Effects of removing Asian hornets

Every Asian hornet removed from the ecosystem is a benefit to wildlife.

It simplifies the management of the bait station and could also have some effect on the quantity of food going to the nest, which could have a drag effect on the nest's ability to produce more hornets by requiring a few extra days for the larvae to get to the required size to pupate. Any method that may have an effect on the speed of nest building and of disrupting food supply should be used alongside the main aim of track and destroy.

General Advice

- Never enter a large bramble patch without wearing a protective suit and always have someone watching you and the surrounding area for Asian hornet activity. You may be a matter of a few feet away from a nest without triggering an attack until the nest is vibrated. By which time the Asian hornets are on you before you realise they are there.
- Nests tend to be positioned so that the entrance faces east or north east away from prevailing winds and able to receive the early sun and warmth. If you think the nest is in a tree, then remember to look for one that is positioned to catch the early sun, for example the easterly side.
- Asian hornets tend to return to a bait station at low level and it's important to try and spot the direction they come back from to compare it with their flight line away from the bait station.
- Asian hornets use gaps in hedges and buildings to reduce their travel time so it's important to place traps or bait stations in line with these gaps in order to attract them to the bait station quickly.
- Do not use too much paint marker as an Asian hornet covered in too much marker paint is unlikely to prove a good one to track. Having said that, a totally fluorescent yellow Asian hornet can be easy to follow!
- Ensure any Asian hornet nets that you catch them in are kept clean and free of attractant. The same applies to bait stations and traps. Asian hornets covered in attractant will never give accurate times as they will go off and clean themselves first before flying back to the nest.
- Look out for Asian hornets defecating when they lift off from a bait station as it indicates that they will be flying to the nest without stopping to clean themselves.
- Later on in the season when the weather isn unreliable, monitoring traps without their lids work well providing they are kept clean and a means of a ladder (such as a dry twig) is positioned inside the trap to help the Asian hornets fly back out.
- When the weather is dull and the Asian hornets are not being attracted to the bait station, try putting some attractant into a foil tray and gently warming it on a gas burner or with a blow torch. The vapours will lift and spread far further than a static bait station. Open bait stations should only have sufficient attractant to cover the base of the dish and a couple of small stones or pebbles placed in it so that the Asian hornets have something to stand on and feed. Avoid standing too close to a bait station or moving about too much as this will confuse the Asian hornets and may stop them from coming in to feed, or at the very least will slow down the speed with which they arrive, land, feed and leave.
- If at any stage you get an Asian hornet flying off in a different direction from your bait station, record it and report it. It may be an indication of another nest in a different direction and will need following up on.

- Make a note of (and perhaps map) any trees that are damaged/diseased such as those that are oozing sap. Butterflies, wasps and Asian hornets love them so you have a permanent bait station that can be monitored.
- Make sure that traps go up after all nest removals to ensure no other activity. If a nest seems like a later stage primary nest, the queen may already have left and started a secondary nest close by.
- Where you have a good number of Asian hornets visiting a bait station, remove all other Asian hornets except for the ones you are tracking. Do not kill them at the bait station site as their alert pheromones will alarm and attract other Asian hornets putting you at risk and disrupting the feeding process of the Asian hornets. Only three or four Asian hornets at most are needed to track.

Which bait station works best?

From the experience of the Jersey volunteers, the wick bait stations have proven to be the best and offer greater benefits:

- Weather proof
- Larger reservoir of attractant
- Easily home-made
- Cloth wick with attractant keeps wafting scent into the air
- Easy to attract Asian hornets on the cloth wick
- **Do not have by-catch** (eg not killing other insects and pollinators).



Although it can take longer for the Asian hornets to feed off the cloth, it would be beneficial to glue a bottle top cap of liquid attractant to the lid of the wick jar so that the Asian hornets can feed from this much faster to speed up the tracking process.

Source: Permission kindly given by Government of Jersey to reproduce.

Open bait station showing attractant and pebbles for Asian hornets to stand on and feed

© Jenifer Tucker Creative Commons (CC BY-NC 2.0)



Did you know?

In the Asian hornet's natural range, the eastern honey bee (*Apis cerana*) guard bees use wing shimmering in response to the presence of Asian honets. This is a very generalised response to disturbance and has variously been suggested to be signal or a strategy for disruption of visual patterns, similar to the behaviour of other honey bees (*Apis cerana nuluensis* and *Apis dorsata*). However, our western honey bees (*Apis mellifera*) exhibit no such behaviour that can act as a deterrant.