The Food and Environment Research Agency

Talanhana

National Bee Unit - South East Region

December 2012

A review of the 2012 season

The South East Team

The season began in earnest this year on 26th March. As usual, all of the bee inspectors gathered at the Food and Environment Agency (FERA) at Sand Hutton, York for our Technical Training Seminar. Always a good start to the season, the seminar is 3 days of intensive training for Bee Inspectors, revising our practices etc. ready for the new season ahead. Of course, prior to that, I was busy with lectures to various Associations throughout the SE region.

The SE team now has 5 regular, experienced Seasonal Bee Inspectors plus myself. Contact numbers and approximate areas of work are listed below:

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Brian McCallum	South London, North West Kent	07775 119478
Caroline Washington	North London	0208 209 0065
Diane Steele	West Sussex, Surrey	07775 119452
Michael Cooper	East Kent	07775 119451
David Rudland	East Sussex, West Kent	07775 119448

Inspection Programme

A total of 3852 colonies/713 apiaries were inspected in the South East region during the 2012 season. The number of apiaries with EFB was less this year than last at 72 (81 - 2011) but AFB was found again, 2 colonies, located in TQ37. (Greater London) The total number of colonies inspected in England was 29869. Of these, 896 colonies were diagnosed with EFB and 37 with AFB. As last year the SE region has the highest number of beekeepers with EFB in their apiaries at 59, followed by the South West at 56 and the Southern region with 52



Regional inspection and foulbrood summary

County Code	Colonies Inspected	EFB Colonies	%EFB Colonies	Apiaries Inspected	EFB Apiaries	%EFB Apiaries
ESU	402	10	2.49%	75	8	10.67%
GRL	753	12	1.59%	193	8	4.15%
KEN	1356	64	4.72%	204	31	15.20%
SUR	581	15	2.58%	126	8	6.35%
WSU	760	38	5.00%	115	17	14.53%
Totals:	<u>3852</u>	<u>139</u>		<u>713</u>	<u>72</u>	

The above figures show the percentage of EFB against colonies/apiaries inspected; it may be more helpful to show the number of colonies infected against the actual number of colonies/apiaries listed on Beebase, as follows:

County Code	Total Colonies	EFB Colonies	%EFB Colonies	Total Apiaries	EFB Apiaries	%EFB Apiaries
ESU	1979	10	0.50%	701	8	1.14%
GRL	3762	12	0.32%	1482	8	0.54%
KEN	5105	64	1.25%	1315	31	2.36%
SUR	2875	15	0.52%	961	8	0.83%
WSU	2753	38	1.38%	692	17	2.46%
Totals:	<u>16474</u>	<u>139</u>		<u>5151</u>	<u>72</u>	

This second table gives a more realistic view of the likelihood of your colony/apiary suffering from European Foulbrood. The higher percentages in the first table show that our apiary priority targeting system is a successful method of finding disease. Of course these figures only relate to the numbers of beekeepers registered on Beebase, there are certainly a number of beekeepers who are not included in these figures. One of the common misunderstandings is that, as a registered member of a local Beekeeping Association you will automatically be listed on Beebase. Unfortunately that is not true, so if you haven't yet signed up to Beebase I would strongly recommend that you do, so that these figures can be a more accurate representation of beekeeping in the UK, go to www.nationalbeeunit.com for more information.

All the figures presented here can be found on the public pages of the National Bee Unit website, Beebase, www.nationalbeeunit.com click on Bee Diseases in the menu and then on Disease Incidence and Maps. As in previous newsletters I suggest that it becomes regular practice to review these pages, to assess whether there is any foulbrood disease in your area. Of course, if your apiary is within 3km of a known diseased apiary and you have given a current email address on Beebase, NBU will notify you through the 'Alerts' system. This makes beekeepers aware of problems close to their own apiary and encourages them to check before a bee inspector arranges a visit. For this system to work efficiently it relies on Beebase having up-to-date email addresses, so please check your personal details on your own Beebase web page and add or correct an email address as necessary.

