National Bee Unit

South East Region

The Food & Environment Research Agency

November 2013

A review of the 2013 season

The South East Team

This year the bee inspection season began on April 1st and as usual the team went up to the Food and Environment Agency (FERA) at Sand Hutton, York for our Technical Training Seminar. We always start the season in this way, 3 days of intensive training and revision for Bee Inspectors before the business of inspecting colonies starts in earnest.

At the beginning of the season the SE team consisted of 5 Seasonal inspectors plus myself but recruitment was in progress. By the beginning of July we had a new member on the team, Jonathan Brookhouse, who after a period of training at York and field training with us in the SE was given the Surrey area previously looked after by Diane. This meant a general adjustment of areas, which now fall out like this:

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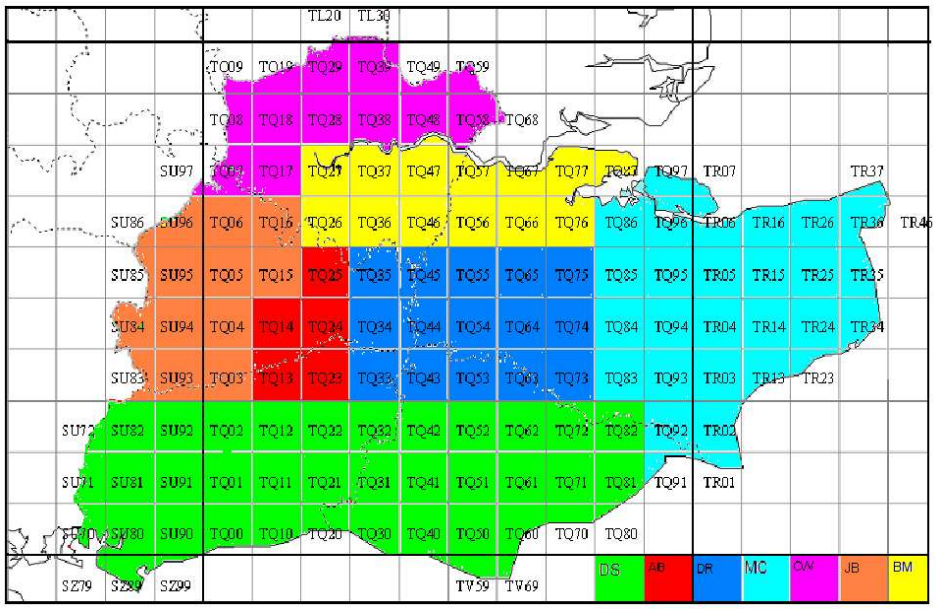
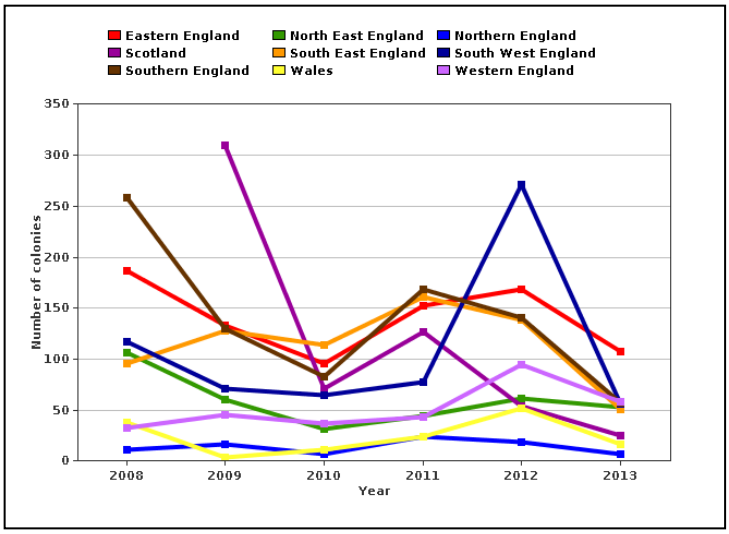
Brian McCallum	South London, North West Kent	07775 119478
Caroline Washington	North London	0208 209 0065
Diane Steele	West Sussex, East Sussex	07775 119452
Michael Cooper	East Kent	07775 119451
David Rudland	East Surrey, West Kent	07775 119448
Jonathan Brookhouse	West Surrey	07867 351598

These areas can be seen easily on this map, which also includes the area that I inspect and gives a better idea of who to contact by using your Ordnance Survey 10km square map reference.



