

## **Annual Bee Report 2009 – Northern Region.**

### **Foulbrood Disease and Inspection Statistics**

American foulbrood (AFB) has been found in the following 10km squares: -

- NY37 (Carlisle, Cumbria) 1 colony in 1 apiary and
- NY47 (Carlisle, Cumbria) 3 colonies in 1 apiary
- SD34 (Knott End, Lancashire) 1 colony in 1 apiary
- SD30 (Little Crosby, Merseyside) 2 colonies in 1 apiary.

The infected colonies in Lancashire and Merseyside have been traced back to bees being supplied from Scotland. (Please see below)

European foulbrood (EFB) has not been found in the Northern region this year, but as last year, there have been several outbreaks close to the Greater Manchester/Cheshire border in North Cheshire.

I have spent a large amount of time this year inspecting colonies in the North Cheshire area and found EFB in the following 10 km squares: -

- SJ69 (Warrington, Cheshire) 3 colonies in 2 apiaries,
- SJ78 (Ashley, Cheshire) 1 colony in 1 apiary
- SJ68 (Appleton, Cheshire), 3 colonies in 1 apiary.

Northern Inspectors have inspected 2267 colonies in 644 apiaries in 2009.

### **Foulbrood Disease in Scotland.**

Following the discovery of American foulbrood disease in Lancashire and Merseyside, in accordance with our protocol, we took steps to try and find the source of the disease.

Our investigations revealed that the colonies had originated in Scotland.

We informed the Scottish authorities and this in turn this initiated an inspection of 'at risk' apiaries, this revealed a major disease problem for Scottish beekeepers.

Between July and September 2,764 hives were inspected in 289 apiaries.

American foulbrood was detected in 121 hives in 34 apiaries, all which have been destroyed.

The infected areas were around Inverness, Banchory, the Perthshire/Angus glens, Cumbernauld, Dunkeld and at the West end of Loch Tay.

Over the same period European foulbrood (EFB) had been found in 255 hives in 56 apiaries, located in many areas of the East of Scotland from Dunkeld to Montrose and from South Aberdeenshire to Central Fife with the major focus in the Perthshire/Angus glens.

Given the incidence of disease being discovered in and close to the Northern region, it is important that beekeepers are vigilant when obtaining bees and second hand equipment. Sterilise all such equipment thoroughly before using. Old brood combs should never be used or bought.

It is important also, that beekeepers undertake a 'foulbrood' check on their own colonies at least twice a year, bees must be shaken from the comb, any suspect brood should be reported

to an Appointed Bee Inspector or a sample should be sent to FERA, National Bee Unit, York. YO41 1LZ. Tel. 01904 462559 or 01904 462510.

Details of disease incidence in and trends in England and Wales and the National Bee Unit (NBU) 'Foulbrood disease of the honey bee' leaflet can be obtained from the NBU or can be downloaded from our Beebase web site <https://secure.fera.defra.gov.uk/beebase> (go to advisory leaflets)

## **Varroa**

Varroa levels this season have generally been fairly low.

There are some concerns from beekeepers that oxalic acid is killing their bees.

I 'hive cleansed' all of my colonies last winter without any losses – all were cleansed with oxalic acid by trickling 5mls per bead(gap between the frames) of bees using 3.2% strength solution in late December. I used 1kg sugar to 1 litre (1kg) of water and added 75 grams of oxalic acid dihydrate crystals mixed in to a cool solution. Solutions should be made up fresh.

Best efficacy is when the colony is broodless, as oxalic acid does not penetrate capped brood cells.

Winter colonies should only be cleansed once.

With oxalic acid, most colony losses occur when the colony is already weak due to other problems i.e. queenlessness (mainly old bees present), diseases i.e. Varroa/virus, Nosema or few or no winter bees.

Beekeepers are now tending to use Integrated Pest Management (IPM) successfully, using thymol treatments combined with bio-technical methods and oxalic acid.

For further information on IPM methods please see the 'Managing Varroa' booklet or visit our web site <https://secure.fera.defra.gov.uk/beebase>

## **Colony Losses**

### Calculating colony loss figures.

Beebase (National Bee Unit data base) holds a number of different colony loss details, those from our inspections when the Inspector fills in the B2 Inspection form and from other sources like discussions or phone calls from beekeeper or from surveys.

As you will appreciate, the final figures are dependent upon a number of factors, particularly the amount of beekeepers inspected (early in the season we tend to visit those beekeepers who call us out because their colonies have died), the amount of beekeepers surveyed and how many returns we get from a particular area.