Beebase is constantly being improved, there is now facility to add details of your own apiary records, if you wish and very recently a facility to add/edit colony numbers at each apiary site has

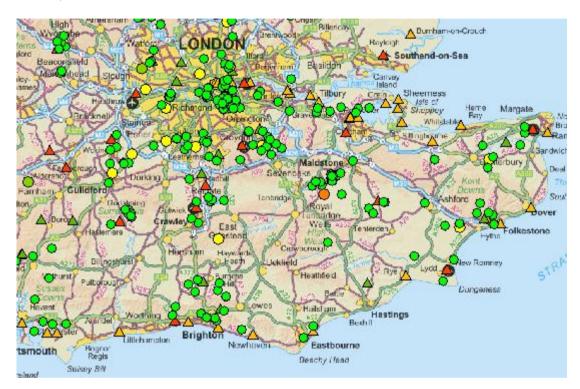
been added. The advisory leaflets section is constantly changing, with new best practice guidelines and factsheet added in 2012. Also a new section with FAQs is now in place and will be extended as time goes on.

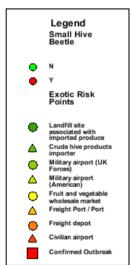
To complete this section the following table shows Ordnance Survey 10 km squares where European foulbrood has been found in the South East area this season:

EFB occurrence by 10KM squares 2012				
County	10 km Squares EFB Found	Area Name	Number of Positive EFB Diagnoses	
East Sussex	TQ31	BURGESS HILL	4	
East Sussex	TQ41	N.E. LEWES	3	
East Sussex	TQ42	UCKFIELD	1	
East Sussex	TQ43	FOREST ROW	1	
East Sussex	TQ53	S.W. TUNBRIDGE WELLS	1	
Greater London	TQ27	S.W. LONDON	2	
Greater London	TQ29	BARNET & FINCHLEY	4	
Greater London	TQ36	CROYDON	3	
Greater London	TQ39	ENFIELD	2	
Greater London	TQ65	W. MALLING & HADLOW	1	
Greater London	TQ36	CROYDON	1	
Greater London	TQ46	BROMLEY & ORPINGTON	5	
Kent	TQ53	S.W. TUNBRIDGE WELLS	4	
Kent	TQ55	SEVENOAKS	6	
Kent	TQ65	W. MALLING & HADLOW	5	
Kent	TQ66	MEOPHAM	6	
Kent	TQ73	CRANBROOK	2	
Kent	TQ75	MAIDSTONE	5	
Kent	TQ84	HEADCORN	3	
Kent	TQ86	E. GILLINGHAM	2	
Kent	TQ92	RYE & BROOKLAND	1	
Kent	TQ93	WOODCHURCH	4	
Kent	TQ96	E. SITTINGBOURNE	8	
Kent	TR01	DUNGENESS	5	
Kent	TR04	ASHFORD	2	
Kent	TR13	HYTHE	4	
Kent	TR14	STOWTING & ELHAM	1	
Surrey	SU94	GODALMING	3	
Surrey	SU95	W. GUILDFORD/ WOKING	1	
Surrey	SU96	ASCOT	6	
Surrey	TQ03	CRANLEIGH	2	
Surrey	TQ05	E. GUILDFORD/ WOKING	2	
Surrey	TQ16	KINGSTON & ESHER	1	
West Sussex	SU70	HAVANT	1	
West Sussex	SU80	CHICHESTER	4	
West Sussex	SU82	MIDHURST	2	
West Sussex	TQ01	PULBOROUGH	1	
West Sussex	TQ10	WORTHING	1	
West Sussex	TQ11	STEYNING	11	
West Sussex	TQ13	HORSHAM	6	
West Sussex	TQ21	HENFIELD	5	
West Sussex	TQ22	WARNINGLID	3	
West Sussex	TQ23	CRAWLEY	2	
West Sussex	TQ33	CRAWLEY DOWN	1	
West Sussex	TQ34	SMALLFIELD	1	
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Exotic pest surveillance programme

The map below shows both the current risk locations registered on Beebase and the inspections made especially to look for exotic pests. At the moment these pests are Small Hive Beetle and Tropilaelaps spp. In 2012 the SE team made 217 Exotic Pest inspections, approximately 30% of our overall inspection visits, which shows just how high a priority we have for looking for these exotic pests.