Inspection Programme



This season got off to a slow start with the very cold spring (more on this later) but we managed to achieve a final total of 3280 colonies/691 apiaries inspected in the SE this year. The number of apiaries with EFB was significantly less this year than last at 32, (72 - 2012) a second year downward trend. The adjacent graph shows regional trends of EFB over the last 5 years, the SE region is shown in orange.

AFB was again found, this time in the Surrey (SU94) area, where we had a small outbreak (6 colonies) which was ably dealt with by our new recruit Jonathan Brookhouse. The total number of colonies inspected in England was 25619. Of these, 390 colonies were diagnosed with EFB and 20 with AFB.

Regional inspection and foulbrood summary

County Code	Colonies Inspected	EFB Colonies	%EFB Colonies	Apiaries Inspected	EFB Apiaries	%EFB Apiaries
ESU	301	6	1.99%	84	4	4.76%
GRL	548	7	1.28%	150	4	2.67%
KEN	990	16	1.62%	190	10	5.26%
SUR	652	4	0.61%	131	2	1.53%
WSU	789	18	2.28%	136	12	8.82%
Totals:	**3280**	**51**		**691**	**32**	

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 (together with the number of current beekeepers) listed on Beebase, as follows:

County Code	Total Colonies	EFB Colonies	%EFB Colonies	Total Apiaries	EFB Apiaries	%EFB Apiaries	Current BKS
ESU	2083	6	0.29%	798	4	0.50%	665
GRL	3949	7	0.18%	1630	4	0.25%	1474
KEN	5110	16	0.31%	1516	10	0.66%	1127
SUR	3099	4	0.13%	1133	2	0.18%	1028
WSU	3206	18	0.56%	786	12	1.53%	622
Totals:	**17447**	**51**		**5873**	**32**		**4906**

I think you would agree that this second table gives a more realistic view of the likelihood of your colony/apiary suffering from European Foulbrood.

Reasons for low disease incidence

It is difficult to be sure why foulbrood is lower some years than others, so these comments are my view of what has happened over the past two seasons. Often in beekeeping the problems encountered this season are a result of issues in the previous year and I think that is partly what has happened here. Last summer was very wet and many colonies had difficulties getting queens mated properly. So colonies went into the winter with poor queens and as a consequence failed or were struggling before spring. In general across the SE region the winter losses were heavy, between 30-40%. These losses were combined with a long cold spring, where colonies were unable to recover and make headway. In my opinion any colony suffering with an extra burden such as foulbrood, nosema, heavy varroa infestation etc. would have succumbed during this extended winter/spring period. That meant that 'survivor' colonies tended to be fit and adapted to cope with the long period of dearth, or of course that the beekeeper was helping them along, making sure they had enough food supplies to last until the weather changed. Those colonies that did not have help from the beekeeper and ran out of stores did not survive. The low EFB count this season shows that, in general, surviving colonies were healthy. Of course foulbrood has the potential to reoccur promptly if beekeepers reuse combs and equipment from colonies that have died out. Combs should be melted out or burnt, regardless of how new they look, and equipment should be sterilised before reuse.

The best result of all this would be that new colonies were created from those fit, surviving colonies but in this modern world this would take time to replace lost stocks and we can't wait, so there have been large numbers of bees imported, especially from EU countries. The table below gives details:

Queen Bees or nucleus colonies imported from the EU into England/Wales in 2013						
Country of origin	**Number of consignments imported**	**Batched number of queens**	**Batched number of nucleus**	**Batched number of packages**	**Batched number of Colonies**	**Number of consignments inspected**
Austria	5	114	0	0	0	1
Cyprus	17	409	0	0	0	13
Czech Republic	15	184	146	350	0	13
Denmark	18	349	0	1	0	8
France	3	10	0	558	0	1
Germany	14	131	0	0	0	4
Greece	91	4263	95	0	0	37
Hungary	4	172	0	0	0	2
Italy	16	1330	0	1000	0	3
Poland	3	70	0	400	10	1
Slovenia	30	1140	0	0	0	20
Spain	3	90	200	0	0	3
TOTALS:	**219**	**8262**	**441**	**2309**	**10**	**106**

The biggest increase here has been in the supply of package bees. Add to this 3rd country imports: 240 queens from Argentina and 540 queens from New Zealand