Figures in the Northern part of the region (particularly Cumbria and the Cumbrian West coast areas) were high in the winter/spring of 2008/9 figures of between 50 to 60%. This figure drops down as the season progresses as we inspect more beekeepers with live colonies.

Figures in Greater Manchester, Merseyside and Lancashire were slightly lower at about 40 to 50%.

This seems to follow the trend of Pyrethroid resistant Varroa mites travelling Northwards + the poor summer of 2008 (low natural food stores) and poor mating of queens.

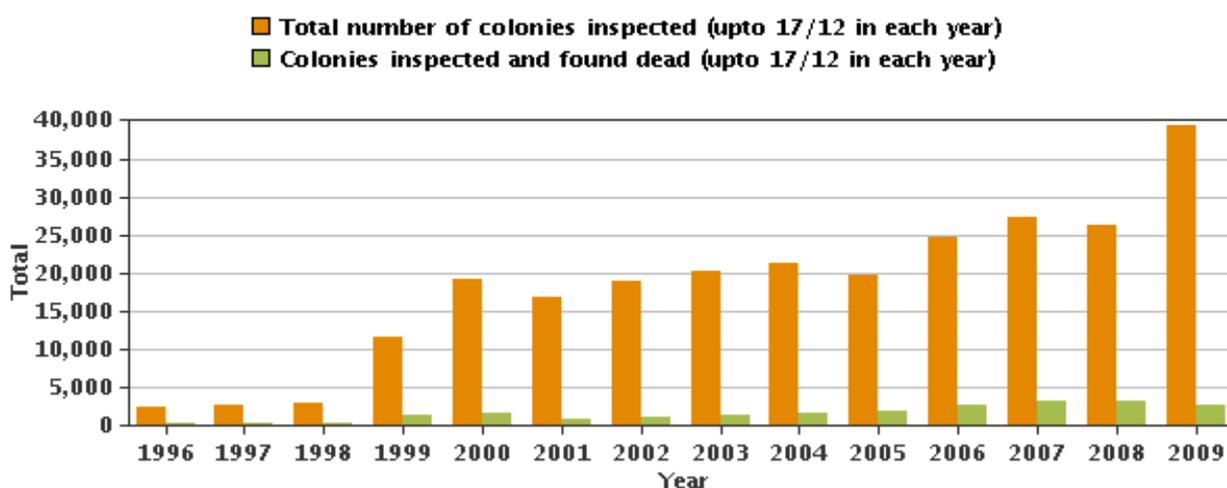
In saying this the overall trend in the Northern region is of fewer colony losses, as beekeepers are better at managing their colonies, understanding the need for plenty of ripe natural food stores, low disease levels, well mated queens, enough bees and those of the right type (winter bees) for over wintering

Total colony loss figures for the Northern region from B2 Inspection forms in 2008 was 12.8%, in 2009 it was 4%, nationally it was about 6%.

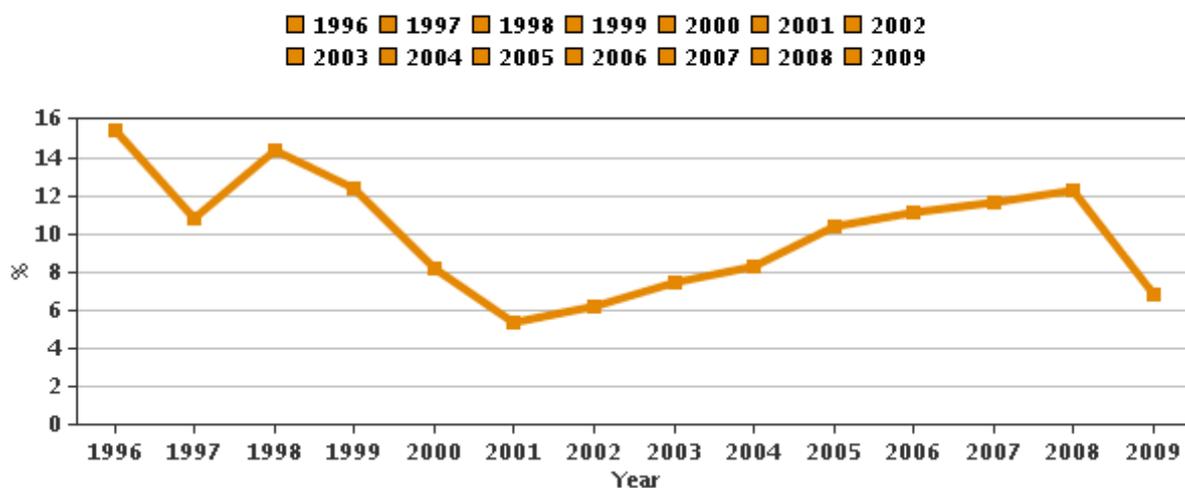
Total colony loss figures for winter colony losses in the Northern region from surveys and phone calls etc. (winter spring 2008/9) was around 60%.

