

## National Bee Unit - South East Region

December 2011

A review of the 2011 season

### The South East Team

The season began on 4<sup>th</sup> April with the Technical Training Seminar at the Food and Environment Agency (FERA) at Sand Hutton, York. This is 3 days of intensive training for Bee Inspectors in new practices and requirements that have come into play in the winter period. Every year there are different targets and tasks, such as collecting samples for research, that have to be learned and understood. This year Inspectors were collecting samples for the Insect Pollinators Initiative (IPI), 'Modelling systems for managing bee disease: the epidemiology of EFB'. This involved the collection of combs from EFB infected colonies and also combs from healthy colonies in the diseased apiary and from apiaries where no disease was found.

The SE team now consists of 5 Seasonal Bee Inspectors plus myself. It was Brian's first full season, having joined us in May 2010 and he and all of the team were put to full use, due to the levels of foulbrood disease found in the area this year.

The 2011 team was:

		<u>Telephone</u>
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 4020 colonies/784 apiaries were inspected during the 2011 season. This season there was an increase in the number of cases of EFB and also AFB was found, the first time since 2007. There were 4 cases of AFB, located in TQ95 (Kent) and TQ39, (Greater London) colonies belonging to two beekeepers, one in each location. The EFB numbers generally in England and Wales increased from 516 in 2010 to 821. So it was no surprise to find that in the SE region the number of cases rose from 114 to 161 this year.

## 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	928	36	3.88%	189	24	12.70%
KEN	1118	55	4.92%	226	22	9.73%
SUR	695	17	2.45%	144	9	6.25%
WSU	877	43	4.90%	150	20	9.85%
<b>Totals:</b>	<b><u>4020</u></b>	<b><u>161</u></b>		<b><u>784</u></b>	<b><u>83</u></b>	

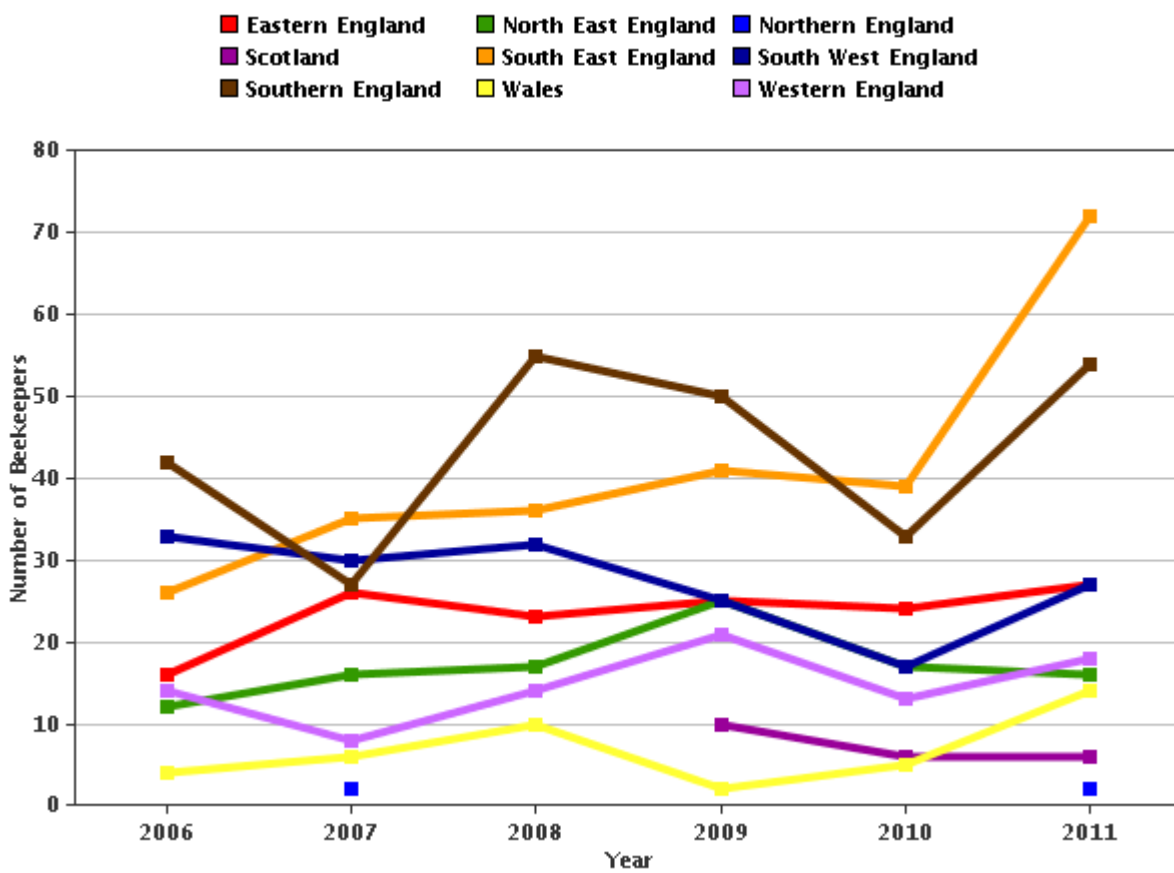
The figure of most interest in these statistics is the number of apiaries with EFB which now stands at 83, up from 50 in 2010 a worrying 60% rise. This may be in part due to an increase in the number of beekeepers, making disease spread more likely, due to closer apiaries, more transfer of beekeeping kit, purchase of nuc colonies etc. It is interesting to note that in last year's newsletter I made a comment about the possible worrying effect of larger numbers of beekeepers on disease levels; it will be intriguing to see whether EFB numbers continue to expand in following years or whether the percentage infection levels remain the same.