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

EFB occurence by 10KM squares 2013				
County	**10 km Squares EFB Found**	**Area Name**	**Number of Positive EFB Diagnoses (including recurrents)**	**Month EFB Found**
East Sussex	TQ31	BURGESS HILL	2	June
East Sussex	TQ41	N.E. LEWES	1	April
East Sussex	TQ41	N.E. LEWES	2	July
East Sussex	TQ43	FOREST ROW	1	July
Greater London	TQ28	N.W. LONDON	1	June
Greater London	TQ29	BARNET & FINCHLEY	4	August
Greater London	TQ29	BARNET & FINCHLEY	2	July
Kent	TQ65	W. MALLING & HADLOW	2	August
Kent	TQ66	MEOPHAM	1	September
Kent	TQ66	MEOPHAM	1	June
Kent	TQ66	MEOPHAM	1	July
Kent	TQ75	MAIDSTONE	2	September
Kent	TQ75	MAIDSTONE	1	July
Kent	TQ84	HEADCORN	1	July
Kent	TQ84	HEADCORN	1	April
Kent	TQ85	EYEHORNE STREET	1	September
Kent	TQ94	W. ASHFORD	1	August
Kent	TR01	DUNGENESS	2	August
Kent	TR04	ASHFORD	2	May
Surrey	TQ04	S.E. GUILDFORD	1	April
Surrey	TQ06	WEYBRIDGE	1	July
Surrey	TQ06	WEYBRIDGE	2	May
West Sussex	SU70	HAVANT	1	June
West Sussex	SU71	WEST MARDEN	1	August
West Sussex	SU71	WEST MARDEN	2	July
West Sussex	SU80	CHICHESTER	3	August
West Sussex	SU80	CHICHESTER	4	July
West Sussex	SU90	N. BOGNOR REGIS	1	June
West Sussex	SU92	E. MIDHURST	1	June
West Sussex	TQ11	STEYNING	1	July
West Sussex	TQ31	BURGESS HILL	1	May
West Sussex	TQ31	BURGESS HILL	2	August
West Sussex	TQ43	FOREST ROW	1	August

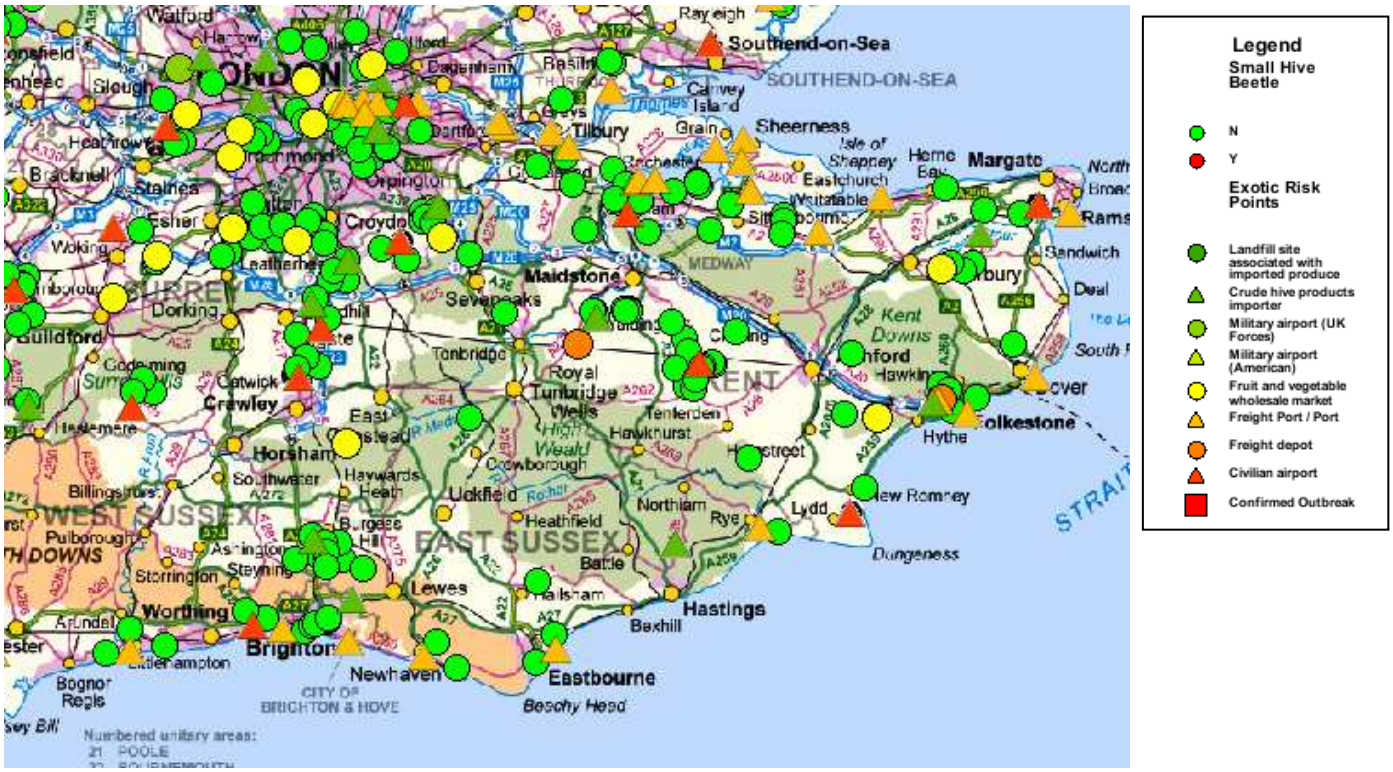
All the figures presented here can be found on the public pages of the National Bee Unit website, Beebase, www.nationalbeeunit.com click on Bee Diseases in the menu and then on Disease Incidence and Maps. As in previous newsletters I suggest that it becomes regular practice to review these pages, to 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 update an email address as necessary.

