

Asian Hornet Monitoring Plan 2020

1. Introduction

The WCBKA Asian Hornet Action Team (AHAT) is a working group. In addition to providing ongoing information, education and encouragement of our members to remain vigilant, this group has been working towards establishing a suitable geographically spread, fit for purpose and hopefully user-friendly Asian Hornet (AH) monitoring regime to be delivered through the Summer and Autumn of 2020, resulting in as many members as possible keeping a watchful eye for a chance observation of an Asian Hornet. Our aim is to encourage all to become familiar with our native insect fauna, and being drawn by and able to recognise something different.

If the Asian Hornet becomes established in the UK it would be devastating for our environment, with particular harm done to all beneficial pollinators including honeybees and current beekeeping practices will need to be drastically changed.

Currently the UK remains in preventative mode, and once notified the National Bee Unit (NBU) take on the task of tracking and destroying Asian Hornet nests. The NBU are reliant on beekeepers and members of the public reporting sightings which have to be positively confirmed either by photograph or a dead Asian Hornet.

The WCBKA AHAT hope to encourage members to take part in monitoring for AH using a variety of methods whilst being aware of the shortcomings and usability. Monitors can choose whatever method of Monitoring suits them best and methods will include but not be limited to:

- Continue and expand the monitoring which has been carried out in previous years by the use of AH traps providing the users can and do diligently view the traps twice a day and release bycatch.
- The use of a variety of 'bait stations' for users who are not able to release bycatch twice a day or feel uncomfortable about being up close to wasps and European hornets (possible contributors to bycatch) without having to put on protective equipment. Located sensibly 'bait stations' can be a focal point and it is thought they will be viewed in the same way as members might watch bird feeders etc., there is no expectation that hours will be spent sitting and watching. Even monitoring occasionally ensures we stay alert to the potential presence of Asian hornets and teaches us much about our natural insect fauna.
- Watching, observing plants in gardens and on walks etc.
- Continue to encourage members of the public, friends, and family to know what they are looking for and to look and report any sightings.
- Continue to encourage beekeepers to remain alert at their apiaries and look for signs of AH hawking at hives.

We hope to get a good geographical spread of AH monitoring volunteers who will monitor for AH will have the support of their nearest AHAT members regarding: the geographical spread of the AH volunteers; training needs; type and system of monitoring to be undertaken; the selection, information regarding appropriate bait and advice about making your own bait, monitoring stations and traps; and how any sightings need to be confirmed and reported via the correct channels.

We all hope that there are no AH's around but by baiting, looking, and trapping (for those diligent members) we might, just might get an early enough sighting to enable the NBU to do their bit!

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Asian Hornet Monitoring Plan 2020

Since 2016 awareness has been raised by the Non-native species Secretariat (NNS), the NBU, the British Beekeepers Association (BBKA), and numerous Beekeeping Associations including ourselves WCBKA. Some press articles have been less than helpful as incorrect photos and descriptions have been used from time to time.

WCBKA AHAT have held talks, issued information leaflets, issued bespoke posters, provided information in An Hes, on our Facebook pages and our website. We have also provided copies of and access to NNS and NBU posters and information.

During 2019 the AHAT delivered against a robust action plan (outreach) which focused on raising awareness both within WCBKA and the wider population. This 2020 monitoring plan is part of the AHAT action plan (outreach) for 2020.

It is hoped that those members who become volunteer monitors will expand the understanding of the threat of Asian Hornets amongst friends, family, and their social and business groups.

Identification photos and sample posters are contained in [Appendix 1](#).

