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Agency

Annual Report – National Bee Unit North East Region
December 2015

The 2015 Season – An Overview

Colonies that were well prepared with healthy bees and good reserves of food enjoyed a fairly mild start to last winter and were generally still quite populous at the turn of the year. A significant frost wasn't experienced in most areas until well into December and many beekeepers delayed using oxalic acid as a winter Varroa treatment until early New Year to be more certain that colonies were broodless and the treatment effective.

There was not too much need for additional feeding at this time but as the winter continued and colonies began to expand in response to increasing daylight hours, food reserves started to diminish rapidly. Regular appraisal by hefting the hives was necessary and any that seemed to be getting light required feeding with fondant – some even needing a second 2.5kg block as the weather continued generally cool and overcast.

Similar weather conditions persisted well into spring, normal flowering of plants and some trees being delayed by at least one week in the South of the region and up to 3 further North. When spring did finally arrive the few fine days were interspersed with cooler, though not particularly wet weather and the bees struggled to gather much of a spring crop. The later than usual flowering oil seed rape should have yielded well but a good crop was only realised perhaps in the warmer South. Queen rearing was also badly affected, some early attempts failed altogether with cell raising colonies actually pulling down queen cells. Even later in the season, unless fortunate to have queens ready to fly on the few warm, still days, mating was often delayed or never happened leading to many drone laying queens, early failure and colonies superseding later on, even into September.

Surprisingly perhaps, without incoming nectar to restrict space for queens to lay, late spring saw quite a high incidence of swarming – possibly a combination of reluctance on the part of the beekeeper to open the hives and the bees getting up to mischief whilst confined due to the poor weather!

The June gap was late this year and although temperatures started to rise in early July, in some areas there was little available forage and colonies were on the brink necessitating a starvation alert from the NBU. As a rule of thumb I like to see a minimum equivalent of two full frames of stores per colony at each inspection. The summer honey flow was intermittent and sporadic, the earlier cool, dry conditions seeming not to favour the Himalayan balsam which, though flowering well gave disappointing results except perhaps

in the far west. The heather was also late, starting to flower in early August on the south Pennine moors but two or three weeks later elsewhere. Despite this heather yields were quite good from the low lying moors in South Yorkshire and some more northern areas where the heather was still flowering when weather conditions improved in mid-September. However, other areas didn't do so well and the bees had to work hard for what they got. Many colonies came back from the moors with little or no brood present though some beekeepers report that queens did come back into lay after returning to the warmer home apiaries and being fed.

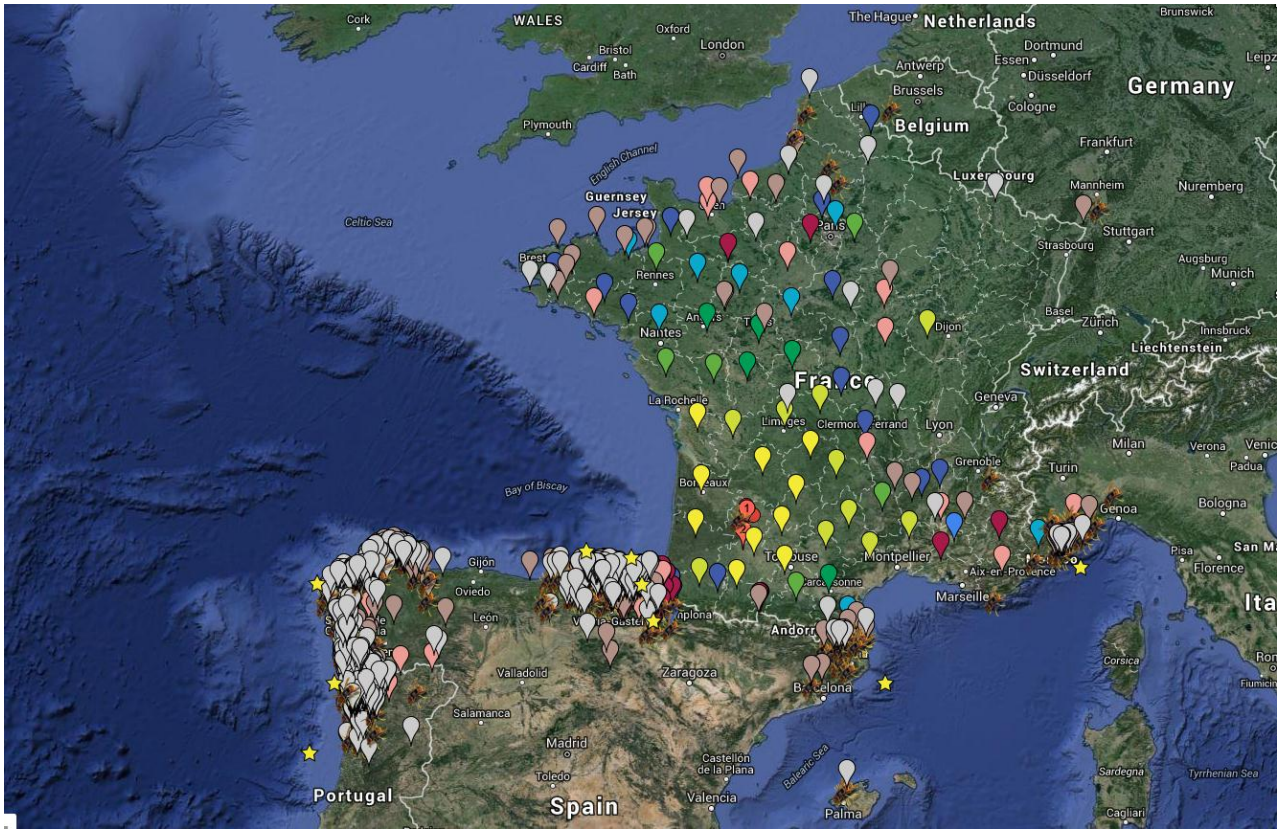
Honey yields for the region were very variable. Overall estimates were an average of about 20lbs spring and summer honey combined and 10lbs heather honey per colony. The best returns were achieved in Derbyshire and South Notts with some reports of 70lbs plus spring/summer and 30lbs heather honey per colony. However, further north some areas produced little if any surplus and colonies needed feeding during the summer months.

