



States of Guernsey
Agriculture, Countryside and
Land Management Services

Asian Hornet Strategy



3-year review: 2019-21 Summary

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Introduction

Asian hornet (*Vespa velutina*) is believed to have been introduced to Europe in pottery delivered from China to southern France in 2004. It readily colonised and has rapidly spread across France and into Spain, Portugal, Belgium and Italy. The first *V. velutina* were detected in Guernsey in 2017. This highly invasive non-native species (INNS) poses a risk to public health and local wildlife.

Due to its habit of preying on native invertebrates *V. velutina* has a negative impact on biodiversity and ecosystems. Where it nests in urban areas it is a potential threat to human activities due to its aggressive behaviours. There are also economic costs in combatting its spread but the costs of doing nothing are far greater.

Were *V. velutina* allowed to establish, it has been estimated the total annual nest destruction costs would be £9.8M in France and £7.1M in the United Kingdom. Scaled to Guernsey, the cost locally is expected to be in the region of £201,500 per annum. Therefore, it has been agreed that effort should be placed preventing *V. velutina* from establishing in Guernsey.

In 2019 Agriculture, Countryside and Land Management Services (ACLMS) implemented The Asian Hornet Strategy (2019-21) with the overall aim to prevent the establishment of *V. velutina* in Guernsey. The main objective was to control and reduce the population of hornets by catching queens and destroying primary and secondary nests, and by doing so reduce the risk to the public.

A detailed review of the three-year Strategy has been compiled which evaluates performance and outcomes against the key objectives. Specific aspects were evaluated such as the 'Spring Queening' initiative, raising public awareness, and locating and destroying secondary nests in a safe and timely manner. This document provides a summary of the full review, which can be accessed from gov.gg/asianhornet.

How have we done?

Objective 1: *Protect public health*

There has been only one confirmed report of anyone getting stung (a member of the public) and they did not require medical treatment.

Objective 2: *Control and reduce the population of Asian hornets in Guernsey*

The number of established secondary nests has not exceeded 10 per annum. In the absence of evidence to indicate that queens have hibernated on Guernsey, it is likely that the *V. velutina* is being effectively eradicated or held at sub-optimal levels on an annual basis.

Objective 3: *Collect and analyse data and communicate with relevant others*

A comprehensive database enabled detailed analysis of hornet sightings and nest locations. Effective working relationships have been established with all key stakeholders.

How did we do it?

Spring Queening

Baited non-lethal traps have been deployed throughout the island in the spring each year to trap *V.velutina* queens the aim of which is to reduce the initiation of nest building. They were placed roughly every 500m and monitored by trained volunteers for a period of 10 weeks every spring. Between 2019 and 2021, 20 queens have been captured in this programme.

Track Don't Trample

The detection of *V.velutina* nests relies on reports received from the public. The Track Don't Trample campaign is aimed at encouraging people to photograph, observe, and report potential sightings. Following a positive sighting, the Asian Hornet Team track worker hornets to locate nests. 844 reports have been received since 2019, of which 87 (10%) were verified positive and led to the successful detection of a total of eight nests.

Nest destruction - figures and costs

The smaller primary nests are made by the queen hornet and usually found in spring inside sheds and outbuildings. To date, three primaries have been found and destroyed.

Larger secondary nests are made by worker hornets and can be 40cm in diameter. These are typically found in broad leaved trees, 5m or more from the ground. In order to prevent establishment of *V.velutina*, it is essential to locate and destroy these nests before they produce new queens in the autumn.

During 2019-21 a total of 5 secondary nests were destroyed, the combined cost of removing these nests was £790 (tree surgeons, cherry picker hire).

Population trends

Spring incursions of *V.velutina* queens into the Channel Islands from France have become the expected norm. The trends shown in Figure 1 strongly suggests that the integrated management controls that Guernsey has adopted have prevented this pest from establishing.

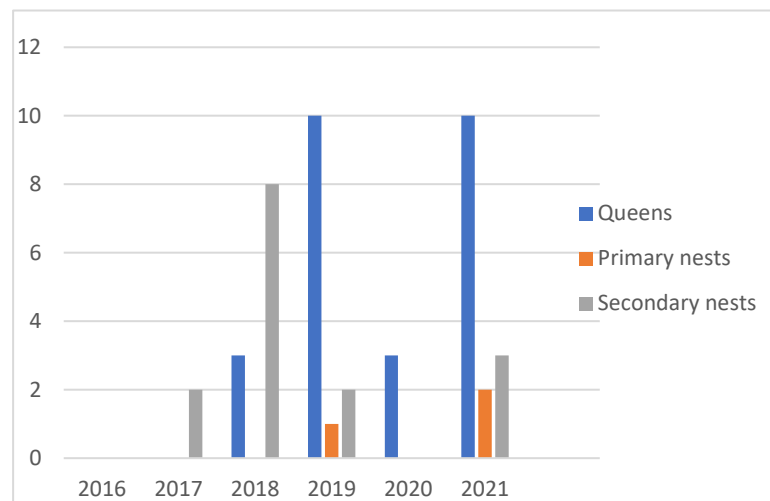


Figure 1: Graph showing *V.velutina* numbers in Guernsey between 2019-21.

Key points

- we will continue to be faced with an ever-present threat of these hornets.
- annual data indicate we are working in an early stage of invasion, with low nest densities compared to other regions. This favours eradication, albeit annually.
- controlling populations of *V.velutina* is very unlikely once it has become established.
- public education and raising awareness are fundamental to detect the presence of hornets.
- engaging the public in citizen science projects such as spring queening has been shown to be a valuable resource.
- early detections of hornets are crucial to minimise their impacts, and this relies on efficient reporting systems to verify sightings.
- provision of resources (technical expertise, manpower and equipment) is essential for proactive surveillance and management.

Recommendations

- R1 To maintain a long-term management programme aimed at preventing *V.velutina* from establishing in Guernsey. Annual eradication is the desired outcome and where this is not achievable, the number of secondary nests should not exceed five per annum.
- R2 To build in a continual review process which responds to 'triggers' such as public health or environmental risks. An operational review covers modifications or minor changes, a strategic review is required for a fundamental change of approach.
- R3 To improve the methodology of spring trapping to minimize the effects on entomofauna. Continually assessing trap design and finding more selective baits will optimise trapping and reduce by-catch.
- R4 To maintain public engagement in control programmes and continue to share information and knowledge to the wider community.
- R5 To ensure consistency and continuity of *V.velutina* control throughout the Bailiwick.