2. Monitoring

a. Importance

There are a few ways in which the early presence of AH can be established. One is by encouraging people to remain vigilant, look at flowers etc. Another method is to monitor for their presence by using bait stations or traps. Trapping relies on the trapper diligently releasing bycatch and the AHAT have decided not to ask our monitors to trap unless they can diligently check them twice a day and release bycatch. Monitors can use bait stations such as an open bait station with bait in a dish on an upturned bucket or by using a wick bait station.

b. AHAT Working Group and AH Monitors

Each member of the AHAT will support several volunteer monitors located around them. The actual number will depend upon the AHAT member and how many they feel comfortable with and will also be dependent upon how much training and support the volunteers need. In this way communication can be maintained and advice will be readily available.

c. Recruitment

Open to all members, recruitment of AH monitor volunteers will be carried out by AHAT members contacting our members with a view to engaging with them and encouraging them to take part in the monitoring. Open invitations have also been made over a period of months in An Hes.

d. Geographical coverage

The current members of the AHAT are located across the WCBKA area giving a good coverage, their approximate location and telephone contact details are shown on the map in [Section 4](#). Monitoring volunteers will enhance this coverage and it is hoped that most, if not all areas will have a degree of proactive monitoring. An indication of the coverage provided by monitors already recruited is shown on map in [Appendix 2](#).

Asian Hornet Monitoring Plan 2020

e. Training

Some training may be needed, and this will be provided by the AHAT members. Subjects where training may be required are: Identification of AH; how to make and set up the bait station; how to monitor safely; how to take identification photos or samples; how to report any sightings correctly. Existing information already published will be used in any necessary training.

f. Health & Safety

Monitors are not being asked to work at height or conduct any activity that a person, experienced in beekeeping would not be competent to do. Monitors are not being asked to catch and release, track or locate nests. There will be a requirement to provide positive evidence of a sighting such as a photo or dead Asian hornet.

g. Reporting sightings with Positive evidence.

We are suggesting that volunteer monitors carry a camera or phone with them and have some means of killing an Asian Hornet by using a racket, net etc to enable them to be able to obtain positive identification. Once positive identification is obtained the sighting should be reported to the NNS by using the Asian Hornet App (download from the [Google](#) or [Apple](#) app stores); or by contacting the NNS. Monitors are also being asked to contact their AHAT support member.

3. Monitoring Mechanism

a. Bait Stations

It is proposed to use either open or wick bait stations. If using liquid bait wick bait stations are preferred because they would reduce evaporation of liquid bait. However, a greater plume of vapour might be generated from open bait stations which might entice more AH activity.

Open bait stations comprise of an upturned yellow bucket, a dish – weighted by a stone to prevent movement by wind, some cloth or paper towel and some bait (liquid or solids). Volunteers will be encouraged to provide their own buckets, equipment, and bait. Advice on how to set up an open bait station is contained in [Appendix 3](#).

Wick bait stations comprise of a weighted jar such as a honey jar or jam jar, a lid with a hole and a wick. A limited number of wick bait stations are available from one of the AHAT members however volunteers will be encouraged to make their own and provide their own bait if they are able to do so. Information on wick bait stations is contained in [Appendix 4](#).

b. Traps

Traps are only to be used by volunteers who are able to check the trap at least twice a day and release bycatch. Volunteers will be encouraged to make or purchase their own traps. Information regarding how to make traps is contained on the NBU website and also contained in [Appendix 5](#).

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Asian Hornet Monitoring Plan 2020

c. Bait

At this time, it has not been possible to secure a sufficient source of the commercially available liquid bait known as Sutterra Trappit although a small quantity may be obtained. Therefore, the AHAT have conducted research into different types of bait, some 18 recipes have been looked at for both solid and liquid baits and advice taken from Dr P Kennedy of Exeter University.

The NBU web site suggests the use of sweet/sugar-dark beer, sugar, apple juice, cassis, orange liquor etc with a dash of vinegar to keep bees out as a liquid bait.

