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National Bee Unit Northern Annual Bee Report for 2017

Covering Cheshire, Greater Manchester, Merseyside and the Wirral, Lancashire, Cumbria, Tyne and Wear, County Durham and Northumberland.

This will be my last annual bee report, as after my health scares in 2015 I have decided to retire at the end of April 2018. I have been an employee of MAFF, CSL, FERA, DEFRA and APHA since 1993, working as a Seasonal Bee Inspector in Yorkshire Cheshire, Merseyside, Lancashire and Greater Manchester, then full time as a Field Officer for DEFRA working on farms all over the North West, in this role I spent 13 months on the Foot and Mouth outbreak, until my appointment as Regional Bee Inspector in 2002.

I would like to thank everyone who has helped and assisted me throughout my time as an inspector and manager. I have been particularly lucky in having good staff to manage and I really appreciate their support and help throughout my time with them. I shall miss all the beekeepers I have met and my work colleagues old and new, but I am looking forward to being out of the 'rat race' and spending more time with my own bees and my family.

Foulbrood Disease

There have been several cases of notifiable disease in the Northern region in 2017: -

American Foulbrood (AFB) has been found in the following areas: -

- 10km square NY35 - 1 colony infected in 1 apiary (Carlisle, Cumbria)
- 10km square NY34 - 10 colonies infected in 1 apiary (Welton, Cumbria) – 11 colonies in the apiary all destroyed
- 10km square SD80 – 1 colony infected in 1 apiary(Oldham, Greater Manchester)
- 10km square SJ38 – 1 colony infected in apiary(Birkenhead, Liverpool)

All colonies were destroyed.

European Foulbrood (EFB) has been found in the following area: -

- 10km square SJ56 - 1 colony infected in 1 apiary, (Tarporley, Cheshire) – colony destroyed

As defined in the National Bee Unit protocol, we have completed 3 km inspection sweeps around the infected apiaries and no further disease was found.

If you have apiaries in any of the above areas, can you please make sure they are registered on BeeBase.

Varroa

As in previous seasons, *Varroa* levels, particularly later in the season have reached high levels in most unmanaged colonies.

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Once again my Seasonal Bee Inspectors (SBI's) were reporting damaged/stunted adult bees and deformed wings (Deformed Wing Virus) while undertaking inspections in late summer. Many beekeepers have found it difficult to control the *Varroa* levels in their colonies.

Please be aware that most colonies have been rearing brood in this winter period, due to the warm weather. This can lead to high mite levels in spring. If the levels are not controlled, populous colonies can collapse in summer or early autumn.

For more information on managing *Varroa*, please visit our website www.nationalbeeunit.com and please read the '*Managing Varroa'* leaflet produced by the National Bee Unit. This can be downloaded from the website.
Please remember *Varroa* and its associated viruses are still the biggest killers of honeybee colonies here, in Europe and throughout the World. Low *Varroa* levels are important in late summer - when the queen lays eggs to produce the colonies winter bees and in early spring when *Varroa* breeding commences after the winter brood break.

Regular *Varroa* monitoring is a very important part of your *Varroa* management and should be completed at least 3 or 4 times throughout the year (winter, spring, mid-summer and late summer); action must be taken if mite levels are near or over the injury or economic threshold limit of 1000 mites in the colony. Do not rely on physical deformities i.e. Deformed Wing Virus (DWV), stunted/small/deformed adult bees to diagnose *Varroosis*, it is generally too late at this point for colonies to recover.

Chronic Bee Paralysis Virus (CBPV)

As in previous years Chronic Bee Paralysis Virus was noticeable again in 2017, particularly in commercial beekeeper's apiaries. This viral disease of adult honeybee seems to be widespread. It is thought to lie dormant in most honey bee colonies and often shows no effect in the colony. However when symptoms such as crawling and/or trembling bees, sometimes with shiny, hairless or bloated abdomens become apparent then the disease can spread quickly through the apiary and result in rapid depopulation of affected colonies. The disease used to only occur in large 'mature' colonies with drones, but I have noticed that some colonies are showing signs in spring and also later in the year. In severe cases, masses of dead bees may be found on the hive floor and/or on the ground at the front of the hive and sometimes the colony may not survive. It is thought that overcrowding and confinement exacerbate the spread of virus within the colony in periods of poor weather. It is also thought that disease can transfer through contact, so good hygiene practices are suggested (i.e. washing gloves and hive tools between inspecting each colony). Re-queening from non-susceptible stocks is also suggested to further reduce the incidence. In some cases this disease can be confused with spray poisoning.

