

Western England Annual Report

The 2021 Season

I'd like to start by saying how delighted I am to have been selected as the new Regional Bee Inspector for the Western Region. I've thoroughly enjoyed working as a Seasonal Inspector across Herefordshire and Forest of Dean since 2018 and I now look forward to meeting beekeepers across the Western Region. I live in the lower Wye Valley where I keep about 10 colonies plus some nucs at my home apiary.

My thanks go to our Seasonal Bee Inspectors for their efforts in the field and to you for supporting us in our inspection programme during 2021. Our inspections are targeted to maximise our ability to find and control pests and diseases and our work schedules are so much easier for the help you give us in arranging appointments.

Despite an easing of COVID restrictions we have continued to work without beekeepers at the hive in most cases. We have also been restricted in the amount of new beekeeper registration visits, bee health days, bee safaris, and other public events that we have been able to deliver. I hope we can rectify that next year.

The levels of European Foulbrood have continued to increase in some areas of Western Region (notably Avon, Herefordshire, Warwickshire, and Worcestershire) to reach record levels. It is vitally important that swarm control, careful management of collected swarms, and biosecurity remain front of mind for beekeepers to manage this.

The beekeeping season began with a relatively cold April followed by a wet May. In much of the Western region the bees had gathered minimal nectar, and many beekeepers had to resort to supplementary feeding. The weather improved throughout late May and June and colonies took advantage and gained strength. Many colonies swarmed but issues such as missing queens and drone laying queens were common. July was very hot, and the bees were able to accumulate large honey stores assuming that the beekeeper had given them enough space to do so. That said, local conditions such as the effect of altitude on the timing of flowering meant that honey harvests were highly variable. August continued to be warm and dry, but the main flow was over. In September and October, the ivy flowered well and was a good food source for the bees. Himalayan Balsam also seemed to provide a long-lasting source of income to those bees with access to it.



Jon Axe



Ben Bowen



Gordon Bull



Liz Gardner



Colleen Reichling



Meg Seymour



Jon Axe (Herefordshire and Forest of Dean)

The season started cold and turned wet and many colonies struggled for food. Swarming was a very common experience for lots of beekeepers and many ran out of equipment and frames. The incidence of European foulbrood increased moderately and was found in and around the usual places in Herefordshire with a couple of new isolated cases linked to bee movements. One interesting case of EFB involved a feral colony in a wall next to a managed apiary which had to be destroyed and sealed to safeguard other local colonies.

Ben Bowen (Shropshire and Staffordshire)

This season saw a difficult start with a prolonged cold spell followed by a wet May. This resulted in many colonies being short of stores and facing starvation. Colonies showed lots of swarming, poorly mated queens in later Spring. The summer was by far a more productive part of the year however beekeepers must maintain awareness to avoid their colonies becoming queen-less. Beekeepers should keep younger stocks of queens and be wary of varroa numbers especially once August and September arrive. The spring didn't help colony health or disease cases as bees were stuck in the hives for prolonged amounts of time in poor conditions, which exacerbates bee health problems.

Gordon Bull (Worcestershire, Northern Gloucestershire, Southwest Warwickshire and Northeast Herefordshire)

During the season I had to deal with more EFB than the record amount I found in 2020. Some cases were spotted and reported by vigilant beekeepers but too many went unnoticed until my inspection. If you suspect a problem, ask an experienced beekeeper or your Bee Inspector to look at photos or inspect the hive. We would rather deal with false alarms than risk undetected cases spreading. It is important for beekeepers who had email notifications of outbreaks to be vigilant next season. This was my last season as a Bee Inspector and (mostly) the sun always shone on inspecting days, the beekeepers have all been helpful and cooperative, and the bees have all been a pleasure to inspect!

Liz Gardner (Gloucestershire)

Because my area has not been subject to as much EFB I have been helping other Bee Inspectors a lot this season. I've spent more time with new beekeepers because they have not been able to do so much with in associations. It's always great getting so many good questions and it is a real pleasure to share knowledge. I am always happy to see bees bouncing out of their boxes and beekeepers well prepared for the season with new frames, comb, and enough kit to see them through the year (they hope). Beekeepers should remember that Varroa does need to be managed. With beekeeping, it is always good to have a plan B for if you find beekeeping too much or fall ill as things can quickly get out of hand. I've really missed the training days and looking forward to Bee Safaris in 2022.



