

National Bee Unit

Wales Annual Review 2020

The 2020 Season



Well, it would have been a bit much to ask to have three good seasons in a row. For beekeepers in Wales 2020 has been a stark reminder that the vagaries of the weather have a profound effect on the nectar flow and our bees ability to gather it in. Likewise for farmers in Wales it's been a year where the grass was slow to grow in the spring followed by an absence of the traditional haymaking windows through June, July and August, notwithstanding the Coronavirus pandemic.

Coronavirus restrictions have impacted every sphere of life this year. During the initial stages of lockdown in April, as key workers, we were responding to priority callouts from beekeepers and spent the rest of our time contacting people by phone or email to update records, which reassured the beekeeping community that we were still available if required but were not adding to any risks. A number of people commented that tending their bees provided a reassuring sense of normality in this strange new world. During May we got out more on inspection visits and, with the support and understanding of our beekeepers, we found that social distancing did not create significant difficulties in getting our work done and by June it was more business as usual. A few beekeepers were nervous of visitors or asked us to defer inspection until later in the season and, where it was not a high priority visit, we were happy to oblige.

There are still a large number of new beekeepers taking up beekeeping and, with no major disease outbreaks this year, we spent more time than normal with them. We found they particularly welcomed our advice and assistance because the normal support networks provided by Beekeeping Associations were often a victim of Coronavirus restrictions. In fact the large majority of beekeepers seemed very glad to receive a visit, especially during lockdown, as it was someone else to talk to, even if from a distance!

Honey yield: *The average honey crop per hive in 2020, as recorded by the Welsh Seasonal Bee Inspectors for their own areas, is 19 lb. That's about a third of the yield achieved last year, and was even worse in some areas.*



Biodiversity and meadowsweet colour in the hive. Photos Frank Gellatly

The NBU, BeeBase and the team in Wales

In November 2020 the Healthy Bees Plan Review and the Healthy Bees Plan 2030 was published, see <http://www.nationalbeeunit.com/public/News/news.cfm#262>. Defra, Welsh Government and the National Bee Unit have worked with stakeholders to produce a review of progress made under the original Healthy Bees Plan, a ten-year blueprint introduced in 2009 to improve honey bee health across England and Wales. The Healthy Bees Plan 2030 is a comprehensive document with future strategies to protect and advance the wellbeing of our honey bees, benefitting from the findings in the review and the work of the Healthy Bees Plan in the first 10 years.

Kate Wilson (NBU Office Manager) and Lesley Debenham (NBU Admin and Support) have taken temporary promotion working on other projects within APHA. Adam Parker has similarly taken up Kate's role also as a temporary promotion, and office support is additionally being provided by Diane Gillibrand and Yvonne Wroe based at Lutra House, Preston. Some Seasonal Bee Inspectors are now working full time, over the winter they take up different roles within APHA including in Animal Health, Plant Health and NBU office support.

In May, Paul Davies from near Ammanford had a delayed start after lockdown as the new SBI to replace Ade Bowen, covering Swansea, Neath, Port Talbot, Rhondda Cynon Taf and Merthyr Tydfil area. Paul comes from a teaching and well established beekeeping background and doubles our fluent Welsh speaking capacity in the inspectorate in Wales.

From April 1st 2021 you can use the post code search on the contacts page of BeeBase to check for your local SBI, who can be contacted on the numbers below from the beginning of April until the end of September. During the winter period of October to March please direct all enquiries to the RBI.

Regional Bee Inspector	Area	Contact
Frank Gellatly	Mid Carmarthenshire 01267 202732	07775 119480
Seasonal Bee Inspectors	Area	Contact
Jonathan Garratt	Anglesey, N Gwynedd & Conwy	07775 119479
Tony Davis	Flintshire, Denbighshire, Wrexham	07900 166018
Paul Aslin	South Gwynedd, North Powys,	07867 351605
Karen Smith	Ceredigion	07979 119374
Shane Jones	Powys	07827 552312
Chris Welton	N Pembrokeshire, SW Ceredigion	07900 166143
Maggie Gill	S Pembrokeshire, S Carmarthenshire	07979 119373
Paul Davies	Swansea, Neath Port Talbot, Rhondda Cynon Taf, Merthyr Tydfil	07557 566228
Daniel Baxter	Cardiff, Vale of Glamorgan, Bridgend	07771 038646
	Monmouthshire, Newport, Torfaen, Blaenau Gwent	

Beekeeper and hive numbers

There are currently 3,660 beekeepers in Wales registered on the NBU's online database BeeBase. Between them they have 21,840 colonies in 5,195 apiaries – an average of 6 colonies per beekeeper and 4.2 colonies per apiary. These figures are relatively static compared with last year but show an overall drop in the number of colonies registered. This is mainly as a result of the data cleansing we did during lockdown, updating BeeBase and removing those previously missed who are not keeping bees any more.