In summers when forage is limited queens tend to reduce lay early. As a result our Bee Inspectors started to see a number of colonies showing signs of Varroa damage in August as increasing mite populations infested most of the available brood. Hopefully late summer treatments and the mild autumn will have enabled colonies to produce a good number of healthy winter bees. However, such conditions may also have favoured a late build-up of Varroa or re-invasion from feral or neglected colonies and so continued monitoring is advised with a follow-up winter treatment if necessary. For best effect the recently registered and authorised oxalic acid treatment, Api-Bioxal, should be applied late December/early January, when there is little or no brood present.

Update on Asian hornet and Small Hive Beetle in Europe

The Asian hornet, *Vespa velutina,* continues to spread through North West France and this year has been reported in and around the area of Calais. It is of serious concern that this pest could make its own way or hitch a ride across the English Channel into the UK. With the amount of traffic entering the UK from Europe the Asian hornet could arrive almost anywhere, though the South and South East costs remain most at risk. Contingency plans have been put into place and all attempts will be made to eradicate any incursion. However, to be successful, any developing nests established by fertile queens in spring must be located and destroyed before the next generation of queens is released. Beekeepers are at the forefront of surveillance for Asian hornet as it is quite likely be observed hawking in front of bee hives, but any suspect sightings should be reported to the NBU and the Non-Native species secretariat (NNSS) at alertnonnative@ceh.ac.uk. An identification sheet for the Asian hornet and details of monitoring traps are available as

downloads from BeeBase. The open access google map is regularly updated to show the continuing spread of Asian hornet in Europe. Note that not all nests and sightings in France are recorded but the white markers show new areas affected this year.



See https://www.google.com/maps/d/viewer?mid=zQZZvCfJcXQo.k0cLRXyow4C0&msa=0

Last year I reported on the detection in September of Small hive beetle (SHB) in South West Italy, near the port city of Gioia Tauro. For the rest of the year a rigorous inspection programme was instigated in Calabria and neighbouring regions. SHB was confirmed in 60 apiaries within the initial 20km protection zone and one in Sicily resulting from tracing of colonies moved there just prior to the first detection. All the colonies in the affected apiaries were destroyed (about 3,500 in total) and soil around the hives treated with insecticide. Inspections were recommenced after winter and, perhaps surprisingly, no further colonies were found to be infested until mid-September this year. Since then and to 27th November SHB has been found in 27 apiaries, all within the 20km protection zone set up in Calabria last year (none within Sicily). A number of sentinel apiaries containing nucleus colonies have been set up in or near areas previously affected and adult beetles detected in two of them. The following map shows the situation for 2015 as of 27th November. A large number of apiaries in Sicily and the South of Italy have been inspected