Colleen Reichling (Warwickshire and West Midlands)

This season resulted in a lot of European Foulbrood in my area and so I have spent a lot of time managing the outbreaks. I have also conducted several Whole Apiary Shook Swarms with the beekeepers as part of the Bee Disease Insurance (BDI) pilot to limit foulbrood reoccurrence. I wish every beekeeper understood the importance of their contribution to disease management and that by registering and updating BeeBase regularly we can much more easily control outbreaks. We can't do it without all of you taking part!

Megan Seymour (Avon and North Somerset)

The first positive EFB callout was in March in Avon and this was followed by more every month thereafter. Because I was dealing with these EFB outbreaks I was involved with fewer new beekeepers than I would like to be. There were many cases of starvation or near starvation, and it's a shame to see otherwise good colonies with piles of dead bees on the floor. Many beekeepers had problems with swarming because the poor weather meant that colonies built up without the beekeeper visiting and giving them space. Honey production varied enormously depending on the state of people's colonies when things like the lime trees or blackberries were in flower. I was personally surprised to get a late August crop from one apiary that had access to a large area of Rosebay willow herb. Despite the challenges, the welcome and positive interaction with beekeepers and a lot of support from my colleagues got me through.

Changes to the NBU Western Inspector team

Colin Pavey retired in late summer after 10 years with the National Bee Unit. He joined the NBU as a Seasonal Bee Inspector and as a Regional Bee Inspector was highly respected and well liked. We celebrated Colin's retirement by getting together for a walk in the country and a barbeque with lots of desserts and cakes – so many cakes and desserts! Colin's wise leaving advice to us all was 'always make sure your veil is done up'.

Gordon Bull retired at the end of the season after 7 years as a Seasonal Bee Inspector and we all wish him a happy retirement. We celebrated Gordon's retirement by getting together for a riverside pub lunch and walk through the meadows. Gordon will be greatly missed by all of us at the NBU.

I'm pleased to announce that Bronwen Hopkins will be joining the NBU at the end of March 2022 as the new Seasonal Bee Inspector for Herefordshire and Forest of Dean.

We are recruiting another new Seasonal Bee Inspector for the 2022 season to replace Gordon. We are planning to make some changes to some of the local areas covered by inspectors based on their home location and differences in current disease concentrations and will communicate these once finalised.



Regional Bee Inspector	Area (2022 proposed)	Contact
Jonathan Axe	Western Region	+447867151641
Seasonal Bee Inspectors		
Ben Bowen	Staffordshire, North Worcestershire, North Warwickshire, West Midlands	+447557178512
Liz Gardner	Gloucestershire	+447867351610
Colleen Reichling	South Worcestershire & South Warwickshire	+447990138898
Meg Seymour	Avon and North Somerset	+447775119475
Bronwen Hopkins	Herefordshire & Forest of Dean	not available yet
VACANT	Shropshire	

Beekeeper and colony numbers

There are currently 4,735 beekeepers in Western Region registered on the NBU's online database BeeBase. Between them they have 24,301 colonies in 6,845 apiaries. Over the past 5 years, the number of new beekeepers in Western Region registering on BeeBase has fluctuated between 247 and 410 a year.

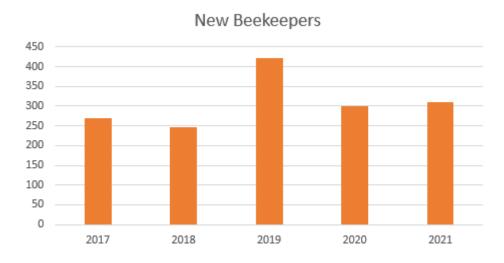


Figure 1 New Beekeepers in Western Region

Our inspectors update BeeBase throughout the season, checking the status of beekeepers who haven't been visited for a long time and removing those who are not keeping bees anymore. Beekeepers can be of great assistance in helping us maintain an accurate database by completing the annual HiveCount census taken in November and December each year.



BeeBase Registration

We often find beekeepers believe that by joining a beekeeping association they have been registered on BeeBase. That is not the case and so we kindly request that anyone running beekeeping courses or otherwise introducing people to beekeeping remembers to show them BeeBase and explain the role of the National Bee Unit.

Registration on BeeBase is essential so that we can identify any apiaries at risk of notifiable disease or an incursion of an exotic pest into the UK and target control measures effectively. Registration is free and your information is completely confidential. All beekeepers registered on BeeBase with a current email address will receive an automatic email alert if disease is found within 3km of the registered apiary. Beekeepers can securely access their personal details and inspection records.

You can register on the BeeBase website (https://nationalbeeunit.com/public/register.cfm) or by contacting the NBU office on 0300 303 0094.

We are happy to receive Beekeeping Association membership lists to compare against BeeBase but you should only send us these details if the requirements of General Data Protection Regulation (GDPR) are satisfied for each member.

