



North East Region Annual Report 2017 National Bee Unit

The 2017 Season – An Overview

It is often said, usually about the weather in Britain that, 'no two years are the same'. I am sure this phrase resonates with people in all walks of life but perhaps no more so than with beekeepers. The weather has a major influence on how well our colonies perform, not just for honey production at a specific time, but also on the vitality and viability of colonies from one year to the next. Looking back over the last year may therefore help us understand past difficulties and anticipate requirements for keeping colonies in good shape for the coming season.

Having said that, there wasn't very much to note about last winter. Yes, winter storms, namely Barbara, Conor and Doris, passed over the UK bringing some wild weather, particularly over the Pennines with winds of up to 93mph being recorded at High Bradfield, but most of the Region escaped serious impact. The winter was generally quite mild with only one cold spell in January bringing appreciable snow fall to North Derbyshire and parts of Yorkshire. A quiet interlude between the storms just after New Year gave an ideal opportunity for Varroa control using an oxalic acid treatment.

Late winter was fairly warm and dry with higher than average sunshine hours. Apart from one brief cold spell in March, the mild conditions continued into April and colonies seemed to be building well for the winter sown oil seed rape. However the weather turned cooler and unsettled with north east winds persisting well into May. Early flowering rape in western and central areas didn't yield well but warmer weather and a mini heat wave towards the end of May suited later flowering rape in eastern counties better. Thunderstorms and heavy rain followed causing some localised flooding in North Yorkshire.

Unsettled weather continued well into June until high pressure brought several days of sun and high temperatures to all regions. However thunderstorms and a return to cooler, wet and windy conditions in the north soon put paid to any hope of a flow from the limes. Although there were occasional good days, the summer months were rather wet with rainfall well above average in June and July and some beekeepers in areas where forage was limited had to resort to feeding. The heather on the south Pennine moors started flowering before the end of July though the bees ate more than they brought in until the flow really got going in the second week of August. The heather bloom was magnificent in nearly all areas and the flow continued right into September. Many beekeepers had one of



the best heather yields on record, though in some cases the honey was perhaps a little mixed or high in water content.

The earlier wet conditions also suited the Himalayan balsam which flowered well into the autumn and gave a good crop as well as adding to winter stores. Ivy also did well, the characteristic aroma of the nectar being noticeable further north than usual.

Queen rearing was again difficult this year. Colonies were strong enough in early May to raise a good number of queen cells from grafts but reluctant to finish cells in queen-right colonies. Mating was also hit and miss right through to mid-June due to the unsettled weather. The result was a high queen failure rate, apparent after natural swarming as well as in artificial splits. Some queens were drone layers from the start and others failed in late summer/early autumn. Reports of some colonies absconding, leaving hives completely empty of bees and brood, may also be point to queen failure. In my experience poorly mated queens may become drone layers or sometimes never start laying again after the winter brood break. It might be an advantage to guard against this eventuality by overwintering one or two nucleus colonies in polystyrene boxes – a strong nuc can be united to a queenless colony (check thoroughly to be sure!) in late winter simply by taking out empty frames and placing the nucleus at one side of the hive. Colonies that appeared to abscond in the autumn but leaving frames with worker brood are more likely to have been suffering from a high Varroa infestation. This year saw high Varroa levels building up in late summer in many colonies and with it a noticeable increase in viral damage. Perhaps this should be expected in a year when brood rearing was able to commence early and continue right through the season – providing an uninterrupted opportunity for Varroa population increase too. Varroa treatments should be targeted before colonies start to produce their 'winter' bees but monitoring of Varroa levels during the season will help determine whether an earlier treatment is required. Viral damage will seriously reduce the longevity of the adult bees and so impact on the foraging capability of colonies with a high Varroa infestation level in the summer period. The reported incidence of Chronic Bee Paralysis virus (CBPV) in the Region was also higher this year, the early build-up and then confinement of colonies due to the unsettled weather a possible contributory factor.

Honey yields for the region were again variable with some beekeepers reporting little or no surplus but others in more favourable locations obtaining up to 90 lbs per colony. The best of the flows came at the end of the season from the Himalayan balsam and the heather. Best yields of over 50 lbs per colony were reported from colonies on the Pennine moors.