Over 9,000 beekeepers completed the Hive Count in 2019 and the 2020 Hive Count launched on 2nd November, so you can update your BeeBase records with the total number of overwintering hives. It is very important that we do all we can to keep levels of foulbrood to a minimum, this information is vital for our planning and preparation for outbreaks of disease or exotic pests.

Over the past 5 years, the number of new beekeepers registering on BeeBase in Wales has fluctuated - in 2016 there were 246 new beekeeper registrations, dropping to 205 in 2017 and 216 in 2018 but rising again to 317 in 2019 and 253 in 2020.

BeeBase Registration

I hope that all of you reading this are registered on BeeBase. If you have received a visit from your local Seasonal Bee inspector you will be, but if not, please can I encourage you to register. It is free and all your details are kept confidential. The benefits to you are email alerts when foulbrood or exotic pests (including Asian Hornet) are found in the area of your apiaries. The benefit to the wider beekeeping community is that inspectors know where to look for disease or pests so that outbreaks can be quickly brought under control. Just because you are a member of the WBKA does not mean that you are automatically registered on BeeBase. If you are registered then thank you, but please do keep your apiary locations updated. If you have lost your BeeBase password then contact the NBU office for a reset. You can register online (www.nationalbeeunit.com) or by contacting the NBU office on 0300 3030094 or through your Regional Bee Inspector.

The graphs and figures in this report are available on the public pages of BeeBase, the NBU website, in 'Bee Pests, Diseases and Maps'. The site also offers multiple pages of tips, advice and downloadable leaflets on disease control and bee husbandry.

Inspections

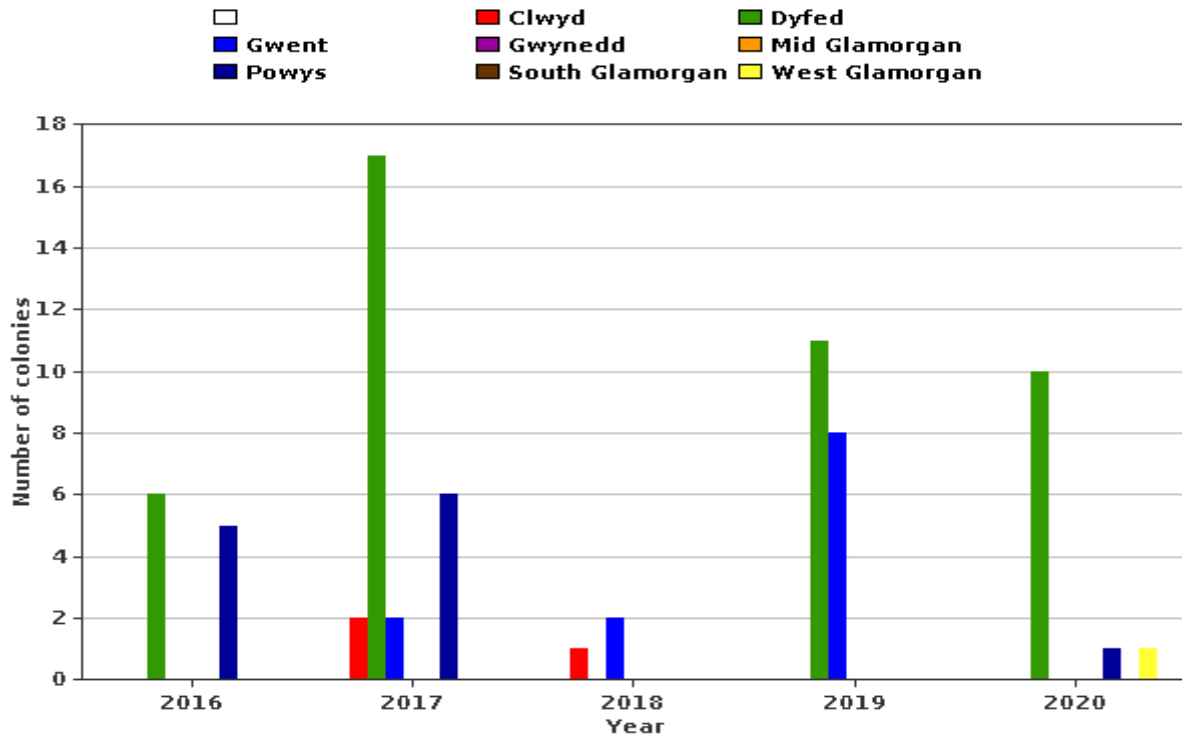
This year Seasonal Bee Inspectors visited a total of 680 beekeepers in 962 apiaries and inspected 5373 colonies in Wales. This represents a rise in beekeepers and colonies inspected but a slight drop in the number of apiaries visited compared with 2019.