To complete this section, a brief comment on our educational activities. During the year the South East bee inspectors team have been involved with more than 40 events and met with nearly 1200 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. We are happy to discuss involvement in a workshop or event, so contact me if you would like me or one of the team to arrange something with your Association.

Exotic pest surveillance programme

The map below shows the inspections made especially to look for exotic pests, shown as green circles. At the moment these are the statutory pests Small Hive Beetle and Tropilaelaps spp. The NBU maintains a list of what are considered to be risk locations for these pests and these are also shown on the map using various symbols depending on the risk type. During 2013 season the SE team made 212 Exotic Pest inspections.



A further move to try to combat the entry of exotic pests has been to establish Sentinel Apiaries. This programme is now entering its fourth 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

Another season has passed in which we didn't, fortunately, see the Asian hornet coming to our shores. I'm fairly sure this is in part due to the poor weather experienced during the first half of the year. This would discourage the overwintered queens in France from flying the Channel to try and establish colonies in England. However the weather was good in the late summer when colonies in France would have been producing this season's queens and it's possible some may have flown over and be overwintering in England now, so be on the lookout next spring. Hang out an Asian hornet trap in your apiary early in the year. There are many different designs, information about making your own or modifying a bought trap can be found on the advisory leaflet pages of BeeBase.

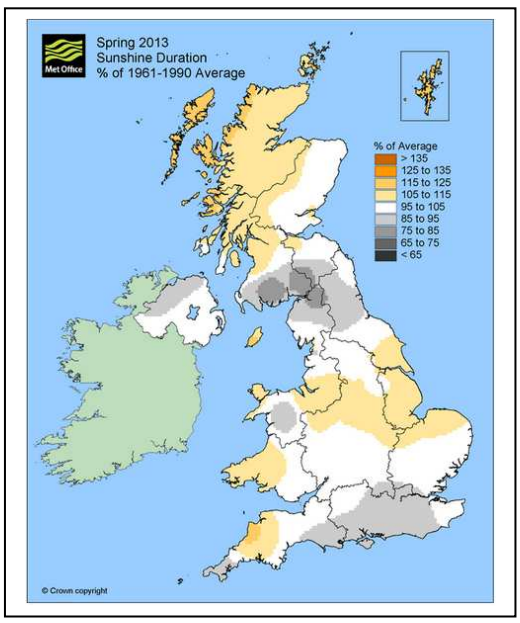
Asian hornet *Vespa velutina nigrithorax*

During the latter part of the season there was a report of Asian Hornet in Kent which was regarded as being credible. However, after several visits to the site, I was able to confirm that it was not Asian Hornet.

