



# Let's talk Asian (yellow legged) Hornet – *Vespa velutina*

A briefing for ABKA members

# ASIAN HORNET

Report any suspected sighting on  
[bit.ly/asianhornetreport](https://bit.ly/asianhornetreport)



## INVASIVE SPECIES

**A single nest of Asian  
Hornets can eat 12kg of  
native pollinators  
a year**

**Body** – velvety  
black/dark brown

**Head** – black  
with an orange  
/yellow face

**Abdomen** - black/brown  
segments bordered with  
a yellow band on the  
4<sup>th</sup> segment

**2.5-3cm** (twice the  
size of a wasp)

**Legs** - brown upper  
segment with yellow  
lower segments



Designed by @mielucie for @londonbeekeepersassociation

A non-native species,  
posing a serious  
threat to our native  
pollinators



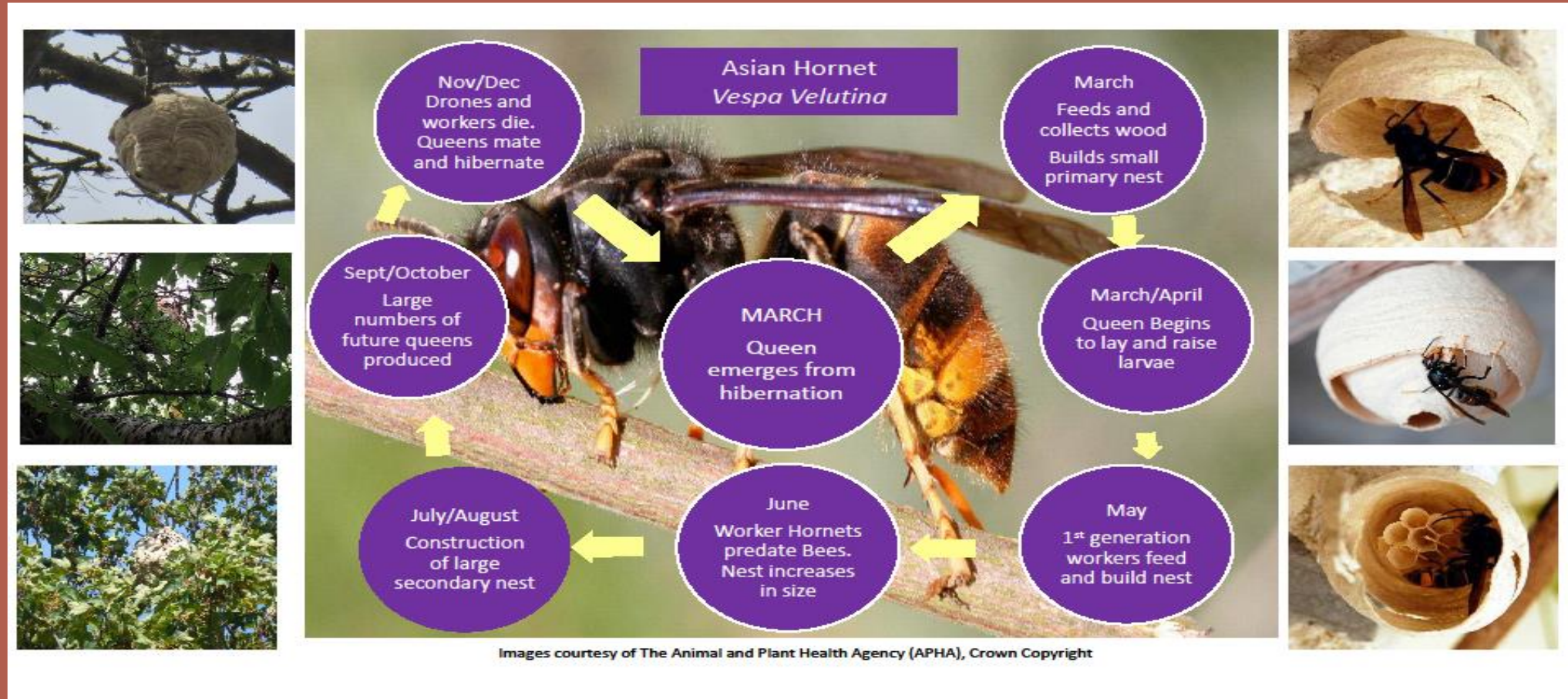
## Not to be confused with our native, European Hornet – *Vespa crabro*

- Note the bright, abdominal markings
- Yellow head and face
- Legs brown at the ends
- Yellow antennae
- Queens up to 3.5cm/workers up to 3cm long
- May be active at night





