



Animal &  
Plant Health  
Agency

# North East Region Annual Report 2021

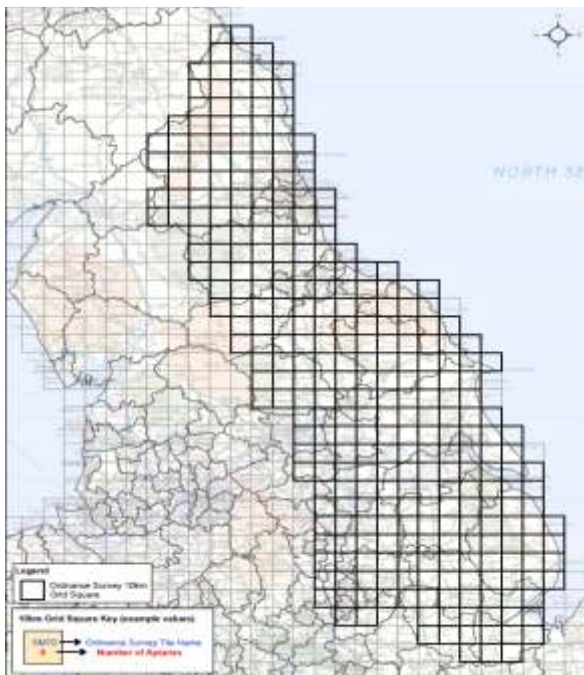


National  
Bee Unit

## Changes and Welcome

Firstly, I would like to welcome the beekeepers of Durham, Tyne and Wear and Northumberland to North East Region. After major changes in the way the NBU defines its regions the “North East” became part of North East region at the start of the 2021 season along with incumbent inspector, Brian Murphy.

The Region now covers the whole eastern side of the country from the Lincolnshire / Norfolk border in the south to the Scottish border in the north, around 250 miles end to end.



As a result of these changes NE Region relinquished responsibility for a major part of West and South Yorkshire over to North West team (formerly North team) under the supervision of RBI Mark McLoughlin, NW also took responsibility for the majority of Derbyshire and a large slice of North Yorkshire.

This has created some challenges as counties have been divided but Mark and I have worked together to resolve as many issues as possible and where there is no obvious solution, we have concluded that the two northern teams should work closely together to provide the best possible service for the beekeepers and associations in the northern half of the country.

We realise this is a little bit strange to start with, but as we all become more familiar with the new arrangements and get to know each other better, it should become easier.

## **The Season**

After a relatively mild winter and early spring, April was bright but fairly cool and most of May was wet which held colonies back and meant some spring forage was later than normal. In much of the North East region the bees had nothing to spare for the beekeeper, some even required supplementary feeding. Late May and June were generally good weather, so the colonies were able to build up strength which inevitably brought on the urge to swarm.

Then came a settled spell in July which coincided with the nectar flow from bramble, clover and other wildflowers which had been held back by the late spring. It meant those colonies in the right condition to take advantage, were able to accumulate some surplus of honey if they were given the space to do so.

August continued warm and fairly dry, but the main nectar flow on the lower ground was over despite a strong showing from knapweed and willowherb.

The Heather moors were highly productive for some this year with reports of 2 full boxes being common and for some this extended into a third but the bees did not quite get to capping it all off. There will probably be some nice mead around next year.

September and October were benign and colony activity continued throughout the month making use of balsam and other late flowers.

With the region now covering such a large area of varied terrains and climatic conditions it is not an easy job to produce an overview of honey production and some of you will have done better than others but every dog has its day, as they say, and maybe it is your turn next season. Optimism - the main ingredient for beekeeping.

## **From your Seasonal Inspectors.**

### **Adrian Wilford, North and East Yorkshire.**

This summer I have consistently seen colonies that were desperately short of stores especially North East of the river Humber and in some cases the beekeepers had not taken any honey off this year. Not just with new beekeepers but some with 20 years plus experience. I have observed the usual amount of varroa, too much. The heather recovered in most areas but is still suffering from the damage done by the heather beetle. This year it produced some exceptional yields, after 2/3 very poor years. Towards the end of the inspection season, I was seeing some very large colonies which leads me to believe that unless beekeepers remain vigilant about stores, the mild weather and colony sizes may bring about colony losses through starvation.