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. In Jersey a primary nest was discovered in a bee hive quite early in the year 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 Woolacombe in North Devon was

identified 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 last year during the outbreak in Tetbury 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.

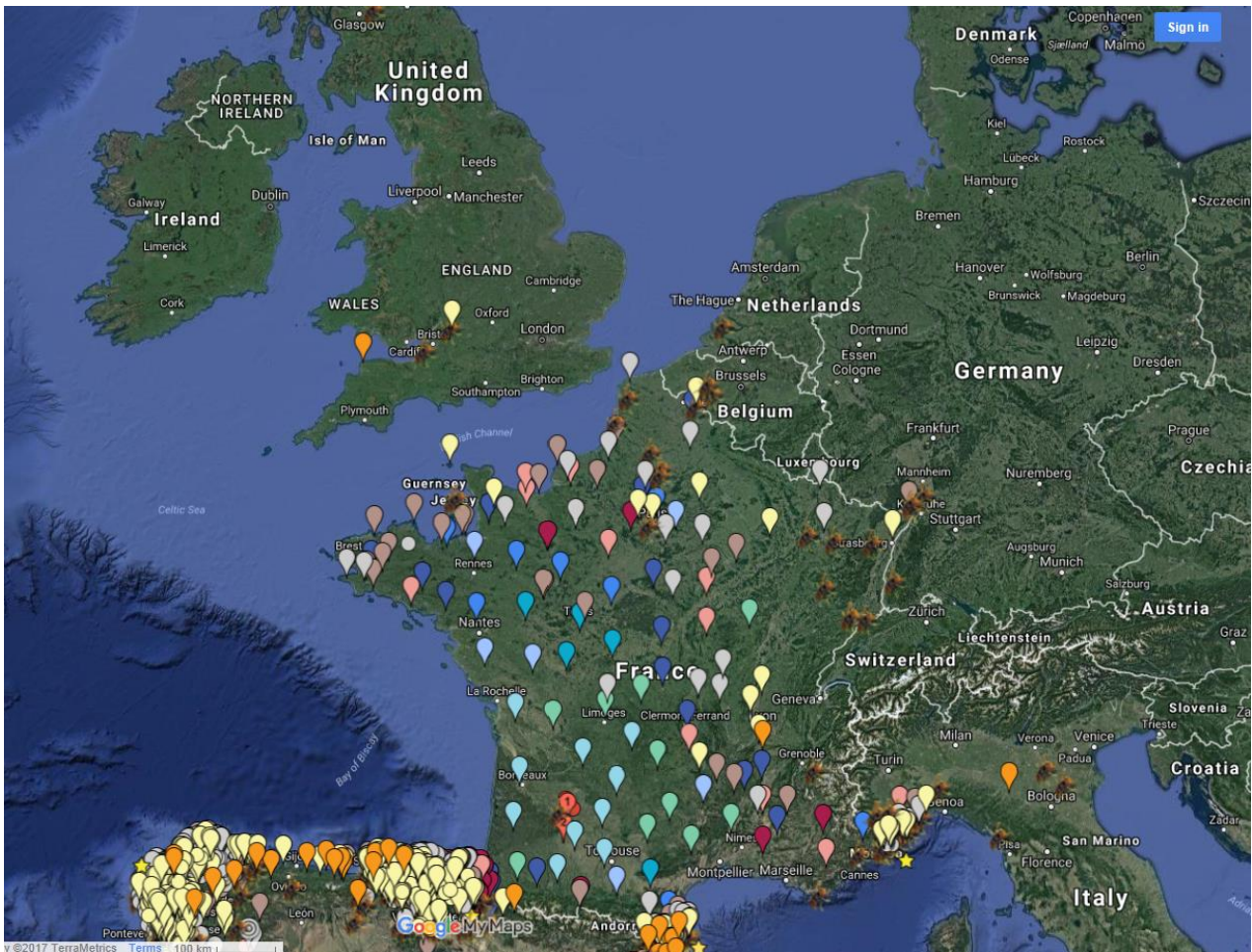
Initial laboratory examination and analysis of the nest indicate that this was a fresh incursion from the French Asian hornet population and not directly related to the nest discovered in Tetbury last year. DNA tests on the brood show that reproduction had reached the stage of drone eggs only. As with other *Vespa* species, drones are produced before gynes (virgin queens) and so we can be fairly certain that this nest was destroyed before it reached the stage of releasing queens capable of setting up new colonies next spring.