Beekeepers can contact their RBI or SBI if they have concerns about bee disease or pests. If you see anything suspicious take a photograph if you can, in relation to insects try to take a sample. The photograph can then be sent via picture message or email to your SBI or RBI, or you can contact us by phone to describe the problem. If we can't rule out it being a statutory disease or pest, we will arrange to visit free of charge. 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.

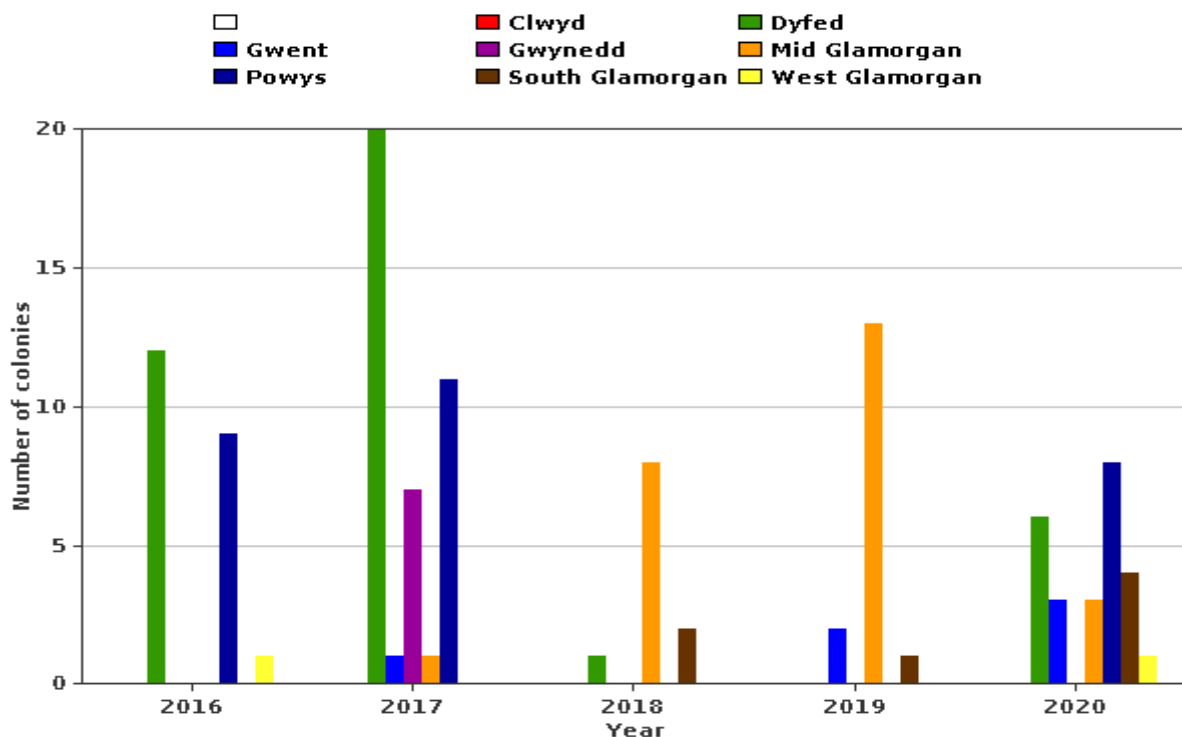
Disease and Pests

Notifiable diseases: European Foulbrood (EFB) and American Foulbrood (AFB)

This season, foulbrood was diagnosed in 19 apiaries, affecting 35 colonies, these are very similar to last year's figures. We found AFB in some disused apiaries in Pembrokeshire (Dyfed) making significant progress in controlling it in an area where it has been present for some time.