Inspections

Our Western Region Seasonal Bee Inspectors completed 721 apiary inspections totalling 4,479 colonies this season. This is down slightly from 2020 due to the additional treatment work required because of the record amount of European Foulbrood (EFB) found by our inspectors.

Please note that it's a legal requirement to inform the NBU if you know or suspect a statutory, notifiable disease or pest is present in your apiary. Beekeepers can contact their Seasonal Bee Inspector during the summer or their Regional Bee Inspector all year round.

If you can take a photograph, then you can send it to your local inspector by email or text message. Alternatively, call us on the phone and describe the problem. If we can't rule out there being a statutory disease or pest, we will arrange to visit free of charge.

Disease and Pests

Details of disease found this year can be found on the "Disease Incidence" pages of BeeBase (https://nationalbeeunit.com).

European Foulbrood (EFB)

EFB was diagnosed at record levels in Western Region during the season. We responded to this by moving our inspectors around the region to help each other manage the outbreaks.



EFB Incidence

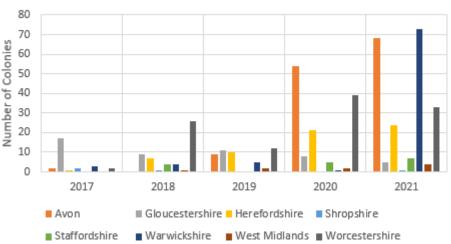


Figure 2 EFB Incidence in Western Region

Cases of EFB in Avon have continued to rise and we believe this is due to high numbers of beekeepers, high apiary density, and the collection of swarms that then spread the bacteria into new apiaries. Warwickshire has gone from low levels for the last 5 years to 73 cases this season. We are following the leads to determine the source(s) and will be working closely with affected beekeepers to limit the outbreak. Worcestershire and Herefordshire continue to have some EFB hotspots and any new outbreaks this year appear to be linked mostly to bee movements and beekeeper spread to different apiaries. We highlight the need for all beekeepers to remain vigilant when collecting swarms from unknown sources and to ensure they are following good hygiene procedures to limit any spread of the disease. If you are buying bees then you are encouraged to seek advice about where they are from and we are always keen to inspect any bees brought into the region.

American Foulbrood (AFB)

This season, AFB was diagnosed in just 2 colonies at 1 apiary in Herefordshire. The outbreak was linked to the use of old comb to make up boxes during swarm control. The comb was from a colony that had died due to unknown causes.



AFB Incidence

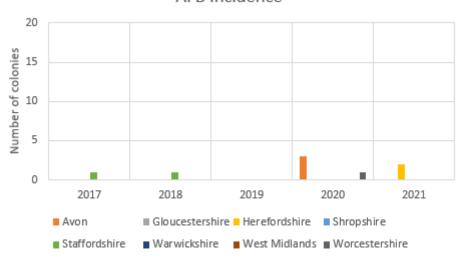


Figure 3 AFB Incidence in Western Region

Varroa

Varroa continues to be a challenge and is responsible for many colony losses each year. Its severity varies each year due to factors such as the differences in swarming and other natural brood breaks.

Inspectors have found that beekeeper knowledge about varroa and its management is poor. This has likely been exacerbated by the restrictions on beekeeper training caused by the pandemic. We advise beekeepers to regularly monitor mite levels as part of the management of their colonies and to act if they reach damaging levels. Control can be achieved by using biotechnical methods and/or authorised products as directed by the manufacturer.

Authorised treatments are carefully assessed to ensure maximum efficacy so please ensure you are following the instructions when you use them. We often find treatments being used at the wrong dosage, at times when the ambient temperature is nor right, or when honey supers are present on the hive and the product does not allow this. You will see that the Veterinary Medicines Directorate Product Information Database (https://www.gov.uk/check-animal-medicine-licensed) contains a new authorised varroa product, Formicpro 68.2g Beehive Strips for Honeybees. Remember, there is a legal requirement that the use of any medicines is recorded, and these records must be kept for a minimum of 5 years.

Exotic Pest Surveillance

The National Bee Unit carried out 70 inspections specific to exotic pests in Western Region this year, targeting a combination of identified risk points and random sites. Exotic Pest Surveillance (EPS) inspections check for the presence of Small Hive Beetle (SHB), Tropilaelaps mites, and Asian Hornets (AH) as well as being a normal brood inspection looking for foulbrood. Given the continued presence of Small Hive Beetle in Italy this year and the continued spread of Asian Hornet in France and



surrounding countries the importance of exotic pest surveillance work cannot be overstated.