### **Brian Murphy, Northumberland, Tyne and Wear, Durham.**

Early season was blighted by a cold April and start of May, I found early doors quite a few queen less colonies and a few drone layers later, Varroa seemed heavier than

previous years throughout the season, it was noted that as well as those BKs that do not bother with treatments that some were not aware of when to treat and with which product. As the season progressed low stores in colonies became apparent and subsequently a notification for this was sent out by the NBU. Late season laying workers and drone laying queens resurfaced as did Varroa, well it did not disappear but rather gave another show of presence, again many new beekeepers were not aware of what/when treatments to use.



Overall, with the very slow start to the season, the cold and wet April and start of May not being much better, most colonies quickly went into overdrive and recovered well and most BKs reported a decent honey harvest. The Bee farmers I have spoken to on my patch reported a very good season.

Left: image of wax moth infested combs, to avoid this happening in your apiaries clear away any dead outs, render down combs and sterilise frames or if you feel you have had your monies worth, burn them.

### **Keith Bartlem, North Yorkshire.**

It has been a bit of an eye opener for me with this being my first full season in the role of bee inspector. I have met some very interesting people and seen some wonderful bees in beautiful locations. My colleagues in North East team are a great set of guys, they have taught me a massive amount about real world beekeeping from an inspector's perspective.

I haven't had to struggle with heavy boxes as either the forage has been poor due to the weather or the bees had swarmed, this has been the case in more apiaries than I would have predicted.

I have found there's still a good number of beekeepers who work with the let alone method of bee keeping despite the regular advice to check for pests and diseases.

### **Tim Roper, North Lincolnshire, Nottinghamshire, Parts of South and West Yorkshire.**

The season got off to a poor start, colonies were strong but the terrible weather conditions kept them shut in more often than not. When the weather improved, all those confined bees decided to prepare for swarming. If the Beekeeper was not on the ball they were off along with a fair proportion of the meagre crop.

If the colonies were kept together and properly prepared at the start of the honey flow the beekeepers should have seen a good lime crop, the heather seems to have performed well too with some colonies producing 3 or more good boxes.

If I could one piece of advice it would be:

change your combs more often, especially if you are in an area where you are receiving NBU disease notifications.

Having said that there are a lot of good beekeepers out there especially when you look back over the last 10 years or so, the quality of bees and beekeeping has definitely improved.

### **Simon Oglesby, South Lincolnshire, Nottinghamshire.**

This year in Lincolnshire the season started late, with a long period of cool, wet weather. Once the season started, I found healthy colonies that were still quite big. Over the summer there were reports of lots of swarms and this was evident when looking through the hives. As a result, I had a lot of reports of foulbrood but I would often find that it was other problems, for example a laying worker, queenlessness or beekeeper error. There was a lot of re-scheduling of appointments because of the inconsistent weather.

Honey flow has been below average due to the slow start and therefore the season was much condensed. With regards to EFB, there have been two separate cases detected, these were unrelated, which is a concern for next season and I would urge vigilance next season if you are within the notification area. Information on how to perform a disease inspection and photographs of infected larvae at various stages can be found on BeeBase. [www.Nationalbeeunit.com](http://www.Nationalbeeunit.com)

In terms of beekeepers, I have found that there have been a lot of beekeepers who have very limited knowledge of bees and how to look after them. I believe this is mainly due to new beekeepers taking up beekeeping during lockdown and struggling to find mentors.

### **David Bough, West and North Yorkshire.**

This year I have seen a similar level of EFB in my area to that of previous years, I have also seen colonies in apiaries where I have found EFB that I would strongly suggest were asymptomatic at the time of inspection and may well develop symptoms in the future.

I have consistently observed high levels of varroa damage in colonies that I inspect manifesting itself in visible signs of Varroa frass, uncapping and cannibalisation of mature pupae and pinpricks in the cappings of mature pupae. I have also seen mobile adult Varroa mites on the comb surface and on the upper thorax and abdomen of adult bees, Deformed Wing Virus and Parasitic Mite Syndrome have also been prevalent. There appears to be a lack of consistency in treatment regimes

and monitoring of mite populations in colonies, beekeepers need to be aware that Varroa is a big problem and needs a lot more consideration.