Incidence of AFB in Wales 2016 – 2020 (per preserved county)



Incidence of EFB in Wales 2016 – 2020 (per preserved county)

We found AFB in south Powys in April, in mid and south Pembrokeshire in May and June and in north Swansea area in September. We found EFB in south and mid Glamorgan in April, May, June and August, in Pembrokeshire in May and June, in west Glamorgan in July, in Powys in August and September and in Monmouthshire in September.

Further details with grid squares can be found on the disease incidence pages of BeeBase at www.nationalbeeunit.com.



Classic AFB ropiness test.

Photo Frank Gellatly



Contorted larvae with EFB

Photo Ben Bowen

Varroa

Varroa has been relatively light this year in many parts, where increasing numbers of colonies are coping well with low varroa loads and not requiring treatment. But we still see colonies suffering severely and in dire need of help. This emphasises the importance of monitoring varroa levels and being prepared with a treatment for those colonies which need it.

Control can be achieved by using biotechnical methods and authorised products as directed. Varroa treatments should be targeted before colonies start to produce their 'winter' bees, but monitoring of varroa levels throughout the season will help determine whether an earlier treatment is required.

Most experienced beekeepers will do two treatments at specific times in the year, the most popular being a thymol based treatment starting in August, after taking the honey off and checking for stores, and a winter treatment with an oxalic acid based product in December. Both of these have active ingredients that are not thought to risk promoting resistance in mites through regular use.

Varroa acts as a vector for viruses which will reduce the longevity of the bees and so impact on the foraging capability of colonies during the summer. Hives treated too late in the season may result in winter bees being affected by viruses or they may be weakened by the varroa mites feeding on them. This could lead to colony mortality in the winter or early spring.

This year the list of approved veterinary medicines for varroa remains unchanged, those registered for use by the Veterinary Medicines Directorate (VMD) is available on their website, <https://www.vmd.defra.gov.uk/ProductInformationDatabase/Default.aspx> the 'Summary of Product Characteristics' giving full details of use. For the full list, select 'Bees' from the drop down list of species in the product search link.

There's a legal requirement that the use of any treatments is recorded, and these records must be kept for a minimum of 5 years. Full details can be found on Beebase along with numerous free fact sheets including the 'Managing Varroa' booklet.

Exotic Pest Surveillance

As well as NBU inspectors carrying out 125 specific exotic pest surveillance inspections this year, a group of volunteer beekeepers in Wales specifically monitor their honeybee colonies for exotic pest species on behalf of the NBU. These 'Voluntary Sentinel Apiary' (VSA) holders represent a valuable front-line defence against exotic pest incursion. There are about fifteen VSAs in each of the eight beekeeping regions (i.e. 120 VSAs in total across England and Wales). Beekeepers are selected from the NBU's BeeBase database based on their proximity to risk points plus a few beekeepers in areas not associated with particular risk points to give a more complete regional coverage.

Risk points include freight ports, plant importers, airports, crude hive product importers, honey and queen importers. The distribution of VSAs both near risk points and at random sites maximises the likelihood of early pest detection. VSA holders are provided with a monitoring and sampling kit and regularly examine their colonies according to standard protocols. Samples of hive debris are tested twice in each season for the presence of Small Hive Beetle (SHB) and Tropiclaelaps mites. We would be happy to hear from any beekeepers who would like to join the scheme.

In addition, by agreement with the beekeeper, NBU inspectors monitor a selected apiary 3 times each season near each of the 4 main freight ports in Wales due to the higher risk at these places. These are Milford Haven, Port Talbot, Holyhead and Newport in order of tonnage handled.

Yellow-legged Asian Hornet

This year has seen a reduction in confirmed Asian Hornet sightings in the UK with just one Asian Hornet nest found and destroyed by NBU inspectors in an apple tree in Gosport, Hampshire on Friday 11th September. This followed reports from two householders in the area, one of which was a beekeeper who had identified Asian Hornets feeding on his grapes. The nest was small, approximately 20cm in diameter, local beekeepers were made aware through the Asian Hornet Teams (AHTs) and monitoring has continued in the area.



Asian Hornet feeding on grapes
Photo Gordon Brooks



Gosport nest in apple tree
Photo Peter Davies

The NBU has close ties with the Jersey Government's Asian Hornet Co-ordinator and team of volunteers, given their location between us and France. NBU inspectors have had field visits there in previous years so that we could learn from their experience. There haven't been as many Asian Hornet nests reported on Jersey this year either, with the tally of those destroyed on the island being 38 by October 15th, which contrasts with 83 found by the end of 2019. The reduction will be partly due to the ongoing eradication of nests and founding queens in previous years. The other most likely reasons given are the damp and variable temperatures between January and March this year making the overwintering queens more susceptible to fungal attack, and the reduction in traffic from France, due to Coronavirus restrictions, reducing the number of founding queens hitching a ride over from the French mainland in the spring.