For additional information on this and other viruses please see the NBU leaflet 'Common Pests, Diseases and Disorders of the Adult Honey Bee' and the recently produced fact sheet 'Chronic Bee Paralysis Virus'. These are available as a pdf downloads at
www.nationalbeeunit.com.

A CBPV research project started in 2017, in conjunction with FERA and Newcastle University, targeting mainly commercial beekeepers whose colonies showed signs of the disease, also

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Appointed Bee Inspectors took samples if they noticed CBPV while undertaking their normal inspection duties.

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Approved Bee Medicines

For your assistance, I list the current authorised bee medicines below. Please check the Veterinary Medicines Directorate (VMD) website regularly (www.vmd.defra.gov.uk) or ring the VMD to confirm that products are still legal to use.

Product name	MA number	Company	Issued	Indications
Bayvarol 3.6 mg Bee-hive Strips for Honey Bees	00010/4090	Bayer plc	17/07/1992	For the diagnosis and control of flumethrin sensitive Varroa jacobsoni in honeybees.
Apistan 10.3% w/w Bee Hive Strip	17017/4000	Vita (Europe) Ltd	26/11/1998	Control of varroosis (Varroa destructor (formerly known as Varroa jacobsoni)) in honeybee colonies
Apiguard Gel (25% Thymol) for Beehive Use	17017/4002	Vita (Europe) Ltd	23/07/2003	Treatment of varroosis due to Varroa destructor.
Apilife Var Bee-Hive Strip for Honey Bees	23101/4000	Chemicals Laif S.P.A	24/06/2009	Treatment of varroosis due to Varroa destructor.
Thymovar 15 g Bee-hive Strips for Honey Bees	36234/4000	Andermatt BioVet GmbH	15/06/2010	Treatment of varroosis on honey bee (Apis mellifera) due to Varroa mite (Varroa destructor).
MAQS Formic Acid 68.2g Beehive Strips for Honey Bees	40476/4000	NOD Europe Ltd	26/02/2013	Treatment of varroosis caused by Varroa destructor in honey bees (Apis mellifera).
API-Bioxal, 886 mg/g powder for in-hive use	23101/4001	Chemicals Laif S.P.A	08/09/2015	Treatment of varroosis (Varroa destructor, parasite of Apis mellifera).
Apitraz 500 mg Bee-hive Strips for Honey Bees	20634/4009	Laboratorios Calier, SA	26/04/2016	Treatment of external parasitosis caused by Varroa destructor sensitive to Amitraz.
Oxuvar 5.7%, 41.0 mg/ml Concentrate for Solution for Honey Bees	36234/4001	Andermatt BioVet GmbH	28/10/2016	Treatment of varroosis on honey bees (Apis mellifera) due to varroa mites (Varroa destructor).
PolyVar Yellow 275 mg Bee-hive Strip	00010/4216	Bayer plc	07/03/2017	For the treatment of varroosis in honey bees caused by flumethrin sensitive Varroa destructor mites.
VarroMed 5 mg/ml + 44 mg/ml Bee-hive Dispersion for Honey Bees	EU/2/16/203/001	BeeVital GmbH	05/04/2017	Treatment of varroosis (Varroa destructor) in honey bee colonies with and without brood.
VarroMed 75 mg + 660 mg Bee-hive Dispersion for Honey Bees	EU/2/16/203/002	BeeVital GmbH	05/04/2017	Treatment of varroosis (Varroa destructor) in honey bee colonies with and without brood.
Apivar 500 mg Bee-hive Strips for Honey Bees	48004/4000	Veto Pharma	15/09/2017	Treatment of varroosis due to Varroa destructor sensitive to amitraz in honey bees.

Treatments are approved for use in honeybee colonies in this country by the VMD and not by the National Bee Unit.

