Monitoring for the Presence of Yellow Legged Asian Hornet Vespa Velutina (YLH)

A Surrey Beekeepers Association Intiative

Summer 2025

Introduction

Although the YLH does not yet have an established population in the UK, there have been many credible sightings in England, with a small number of these in neighbouring counties.

To avoid spending significant time in attending or following-up every sighting, the National Bee Unit (NBU) will now only attend sightings which can be confirmed by, for example, a photograph or a killed sample. It is therefore vital that we, as bee keepers, all recognise the YLH, are active in monitoring for the YLH, and are fully conversant with what we need to do in the event that we do find a hornet.

A simple tool that is available to all of us is to monitor with a home-made wick bait station.

The Bait Station



The bait station encourages insects to land and to feed therefore giving the observer the opportunity to monitor the insects and to take pictures, when deemed necessary. The station does not trap insects and so there is no insect by-catch.

YLHs do not recruit other YLHs to visit an identified food source, as honey bees do with their waggle dance. However, a hornet will repeatedly return to the same food source once they have discovered one. Consequently, with a little patience, you can wait for a hornet to return if you fail to photograph it on a previous feeding sortie.

Wasp bait is familiar to many of us already this year but can be purchased at garden stores, GBKA purchases a small stock each spring and some people make their own from syrups, yeasts and jams. Brand names such as Trappit, AF and various others have been used.

Bait Station Construction

The equipment required to make a bait station is very straight forward: a jam jar with its lid, a disposable kitchen cloth, and the bait liquid.

Step 1 - Prepare the Jar and Lid

Make a hole in the lid of the jar. The hole should be approximately 1cm diameter.

To make the hole, use a pointed item such as a countersink/chamfer drill bit, position it in the middle of the lid and tap it using a hammer to create the hole. The shape of the hole is not important. To protect your fingers, flatten any sharp metal protrusion using the hammer.

If you lack the tools or skills, there are some pre-assembled jars at the apiary, which are free to take away.







Step 2 - Prepare the Kitchen Cloth

Take a piece of kitchen cloth and roll it into a tube, insert it into the hole in the lid, fold in half if you need to, to make it snug in the hole so it doesn't fall through.

The cloth should extend to the bottom of the glass jar so that it sits in the bait liquid, it should also extend above the lid by 2 to 3cm.

You may find that the insect nibble the cloth and shorten it. If you allow a longer length inside the jar then you can pull more cloth upwards through the lid instead of having to replace the cloth.







Step 3 – Add the Bait Liquid to the Bait Station

Fill the jar with wasp bait to a depth of about 3cm. Shake the jar so the cloth is fully wet with

the bait liquid. Leave the bait station where you can easily see it from a window. Consider putting it under cover as rain will dilute the bait. Within a few hours to a few days later you will have visitors.

Step 4 – Monitor the Visitors

There is no need to continually watch the bait station. Instead, monitor the visitors to the bait station for a few minutes, then leave and return from time to time. If you see a YLH at the station you will find that it will feed, fly off, and return regularly. These return flights depend on the location of the nest, with a maximum flight of around 10 minutes likely.

You can approach close to the bait station without risk as the insects are very focused on feeding but do not poke and try to avoid standing in their line of flight.

The bait will deplete after a few hours. To conserve the bait, put the station in position only when you are able to monitor it, at other times it can be taken into a shed or garage where it is inaccessible to the insects.

GBKA Monitoring Plan

As summer approaches, the YLH larvae are better fed and are able to forage up to 1km from their nests, 1.4 km has been recorded in Jersey in late August. Therefore, in future years we would like to aim to have bait stations up and running for every square km of the Surrey countryside for at least 1 week in the summer. This will be coordinated with the other Surrey associations but has proved valuable along the Dover coast

We need as many people as possible to become familiar with monitoring, even if it is only occasional, this year. Please do respond to me if you are willing to participate, rebecca@projectfourwinds.com with the following information:

- 1. The location that you can monitor a bait station, preferably a what3words ref or a post code
- 2. Your agreement to use your email address in our recording app
- 3. Your mobile number for a WhatsApp group that I will setup to cover monitoring questions etc.

The volunteer monitors do not need to be beekeepers. Please share this information with family and friends who you think might like to be involved too.

Any sightings of the YLH must be reported in the Asian Hornet Watch App which can be downloaded to your phone, or alternatively to alertnonnative@ceh.ac.uk. Pictures and locations are essential information for the sighting to be considered credible.