The google map illustrated below (updated November 2017) shows the 2016 and 2017 nests and individual hornet incursions within the UK and the continuing spread of Asian hornet in Europe, north into the Netherlands and east across northern Italy.

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.

The image gallery on BeeBase <http://www.nationalbeeunit.com/gallery/index.cfm> contains several pictures of Asian hornet and Small Hive Beetle as well as other pests and pathogens and general beekeeping topics. All images are subject to © Crown copyright 2010 but may be used free of charge in any format for non-commercial research, private study or internal circulation within your organisation. When reproducing images, please associate the phrase "Courtesy The Animal and Plant Health Agency (APHA), Crown Copyright" alongside each image.



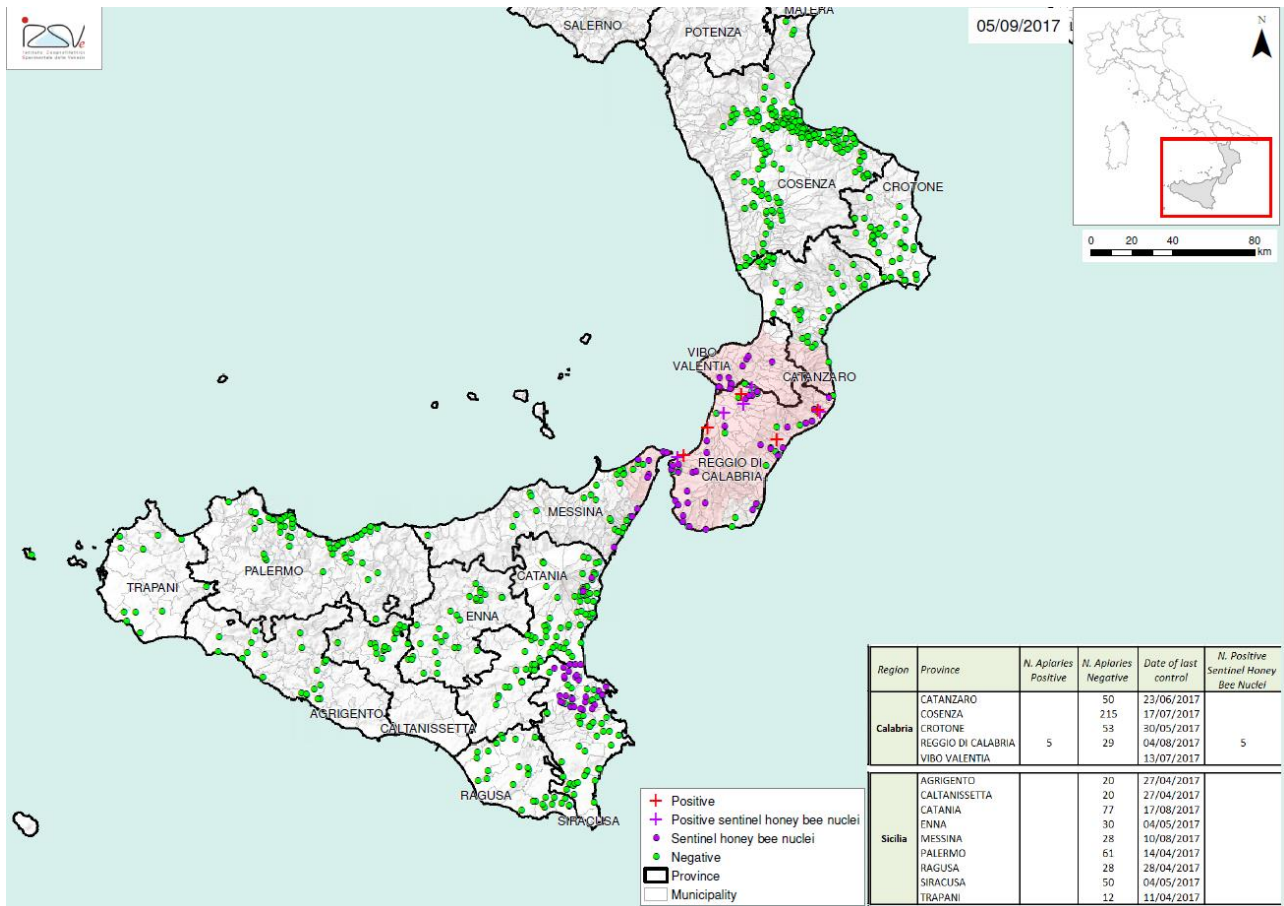
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Small Hive Beetle