As you can see from the forgoing table, there are now two legal treatments based on oxalic acid. Please note these are the only products that can be used for oxalic acid treatments in honeybee colonies in this country. Oxuvar is currently being marketed by Agri-Nova Bee Technology and can be only used for trickling, as it is partially pre-mixed.

‘Apitraz 500’ strips are now available in ‘National’ size and ‘Apivar’ strips have recently been authorised. These are Amitraz based products and as with all medicines should be used as per the manufactures instructions.

Please note, there is a legal requirement to record all hive treatments applied/used, i.e. when and where purchased, type and amount of treatment or product used, batch number and expiry date if applicable, when applied and when withdrawn. The product, again if applicable, should be disposed of as per the manufacturers’ instructions. This information should be kept for 5 years. There is no stipulation in which format the treatments should be recorded, but a suitable record card can be found on BeeBase at:

https://secure.fera.defra.gov.uk/BeeBase/index.cfm?pageid=309

Other treatments from Europe are available for use under the 'Cascade' system. Please visit the VMD website for information and import regulations, at www.vmd.defra.gov.uk

The 2017 honey season

Reports from beekeepers in the Northern region indicate that 2017 has been a slightly better honey gathering season than 2015 and 2016.

The Northern region average yield was around 17kg (37lbs) per honey producing colony, but some beekeepers further North produced no excess honey. Some beekeepers reported a much higher yield of 22kg (50lb) to 40kg (90lb) per honey producing colony, this was due to their proximity to the high nectar yielding plants, Himalayan Balsam and Heather plus having their colonies in peak condition. The Heather crop average was generally good due to the warm autumn weather at an average of 9kg (20lb) per colony.

As always, good English honey is in high demand with flower honey retailing between £4 and £6 per lb.

Staffing

Mr Chris Appleby has taken over from Mr Ian Wallace as Seasonal Bee Inspector for County Durham, Tyne and Wear and Northumberland. Chris started work in May and has undergone training at the National Bee Unit at York and field and technical training with all the members of the Northern team. Chris is an experienced beekeeper and has the qualities of being a very good inspector.

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 Importer Notification Form 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 http://www.nationalbeeunit.com/index.cfm?sectionid=47
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)

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Update on Asian hornet and Small Hive Beetle in Europe

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 http://www.nationalbeeunit.com/index.cfm?pageid=208). 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. A primary nest was discovered quite early in Jersey 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 Wollacombe in North Devon was confirmed as an Asian hornet. Once a positive confirmation was made, the NBU Contingency Plan was activated and Bee Inspectors deployed in the area. Aided by lessons learned during the outbreak in Tetbury last year 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.