The WBKA website now has a 'Report an Asian Hornet sighting in Wales' page with an interactive map that gives details of the local associations' Asian Hornet Co-ordinators, they are trained in identifying Asian hornets and to have an understanding of the lifecycle and foraging habits. Please see <http://www.wbka.com/asian-hornet-reporting/>

We are encouraging everyone to:

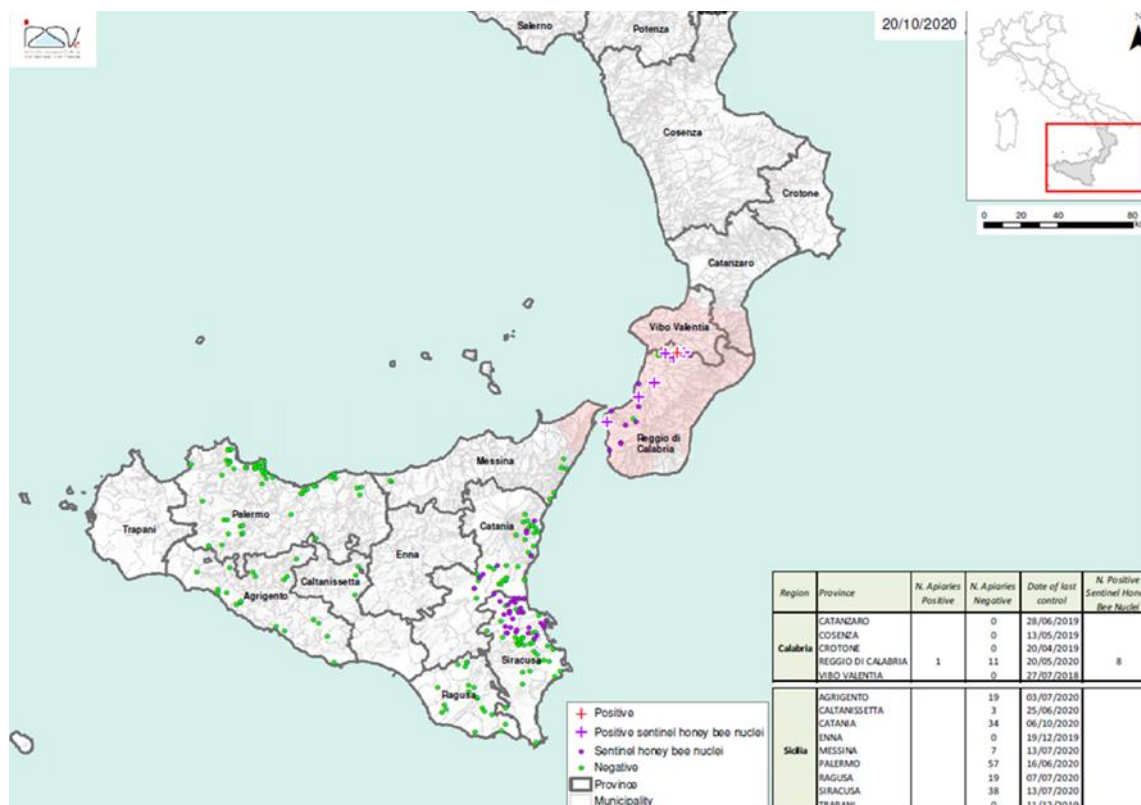
- download the free Asian Hornet Watch iPhone or Android app
- familiarise yourself with what the hornets and similar insects look like
- keep a look out on late summer flowering plants such as ivy where the hornets (and other insects) forage on the flowers.
- report suspect sightings using the 'Asian Hornet Watch' app, or by filling out an online report form, or by emailing alrtnonnative@ceh.ac.uk.

We in Wales are currently at the northern edge of the Asian hornet's European range and by working together hope to keep this invasive species at bay and protect our nation's important pollinators.

Surveillance of Small Hive Beetle (SHB) in Italy in 2020

Information from the National Reference Laboratory for Apiculture in Italy below, updated in October 2020, shows extensive surveillance for Small Hive Beetle in Sicily with no

positives found. Meanwhile in the Calabria region on the mainland one positive apiary and eight positive sentinel Nuclei have been found containing both larvae and adult beetles.



