

West Cornwall Beekeepers' Association

ASIAN HORNET Information leaflet

Remember:

- In the spring, from as early as March, the Asian Hornet queens will be emerging from hibernation and will be feeding on nectar rich flowers not on honeybees.
- In the early season workers are small and are unlikely to be seen in the apiary preferring to hunt at flowering vegetation rather than tackling guard bees.
- You are unlikely to see an Asian Hornet in an apiary until July/August, by which time a secondary nest will have become established nearby (< 1 km).
- It is therefore important to keep an eye out for potential sightings on flowering plants in gardens and parks etc. in the early spring and summer as this is where they are most likely to be seen.
- Early **positive** sightings are important to prevent the Asian Hornet becoming established here.
- It is essential to remember NOT to approach a nest or the site of a suspected nest
- Information on using traps and bait stations is available on BeeBase <u>https://www.nationalbeeunit.com/diseases-and-pests/asian-hornet/</u> and elsewhere.
- If any member wishes to become a verifier for the association AH Action Team, please contact Phil Green phil@kgbee.co.uk in the first instance.
- It is important to recognize that the Asian Hornet is a threat to ALL insects, especially pollinators, not just to honey bees.



Asian Hornet –'yellow legged hornet' Vespa velutina nigrithorax (Smaller; workers approx. 20mm long (up to 25mm); queens up to 30mm long)



European Hornet (native) Vespa crabro (Larger; workers typically 25mm long; queens 25-35mm long)

What to do if you think you have seen an Asian Hornet...

- Before anyone investigates your sighting, you must provide evidence either a photograph or a specimen (live captured or dead Asian Hornet, but take no risks).
- We strongly recommend downloading the **Asian Hornet app** using the following QR code to help with species identification and easy reporting of a sighting.





For apple phones, use this QR code.

For and roid phones, use this $\ensuremath{\mathsf{QR}}$ code.

- An identification sheet and more information about the hornet and monitoring for it may be found on our website <u>www.wcbka.org.uk</u>.
- Positive sightings <u>with evidence</u> can also be made in an email to <u>alertnonnative@ceh.ac.uk</u>

- You may find it useful to keep a laminated identification picture under a hive roof in your apiary for ease of reference, as well as your apiary location, or in your kit box.
- Asian Hornets can be captured in nets or traps or stunned by swotting with a racket, and frozen for 24 hours if still alive. Only use 'non-kill' traps if you are able to inspect them at least once a day as you risk killing a lot of harmless useful pollinators (do not use 'kill' traps, i.e. ones that drown insects caught, due to their risk to our native wildlife).
- Remember that at present it is illegal to release a captured Asian hornet

Monthly tips

March/April

Look up into trees for old Asian Hornet nests before leaf-bud burst after which foliage will make seeing them more difficult.

Queens rarely, if at all, hawk in front of hives, therefore early in the season you are more likely to see an Asian Hornet elsewhere than in your apiary. Queens feed on tree sap and floral nectar in spring when they come out of hibernation, keen to replenish energy reserves used up over the winter. It is well worth keeping an eye on spring flowers frequented by our native pollinators in gardens, parks etc. to check whether this non-native invader is amongst them.

Similarly, the first cohort of workers (raised by the queen on her own) produced early in the season (e.g. May/June) are smaller than workers later in summer and are also unlikely to hawk in front of a hive at this time of year

Look at flowers in your garden, parks etc, and put out monitoring traps using a sweet bait of fruit juice and beer. Don't put out traps if you are unable to check them at least once daily and release the bycatch.

Consider Spring queen trapping, but only if indicated by previous sightings of Asian hornets in the area.

May/June

Workers produced early in the season are smaller than workers later in the summer (because they are reared by the queen). They are also less likely to hawk in front of a hive, but are more likely to visit flowers for nectar or to pounce on other pollinating insects.

Look at flowers in your garden and put out bait stations or monitoring traps using a sweet bait of fruit juice and beer, and/or a protein bait (such as one or two defrosted prawns). **Don't put out traps if you are unable to check them at least once daily and release the bycatch.**



Asian Hornet queen constructing a primary nest, typically seen in a garden shed or under eaves. Note similarity to a wasp nest!

June

Asian Hornets are likely to be feeding larvae, so switch to include protein rich sources amongst their prey from June onwards, but workers are unlikely to be hawking in front of hives at first.