Please find below two national graphs, one representing colony losses over the last 14 years (from B2 forms). The second one shows that the figures have been steadily rising since the development of Pyrethroid resistant mites in 2001, lets hope the trend of 2009 continues.

### Running Totals



### Percentage of inspected colonies found dead



### **Nosema and Acarine**

It is good beekeeping practise to complete an adult bee diagnosis for Nosema and Acarine, using old/flying bees. Samples should be taken twice a year, once in Spring (March) and once in late summer (Aug/Sept)

If required, the National Bee Unit will undertake a Nosema check for you at £10 per sample (30 dead bees in a match box). If Nosema is found they will not be able to confirm whether the disease is *Nosema apis* or *Nosema ceranae*, as they will only be completing a microscopical examination of the sample.

If your association would like training in Nosema and Acarine detection, then please let me know and I can arrange a suitable day for the training

### **The 2009 honey season.**

As in 2008, 2009 been a poor honey season for nearly all beekeepers in the Northern region. Some have commented that it has been a worst season than 2007 and 2008.

Beekeepers who did obtain a crop were on or near the rape. In many areas farmers had planted spring-sewn rape as well as winter sewn, so this extended the flowering/nectar gathering period

There was little or no summer flow and many beekeepers in Cumbria have had no honey at all. They have informed me that they have been feeding their bees throughout the summer.

Honey crops in the Northern region were down by at least 45 to 50% on a good year.

Even the ever reliable Balsam had a nectar flow gap here of 2 to 3 weeks.

Some beekeepers, with strong stocks, reported 1 to 2 boxes of Heather honey.

Total honey crops for England and Wales was 3289 tons (metric) 45% down on good year.

### **Events for 2009**

As part of the National Bee Unit and Healthy Bee Plan initiatives to improve good husbandry and management practises, there will be several Northern training events in 2010.

On Saturday March 6<sup>th</sup> we will be holding a 'Healthy Bee Day' at Fera York. (This location to be confirmed). This will be part of the Healthy Bee Plan and will be centred on disease prevention and control, particularly varroa and will involve workshops on other common bee diseases.

There will also be a 'Foulbrood' day in Carlisle, provisionally booked for Saturday 3<sup>rd</sup> July.

This is aimed at preventing, recognising and controlling American and European foulbroods. Later in the year there will be a Northern Bee Forum, where members from each association will be invited to attend and offer their views and opinions on our service and any bee health related issues.

All these events will be advertised and confirmed on Beebase in the 'events' section, you will also be able to book a place on the course/s here.

## **Seasonal Bee Inspector Contacts**

### **Merseyside/Wirral and Lancashire**

Doug Jones, (available April to end of August)  
'Honeysuckle'  
3 Seabank Road  
Lower Heswall  
Wirral,  
Cheshire. CH60 4SN Tel: 0151 342 7062  
Works mobile: 07775 119444

### **Cumbria**

Stewart Beattie (available April until end of July)  
'Helensdale House'  
Long lane  
Stainton with Adgarley  
Barrow-in-Furness  
Cumbria. LA3 0NH. Tel: 01229463127  
Works mobile: 07775 119443

### **Durham, and Tyne and Wear (South of Newcastle)**

John Newton (available April to end of August)  
150 Devonshire Road  
Durham  
County Durham  
DH1 2BL. Tel: 0191 386 3044  
Works mobile: 07775 119445

### **Northumberland (North of Newcastle)**

Sue Scott (available April to end of August)  
Mobile: 07775 119446

Please note all my Seasonal Officers have new 'work' mobile numbers.

Details of disease incidence, research and news updates are regularly placed on the NBU website on [www.nationalbeeunit.com](http://www.nationalbeeunit.com) or you can access our web based site at <http://secure.fera.defra.gov.uk/beebase>

If there are any items in this report you would like to discuss, then please feel free to contact me.

Just to remind you, I am available for lectures and demonstrations throughout the year, all cost being taken care of by the NBU.

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