Imports and Exports

We carried out 8 import inspections in 2020 for potential disease and exotic pests in Wales, covering both package and queen bee imports.

The UK has left the EU, new rules apply from January 2021

The transition period comes to an end this year on 31st December 2020. To find out how this affects Imports and Exports of honey bees as of the 1st January and what you can do to prepare please refer to guidance on [Gov.uk](https://www.gov.uk) and the [Border Operating Model](#), which provide information on the new processes.

For movements both ways between Northern Ireland and GB guidance may be found in the [Northern Ireland Protocol](#).

If you are planning to import or export bees it is your responsibility to follow these new rules and protect GB biosecurity.

Guidance on changes for businesses and citizens may be found at <https://www.gov.uk/transition> where you may use the Brexit checker to obtain a personalised list of actions.

If you import bees:

- [Check what you need to do to import from the EU from 1 January 2021](#)

You risk not being able to bring or receive goods from EU countries from 1 January 2021 if you are not prepared for the end of Transition.

- [Check what you need to do to import animals, animal products, high risk food and feed into Great Britain from 1 January 2021](#)

There will be new processes that importers must follow. These processes to import from an EU country will be introduced in 3 stages:

- [1 January 2021](#)
- [1 April 2021](#) (included for completeness but only relevant to animal products and high-risk food and feed)
- [1 July 2021](#)
- **You will need to register for the UK's new Import of Products, Animals, Food and Feed System ([IPAFFS](#))**

You will no longer be able to import using the TRACES system from 1 January 2021.

More information: [Importing animals, animal products and high-risk food and feed not of animal origin from 1 January 2021](#)

EU law prohibits or restricts the import of specific goods from third countries that are deemed to present an unacceptable level of animal, plant or public health risk. These prohibitions and restrictions will be transposed into UK law at the end of the Transition Period.

As GB and the EU are expected to be treating each other as third countries from a bee health point of view, these restrictions and prohibitions will currently prevent or restrict mutual trade in bees.

As a result, importers will only be able to import queens from the EU. Any associated packaging (including queen cages and attendant workers) will have to be sent to a designated laboratory for examination and for honey bees this is Fera Science. Importing packages or colonies will no longer be possible after the 31st December 2020. From 1st July 2021 imported queens will have to pass through a Border Control Point (BCP). Currently, only BCPs at Heathrow and Manchester airports will accept imports of invertebrates, which includes bees. The National Bee Unit will continue to carry out physical checks on consignments of queens according to risk.

If you export Bees:

- [Check what you need to do to export to the EU from 1 January 2021](#)

You risk not being able to send or take goods to EU countries from 1 January 2021 if you are not prepared for the end of Transition.

The position regarding exports is similar to imports. The EU would also consider the UK to be a Third Country. This will mean that the EU would only accept exports of queens from the UK – providing we are listed as a third country approved to export to the EU. The export of packages and colonies will no longer be possible.

Further Advice:

Please review the Gov.uk pages linked above for more detailed and the most up to date guidance. [BeeBase pages](#) containing Import and Export guidance will be updated on a regular basis for easy reference.

Beekeeper training

All events since March, gatherings for business and pleasure, for education and training have been absent from our calendars, same as the rest of the country, but we hope it will be a different story next year. In some compensation for this our inspection programme has included visiting many new beekeepers where we offer 1:1 education, socially distanced, at the hive side.

I've been happy to support WBKA who, as one beekeeper put it, have not been like a rabbit frozen in the headlights, but have proactively organised 'Go To' educational webinars which have had a wide audience and been well received in Wales and beyond. Further to my Asian Hornet presentation, we plan a 'Disease Recognition' webinar in the spring.



*Dealing with AFB in Pembrokeshire
Photo Maggie Gill*



*A late swarm with damsons!
Photo Frank Gellatly*

Finally

Beekeepers, like gardeners, are ever optimistic for a better year to come and there is never a more fitting time to hope for that than now. No one started the year expecting a pandemic and lockdown but we can count ourselves fortunate that we haven't been deprived of the joy in managing our bees well, even if we got a poor honey harvest in return. Furthermore the very large majority of beekeepers were glad to receive a visit from us, especially during lockdown, as it was someone else to talk to, even if from a distance!

Many thanks to the SBIs for getting out there, to you for having us inspect your bees, and I look forward to seeing you next year.

Frank Gellatly

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National Bee Unit | Uned Gwenyn Cenedlaethol

Animal and Plant Health Agency (APHA) | Asiantaeth Iechyd Anifeiliaid a Phlanhigion

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