municipality of Lentini in the province of Syracuse. Two adult SHBs were detected in two different colonies. The apiary had been under surveillance since May 2019 because, on 2nd 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 *A. tumida*. 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 9th June in the protection zone of Reggio di Calabria located on the mainland.

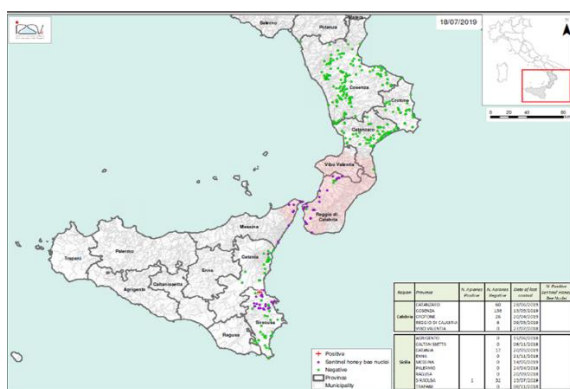
Aethina tumida had only been detected once in Sicily prior to this outbreak, on 7th November 2014. SHB adults were detected in a migratory apiary in the municipality of Melilli, located approximately 35 km away from Lentini. At the time, the epidemiological investigation had shown that the colonies were 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 the 2014 positive find, a Commission Implementing decision of 1st 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 in the protection zone of Reggio di Calabria and not a consequence of the spread of SHB in Sicily.

The infected apiary was destroyed on 23rd 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

Imports and the Sentinel Apiary Program

As part of the ongoing surveillance for exotic pests we run a Sentinel Apiary Program within the Eastern Region. This year we have had 27 samples back into the lab for analysis, all have thankfully turned out negative for both SHB and Tropilaelaps which is very good and I would take this chance to thank all those beekeepers who took part in our Sentinel apiary program for returning the samples. As I have said on many occasions it's better to find any invasive species early. If it were to get established, it would be much harder to deal with, and the threat from SHB especially is very real with free movement of bees between the continent and the UK.



Adult Small Hive Beetle and Larvae

Photos APHA leaflets

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 <http://www.nationalbeeunit.com/index.cfm?sectionid=47> which will require reference for any changes after Brexit.

Finally...

I would like to thank all the Eastern Region Inspectors for their help and enthusiasm over the last year. With the increase in disease, and greater beekeeper numbers, it has certainly been a very busy and challenging season. I must also thank the associations for their help in organising the Bee Health Days, and the members of the Sentinel Apiary program, and finally the beekeepers for their continued co-operation with the Inspectorate.

I will wish you all a prosperous New Year with healthy bees, a decent honey crop and freedom from invasive species.

Keith Morgan

Regional Bee Inspector, Eastern Region

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