I try to spend as much time as I can afford with new or nearly new beekeepers while inspecting their colonies to try and establish good working relationships and promote the work we do. I have found this helps with future inspections, or for recommendation for inspections to other beekeepers. Most of my inspection time is spent in consultation with beekeepers, offering advice and reassurance but despite this there is still a definite fear amongst first time clients, that I am about to destroy all of their bees and equipment. I think this idea is propagated via online chat rooms and social media apps and is clearly wrong, I personally endeavour to save as much serviceable equipment as possible and bees are only destroyed if they fall short of the treatment criteria, I do my best to save as many colonies as possible.

## **BeeBase Registration and Association Membership Lists**

I would like to take this opportunity to remind everyone how essential it is that your apiaries are registered on BeeBase this allows us to identify any apiaries at risk of notifiable diseases or exotic pest into the UK allowing us to respond and target control measures effectively.

Self-registration is free via the link at [Beebase - Beekeeping information resource for Beekeepers \(nationalbeeunit.com\)](http://Beebase - Beekeeping information resource for Beekeepers (nationalbeeunit.com)) you can also register by contacting the NBU office on 0300 303 0094 or your RBI.

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.

If you are self-registered, please ensure that you keep your apiary records up to date or contact your inspector if you are unsure. I recommended self-registration, it provides beekeepers secure password protected access to personal details and inspection records.

I would also appreciate it if association secretaries could send me their list of members, please ensure you have satisfied the requirements of the General Data Protection Regulation first (The Information Commissioner's Office (ICO) website provides guidance on best practice). These lists are very useful to us as they allow us to identify new beekeepers and to update contact details for existing beekeepers. We use our database every day to prioritise our notifiable disease inspections. An up to date list is something that will be hugely important if we are unfortunate enough to find Small Hive Beetle (SHB) in NE Region.

## **BEE FACT**

*Right: Drone eye mutation.*

Visible mutations are most often seen in drones. Since drones develop from unfertilized eggs, they have only one set of chromosomes. All recessive genes are expressed in drones, none are hidden by a second, dominant gene.



## **Varroa**

Varroa continues to be a challenge, it is responsible for many colony losses each year, however its incidence varies across the country and depends very much on its management. Out in the field inspectors have found that the general level of knowledge amongst beginners about how to manage varroa was poor, probably not helped by the lack of BKA training due to the pandemic. We felt that many knew of treatments, but not much detail about them, which is something we hope to cover in our bee health events next year. It is strongly advised that beekeepers regularly monitor mite levels as part of the management of their colonies and act if they reach damaging levels. Control can be achieved by using biomechanical methods and/or authorised products as directed by the manufacturer.

The manufacturers of the authorised treatments spend a great deal of time formulating how they should be used to ensure the maximum efficacy. Please ensure that when using treatments that the manufacturer's instructions are strictly followed to achieve the greatest benefit from the product. It is also worth noting that some treatments, such as those that are thymol or formic acid based are affected by temperature. Strips such as those containing Amitraz need to be placed correctly in the brood chamber in line with instructions, for maximum effect. There is a new authorised varroa product - Formicpro 68.2g Beehive Strips for Honeybees which is listed on the Veterinary Medicines Directorate website [Product Information Database - Currently authorised products \(defra.gov.uk\)](#)

Most beekeepers will complete two treatments at specific times in the year. The first after taking the honey off and checking for stores, often a thymol-based treatment starting in August, which promotes healthy winter bees. Secondly a winter treatment with an oxalic acid-based product in December, when there is little or no brood, keeping mite numbers low as new brood is reared in the

spring. Both active ingredients do not induce resistance in mites through regular use, unlike some harder chemicals.

The rule of thumb is to have colonies going into winter with low mite numbers and likewise going into the spring. Treatments performed too late in the season, e.g., late September, will often be less effective, resulting in winter bees being weakened by the varroa mites feeding on them. As inspectors we often see colony mortality in the winter or early spring because of poor varroa management.