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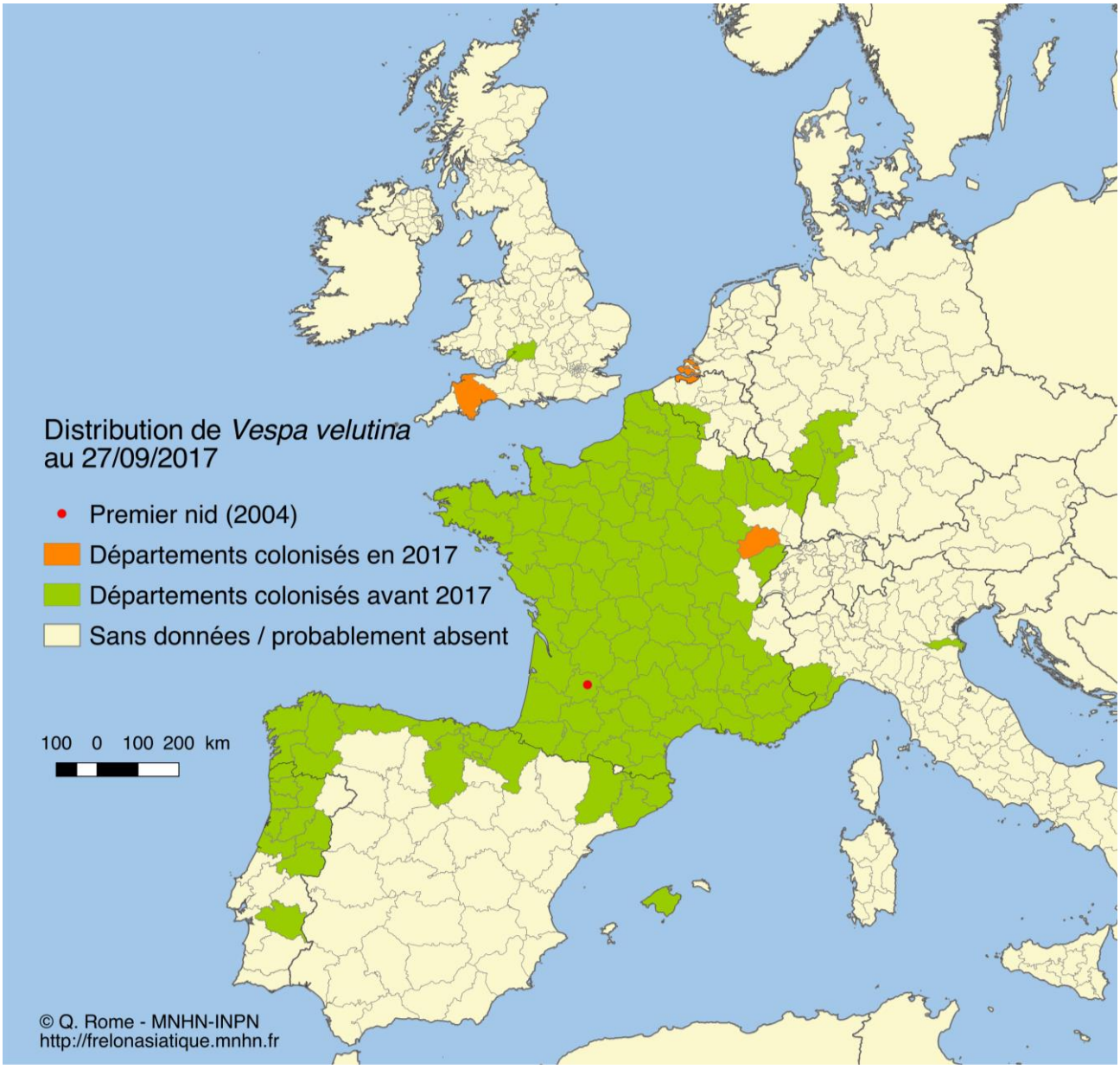
Initial laboratory examination and analysis of the nest indicate that this was a fresh incursion from the French Asian hornet population and not directly related to the nest discovered in Tetbury last year.

The map shows the extent of hornet incursions within the UK and the continuing spread of Asian hornet in Europe, north into the Netherlands and east across northern Italy during 2016 and 2017.