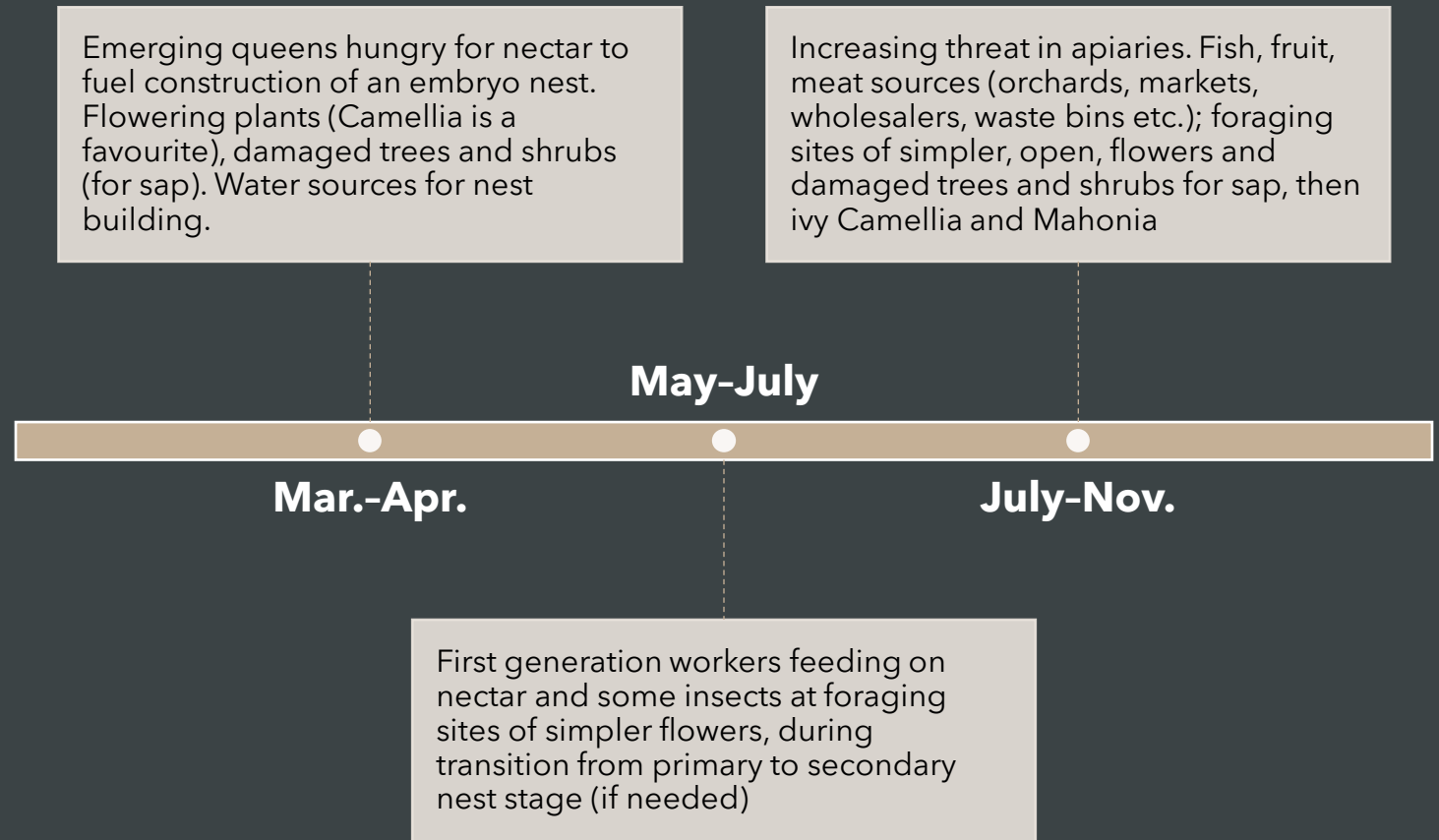
# When might I see an Asian Hornet?



Images courtesy of The Animal and Plant Health Agency (APHA), Crown Copyright

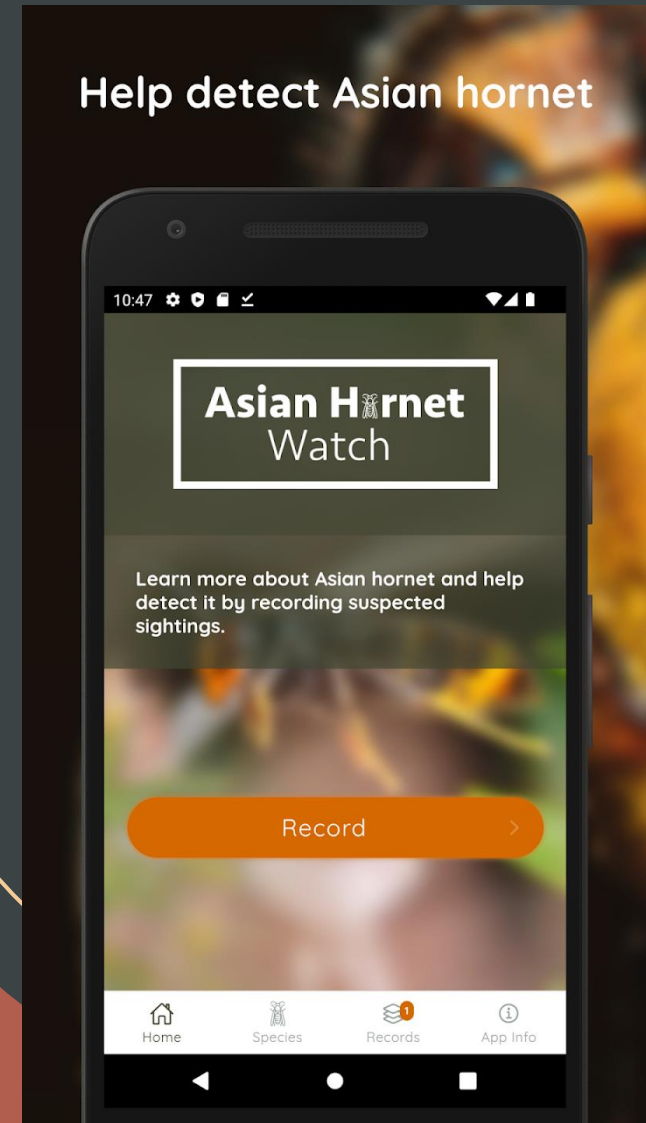
# Where might I see an Asian Hornet?