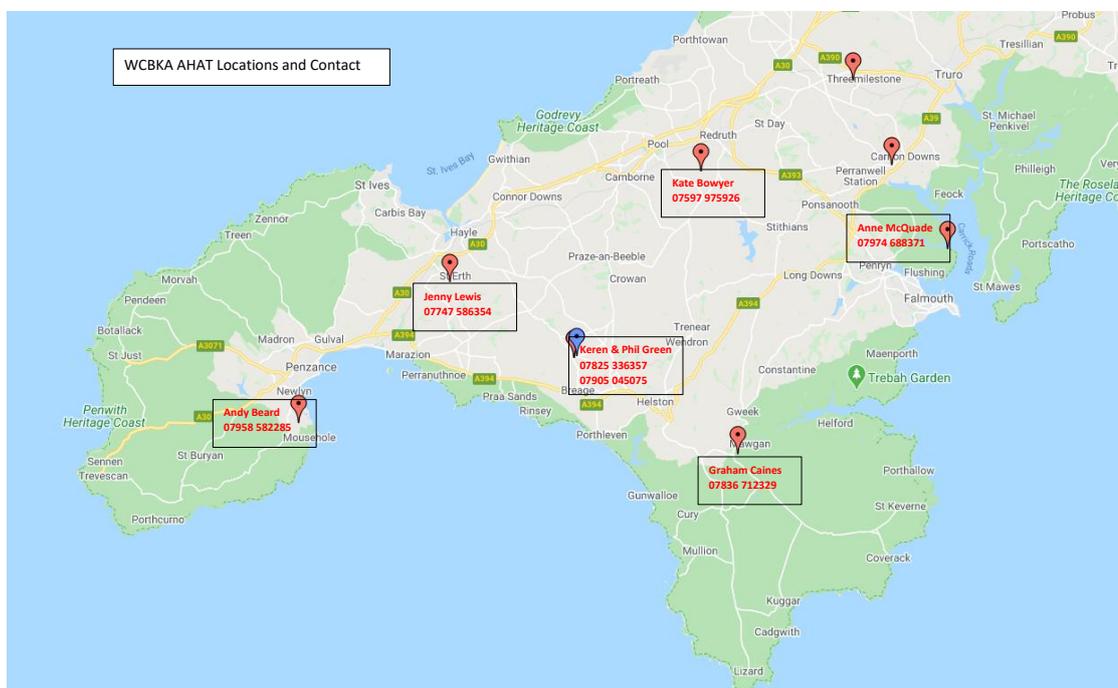
Protein, raw meat or fish (e.g. prawns) 25% in water, as a solid bait. This will need to be changed every 3 days.

d. Location

To be effective traps and/or bait stations must be located where they can be viewed and accessed safely. In the case of bait stations these need to be located near the house, in a garden or an area where viewing is easy.

4. Contact Details

AHAT team members phone contact numbers and approximate location are shown on the following map.



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Asian Hornet Monitoring Plan 2020

5. Useful Links

- i. National Bee Unit (NBU) Bee Base Advisory leaflets
<http://www.nationalbeeunit.com/index.cfm?pageid=167>
- ii. British Beekeepers Association Asian Hornet Page
<https://www.bbka.org.uk/Listing/Category/asian-hornet-vespa-velutina>
- iii. Asian Hornet Watch App
https://play.google.com/store/apps/details?id=uk.ac.ceh.hornets&hl=en_GB
- iv. Gov.uk Pages
<https://www.gov.uk/government/news/new-app-to-report-asian-hornet-sightings>
- v. Non-Native Species Secretariat Website
<http://www.nonnativespecies.org/home/index.cfm>
- vi. Non-Native Species Secretariat Risks Associated with Asian Hornets
<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=643>
- vii. WCBKA Website
<https://wcbka.org.uk/asian-hornet-action-team/>

6. Appendices

- [Appendix 1 – Identification Posters and Photos](#)
- [Appendix 2 - Approximate Geographical Monitoring Cover](#)
- [Appendix 3 – How to set up an open Bait Station](#)
- [Appendix 4 – Information on Wick Bait Stations](#)
- [Appendix 5 – Information on Traps](#)
- [Appendix 6 – Blank](#)
- [Appendix 7 – Further Information](#)

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Asian Hornet Monitoring Plan 2020

Appendix 1 – Identification Posters and Photos

Best quality photos and a copy of the poster is available from your nearest AHAT member as shown in [Section 4](#).



ASIAN HORNETS ARE KILLING OUR BEES!