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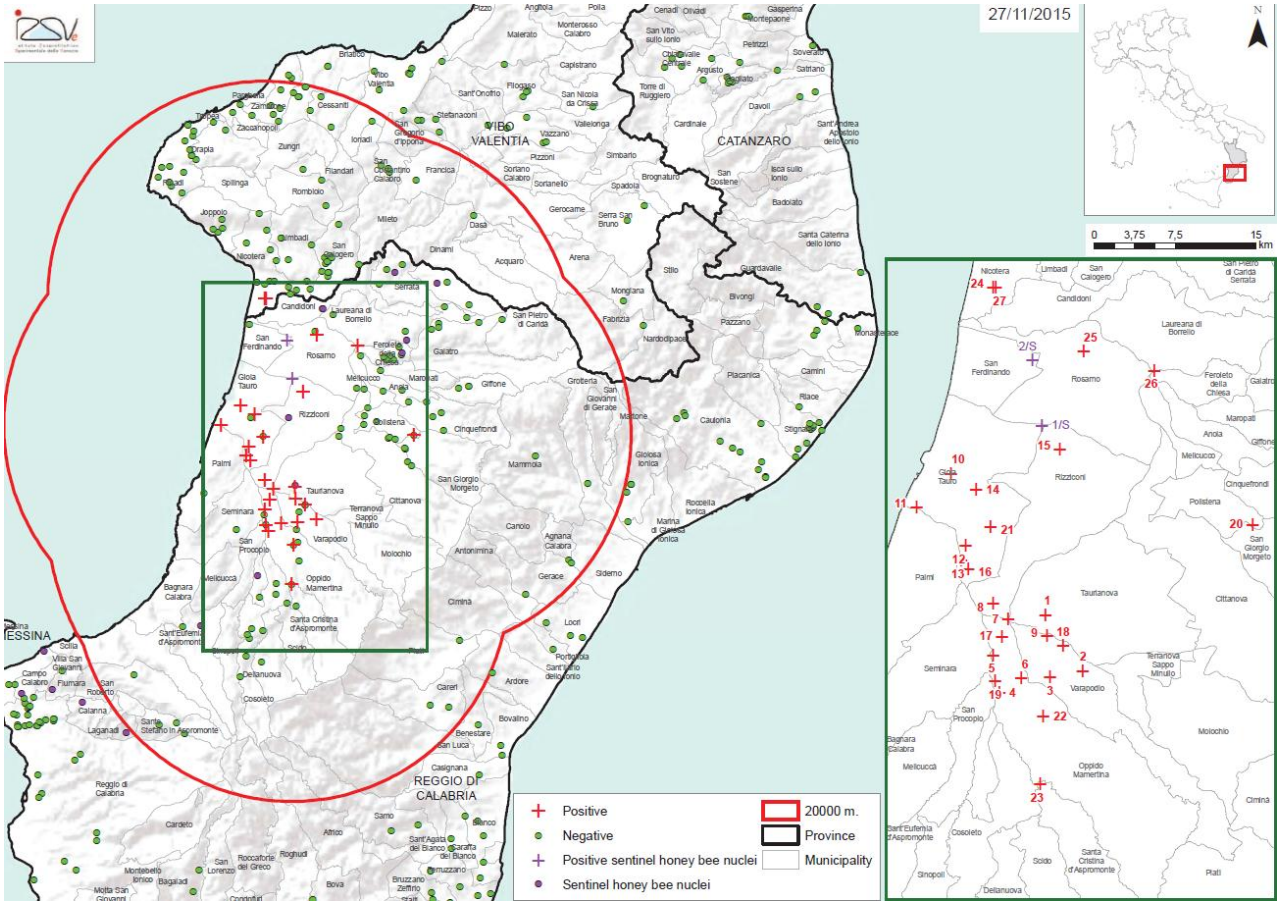
but no spread of SHB outside the initial area within the 20km protection zone has been detected.



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

The NBU leaflet, 'The Small Hive Beetle – a serious threat to European apiculture' has recently been revised and is available as a download from BeeBase at www.nationalbeeunit.com or as a hard copy.

Contingency plans are in place to deal with any incursion into the UK and were tested in the field this year in both England and Wales. Early detection is key to the success of any attempt to eradicate SHB. As well as an increased focus on inspection by the NBU of imports (queens and colonies) and colonies situated in areas considered at increased risk of an incursion, it is essential that all beekeepers remain vigilant. It is also essential that all apiaries are registered on BeeBase (as well as beekeeper contact details) so that we can identify apiaries at risk in the event of an incursion of SHB into the UK and target control measures effectively. I would like to thank members of the Sentinel Apiary Programme,

both in this region and elsewhere in England and Wales for their diligence in monitoring their own colonies for exotic pests.

The most serious threat of the introduction of SHB into the UK remains the trade in bees and hive products. Import regulations are our main defence and it is essential that all beekeepers abide by them. If in any doubt, please contact me or the NBU office.