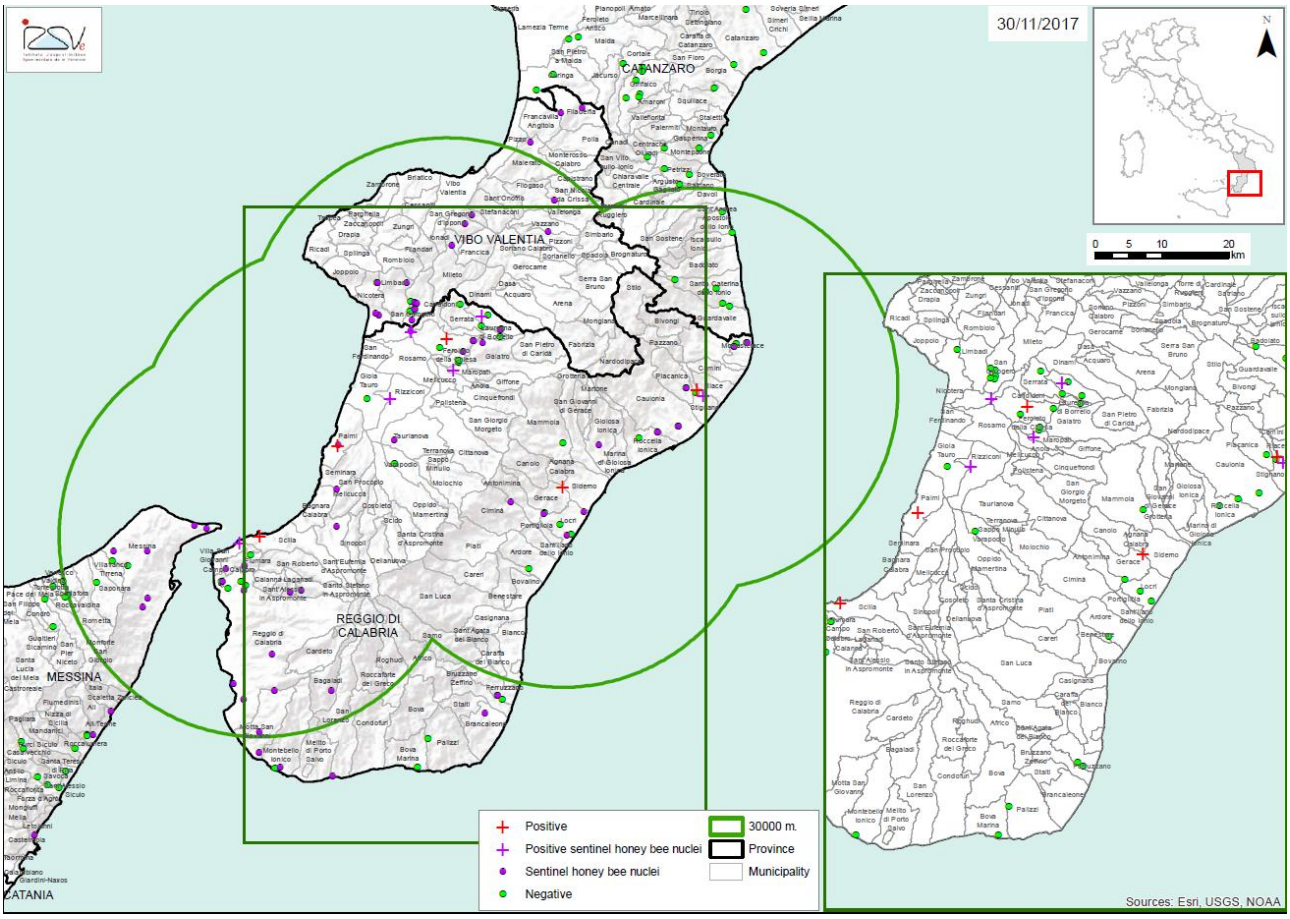


Please check BeeBase News items for regular updates and the dedicated page at http://www.nationalbeeunit.com/index.cfm?pageid=208 for further information including the Asian