ASIAN HORNETS HAVE RECENTLY INVADED THE UK, INCLUDING SEVERAL IN CORNWALL. SINCE 2016, THEY POSE A SERIOUS RISK TO BIODIVERSITY AND OUR ECONOMY.

WHAT YOU CAN DO

They are a serious problem at our native pollinating insects, especially honey bees. They capture flying insects like all their teeth and use the insects as food for their larvae that they eat.

WHERE YOU ARE LIKELY TO SEE ONE

Asian hornets are found in a wide range of habitats, from urban areas to rural areas. They are most likely to be found in areas with a lot of flowers, especially those that are in bloom in the summer. They can be found in a wide range of habitats, from urban areas to rural areas.

RECOGNISING AN ASIAN HORNET

Asian hornets are large, black and yellow wasps. They have a distinctive yellow and black pattern on their abdomen. They have a very long, curved mandible (jaws) that they use to capture and kill their prey. They also have a very long, thin proboscis (tongue) that they use to drink nectar from flowers.

WHAT YOU CAN DO

Asian hornets are a serious problem at our native pollinating insects, especially honey bees. They capture flying insects like all their teeth and use the insects as food for their larvae that they eat.

WHERE YOU ARE LIKELY TO SEE ONE

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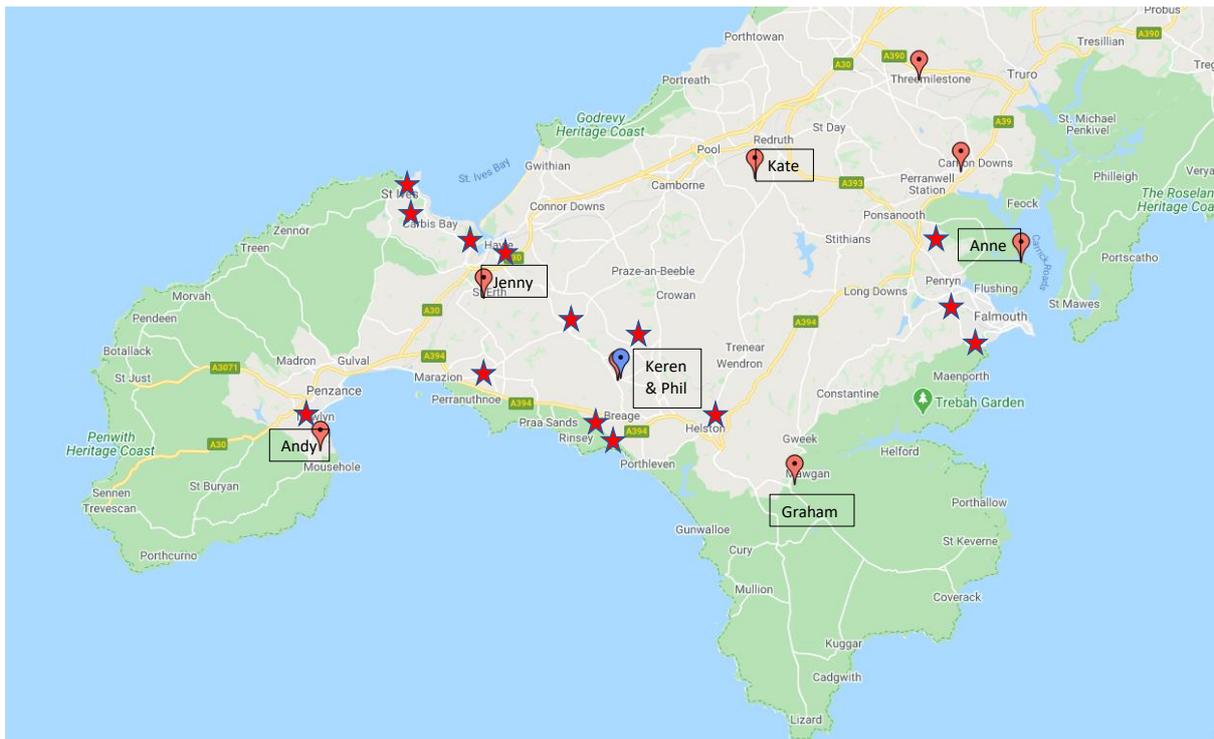
www.westcornwallbeekeepers.org.uk

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Asian Hornet Monitoring Plan 2020

Appendix 2 - Approximate Geographical Distribution of Monitoring

★ On the map below indicates approximate location of monitoring (as at 11 Aug 2020).