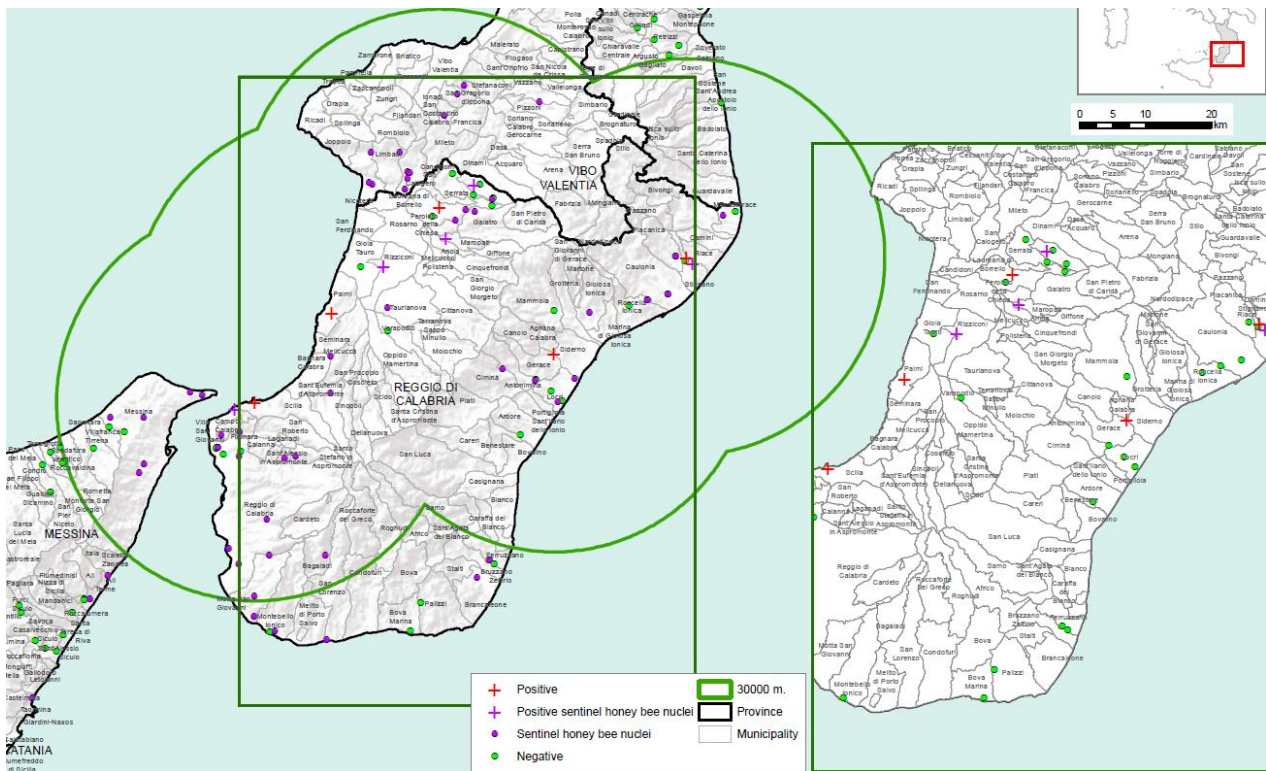




At the time of writing there have been a total of just 10 apiaries reported positive for Small Hive Beetle in the province of Reggio Di Calabria in the region of Calabria, southern Italy. Two of these were in fact feral colonies and 5 others were sentinel apiaries set up by the authorities.