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. Full details can be found on Beebase along with free fact sheets including the 'Managing Varroa' booklet. [Beebase - Beekeeping information resource for Beekeepers \(nationalbeeunit.com\)](http://Beebase - Beekeeping information resource for Beekeepers (nationalbeeunit.com))



*Varroa mite*



*Mites on drone pupae*

## 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 honeybees

Honeybees 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.

## Third Country Import report

Honeybees imported into England, Scotland and Wales in 2021 and Laboratory examination of Attendant Worker Bees which accompanied Queen Bees imported into England/Wales in 2021										Report for year 2021
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 samples examined	Number of samples with Varroa	Number of samples with Small hive beetle	Number of samples with <i>Tropilaelaps</i>	Number of consignments inspected
Argentina	1	250	0	0	0	1	1	0	0	1
Austria	1	7	0	0	0	0	0	0	0	0
Cyprus	2	25	0	0	0	1	0	0	0	0
Denmark	25	1,380	0	0	0	9	4	0	0	12
Germany	1	11	0	0	0	1	1	0	0	1
Greece	27	2,016	0	0	0	7	3	0	0	7
Italy	18	5,552	0	0	0	13	8	0	0	12
Malta	11	3,050	0	0	0	3	1	0	0	3
Romania	15	1,140	0	0	0	1	1	0	0	4
Slovenia	19	590	0	0	0	8	2	0	0	9
Totals	120	14,021	0	0	0	44	21	0	0	49

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 honeybees**

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

[Beebase - Beekeeping information resource for Beekeepers \(nationalbeeunit.com\)](https://nationalbeeunit.com/)



## **Beekeeper training**

Our primary beekeeper training is in the apiary as we inspect your hives, and we relish the opportunity to provide advice and guidance to those who require it. We hope to be able to continue with our bee health events next year, after a two-year break due to Covid, and will pick up the rolling programme with the participating associations. We are licensed to demonstrate diseased combs and endeavour to keep a well stocked fridge in the summer containing the very best examples of all brood disorders, be they common or notifiable.

### **Track and trace training**

At the end of Summer NE and NW regions came together to deliver a day of Asian Hornet Track and Trace training to the HRBKA AHT group. The day consisted of presentations delivered through the morning session covering DEFRA's current approach to an incursion, experiences from Jersey, Map reading and how to obtain bearings and triangulate flight lines from bait stations.

In the afternoon, the delegates were put into small groups with an inspector leading and the information from the presentations was put into practice. The groups were given start coordinates which represented a hornet sighting, the groups were then given flight bearings that took them to a second point where further bearings were given by the accompanying inspectors until eventually the group manning the operations room were able to suggest an area where the nest was likely to be.

I would like to thank the HRBKA AHT group for their help and the feedback they gave for this exercise, it was an opportunity for all involved to learn or refresh their understanding and NE team will be looking to provide this training in the future to prepare beekeepers for an Asian Hornet incursion in the region.

## **Inspections and Foulbrood**

With the recent boundary changes in the North of England the stats you are all used to will now reflect a much different region. West Yorkshire stats will be incorporated into North West region along with stats generated from disease finds in Derbyshire. In effect this will give the appearance of much less disease in North East and an increase in North West.

839 Apiaries were visited by NE inspectors during the 2021 season during these visits 5459 individual colonies were inspected.

Treatments were applied to 30 colonies in 20 apiaries and 29 colonies were destroyed in 16 apiaries. our actions to treat or destroy were all carried out within 10

days of confirming disease on site. The mean treatment time was 3 days and 2 days for destructions.

This above information has been taken from individual inspector stats and not BeeBase Graphs.

Please remember to inspect your colonies for disease on a regular basis, details on how to do this can be found on BeeBase [WWW.nationalbeeunit.com](http://WWW.nationalbeeunit.com).