A further move to try to combat the entry of exotic pests has been to establish Sentinel Apiaries. This programme is now entering its third season. In areas considered 'at risk' a beekeeper is asked to check their colonies for exotic pests. All necessary equipment and paperwork is supplied, the beekeeper collects floor scrapings according to a sampling programme and sends these to the NBU laboratory at York for checking. SHB floor inserts are supplied and are checked at normal colony inspections, checks being noted on a log sheet. Anything unusual or unidentifiable is reported to the RBI or NBU office. We (NBU) value this work by local beekeepers; you can check your colonies in a risk area many times a year, the inspector is only likely to visit once. I am constantly on the look-out for new beekeepers to participate in this scheme, if you think you might like to be involved please contact me; details are at the end of this newsletter.

Asian Hornet

There has been much interest in the Asian Hornet, *Vespa velutina* in the SE region due to our close proximity to the French coast. This season there have been several reports of this insect but so far none have been confirmed.



Asian hornet Vespa velutina nigrithorax



Banded hoverfly Volucella zonaria

An insect that has been mis-identified several times is *Volucella zonaria*, the banded hoverfly, a picture (left) is shown for comparison with the Asian hornet. As a fly, one of the main differences is that it only has one pair of wings. Last year I was fairly sure that Asian hornet would be discovered in the UK in 2012 but fortunately that has not happened, maybe the poor weather assisted in stopping the hornet flying the channel. Whatever happens, we must all be vigilant in checking and reporting anything unusual. Many of the beekeepers who have volunteered as sentinel apiaries have also been given hornet traps to hang in their apiaries.

If you think you have seen this hornet, collect a sample if possible or take a photo and report any suspect sightings via the Alert System: alert_nonnative@ceh.ac.uk

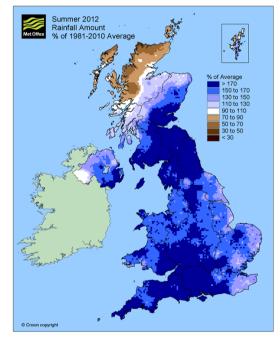
Please contact me for help with any suspicious insect, or indeed exotic pest.

The beekeeping year

Well what a year it has been, poor weather being the culprit for most of our worries in beekeeping. The year started reasonably well in March with warm dry days, the season looked promising but in April the weather turned to rain and it feels as though it hasn't stopped since! April was the wettest since 1912 with 121.8mm of rain over the UK significantly more than the average of 69.6

normally expected. This was quickly followed by the wettest summer (June, July and August) for 100 years with 370.7mm rain over the UK the highest rainfall on record being in 1910 at 384.4mm. June was another record breaker with double the average rainfall at 145.3mm, the wettest since records began in 1910. The map shows rainfall against the average and most areas of the SE had between 130 to 170% of that average.

August was the best of the three summer months with 109.5mm of rain and 154 hours of sunshine and a mean temperature of 15.3C, so even when it wasn't raining it wasn't especially hot. It was also one of the dullest summers on record with 413 hours of sunshine for the three months, the dullest since 1987 with 402. The map and data given here have been taken from the Met Office website www.metoffice.gov.uk



Check this out for more interesting weather information, both forecast and historic.

How did all this affect the beekeeping? The early warm weather started colonies off well but they quickly went into a long period of rain, leading to many colonies needing feeding, some throughout the entire summer. Also, and something which many beekeepers did not realise, colonies ran out of pollen stores (pollen starvation). Broodnests then contracted and I saw many colonies that only had sealed brood and eggs as there was little or no pollen to feed larvae. Early crops such as apples, pears etc. (top fruit) were washed out

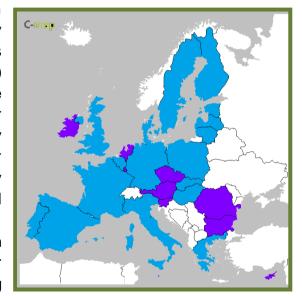
and pollination was negligible, as a consequence crops have been poor. When there was a break in the weather many colonies swarmed but were then unable to have queens mated successfully both in the swarm and the parent colony, leading to colony failure due to drone laying queens. In fact that is one of my worries for this coming winter, poorly mated queens will either fail during the winter or in the spring of 2013 as they are asked to produce the brood necessary to expand the colony. All this meant that colonies did not achieve full size in terms of adult bee numbers and so, even if the weather did break for long enough, they weren't sufficiently strong to bring in a honey surplus.