However, the Italian web site has not been updated since 5th September and it should be noted that nearly all the positives reported in previous years have come from mid-September to December. Surveillance inspections in Sicily (326 apiaries) and in the more Northern Regions of Cosenza, Crotone and Catanzaro (318 apiaries) have all been clear. This indicates 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.



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 North East 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.

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)

Colony Losses 2016-17

The figures presented are derived from information gathered during inspection visits and personal contact with beekeepers in the Region. We were not able to collect sufficient data in some counties for these results to be statistically meaningful this year and so only the larger data sets and Regional average of 'winter' colony losses for the period 30th September 2016 to 1st April 2017 are presented. The combined average for 2016/17 from across the region was 21.5%. It is good to see some reduction on the previous year but this figure is still higher than expected for a mild winter. Once again queen failure during the winter together with difficulties encountered controlling Varroa are likely to be the main factors.



Region	Colony Losses (%)									
	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Derbyshire	31.2	34.6	26.8	17.5	17.1	35.9	9.2	32.1	41.7	
East Yorks	48.6	19.8	18.0	18.0	15.8	33.7	2.2	33.8	23.5	12.2
North Yorks	31.0	11.7	28.5	12.5	16.4	23.1	11.2	14.3	22.2	26.0
Notts	58.3	15.7	14.4	19.7	5.8	50.4	11.5	22.4	60.6	
South Yorks	56.5	32.3	36.8	14.5	13.9	37.0	7.6	18.2	36.0	
West Yorks	35.7	21.7	23.3	25.5	13.0	33.9	9.0	17.2	24.5	20.6
Region Average	35.8	15.7	25.0	15.0	14.8	30.8	10.0	18.1	29.1	21.5

The National Bee Unit also conducts a randomised husbandry survey of beekeepers each year as part of the healthy bees plan to monitor trends. The survey provides valuable information on beekeeping practices and the health of colonies in the UK and I would encourage all beekeepers selected for the survey to take part.

It is perhaps worth mentioning here that there have been some additions recently 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 SPCs giving full details of use. For the full list select 'Bees' on the drop down list of Species in the product search link. Apivar is the most recent addition and Apitraz has now become available in the UK. Both of these are strips containing Amitraz as the active ingredient. Now that they are on general release they may be obtained from UK beekeeping suppliers and will no longer require a veterinary prescription. Oxuvar, an oxalic



acid based treatment applied by the ‘trickle’ method was also approved late last year but is currently without a UK distributor.

