BIOSECURITY RISK TO THE SCILLY ISLES

The yellow legged Asian hornet.

BEE VIGILANT!

- The yellow legged Asian hornet is present in many parts of Europe.
- It is a pest of honey bees, is a threat to agriculture and is a public health risk.
- A single hornet queen could establish a nest producing many more queens.
- Hornets are known to have moved between countries through shipping.
- Hornet queens can travel on ships, in luggage and in consignments of fruit and vegetables.
- If established in the Isles of Scilly its eradication could be impossible.

Background

The yellow legged Asian hornet (YLH) (Vespa velutina nigrithorax) was first found in France in 2004, most probably brought in a shipment of pottery from Asia arriving at the port of Bordeaux. It has since spread rapidly and is now found in many parts of Europe, especially France, Spain, Portugal, the Channel Islands and northern Italy. The YLH has been found in various places on the UK mainland since 2016, and seems to now be established in Kent and East Sussex. In 2023 72 nests were found in 56 locations across the UK ranging from Kent to Cornwall. Already in 2025 a number of embryo nests and many other confirmed sightings have occurred on mainland UK.

An individual mated YLH queen can establish a nest which by late summer may have produced up to 6,000 individuals, including males and up to 350 new queens, each of which can overwinter and produce nests the following year. Nests can be almost anywhere; high in trees, in shrubs and bushes, and in holes in the ground. This variety of locations means that nests are more likely to be disturbed by people than those of common wasps or European hornets.

Worker YLH feed on many types of insects including a wide range of bees, wasps, flies, beetles, butterflies, moths and spiders. One YLH colony alone can consume 11 kg of pollinators in a season. YLH often prey on honey bees, reducing hive populations and preventing the bees from foraging, thus harming honey production.

In late summer, YLH workers are attracted to fruit, and may damage fruit crops such as grapes and soft fruit as well as posing a risk to those picking the fruit.

The risk of getting stung for anyone disturbing a nest or inadvertently coming within 5 m of a nest is extremely high. YLH are thus a public health problem, as due to the location of nests, they may easily be accidentally disturbed, and workers may then sting humans, causing aphylactic shock and fatalities. In France last year a group of walkers were attacked by YLH, and one walker died.

The cost of YLH nest destruction in France has been estimat4ed as €23 million between 2006 and 2015. It is estimated that that yearly costs will increase as the species keeps spreading, and could reach €11.9 million in France, €9.0 million in Italy and €8.6 million in the UK if the species fills its current climatically suitable distribution. These costs include nest destruction only, and do not include the financial impact on agriculture, tourism, or beekeepers.

The Risk to Scilly

Islands are especially vulnerable to invasive plants and animals. The establishment of YLH on the Scilly Isles could be extremely damaging at every level. In particular the rich and diverse insect population of the Scilly Isles could be at risk.

The arrival of the YLH on Scilly could prove disastrous, and unfortunately shipping is the most likely means of entry. Individual hornets could travel in crevices in the structure of ships, but could also hide in consignments of fruit and vegetables, in passengers' luggage, or simply land on the deck. There is also a high possibility of introduction through, for example, soil associated with imported plants, cut flowers, fruit, garden items (furniture, plant pots), freight containers, in vehicles, or in / on untreated timber. In 2018, 2023 and 2024, YLH were found in the UK on the decks of cross channel ferries, and many others may have arrived unseen. YLH have also been found in the UK in fruit and vegetable warehouses, and on imported cauliflowers and shallots sold to the public. One hornet was found in Ireland in the port of Dublin and was destroyed in 2021.

The risk to people if established on Scilly would be heightened by the islands' limited medical provision. Calling an ambulance is not as easy as on the mainland, and may require casualties being ferried to the mainland for attention.

As part of a developing biosecurity strategy for Scilly, it is vital that all operators of shipping, large and small, are aware of the risks of YLH arriving in shipping – especially on ships travelling directly from areas with established YLH populations such as Jersey, Guernsey, and mainland Europe. The island of Jersey has already recorded many more queens and embryo nests in 2025 than in previous years, so this threat is growing.

Evidence shows us that YLH are extremely successful at establishing themselves in new places, and once established their control and removal (usually by nest destruction) pose a huge logistical and financial challenge to the authorities.

Resources

There are many resources available from the UK Non-Native Species Secretariat, the UK National Bee Unit and the British Beekeepers Association, including identification charts (attached) which enable YLH to be distinguished from other similar looking insects, and an app on which possible sightings can be reported:

https://www.nonnativespecies.org/non-native-species/information-portal/view/3826

https://risc.brc.ac.uk/alert.php?species=asian hornet

https://www.nationalbeeunit.com/diseases-and-pests/asian-hornet

https://www.bbka.org.uk/asian-hornet-teams

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