*NB an opportunistic “hitch hiker” by land, sea and air*



# What should I do if I see an Asian Hornet?

- Take a photo (if safe to do so)
- Take note of where you saw it (use What3Words for ease)
- Report it via the Asian Hornet Watch App (a location feature is included)
- Or via email at:  
[alertnonnative@ceh.ac.uk](mailto:alertnonnative@ceh.ac.uk)



# History of the Asian Hornet in Europe

- Native to Asia it was confirmed for the first time in Lot-et-Garonne in the South-West of France in 2004.
- Thought to have been imported in a consignment of pottery from China, it quickly established and spread to many regions of France.
- By December 2022, Asian hornet was established in Spain, Belgium, Netherlands, Portugal, Italy, Switzerland, Germany and Jersey.
- It has altered the biodiversity in regions of France where it is present and can be a serious health risk to those who have allergies to hornet or wasp stings.

Photo credit: Angus Deucher





# Asian Hornet the UK experience

- The first Asian Hornet nest was discovered in the UK in 2016.
- In 2023 more nests were discovered in the UK (72) than in the previous six years combined!

**ASIAN HORNET NESTS 2016 - 2023**







## Impact of Asian Hornets

- A single nest can produce about 300 queens. Not all will survive, but enough to create a significant rate of species increase, over a wide area
- A single nest can eat 12kg of native pollinators – that's just heavier than an average passenger-car tyre or a small dog!
- Honey bee colonies at particular risk, as a substantial food source in one place. Hawking hornets affect the bees' willingness to forage, causing stress, impacting on current and future supplies of stores and rearing young. Hornets may enter a really weakened colony late in season to feast on honey, larvae, pupae and the remaining bees

# Some origins of AH in UK 2016 - 2022



In camping gear  
from a trip to France



In a supermarket  
distribution centre



In a crate of  
cauliflower from  
Lincolnshire



On the Poole to  
Cherbourg Ferry



On the grille of a  
new mini imported  
from mainland  
Europe



Blow-in across the  
Channel after a bad  
storm



Found near a port





## Asian Hornet nest stages

- **Embryo:** Built by a foundress queen, emerged from hibernation, to raise the first cohort of workers. She chooses a sheltered spot, usually less than 10-metres high
- She is solely responsible for nest construction, egg laying, foraging and nurturing young at this early stage and for some 50 days until the first adult workers emerge from their birth cells to assume all duties other than laying eggs
- Photo credit John De Carteret



# Asian Hornet nest stages

- **Primary:** The developing colony of workers increases the size of the embryo nest to accommodate more eggs and larvae. With more food provided by more foragers and more workers to keep the nest warm, the time span from egg to adult gets shorter
- The nest is built from various plant materials, mixed with saliva and water. It has a banded appearance, with thin lines of differing colour quite unlike the uniform grey of a wasp's nest
- If the embryo nest site allows sufficient space to grow, the primary nest can see the colony through the whole season, in France some 30% do so. Nests at ground level are especially at risk of accidental disturbance - with serious consequences
- Photo credit: John De Carteret





## Asian Hornet nest stages

**Secondary:** start small, then grow from mid-summer to September. This nest stage has an entrance on the side. Usually within 10m of the primary nest but can be further. Both nests can co-exist for a month or more.

More likely on natural structures (trees/bushes/hedges) than primary nests and often 10m high or more. Nests are not re-used from year to year, but nest sites can be, and several secondary nests have been found in close proximity, in France

Photo credit: John De Carteret



# Foraging distances from a nest

photo credits: John de Carteret

Primary: about 350 metres



Secondary: about 700 metres – but some long-range foragers can travel 5km





## Asian Hornet Quiz

- Which of these is an Asian Hornet?
- A at the top
- B at the bottom



How many  
Asian  
Hornets  
can you see  
here?