## Notifiable Diseases

### European Foulbrood

EFB occurrence by 10KM squares 2021				2021
County	10 km Squares EFB Found	Area Name	Number of Positive EFB Diagnoses (Including recurrent cases)	Month EFB Found
Lincolnshire	SK96	BASSINGHAM.	1	August
Lincolnshire	TF25	CONINGSBY	4	May
North Yorkshire	SE44	THORPE ARCH	1	April
North Yorkshire	SE44	THORPE ARCH	1	June
North Yorkshire	SE44	THORPE ARCH	1	July
North Yorkshire	SE46	ALDWALK	1	April
North Yorkshire	SE55	YORK WEST	7	April
North Yorkshire	SE55	YORK WEST	1	May
North Yorkshire	SE56	HUBY	7	July
North Yorkshire	SE56	HUBY	2	September
North Yorkshire	SE63	SELBY	2	April
North Yorkshire	SE64	WHELDRAKE	4	April
North Yorkshire	SE65	YORK EAST	1	August
Nottinghamshire	SK63	COTGRAVE	1	July
Nottinghamshire	SK63	COTGRAVE	1	August
Nottinghamshire	SK64	BURTON JOYCE	1	May
Nottinghamshire	SK64	BURTON JOYCE	3	July
Nottinghamshire	SK74	SHELTON	3	April
Nottinghamshire	SK74	SHELTON	5	July
South Yorkshire	SE50	BENTLEY	2	July
South Yorkshire	SE50	BENTLEY	1	August
South Yorkshire	SK28	UN-NAMED	2	July
South Yorkshire	SK38	UN-NAMED	2	May
South Yorkshire	SK38	UN-NAMED	2	August
South Yorkshire	SK59	CARR	1	June
West Yorkshire	SE12	BRIGHOUSE	1	April
West Yorkshire	SE23	WEST LEEDS	1	April
West Yorkshire	SE23	WEST LEEDS	13	May
West Yorkshire	SE23	WEST LEEDS	8	August

### American Foulbrood

County	10 km Squares where AFB Found	Area Name	Number of Colonies Infected	Month AFB Found
North Yorkshire	SE04	KEIGHLE Y	3	August
South Yorkshire	SK38	UN-NAMED	1	August

In the three outbreaks where swabs were taken, EFB bacteria was found on a steering wheel and other dashboard controls, on a beekeeper's toolbox and in the area where colonies and equipment were transported. We cannot do this routinely but are able to use these findings to highlight the importance of biosecurity, the cleaning of equipment between colonies, and barrier management. Whilst in these cases EFB was the issue of concern, it shows how easily diseases in general can be spread by beekeepers. Guidance documents are available on BeeBase with regards to apiary hygiene which I would encourage you to be aware of.

It is also worth mentioning that we treat 'call-outs' by beekeepers for suspected foulbrood as priority 'Red' inspections. If you suspect you may have foulbrood it is a legal obligation to inform the bee inspectorate. It is a free service so you will not be charged, even if we visit and deal with a confirmed incident. It is good practice to have a smartphone/camera with you at inspections so you can take pictures of anything suspicious. These can then be emailed to your SBI or me for an opinion before attendance.

## **Asian Hornet (*Vespa velutina nigrithorax*)**

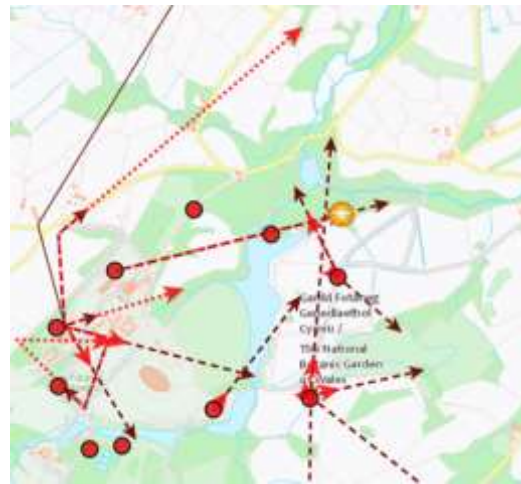
Late in the season a beekeeper in the Ascot area of Berkshire filmed live insects near a hive on Wednesday 6<sup>th</sup> October. He also captured a sample and reported the sighting using the free 'Asian Hornet Watch' app. They were confirmed as Asian hornet and after mounting a track and trace operation in the area, a nest was found in a poplar tree and destroyed on Monday 11<sup>th</sup> October. It 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). This involved residual trapping and surveillance and was carried out daily for 3 weeks following the destruction of the nest. When nothing was seen or caught for 7 days all the traps were removed and the local AHTs and beekeepers were asked to remain vigilant.