Colony Losses 2014-15

The figures presented are derived from information gathered during inspection visits and personal contact with 253 beekeepers taking 2653 colonies into winter and give an indication of 'winter' colony losses for the period 30th September 2014 to 1st April 2015. The combined average for 2014/15 from across the region was 17.1%, somewhat higher than the previous year. Some losses were due to starvation, especially in late winter and others colonies that had been weakened by Varroa or disease. However, queen failure was also a factor.

Region	Colony Losses (%)							
	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Derbyshire	31.2	34.4	21.1	14.8	14.3	35.6	9.2	32.1
East Yorks	50.0	19.8	14.6	15.2	13.6	34.0	2.2	36.2
North Yorks	34.0	11.7	29.9	11.3	14.1	22.9	11.2	14.3
Nottinghamshire	48.3	15.7	12.6	16.3	10.7	53.6	11.5	22.4
South Yorks	56.5	30.7	36.8	12.7	12.2	37.0	8.4	13.4
West Yorks	35.7	21.6	19.1	20.3	11.5	34.1	9.0	17.2
County average	42.6	22.3	22.4	15.1	12.7	36.2	8.6	22.6

Small colonies or those weakened by Varroa are particularly susceptible in severe or late winters when the bees cannot generate sufficient heat within the cluster to move onto

fresh stores and so succumb to the cold or isolation starvation. The use of dummy boards and/or added insulation may be of benefit. Larger colonies may consume more food under these conditions and even the experienced beekeeper needs to be wary of the possibility of starvation.

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.

Foulbrood Diseases and Inspection Statistics 2015

3115 colonies were inspected in 608 apiaries within the region. The overall number of cases of foulbrood and number of apiaries affected were a little up on last year. 5 Cases of AFB were found in 3 apiaries and 59 colonies with EFB in 29 apiaries. AFB in West Yorkshire and EFB in Derbyshire, North Yorkshire and South Yorkshire were largely in areas where disease has been reported in previous years, albeit not for some time, but most of the cases of EFB in West Yorkshire were in quite a wide area previously thought to be of low risk. It is hoped that the quick intervention made possible by the alertness and good cooperation of the beekeepers affected will minimise any recurrence next year.

One third 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	4	
	SK23	2	
	SK33	6	
	SK34	5	
	SK37	6	
North Yorks	SE36	1	
	SE46	1	
	SE53	2	
	SE54	1	
	SE64	1	
	SE86	1	

East Yorks	TA03		1
Notts			
South Yorks	SE50 SE70 SK37	5 2 1	
West Yorks	SE04 SE13 SE14 SE23 SE42	 11 1 8 1	2 2

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.

All beekeepers should ensure that they are registered on BeeBase. This can be done through the NBU office (tel. 0300 3030094), through your Bee Inspector, or by self-registration. I am grateful to the majority of Beekeeping Associations who have sought permission to forward member's contact details to the NBU so beekeepers can be advised if there is a notifiable disease nearby, either through the automatic e-mail alert if the disease is within 3km of the apiary or by telephone. However, self-registration is still recommended, especially for beekeepers whose apiaries are not at their home address. Self-registration also gives beekeepers secure password protected access to personal details and inspection records.

Education and Advisory Services

The NE team of Regional and Seasonal Bee Inspectors continues to provide a number of talks, workshops and demonstrations to District and county Associations and Bee Farmers throughout the year and to represent the NBU at other events. I would especially like to thank the Associations at Burton and York for hosting the Bee Health Days which attracted good attendances from South Derbyshire and North Yorkshire (and some from further afield). I am hoping to reach out to different areas with more Bee Health Days next year – details to follow. If Associations require assistance from the team at any events related to bee health then please contact me before the start of the season.

North East Inspectors and 2016 Season

There were some changes to regional staffing during the 2015 season. Sandra Kinchin moved south and so has taken up responsibility for the southernmost parts of

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Nottinghamshire and Derbyshire but also some cross border areas in Lincolnshire and Leicestershire. I am pleased to say that we were able late in the season to recruit a new SBI, Nick Mitchell, to cover East Yorkshire. This has allowed Adrian Wilford to take more of the North Yorkshire area previously covered by Sandra. Dhonn Atkinson will continue to be responsible for central North and West Yorkshire and Doncaster, Tim Roper for the area south from Sheffield down to Nottingham and Derby and my own inspection area the remainder of West and South Yorkshire. Unfortunately town and county boundaries don't follow the 10km squares to which we work so after April 1st 2016 if unsure you can check who your local SBI is using the post code search on the contacts page of BeeBase. Before then all enquiries should come to me.

I would like to take this opportunity to thank the Seasonal Bee Inspectors who make up the NE team for all their hard work during the past year.

The 2015 season will start on 1st April and from that date their contact details will be as follows:

Sandra Kinchin	sandra.kinchin@apha.gsi.gov.uk	07775 119440
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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 every best wish for the New Year.

Ivor

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