I have already referred to the risks of drone laying queens contributing to colony losses, the other main issue being colony stores. Due to the low availability of any nectar that hadn't been washed out by the rain, many colonies failed to collect sufficient stores to pass the winter and some required considerable feeding. Please check your colonies regularly during the winter and feed candy if you suspect they are low.

EU PSP

This year the National Bee Unit has become involved in the European Union Pilot Surveillance Programme (EUPSP) which will conclude at the end of the coming season

(2013). This programme was initiated in the autumn of 2011 when all member states were asked if they would like to participate, 17 of those states volunteered to take part. The map shows (in blue) those who have agreed to take part. The background for the study is the concern over 'winter losses' and the fact that there is so much variability between methods of recording in separate member states. The project seeks to address these issues by having a standard method of taking samples and gathering information across all those who take part. One of the primary aims of the EUPSP is to gain an accurate estimation of colony losses in EU member states. Our involvement began in 2012 by asking



200 beekeepers (England & Wales) picked at random to volunteer to take part in this project. Those that declined were replaced by others, again randomly selected until 200 volunteers were achieved. 25 of those who agreed to take part are in the SE region. Inspectors then visited during August and September, the beekeeper was interviewed and a questionnaire completed. This was followed by a thorough inspection of all colonies, carefully noting the health status and samples were taken as necessary. Two further visits are planned, this coming spring and autumn (2013). The idea here is to gather data both about winter losses and in-season losses and try to discover the reasons for those losses. Obviously this is an ongoing project, results from samples for those taking part are shown on their own pages of Beebase and an overall assessment of the results will be available publicly, sometime after the project is complete.

Honey

I have already completed the 2012 Honey survey; it is published on Beebase if you wish to download a copy, so I will only give a very brief resume. As you can tell from my comments above the honey crop was very small with an average of 19lbs per colony recorded for the SE. This is the worst average honey yield I've ever recorded. Also many beekeepers reported that the honey was very high in water content often around the 20% mark. Average price selling direct has gone up approx 4.5% and is now £4.92 per lb, but of course the total income was reduced due to the low yields. This year a massive 470 beekeepers responded to my request for information about honey crop and prices and I would like to thank them for their participation. The honey survey can be found at: www.nationalbeeunit.com click on Apiary Inspections & Training and select Regional Bee Inspector reports from the menu.

Imports and Exports

This season imported to England and Wales:

From the EU – 8267 queens were imported from Austria, Cyprus, Czech Republic, Denmark, Germany, Greece, Italy, Poland, Romania, Slovenia & Spain. Up from last year (4113) the largest importer being Greece at 3630

From 3rd countries (non EU) – 590 queens were imported from Argentina (100) and New Zealand (490). Much reduced on last year's total of 1762

Those of you who import queens in the South East area will receive a visit to check that they have the correct paperwork and that the queens establish healthy colonies. If you wish to import queens to the UK, either from the EU or beyond, guidance notes and forms are available on our website at www.nationalbeeunit.com click on Bees & the Law and select Imports and Exports from the menu.

Educational events

During the year the South East Bee inspectors we have been involved with 40 events and met with nearly 1500 beekeepers. The range of events comprised; lectures to Associations, apiary demonstrations, apiary tours, various workshops and of course attendance at the National Honey Show and local bee auctions. All these events are an opportunity for us to meet beekeepers and, likewise, for you to meet with bee inspectors. I very much hope that they form a bridge to the inspectorate, it is now increasingly important that we work together to improve both bee health and the skill level of beekeepers. Better bee husbandry is the key to improving the overall health of our bee stocks and I hope that we, the NBU, can assist with in important work of teaching beekeepers.

Please remember that these events largely happen because you have requested them, so contact me if you would like me or one of the team to arrange something for your Association.

Finally

I would like to take this opportunity to thank the Seasonal Bee Inspectors who make up the SE team for all their hard work during the season: Caroline Washington, Diane Steele, Michael Cooper, David Rudland & Brian McCallum.

Alan Byham

For further information please contact:

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National Bee Unit website: www.nationalbeeunit.com