Which is the head of an Asian Hornet?

A: Top right?

B: Bottom right?





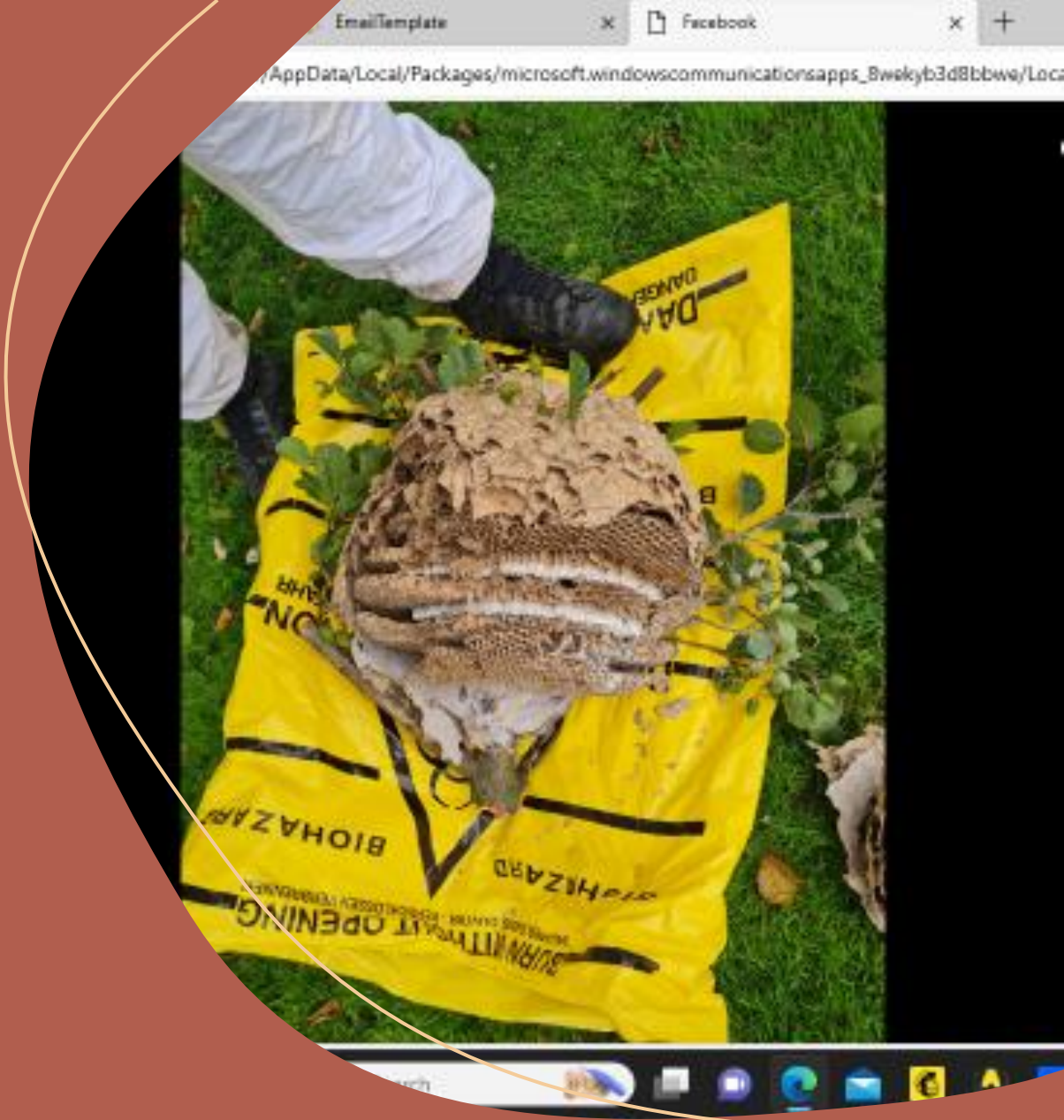
# Which of the following statements are true?

- AH workers can be found in apiaries in early spring: T/F
- AHs always have both a primary nest then a secondary nest: T/F
- AHs are most aggressive near their nest: T/F
- AH queens are slightly larger than queens of the EH: T/F
- If I find an AH in a trap it's ok to release it after taking a photo to report the sighting T/F
- Asian Hornet Watch app is the most reliable reporting tool: T/F
- AH nests are always at height, to avoid disturbance: T/F
- Beekeepers have spotted and reported all the AHs found in the UK to date: T/F
- Asian Hornets will fly at night in warm weather: T/F
- AH adults are carnivores: T/F
- The entrance to an AH secondary nest is on the side: T/F

# Closer to home: the Asian Hornet in Yorkshire

- 2018 Hull, Yorkshire: 9 September – a single dead hornet was found
- 2023 Hull, Yorkshire: 15 September – 2 nests destroyed
- 2023 Yarm, North Yorkshire: 25 September – nest destroyed

(picture credit: Dhonn Atkinson)