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Asian Hornet Monitoring Plan 2020

Appendix 3 – How to set up an open Bait Station

You will need:

- a yellow bucket or upcycled margarine tub
- a shallow dish such as those under a flowerpot, the heavier the better but a plastic one would do
- a stone or brick to prevent the set up being blown over and some smaller stones and paper towel to give the hornets access – they do not like getting their feet wet.

The inverted bucket raises the bait off the ground to a height that it appears Asian Hornets are happy to go down to and there is some evidence that the yellow colour acts as an attractant.

Place the inverted bucket in a sunny spot where it can be viewed easily, place the shallow dish on top of the inverted bucket, place the stone or brick to prevent the bucket and, if using a plastic one, the tray does not get blown about in the wind. Place the paper and smaller stones in the dish to give the Asian Hornets somewhere to stand and then top the dish up with your bait.

You could use two dishes on the bucket, one with liquid bait and one with solid bait.

If using solid bait remember cats and dogs might show an interest and at night you could pop the dish and contents under the bucket and place the stone back on top to prevent rodents etc from having a nibble during the night.

Solid bait such as fish / prawns etc will need changing every few days. You could make up a batch of bait and freeze portion sizes to make recharging your bait station easy.



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Asian Hornet Monitoring Plan 2020

Appendix 4 – Information on Wick Bait Stations

Wick bait stations for use with homemade or commercially available liquid bait comprise of:

- a jar such as an empty honey or jam jar
- a piece of tube about 100mm long (hosepipe)
- a paper or cloth wick
- liquid bait

A hole has to be drilled in the lid of the jar through which passes the short piece of tube (hosepipe). The wick is threaded through the tube projecting above by approximately 50mm. The bottom of the wick needs to reach the bottom of the jar.

Bait is used to fill the jar to about three quarters full and the lid is screwed in place.

The charged wick bait station needs to be located off the ground (this could be on a bucket) in a sunny area where it can be viewed regularly and easily. Bait will need to be recharged as and when needed.



Only make your own if you are confident and it is safe to do so. If you need help or if you need someone to make a wick bait station for you please contact your nearest AHAT member. We have a small supply of ready-made wick bait stations which have been kindly made by one of the AHAT.

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Asian Hornet Monitoring Plan 2020

Appendix 5 – Information on Traps

Please only use traps if you can check them at least twice a day and release bycatch.

The National Bee Unit have produced information regarding making your own Asian Hornet traps. The BBKA have put this information on their [web page and a video](#) can be viewed there.

Commercially available Asian Hornet traps such as the [Veta trap available from Thornes](#) at around £6.00 each.

If you are confident to make your own trap you will need:

- A 2 litre plastic drinks bottle with a large neck
- Some plastic coated wire or galvanised wire
- A 100mm square off cut of mesh such as varroa floor mesh (not the woven type) (WCBKA has a small supply – just ask your nearest AHAT team member)
- A 150mm square of corex or similar (ditto above)
- A piece of stiff cardboard
- Sharp knife and scissors
- Something to melt small holes in the bottle wall
- Something to cut the mesh with
- A pair of pliers
- Stapler/ pop riveter and rivets
- A fine marker pen

Solid or liquid bait can be used when using traps.



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Asian Hornet Monitoring Plan 2020

Appendix 6 – Intentionally Left Blank

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Appendix 7 - Further Information

Why should you be concerned about Asian Hornets?