We have 17 Voluntary Sentinel Apiaries (VSA) in Western Region. A volunteer beekeeper is identified near a risk point and they monitor their colonies for exotic pests. Floor debris is sampled twice a year and sent to the FERA lab to be checked for Small Hive Beetle and Tropilaelaps. In addition, we have 6 Enhanced Sentinel Apiaries (ESA) in Western Region. Our inspectors monitor the selected apiary 3 times each season near each of our high-risk points. I'd like to thank the beekeepers who currently support us in these important activities.

Small Hive Beetle (SHB)

Information from the National Reference Laboratory for Apiculture in Italy below, updated in September 2021, shows surveillance for Small Hive Beetle in Sicily with no positives found again this year. Meanwhile in the Calabria region on the mainland, two positive apiaries and five positive sentinel nuclei have been found, their website documents a total of 37 adult beetles found this year.



Figure 4 Small Hive Beetle in Sicily and Calabria during 2021

Yellow-legged Asian Hornet (Vespa velutina nigrithorax)

The National Bee Unit has developed an iPAD based track and trace application that supports our track and trace field techniques. We ran field training for the application in Worcestershire on a day of particularly heavy rain.

On 6th October, a beekeeper in the Ascot area of Berkshire filmed live insects near a hive and captured a sample. They reported the sighting using the using the Asian Hornet Watch app. The sighting was confirmed, and a nest was found in a poplar tree and killed on Monday 11th October. The nest measured approximately 35cm in diameter, the largest nest found to date in England. Monitoring continued in the area



supported by local Asian Hornet Teams (AHTs) and when nothing was seen or caught for 7 days the team was stood down.

On 29th October, another sighting accompanied by clear photographs was reported on the Asian Hornet Watch App. The NBU team was onsite by 2pm that afternoon and the nest was found in a Norway Maple Tree shortly after noon on Saturday 30th October.







Figure 6 Asian Hornet Nest (Portsmouth)

If you have a smartphone please make sure you download the free Asian Hornet Watch app for iPhone or Android and familiarise yourself with what the hornets and similar insects look like. If you don't have a smartphone you can email alertnonnative@ceh.ac.uk or contact the NBU.

Imports and Exports

The UK is now considered a Third Country by the EU and similarly all EU member states are now considered a Third Country by the UK, so Third Country rules apply for both imports and exports.

Import of Honey Bees

Honey bees imported from a third country must be accompanied by an appropriate export health certificate (EHC) from the Third country. This must be issued by the Third Country's Competent Authority or their Official Certifier. Currently only the import of Queens (in cages with attendant workers) is permitted under Third Country rules, except from New Zealand where the import of packages of bees is also permitted.

Importers wishing to import bees from a listed third country must comply with the import requirements. Importers must notify all imports in advance via the IPAFFS system (Import of Products, Animals, Food and Feed System). Imports from countries other than EU member states must enter via a Border Control Point (BCP). Until March 2022 imports from EU member states will be checked at destination by a Bee Inspector on a risk basis.

The Northern Ireland Protocol sets the principle of unfettered access for Northern Ireland businesses to Great Britain. NI beekeepers may continue to export packages



and colonies to the UK. There will be no border checks on consignments despatched from Northern Ireland.

Export of Honey Bees

Honey Bees exported to a third country must be accompanied by an appropriate health certificate. This is issued by the NBU once the bees to be exported have been inspected and confirmed free from serious notifiable pests and diseases.

Currently only the export of Queens (in cages with attendant workers) is permitted under Third Country rules to EU and Northern Ireland.

As Northern Ireland is treated as though it still resides within the EU, movements of bees to Northern Ireland must now be accompanied by a health certificate and the full Third Country export procedure must be followed. In the same way, only queens may be exported to Northern Ireland. The export of colonies and packages to Northern Ireland are no longer permitted.

To keep up to date with the latest guidance on importing and exporting live honey bees please visit the following link

(https://www.nationalbeeunit.com/index.cfm?sectionid=47).

Finally

I hope to meet many of you in 2022. Please do not hesitate to contact me or one of the Western Region Seasonal Inspectors should you require help and advice.

With best wishes to you all.

Jonathan Axe

Regional Bee Inspector, Western England (Gloucestershire, Herefordshire, Shropshire, Staffordshire, Warwickshire, West Midlands and Worcestershire)

National Bee Unit

Animal and Plant Health Agency (APHA)

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Website: www.gov.uk/apha | Twitter: @APHAgovuk | Facebook: aphagov

Help us to look out for Asian hornet! Download the Asian Hornet Watch app for detailed guidance on identification and to quickly report potential sightings.

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