# Beverley BKA district

A large area comprising coastline,  
industry, docks, rural districts, and  
urban dwellings



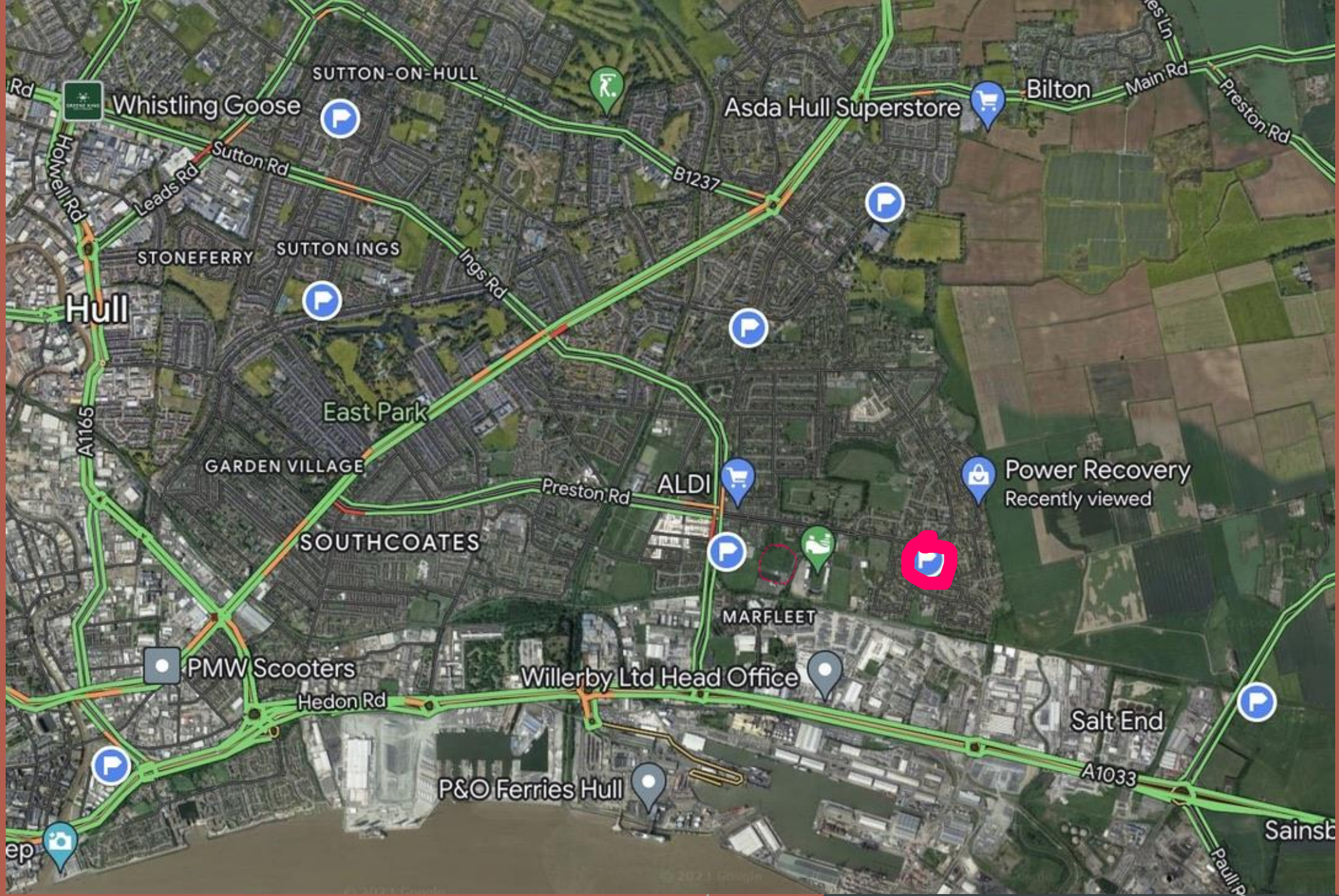


# Location of one nest

Postcode district HU9