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



Another poor year for weather, a cold winter following on directly from last year's very wet summer. The winter between December 2012 and February 2013 was slightly cooler and wetter than the long term average, so winter wasn't much different than usual. However when it came to spring it was another story. The spring months, March April and May were consistently cooler than expected. March was 3.3 ℃ below the long-term average for the month, April was 1.1 ℃ below, and May was 0.8 ℃ below. March was colder than any of the winter months and the coldest for the UK since 1962. Any spells of warm weather through the season were very short-lived. As you can see from the adjacent map, the number of hours of sunlight was up to 15% less than the average in most parts of the SE region. What did this mean for bees? Many colonies came through the winter in a poor state and were then faced with a cold spring. A good number of the colonies that I saw stopped brood rearing due to a lack of pollen income. Many of the early flowering trees were either washed out by rain or it was just too cold for bees to fly. This

really put the colonies back and those that survived took a long time to recover. In my area, close to Gatwick on heavy clay soil, many of the overwintered crops, such as winter sown Oil Seed Rape, drowned in the fields due to the rain and cold and were ploughed in and resown by the farmers, giving no available spring crop to many beekeepers. Accordingly, a large number of colonies were being fed right into June. At the end of spring most colonies were about a month behind in their normal annual development.

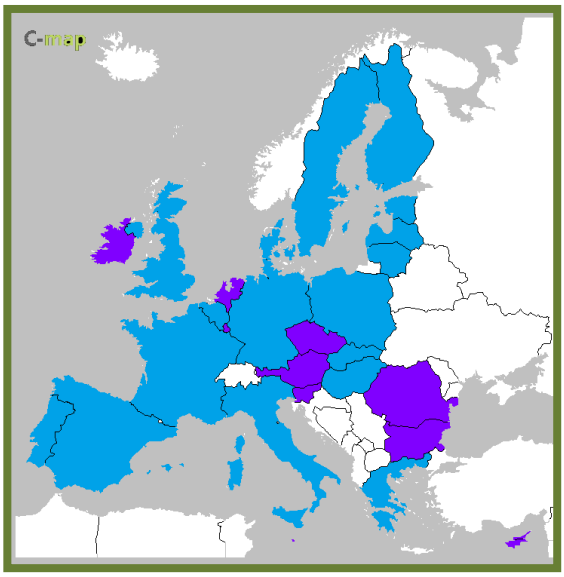
However, as always with our British weather, once the summer finally started the picture changed dramatically. It was the warmest summer since 2006, the most notable feature being a prolonged heat wave during July. This in some measure made up for earlier weather, colonies swarmed but many beekeepers had difficulties getting queens mated properly. Again in my area the spring sown OSR flowered and a crop was available. (and taken!)

At this point, (mid November) it has been a long mild autumn giving bees plenty of time to fly and forage on late crops such as Ivy and Water Balsam. It has only recently become cold enough to cause bees to cluster and because the bees have been active they may have consumed more of their hard won winter stores than expected. Please be aware of this as winter progresses and feed candy if necessary.

The map and much of the 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.

EU PSP

I mentioned last year that the National Bee Unit had become involved in the European Union Pilot Surveillance Programme (EUPSP) which concluded at the end of this season (2013). The programme was initiated in the autumn of 2011 when all EU 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 participate. The background for the study is the concern over both 'winter' and 'in season' losses and tries to even out the variability in the ways in which member states record information. The project seeks to address these issues by having a standard method of taking samples and gathering information across all those who take part. 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 were in the SE region. Inspectors then visited during August and September 2012, 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 happened in the spring and autumn of this season. (2013) Results from samples for those taking part are shown on their own pages of Beebase, the overall assessment of the results will be available publicly, from the EU when all data has been collated.



Honey

I have now completed the 2013 Honey survey; it is published on Beebase if you haven't seen a copy, so I will only give a very brief resume. As I'm sure you're all aware the average honey crop this season wasn't much better than last year's all time low of 19lbs, at 21lbs. Average price selling direct has gone up approx 8.1% and is now £5.32 per lb. One of the most interesting facts was the table on the differences in price and average crop between Counties. It shows that Kent has both the lowest average price and crop, making the average turnover per colony more than £37 less than the SE average! The honey survey can be found at: www.nationalbeeunit.com click on Apiary Inspections & Training and select Regional Bee Inspector reports from the menu.

Finally

This will be the last newsletter that I write as RBI for the SE region, as I am retiring at the end of December. I have been working as an inspector in the SE since 1999 and have very much enjoyed the experience. One of the best aspects has been meeting beekeepers from all over the region with a vast range of ideas. It makes you think carefully about keeping bees and how best to manage your colonies.

I would like to take this opportunity to thank the Seasonal Bee Inspectors who make up the SE team, some of whom have worked with me for a long time, for all their hard work and enthusiasm during the season: Caroline Washington, Diane Steele, Michael Cooper, David Rudland, Brian McCallum & Jonathan Brookhouse.

Alan Byham

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