Foulbrood Diseases and Inspection Statistics 2017

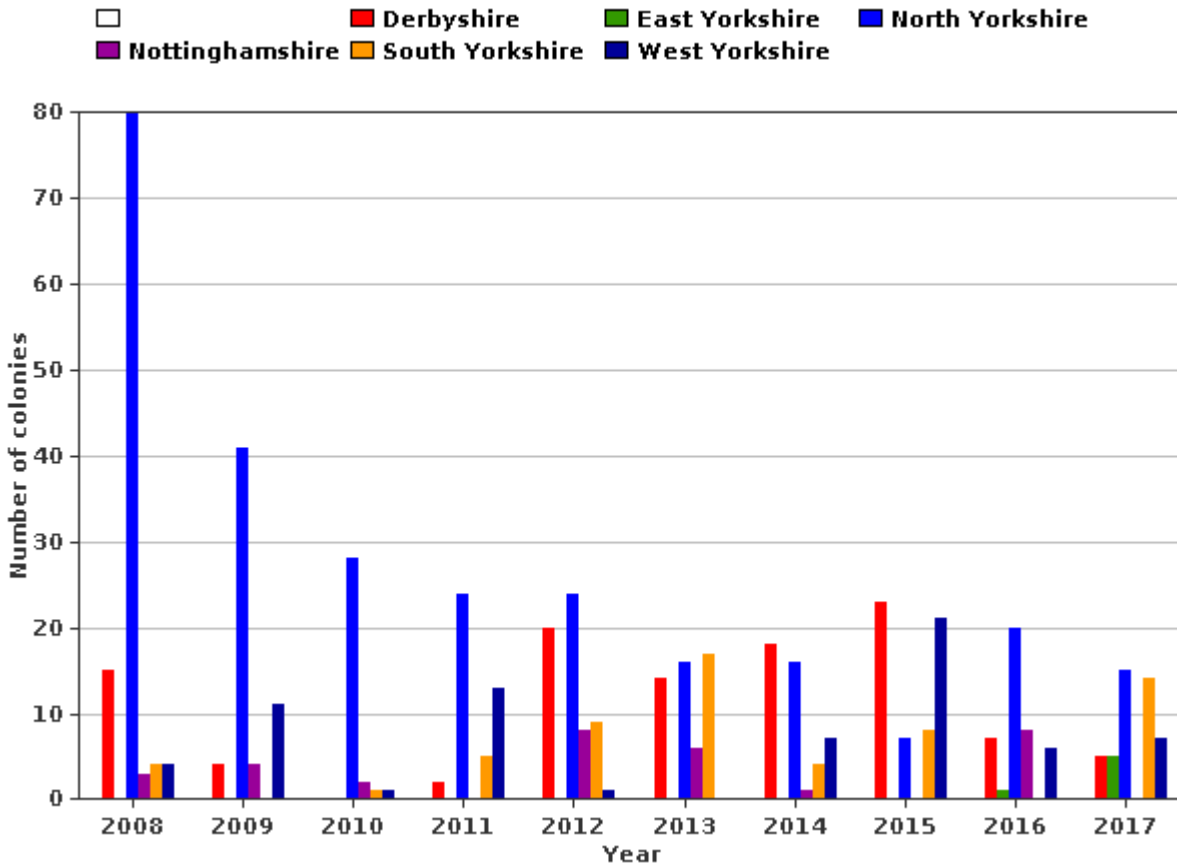
3187 colonies were inspected and 633 apiary visits made within the Region, less than last year but good numbers considering staff availability. 10 cases of AFB were found, 3 in West Yorkshire and 7 in North Yorkshire. 46 cases of EFB were found in the Region, a little up on last year and spread over a much larger area, affecting 31 apiaries, many with no previous history of disease. The large number of smaller outbreaks was quite a challenge but one which the team managed well. 236 of the apiary inspections were also carried out as part of the NBU exotic pest surveillance programme, covering imports and apiaries in areas where there is an increased risk of an exotic pest incursion.

The locations of foulbrood disease by 10km squares are listed in the following table:

County	10km Square	Colonies with EFB	Colonies with AFB
Derbyshire	SK22	1	
	SK33	1	
	SK34	1	
	SK56	2	
North Yorks	SE25	1	
	SE26	2	
	SE35	4	5
	SE45	4	
	SE55	2	
	SE56	2	2
East Yorks	SE92	1	
	SE93	1	
	SE94	2	
	TA02	1	
Notts			
South Yorks	SE50	9	
	SK38	3	
	SK48	2	
West Yorks	SE13	6	2
	SE21		1
	SE23	1	



EFB Incidence in North east Region by County



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 to see if there is any foulbrood disease close by.

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 something similar to 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”.