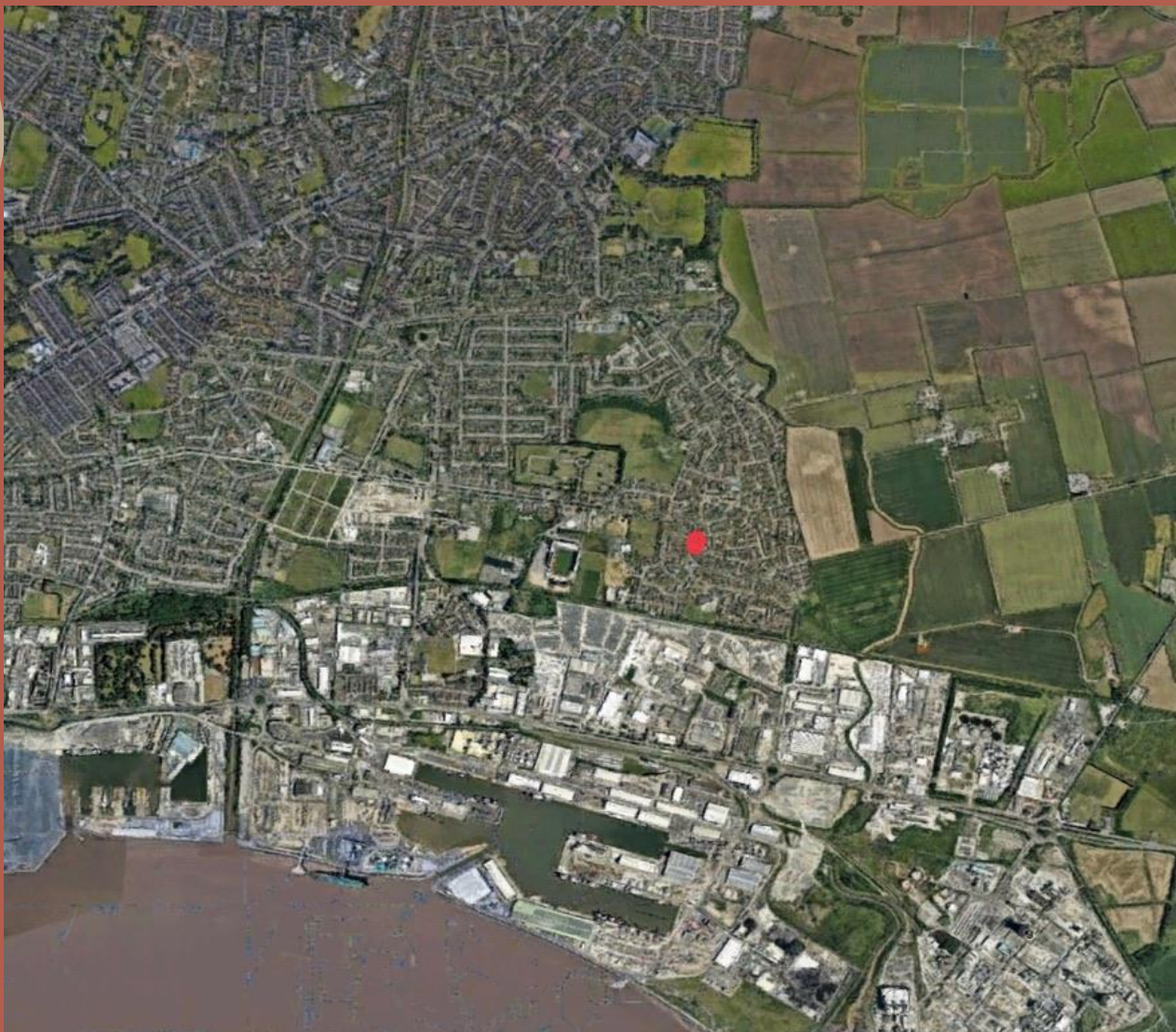












## Awareness of local issues

Easier access:

Urban and Rural

Light industry

Good for monitoring sites



Difficult access:

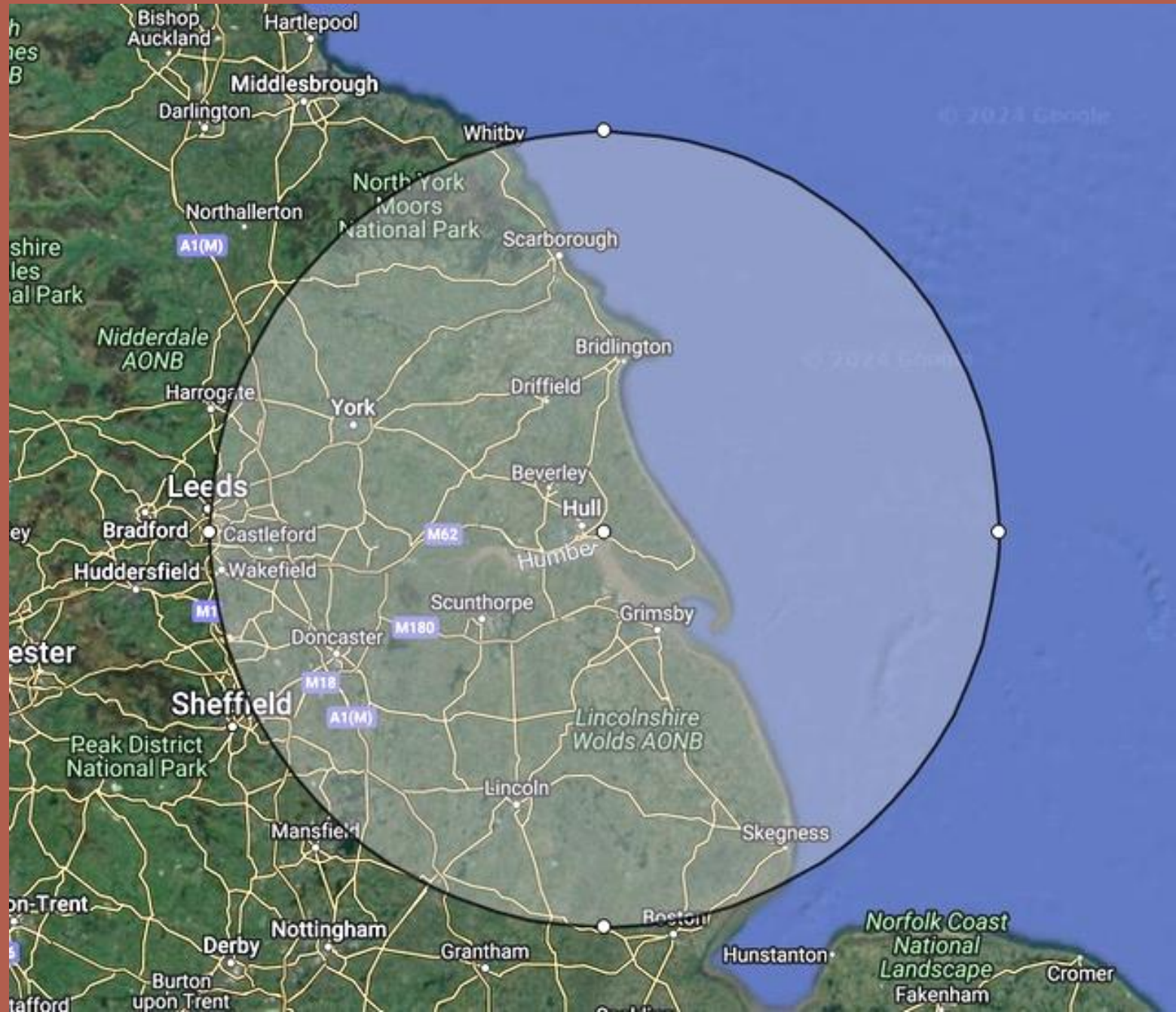
Heavy industry / Docks

Security issues



When colonies are established in an area AH queens can travel 80 km (50 miles) to find a nest site

[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjC0dqS0ZaEAXs7bsIHapQCXYQFnoECBEQAQ&url=https%3A%2F%2Fwww.nationalbeeunit.com%2Fassets%2FPDFs%2F3\\_Resourc es\\_for\\_beekeepers%2FFact\\_Sheets%2FFact\\_01\\_Asian\\_Hornet\\_Monitoring.pdf&usg=A OvVaw2w9w2x\\_EFKC7JL53\\_YX5Nw&opi=89 978449](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjC0dqS0ZaEAXs7bsIHapQCXYQFnoECBEQAQ&url=https%3A%2F%2Fwww.nationalbeeunit.com%2Fassets%2FPDFs%2F3_Resourc es_for_beekeepers%2FFact_Sheets%2FFact_01_Asian_Hornet_Monitoring.pdf&usg=A OvVaw2w9w2x_EFKC7JL53_YX5Nw&opi=89 978449)