Look at flowers in your garden and put out bait stations or monitoring traps. You can use e.g. a fish-based bait, but sweet baits still work as workers still like sugar-based food. (Ideally put out two, one with sweet bait and one with protein). **Don't put out traps if you are unable to check them at least once daily and release the bycatch.**

July

Large worker Asian Hornets appear from late July/August and it is from now on that beekeepers may see them hawking in an apiary. **Be vigilant** – make sure you have an identification guide to hand in your apiary, a means of photographing or capturing any suspects (child's fishing nets are ideal), or swatting it with a racquet. A camera and a pot of some kind to put the suspect into are useful. Away from the nest, the hornets are no more aggressive than bees.

Monitoring bait stations or traps are best only placed in apiaries when hornet are suspected to be hunting there. Otherwise, for general monitoring, bait stations or traps are best placed near but outside apiaries to avoid unwittingly drawing them to apiaries. From July/August onwards, you can use a protein e.g. fish bait, but can also use sweet bait. **Don't put out traps if you are unable to check them at least once daily and release the bycatch.**

Examples of wick open bait stations



Suitable 'selective' monitoring traps include



Gard'Apis

Jabeprode



Veto-pharma Vesps Catch Select

August

Are you sure you know what an Asian Hornet looks like? See comparison photographs.

As for July, put monitoring bait stations or traps near but away from your apiary with either a protein or sweet bait. **Don't put out traps if you are unable to check them at least once daily and release the bycatch.**

September

Large workers will still be actively foraging for protein and carbohydrates, but September is also the time when new queens may begin to emerge from a nest (although this can stretch as late as October/November). New queens will remain in the nest for the first few days, while nourished by nestmates, but will soon go on mating flights and then forage for themselves, building up fat reserves before the winter. Males will be noticeable outside the nest before, as these typically emerge from the nest 1-2 weeks before new queens emerge. Mated queens overwinter and the aim of the current eradication phase of the National Bee Unit's policy is to destroy Asian Hornet nests before the winter in preparation for establishing new nests the following year. This would enable them to become established in this country. In 2023, we saw a huge increase in Asian Hornet incursions into the UK, with 72 nests found in 56 locations, including two in Plymouth. Genetic analysis on a few hornets found in 2024 confirmed that some mated queens overwintered in the UK.

Positive sightings of Asian Hornets are often made by beekeepers in apiaries. Please be extra vigilant and watch out for potential sightings around the hive.

Put bait stations or traps near your apiary with a sweet bait containing fruit and beer. Don't put out traps if you are unable to check them at least once daily and release the bycatch.

It may be possible to see a secondary nest, typically high in a tree canopy, but they may be lower down in a hedge etc. Report it but do NOT approach one.

October / November

Those nests that did not generate queens in September are likely to do so in October/November. The urgency to destroy Asian Hornet nests before the new queens disperse to hibernate over the winter is all the more urgent.

There is also the chance of catching queens, trying to build up fat reserves before hibernation by feeding on floral nectar or other sources of carbohydrates. Please be extra vigilant and watch out for potential sightings around the hive but also around nectar-rich flowers and fallen fruit.

Put traps near your apiary with a sweet bait containing fruit and beer. **Don't put out** traps if you are unable to check them at least once daily and release the bycatch.

December-March

When out walking, look up into tree canopies where you might see an old hornet nest which was not visible during the summer. Be also aware that Asian hornets can nest anywhere, including amongst brambles, in soil banks, in garden stores or even under drain covers.



Secondary nest



Suitable Baits/Attractants

Suterra (Trappit) is very effective but can be expensive; other home-made recipes are effective (even if slightly less so) and more economical for general monitoring.

Home made bait recipes

- 1. Dissolve 1 kg sugar in 2 litres water, and add 2 heaped desert spoons of cheap bramble jelly. Just before use, add half a teaspoon of (in date) baker's yeast, making it froth up, becoming smelly and attractive.
- 2. A weak sugar solution, a ¹/₄ to ¹/₂ sugar to water. Add 1-2 tablespoons of 'dirty honey'. Bring to the boil, cool and sprinkle with yeast. Leave to ferment, perhaps in a demijohn with airlock.

Further information is available on BeeBase, and further (essential!) reading:

- Sarah Bunker (2024) The Yellow-Legged Asian Hornet, a Handbook, 2nd edition
- Alan Baxter (2024) Fit2Fight, A Practical Guide for Beekeepers in Managing the Asian Hornet

Rev 8/24

If anyone, whether a member of West Cornwall Beekeepers' Association or a member of the public wishes to be part of the country wide British Beekeepers' Association monitoring scheme for the Asian Hornet, using an open bait station or selective monitoring trap, please contact Phil Green, <u>phil@kgbee.co.uk</u> giving their post code and mobile number.