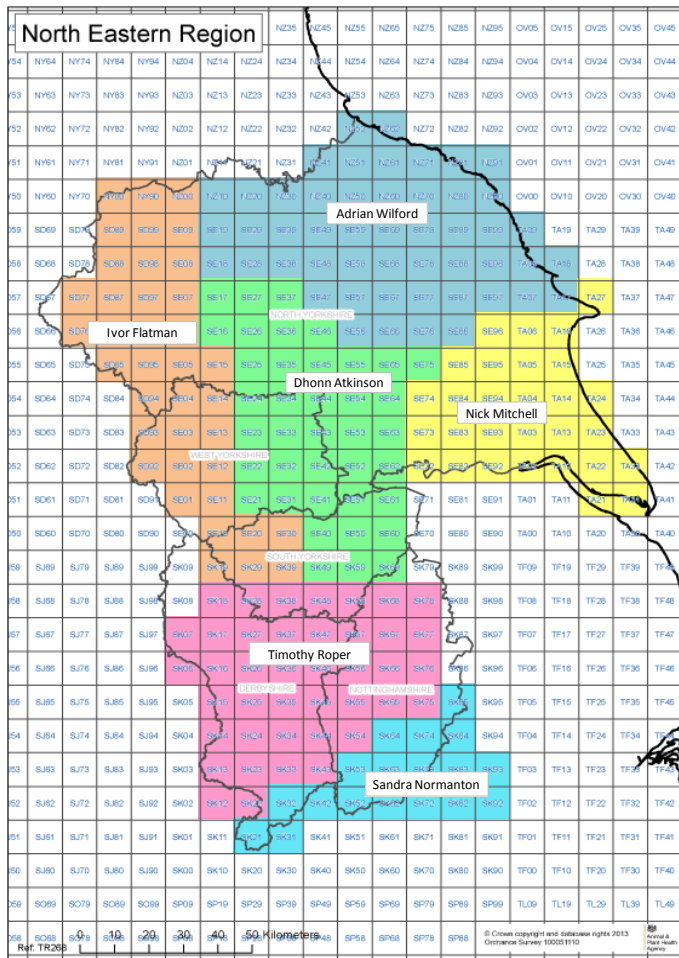
These lists are very useful to us as they allow us to identify new beekeepers and to update contact details for existing beekeepers. **Secretaries** – if you currently have this in place, please email me your current membership list, so I can ensure our records are as accurate and complete as possible. This is something that will be incredibly important if we are unfortunate enough to find Small Hive Beetle in the UK or Asian hornet in our Region in the coming season.

Education and Advisory Services

The main event was a Bee Health Day again held at Bradford University and hosted by Bradford BKA. Kirsty Stainton from Fera gave the lead lecture and further talks were provided by Bradford’s own Bill Cadmore and myself. Comb and Nosema workshops were also run during the day by the NE SBIs. Once again I would like to thank Bradford University and Bradford BKA for providing the facilities and hosting this event attended by beekeepers from across the Region. We continue to meet where possible the demand for talks, workshops and demonstrations for District and County Associations and Bee Farmers throughout the year and I hope to see many of you at talks and events over the winter period. I am already receiving enquiries about events for next year so if other Associations are planning an event related to bee health and would like to have input from members of the team, please let me know as soon as possible.



North East Inspectors and 2018 Season



The map shows the Region and areas covered by our North East Inspectors at the start of this year.

However, there will be significant changes next season. Firstly, Sandra Normanton (previously Kinchin) left the team in July to take up an opportunity to work with her partner Paul, based in north Leicestershire. Sandra has been with the NBU since 2009 and I would like to thank Sandra for her support and all she has done over those years. We wish her the very best for the future.

Secondly, I will be retiring at the end of April 2018 after 13 years with the NBU (10 years as RBI for the NE Region). I have enjoyed my second career with the NBU immensely, but as they say, 'all good things must come to an end'. I have worked with a great team of SBIs and colleagues

from the NBU, both past and present. It has been hugely satisfying meeting so many wonderful beekeeping folk and helping (or so I would like to think) to promote better beekeeping and healthier bees in the Region. I will not be retiring from beekeeping though and hope to keep in touch at meetings and events with the many friends I have made during my time at the NBU.

Recruitment is already underway for Sandra's replacement, but the post advertised for West Yorkshire, where the need is greatest. It is hoped that my own replacement can be recruited for the start of next season to allow a smooth hand-over. The intention at present is for Tim Roper to take up the 10km squares in Derbyshire and Notts previously allocated to Sandra (those in north Leics and Lincs probably returning to Eastern Region).



Animal &
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When the situation is clearer a revised map will be drawn up and from the start of the 2018 season the post code search on the contacts page of BeeBase should be updated to give your local SBI. In the mean-time, please direct all enquiries to me.

It has been quite a difficult year and I would like to take this opportunity to thank my team for all their support and hard work.

The new season will start on 2nd April 2018 and from that date you can contact the existing team as follows:

Dhonn Atkinson	dhonn.atkinson@apha.gsi.gov.uk	07775 119437
Tim Roper	timothy.roper@apha.gsi.gov.uk	07775 119441
Adrian Wilford	adrian.wilford@apha.gsi.gov.uk	07775 119444
Nick Mitchell	nick.mitchell@apha.gsi.gov.uk	07796 548575

Finally I would like to wish you all a very Happy Christmas, good wintering and very Best Wishes for the New Year.

Ivor

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