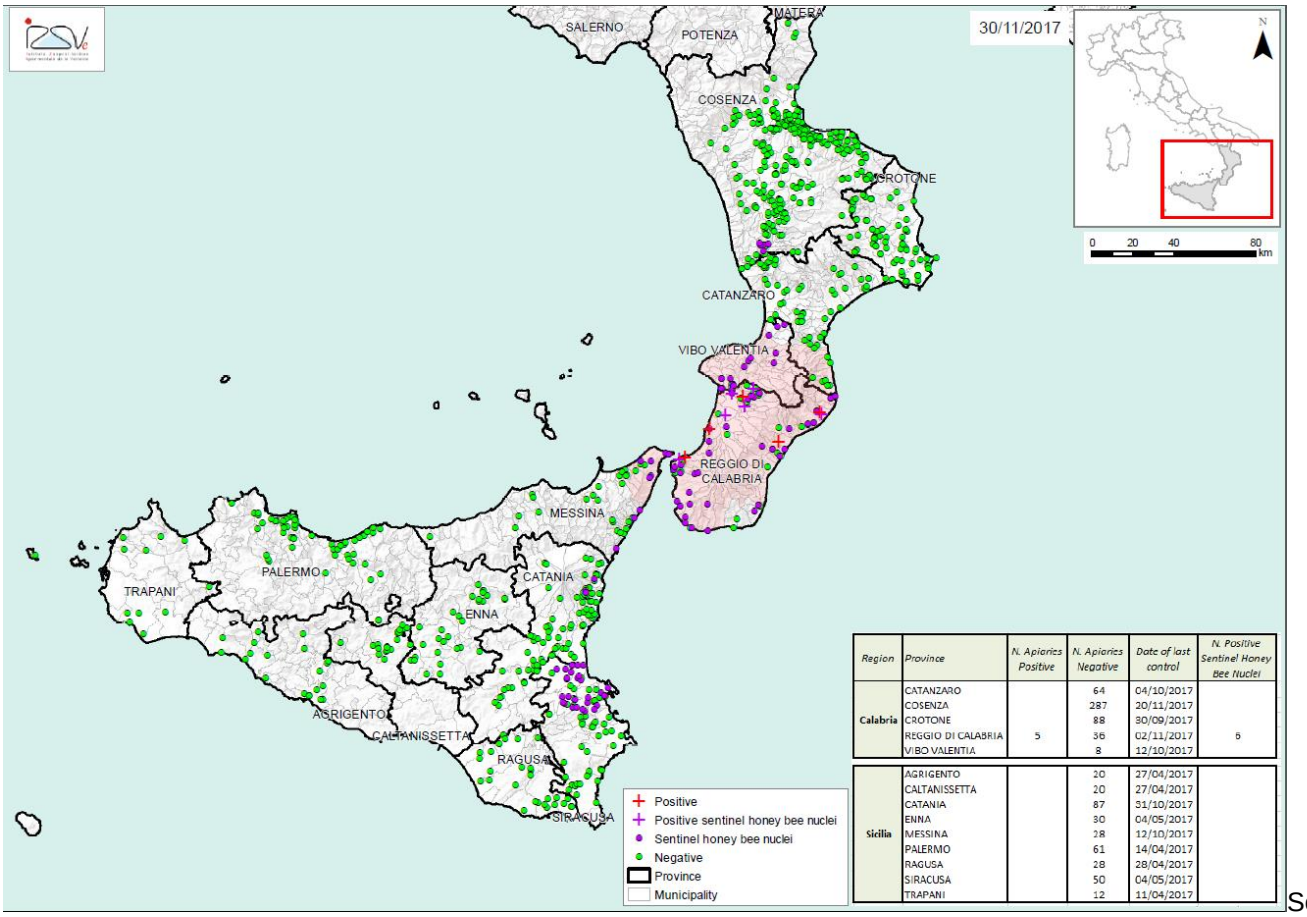
hornet i.d. sheet, videos and useful links. Any suspect sightings of the Asian hornet should be reported to the Native Species Secretariat at alertnonnative@ceh.ac.uk and the NBU office or your Regional Bee Inspector.

Small Hive Beetle

At the time of writing there have been a total of just 11 apiaries reported positive for Small Hive Beetle in the province of Reggio Di Calabria in the region of Calabria, southern Italy. Two of these were if fact feral colonies and 6 others were sentinel apiaries set up by the authorities.



The Italian web site was last updated on the 30th November though in previous years since SHB was first detected inspections have continued well into December, so please check http://www.izsvenezie.com/aethina-tumida-in-italy/ for the latest situation. Surveillance inspections in Sicily (336 apiaries) and in the more Northern Regions of Cosenza, Crotone and Catanzaro (439 apiaries) have all been clear. This indicate 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.



Region	Province	N. Apiaries Positive	N. Apiaries Negative	Date of last control	N. Positive Sentinel Honey Bee Nuclei
Calabria	CATANZARO		64	04/10/2017	
	COSENZA		287	20/11/2017	
	CROTONE		88	30/09/2017	
	REGGIO DI CALABRIA	5	36	02/11/2017	6
	VIBO VALENTIA		8	12/10/2017	
Sicilia	AGRIGENTO		10	27/04/2017	
	CALTANISSETTA		20	27/04/2017	
	CATANIA		87	31/10/2017	
	ENNA		30	04/05/2017	
	MESSINA		28	12/10/2017	
	PALERMO		61	14/04/2017	
	RAGUSA		28	28/04/2017	
	SIRACUSA		50	04/05/2017	
	TRAPANI		12	11/04/2017	

Se e http://www.izsvenezie.com/aethina-tumida-in-italy/

The map above indicates 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 Northern 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 and 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 http://www.nationalbeeunit.com/index.cfm?pageid=125 for links to the leaflet, a video and much more detailed information.