This insect is native to SE Asia but was accidentally brought into France in 2004. It is now endemic there, has become a major hazard for beekeepers, and has altered the biodiversity where it is present. It is now present in the Channel Islands, and there have been many sightings in mainland England over the past 4 years.

Asian hornets are a particular threat for beekeepers since they predate honeybee colonies, capturing the bees to feed their larvae. They are capable of wiping out complete colonies. The hornets make very large nests high in trees (making them difficult to detect) and in the autumn produce hundreds of queens that hibernate and become a huge threat the following spring. You can read more about the species and their life cycle in numerous sources: there is an article in BBKA News And you can see a BBC short film about the threat of Asian Hornets on YouTube (including gruesome film of them capturing and decapitating honey bees outside a hive): <https://www.youtube.com/watch?v=QzeDskBHl8U>

How great is the threat in Cornwall?

Fortunately, there have only been two sightings of Asian Hornets in Cornwall to date, in 2018, and their nests were successfully eradicated by the National Bee Unit. However there have been many sightings all along the south coast of England over the last four years, as can be seen by the map on the BBKA website (see <https://www.bbka.org.uk/asian-hornet-incursion-map>). It is therefore very likely that there will be further incursions into Cornwall, and so we all need to be vigilant and well informed.

When and where might I see Asian Hornets?

When a queen comes out of hibernation around March, she constructs a small 'primary' nest of papier mâché, in which she raises her brood. These early nests are typically in sheltered locations, such as a garden shed. They can be mistaken for wasps' nests. In spring and early summer, the Asian Hornet may be seen on flowers collecting nectar. Later in the year a larger 'secondary' nest is established (up to 90cm in diameter), typically high up in trees. From July onwards the Asian Hornets may also be seen capturing bees and other insects in flight. Whilst Asian Hornets do have a sting, they are not aggressive to humans, unless their nests are approached.

What can I do about the threat?

WCBKA has an Asian Hornet Action Team (AHAT) that is linked to the regional and national AHATs. We have members of the team spread across the whole of our geographical area, who are co-ordinating activities in their patch. You can see who is the representative for your location on the map on the WCBKA website. We have devised an action plan for West Cornwall, and this identifies a number of things you can do to help in preparing for any future incursions into the County.

Asian Hornet Monitoring Plan 2020

- Learn to recognise an Asian Hornet. They are very distinctive insects, quite different from European Hornets. They are very black, have a wide orange band on the fourth segment of the abdomen, and have legs that look like they've been dipped in yellow paint.



- Spread the word. Tell your friends about Asian Hornets and how to recognise them! We have an A4 poster that you can put up in your window, on public notice boards, or on telegraph poles! You can print it out from this file, or by contacting any of the AHAT team.



- Monitor for Asian Hornets
You can set up your own monitoring station – this can be either open or a wick bait station. Place it in a location where you can regularly watch it, such as outside your kitchen window. Open bait stations comprise of an upturned yellow bucket, a dish – weighted by a stone to prevent movement by wind, some cloth or paper towel and some bait (liquid or solids). Wick bait stations comprise of a weighted jar such as a honey jar or jam jar, a lid with a hole and a wick.

If using liquid bait, wick bait stations are preferred because they would reduce evaporation of liquid bait. However, a greater flume of vapour might be generated from open bait stations which might entice more AH activity.

- Make or purchase a trap
Please only use traps if you can diligently monitor and release bycatch at least twice a day.

What to do if you see an Asian Hornet

If you have a smart phone, download a free app called 'Asian Hornet Watch' from the Apple and Android app stores. This has photographs and information to help identify the Asian Hornet, and a facility to report a possible sighting. You can also email a report of a sighting to alernnonnative@ceh.ac.uk, but you will need evidence, such as a photograph.

Reports will be quickly reviewed and if a sighting is confirmed, the government's well-established protocol for eradicating the species will kick into action.

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Asian Hornet Monitoring Plan 2020

If you are able to assist the AHAT representative in your area by setting up a monitoring station or bait trap, please get in touch with us. Together we can minimise the risk to Cornwall from Asian Hornets!