This success was followed 3 weeks later by another report of Asian Hornets feeding on nectar on garden plants in the Buckland area of Portsmouth. The report via the Asian Hornet Watch App on the morning of Friday 29<sup>th</sup> October, was accompanied by clear photographs. NBU inspectors followed up the sighting quickly and were on site by 2pm that afternoon. An Asian hornet nest was then located in a Norway Maple tree on Saturday 30<sup>th</sup> October shortly after midday and destroyed early Sunday evening 31<sup>st</sup> October. The nest was subsequently sent to FERA Science Ltd for analysis and monitoring continued in the area supported by local beekeepers.

An NBU tracking App has been developed for the inspectorate which has been used successfully during the 2021 outbreaks. The App can track hornet flight lines and record positions of bait stations and traps. It has been proved to be an asset when dealing with incidents.



*Asian hornet nest found*



*Track and trace mapping app*

*October 30<sup>th</sup> in Portsmouth*

If you have a smartphone, please make sure you download the free Asian Hornet Watch iPhone or Android App and familiarise yourself with what the hornets and similar insects look like. It is a bit late for this season but in the future keep a look out on late summer flowering plants such as ivy where the hornets (and other insects) forage on the flowers. Report suspected sightings using the 'Asian Hornet Watch' app, or by filling out an online report form, or by emailing [alertnonnative@ceh.ac.uk](mailto:alertnonnative@ceh.ac.uk) or contact the NBU.

## **....And finally**

Whilst coming to the end of writing this report I have received messages from bee keepers around the region informing me that they had taken advantage of the unseasonably warm weather between Christmas and New year to open up colonies and examine the combs and finding brood at all stages. This may have a knock on effect with winter Oxalic acid treatments not being as effective as they would have been in a broodless colony. You may need to consider other alternatives as we move into spring to minimise the varroa populations in your colonies.

I would also like you all know that from 10<sup>th</sup> January 2022 I have taken on the role of National Bee Inspector whilst Cristina Ruiz takes maternity leave. I have agreed to cover the role for a period of 6 to 9 months which will take my attention away from North East region, at this time I am not able to tell you who my replacement will be but please be assured that I will be in the background offering guidance and solutions to whoever has the pleasure of being your RBI.

Adrian Wilford will be retiring at the end of the 2022 season after many years of dedicated service to the beekeeping community in North East region. The team and I will miss Adrian when he leaves us at the end of next summer and there will be a big hole in the team. We are looking to recruit a replacement inspector to take over where Adrian will leave off, the successful applicant will get the bonus of Adrian passing on his accumulated knowledge and experience in the field. If you think you have the people skills and beekeeping knowledge to work with some of the best beekeepers in the country please have a look at the vacancy on [www.gov.uk](http://www.gov.uk). Job reference: 174136

I would like to thank my team Tim Roper, Adrian Wilford, Brian Murphy, Simon Oglesby, Keith Bartlem and David Bough for their flexibility and dedication to the work. The Laboratory team at Fera Science for their expertise and all the beekeepers and bee farmers who work with us to help maintain the health of our bees in North East region.

## NE team contact details

<a href="mailto:Timothy.Roper@apha.gov.uk">Timothy.Roper@apha.gov.uk</a>	North Nottinghamshire	Lincolnshire	07775 119 441
<a href="mailto:Adrian.Wilford@apha.gov.uk">Adrian.Wilford@apha.gov.uk</a>	N.Yorkshire / E.Yorkshire		07775 119 444
<a href="mailto:Brian.murphy@apha.gov.uk">Brian.murphy@apha.gov.uk</a>	Northumberland/Durham Tyne & Wear		07747 765934
<a href="mailto:David.Bough@apha.gov.uk">David.Bough@apha.gov.uk</a>	N.Yorkshire / York		07824 408 973
<a href="mailto:Simon.Oglesby@apha.gov.uk">Simon.Oglesby@apha.gov.uk</a>	S Lincolnshire/ Nottinghamshire		07815 475748
<a href="mailto:Keith.bartlem@apha.gov.uk">Keith.bartlem@apha.gov.uk</a>	N Yorkshire		07385 397936

All the best for 2022, let's hope it is a productive year!

Dhonn Atkinson

National Bee Inspector.