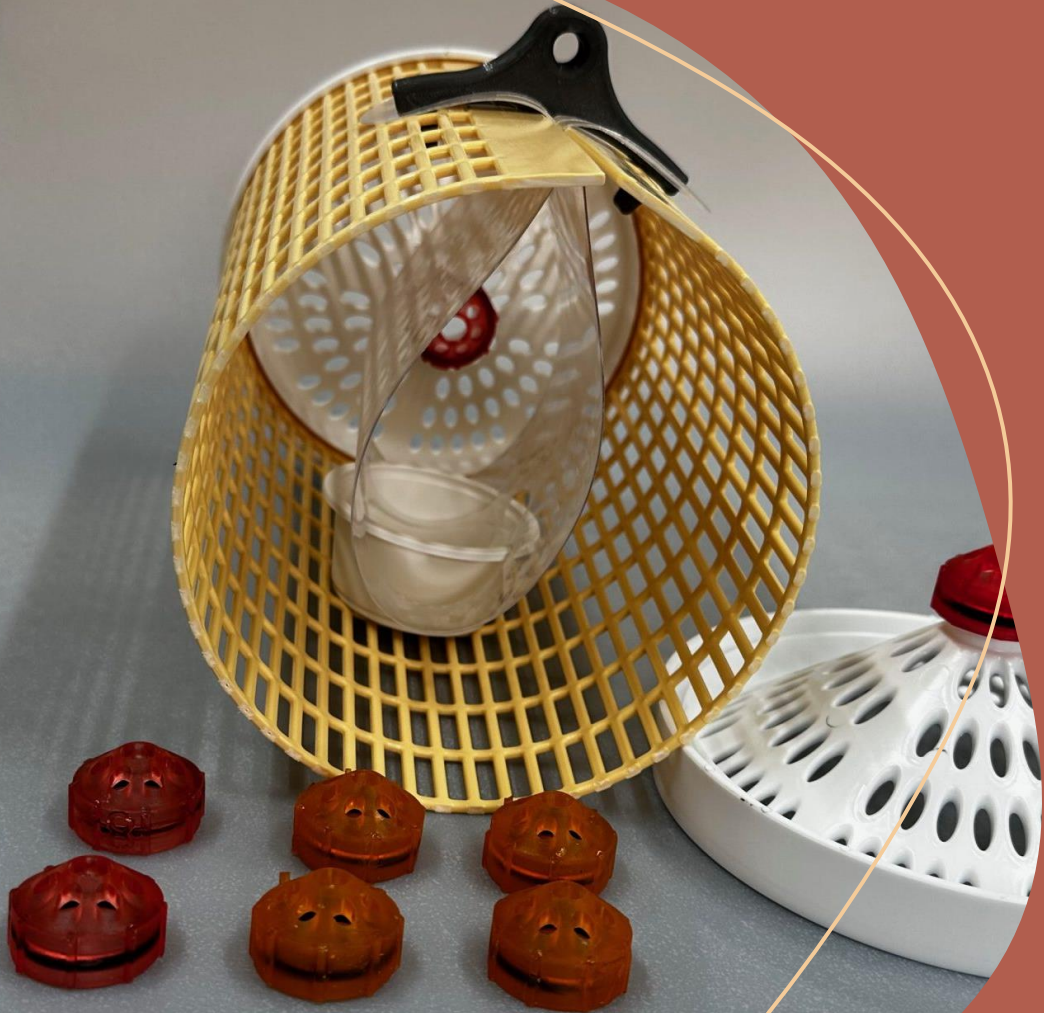
# The Hull Primary Nest





# Action needed in our area

- Spring monitoring (not in apiaries) from mid/late March (to trap any foundress queens emerging from hibernation and creating embryo nests). Various traps available but differ in ability to avoid by-catch of native insects
- Budget provision for AH expenditure - eg printing leaflets and handouts
- Beekeeper confidence in conducting health checks as Bee Inspectors involved with rising AH incursions



# Most important, to raise public awareness of the AH risk (this is our insurance policy)

- What to look for – more accuracy reduces time wasted
- How to report a sighting – photo/location/use the App!
- Distribute posters/leaflets/postcards (shops, garden centres, libraries, outdoor activity clubs, schools, workplaces etc)
- Mention in talks given to groups and “general conversation”
- Local press/social media



# Verifiers to help with tasks

- Some members of the public may need help/support to identify a sighting
- In the event of a credible AH sighting in the Airedale area, the Bee Unit will need to call on the local AHT to assist and support their work.
- This may involve negotiating permission to set up bait stations to attract hornets and helping to track them back to a nest that can be destroyed by others who are both qualified and equipped for the task
- Continued monitoring in the region of a nest (10km) post destruction and the following year
- Local knowledge is crucial
- BBKA insurance cover for work done in conjunction with Asian Hornet control is now applicable to all registered members (subject to terms and conditions - see the BBKA website members section)





### Asian Hornet Taskforce - Verifiers Map

Legend (AHT role): Beekeeper verifier:   
: 



# BBKA Internal Map of AHT Verifiers





# How to offer your support

- We will need many more volunteer verifiers to cover the Airedale area - to spread the word/check out any uncertain identification photos sent to AHW site/ set up monitoring traps when needed/ help NBU in the event of a credible sighting
- Contact ABKA Membership Secretary (Sam Kavannah: [membership@airedalebka.org.uk](mailto:membership@airedalebka.org.uk))
- or AHT Co-Ordinator (Linda Schofield: [gorluvaduck@gmail.co.uk](mailto:gorluvaduck@gmail.co.uk))
- Your details will be available to the local AH Co-Ordinator/s only, and will NOT be made public



# Some sources of further information

- [www.nonnativespecies.org](http://www.nonnativespecies.org)
- [British Beekeepers Association \(bbka.org.uk\)](http://bbka.org.uk) take the Asian Hornet Training Exercise
- [www.nationalbeeunit.com](http://www.nationalbeeunit.com)
- [www.somersetbeekeepers.org.uk](http://www.somersetbeekeepers.org.uk)
- [www.lbka.org.uk](http://www.lbka.org.uk)
- Facebook sites: Jersey Asian Hornet Group /Asian Hornet Action Team
- The Asian Hornet Handbook: Sarah Bunker
- The BBKA Asian Hornet Conference 2024

YouTube Link Livestream

<https://www.youtube.com/watch?v=dUMk2tzaw>

1E



Just in case you haven't already, do download the Asian Hornet Watch App now!

and as a beekeeper, please register with NBU to receive alerts about AH threats in your apiary area

Asian Hornet Watch - Android



Asian Hornet Watch - iPhone





A macro photograph of a bee, focusing on its head and thorax. The bee's head is dark brown with large, black, oval-shaped compound eyes. The thorax is a vibrant reddish-brown color and is covered in fine, white, hair-like structures. The legs are dark brown with yellowish-orange segments. The background is blurred, showing a wooden surface.

Thanks for  
watching!