Beebase registration

There is a common misunderstanding that beekeeper's who are members of a Beekeeping Association are automatically registered on BeeBase, unfortunately this is not the case.
Generally you are registered on BeeBase:

- if you have had your bees inspected by an Appointed Bee Inspector,
- or you are added to the data base by an Appointed Bee Inspector (without an inspection – but with the beekeepers permission),
- or you are added by the office staff at the National Bee Unit in York (with prior permission from yourself or your Beekeeping Association)
- or you register on-line yourself.

As always, we try to encourage as many beekeepers as possible to register on BeeBase. This will enable us to contact beekeepers for example, to undertake exotic pest surveillance work, offer one to one advice and to inspect colonies for notifiable diseases and pests.

When notifiable disease is found, the BeeBase 'sweep system' is used to search the area around the disease outbreak (normally 3km). This enables us to visit the beekeepers in the surrounding areas to make sure that their bees have not contacted the disease.

We then use our email disease alert system to make beekeepers aware that notifiable disease has been found in their area. **To be alerted you must have a current and correct email address on BeeBase**. If you are registered, please make sure that all your apiaries and your personal details are kept up to date.

If you are not already registered on BeeBase, please register as soon as possible.

If you are unsure whether you are registered, or are having difficulty registering, please contact the NBU office on 0300 3030094.

Please note the National Bee Unit does not pass any of your personal information to third parties.

To access the site, please visit www.nationalbeeunit.com

Healthy Bee Days 2017 and 2018

I would like to thank the members of Preston Beekeeper Association for hosting and making the 2016 Healthy Bee Day a success.

The 2018 events will be organised by the new Regional Bee Inspector, but there are likely to be two Bee Health Days, one in the Southern and one in the Northern part of the Northern region.

If your association is prepared to run one of these days then please contact me on the e mail or numbers below for more information.

As before, we will be asking associations to encourage 1st and 2nd year beekeepers on the course and particularly beekeepers that have not attended this type of training course before.

These events will be focus on 4 of the following: -

1. ***Varroa* control/management**
2. **Good husbandry/hygiene/barrier management**
3. **Diseased and 'confusion' comb recognition**

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4. ***Nosema*** **diagnosis and management.**
5. **Practical hands on examination of honeybee colonies for notifiable disease and pests**
6. **Exotic Pest recognition and management**
7. **Comb changing**

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REGIONAL CONTACTS

Northern Regional Bee Inspector

Ian Molyneux.
Tel: 01204 381186
Mobile: 07815 872604
Email: ian.molyneux@apha.gsi.gov.uk

Seasonal Bee Inspector Contacts

Merseyside/Wirral

Mark McLoughlin (available April until the end of September)
Works mobile: 07500 891425
Email: mark.mcloughlin@apha.gsi.gov.uk
Working 5 days per week

Cumbria/North Lancashire

Julia Hoggard (available April to end of September)
Works mobile 07900 394303
Email address: julia.hoggard@apha.gsi.gov.uk
Works 4 days per week

Lancashire and some parts of Greater Manchester

John Zamorski (available April until end of September)
Works mobile: 07775 119446
Email: john.zamorski@apha.gsi.gov.uk
Works 4 days per week

County Durham, Tyne and Wear and Northumberland

Chris Appleby (available April to end of September)
Mobile number: 07990 138900
Email: chris.appleby@apha.gsi.gov.uk
Works 5 days per week

Cheshire

Graham Royle (available April until the end of September)
Works mobile: 07500 891423
Email: graham.royle@apha.gsi.gov.uk
Works 4 days per week

Details of disease incidence, research and news updates are regularly placed on the NBU website on www.nationalbeeunit.com

Finally, I would like to thank my Seasonal Bee Inspectors for all their hard work in 2017 and wish you all a successful beekeeping season in 2018.

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Kind regards,

Ian Molyneux.