The above figures show the percentage of EFB against colonies/apiaries inspected; it may be more appropriate 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	2235	10	0.45%	617	8	1.30%
GRL	2969	36	1.21%	991	24	2.42%
KEN	4971	55	1.11%	1203	22	1.83%
SUR	2772	17	0.61%	827	9	1.09%
WSU	2517	43	1.71%	959	20	2.08%
<b>Totals:</b>	<b><u>15464</u></b>	<b><u>161</u></b>		<b><u>4597</u></b>	<b><u>83</u></b>	

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](http://www.nationalbeeunit.com) for more information.

Below is a graph showing the numbers of Beekeepers by region who have had EFB in their apiaries over the last 5 years. It is regrettable that the SE region now tops the list with 72 beekeepers suffering EFB in their apiaries this season. This has something to do with beekeeper demographics: in the SE there tend to be far more hobbyist beekeepers, with smaller numbers of colonies per apiary and only one or two apiaries, but more crowded together. Whereas in the Eastern region, for example, there are beekeepers with more out apiaries and larger numbers of colonies at those sites but which are more widely spaced apart.



All the figures presented here can be found on the public pages of the National Bee Unit website, Beebase, [www.nationalbeeunit.com](http://www.nationalbeeunit.com) click on Bee Diseases in the menu and then on Disease Incidence and Maps. I suggest that it becomes regular practice to review these pages, to assess whether there is any foulbrood disease in your area. This year has been the first full year with the 'Alerts' system active, which automatically contacts a beekeeper by email if they have an apiary within 5km of a known disease outbreak. This has made beekeepers that have had messages, aware of possible problems close to their own apiary and encouraged them to check before a bee inspector arranges a visit. For this system to work 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 2011. 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:

County	10 km Squares EFB Found	Area Name	Number of Positive EFB Diagnoses
East Sussex	TQ31	BURGESS HILL	3
East Sussex	TQ34	SMALLFIELD	8
East Sussex	TQ43	FOREST ROW	2
East Sussex	TQ53	S.W. TUNBRIDGE WELLS	4
Greater London	TQ06	WEYBRIDGE	4
Greater London	TQ16	KINGSTON & ESHER	4
Greater London	TQ29	BARNET & FINCHLEY	4
Greater London	TQ36	CROYDON	22
Greater London	TQ39	ENFIELD	10
Greater London	TQ46	BROMLEY & ORPINGTON	2
Greater London	TQ47	WOOLWICH & ELTHAM	2
Kent	TQ55	SEVENOAKS	11
Kent	TQ56	SWANLEY & KINGSDOWN	3
Kent	TQ66	MEOPHAM	4
Kent	TQ75	MAIDSTONE	12
Kent	TQ77	N ROCHESTER & HOO	1
Kent	TQ84	HEADCORN	1
Kent	TQ85	EYEHORNE & STREET	3
Kent	TQ92	RYE & BROOKLAND	5
Kent	TQ96	EAST SITTINGBOURNE	6
Kent	TR04	ASHFORD	3
Surrey	SU94	GODALMING	5
Surrey	SU96	ASCOT	2
Surrey	TQ03	CRANLEIGH	1
Surrey	TQ14	DORKING	2
West Sussex	SU70	HAVANT	6
West Sussex	SU71	WEST MARDEN	3
West Sussex	SU72	PETERSFIELD	1
West Sussex	SU80	CHICHESTER	7
West Sussex	SU82	MIDHURST	1
West Sussex	TQ01	PULBOROUGH	7
West Sussex	TQ10	WORTHING	1
West Sussex	TQ11	STEYNING	9
West Sussex	TQ13	HORSHAM	2
West Sussex	TQ23	CRAWLEY	5
West Sussex	TQ34	SMALLFIELD	1
West Sussex	TQ20	SHOREHAM & HOVE	1

### **Exotic pest surveillance programme**

The following map shows the risk locations currently registered on Beebase. These are the places where NBU considers there is an increased risk of the entry of exotic pests such as Small Hive Beetle (SHB) and where inspectors will make higher numbers of inspections especially to look for SHB and Tropilaelaps. In the 2011 season the SE team made 108 Exotic Pest inspections, approximately 10% of our overall inspection visits.

A further move to try to combat the entry of exotic pests is to establish Sentinel Apiaries. In areas of 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 colonies inspections, checks are 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. I have had several beekeepers who have said that they had seen this hornet but unfortunately no-one has managed to catch an example to prove the identity. I am expecting an incursion of this exotic insect and will be much surprised if it is not confirmed in the coming season.



Asian hornet, *Vespa velutina nigrithorax*



Photo - J. BLOT

In order to check/catch these insects, it is advisable to put out hornet traps in early spring. These should be manufactured with a hole of 7mm diameter in order to stop the ingress of our native hornet *Vespa crabro*. In France, using hornet traps in the spring has proved a very successful way of reducing the damage caused by the Asian hornet, as it catches the overwintered queens and stops the initiation of new nests. For further information about the traps:

[www.apiculteurs-en-aquitaine.fr/pdf/frelon-peige.pdf](http://www.apiculteurs-en-aquitaine.fr/pdf/frelon-peige.pdf)

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](mailto:alert_nonnative@ceh.ac.uk)

## Random Apiary Survey

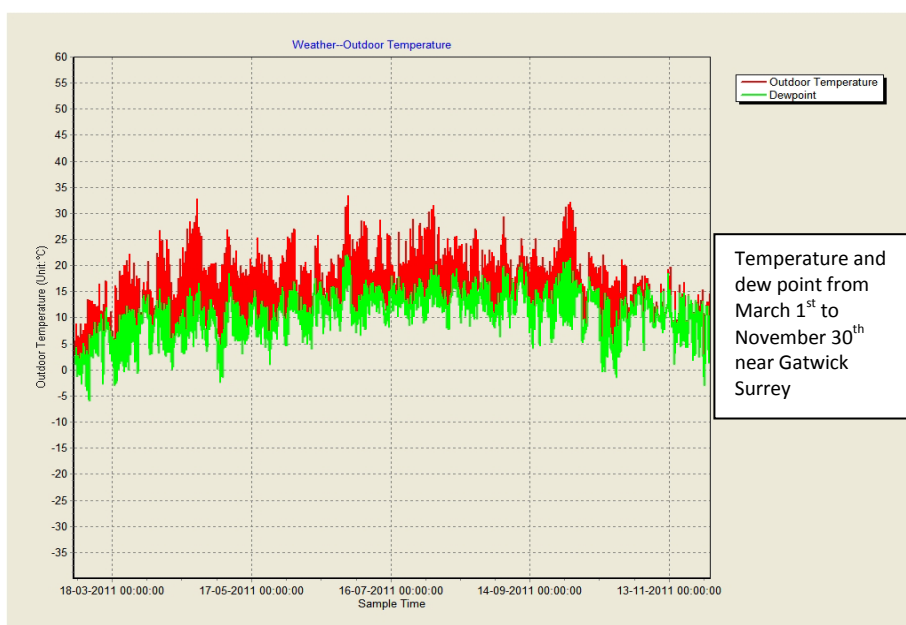
The last samples for the Random Apiary Survey (RAS) were collected at the end of May. All samples have now been analysed and those of you who had samples taken can find results by checking your personal page of Beebase. As a guide we are checking for: *Nosema* spp, Acarine & various virus types, as well as foulbrood and exotic pests. The results for any foulbrood picked up by the RAS will not be shown, as this may lead to confusion as to whether a colony is infected or not.

This has been the largest apiary survey ever conducted and we are expecting some very useful information from it. We now have some preliminary results: they indicate that the way in which the NBU works, by doing risk based inspections, is the most effective way to find disease and suggests that the NBU has a good idea where foul brood is located. The RAS indicates that apiaries with shared ownership (joint apiaries) are more likely to have EFB than apiaries run by a single beekeeper and also shows that DWV is the most common virus and that those that cause colony loss in the US are not prevalent in the UK. Further results will be published when the statistics are fully calculated.

## The beekeeping year

The following is an extract from the 2011 SE region honey survey but I think it bears repeating here:

“The year began well in March with warm, dry weather that didn’t turn cold again, as so often happens with our British weather. Early spring nectar flows were good and this year, apples, pears; in fact all top fruit, cropped well due to good weather during pollination times. This warm weather led to a good spring nectar flow and we all looked forward to another heavy honey crop at the end of the season, as in 2010. However, after the spring in many areas it was a different story. The weather kept good but there was a decided lack of rain leading to dry conditions and low groundwater levels, which in turn led to low nectar production by many of the usual summer forage plants. Many colonies were low on food and required feeding, especially if a spring honey crop had been taken. If the honey was still on colonies the bees consumed it; the beekeeper didn’t need to feed but didn’t have any crop to speak of. In some areas there was quite a good late flow from Water Balsam and Heather but these didn’t compensate for the poor main flow.”



I think that this weather pattern combined with an autumn which had consistently high temperatures may lead to problems with colonies and high winter losses, unless beekeepers are alert to the risks. I have included a temperature graph to show the range over the active season that indicates outdoor temperatures over 10C for most of the nine months from 1st March to 30<sup>th</sup> November.

So what are the risks?

Firstly, starvation: With a warm autumn bees have been active and had a longer brood raising period therefore consuming more honey stores than they would if brood rearing had ceased earlier and the colony had clustered. Check your colonies regularly for food supplies, if you think they are running low, feed candy.

Secondly, varroa: I have already spoken with a number of beekeepers who have had very high varroa drops of 60+ varroa a day even though they carried out an apparently effective varroa control at the end of summer. How has this happened? The season was very long and warm leading to an extended period of brood rearing, which of course leads to a long period when varroa can multiply. If a colony has high varroa numbers at the end of summer and even if effective treatment is carried out, roughly 20% of the number of mites may well be left in the colony and this could be a sizeable number. This number then has several months of further brood rearing in which to multiply, don't forget that varroa numbers double roughly every 3 weeks when brood is present. This can then lead to a nasty surprise in late autumn, with higher than expected numbers. I suspect care will be needed to ensure that varroa levels are kept down, so carry out a check on varroa numbers, if they are high think about carrying out a winter treatment.

## **Honey**

I have already referred to the 2011 Honey survey; it is published on Beebase if you wish to download a copy, so I will only give a very brief resume. The average honey yield is the worst I've ever recorded at 31lbs per colony a large drop from last years high of 46lbs, which I think was mainly due to the lack of rain in most parts of the SE. The average price selling direct has gone up approx 8% and is now £4.70 per lb, with a very wide range of prices from £2.00 to £13.00. 260 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](http://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 – 4113 queens were imported from Cyprus, Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Poland & Slovenia. The largest number came from Greece (2850) Also 405 nucs were imports from Czech Republic, Ireland, Italy & Poland.

From 3<sup>rd</sup> countries – 1762 queens were imported from Argentina, Australia & New Zealand. The largest number came from New Zealand (1242)

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](http://www.nationalbeeunit.com) click on Bees & the Law and select Imports and Exports from the menu.



## Educational events

This season we have been active at 49 events, which this year comprised, a large number of lectures to Associations on all manner of bee related topics, a number of apiary demonstrations and some apiary tours, although we now only arrange these under specific criteria. We were present at 4 SE region bee auctions, Sussex, (Heathfield) & West Sussex (Brinsbury); at both of which we had a stand; also Reigate and Yalding. We ran Bee Health workshops and Bee Husbandry workshops for a number of Associations and represented the NBU at the National Honey Show at Weybridge. We also held the second SE area Associations day, which is an opportunity for delegates from Associations to put their points across to us, so that we can work out better ways of working together in the future. An account of the event is published on Beebase, as with the Honey survey, on the Regional Bee Inspectors page

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 that makes working together easier. I, personally, enjoy meeting with beekeepers and building relationships with Associations. I look forward to meeting you at a similar event in 2012.

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.

-----

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:

Alan Byham, Regional Bee Inspector. ☎ 01306 611016

☎ 07775 119447

Email: [alan.byham@fera.gsi.gov.uk](mailto:alan.byham@fera.gsi.gov.uk)

National Bee Unit website: [www.nationalbeeunit.com](http://www.nationalbeeunit.com)

National Bee Unit ☎ 01904 462510