

Murder hornets

March 26, 2021

In news : Local authorities in the Pacific Northwest of the United States and Canada's province of British Columbia are waging an aggressive campaign to eradicate colonies of "murder hornets"

What are the concerns and threats?

- Experts in British Columbia alone have reported at least seven nests or sightings of the aggressive insects, which are native to Japan, the Korean Peninsula and other parts of mainland Asia since 2019
- The cases of hornets have been reported in Washington State, including incidents in which experts monitoring the sites were attacked and reported stings far more painful than from other insects.
- These hornets have been blamed for attacks on several hives of honeybees in which entire colonies were wiped out
- Commercial beekeepers have expressed concern for the well-being of their hives if Asian hornets become established in North America.
- A concerted attack by several dozen workers of murder hornets can destroy an entire colony of 25,000-30,000 *Apis mellifera* in a matter of a few hours
- Thus, the establishment of Asian hornets in British Columbia would represent a threat to the beekeeping industry
- Murder hornets are blamed for the deaths of around 50 people a year in Asia.
- Another problem is that these hornets do not have any natural predators and the local flora and fauna have not developed effective defensive mechanisms as these species have not previously been exposed to this threat.

Measures taken

Various have been taken to protect honeybee hives, such as traps and reducing the size of the hive entrance, although none of these methods seems to be entirely effective or satisfactory.

How did they enter North America?

No one knows how the hornets may have arrived in the Pacific Northwest, although the introduction and establishment of a congener species in France was traced to a cargo container shipment of terracotta flower pots from China

Stacks of earthenware pots with gaps between the pots appear to have served as wintering chambers for Asian hornets, while similar exports from Asia are sold in garden centers in the US and Canada

Media reports and social media posts have referred to Asian giant hornets as “murder hornets” in certain instances. While this species is known to kill as many as 50 people a year in Japan, their dubious nickname comes from their aggressive and deadly behavior towards honey bees, rather than humans. In fact, Asian giant hornets can attack and destroy entire honey bee hives in a matter of hours.

About Murder hornets (Asian giant hornets)

- Asian hornets are the largest hornet in the world
- It is native to East Asia, South Asia, Mainland Southeast Asia, parts of the Russian Far East.
- Scientific name: *Vespa mandarinia*
- An adult hornet can grow to more than 4.5 centimeters (1.7 inches) long and have a stinger that is another 6 millimeters (0.2 inches) long.
- **Appearance:** They are large, and have noticeably large orange heads and black eyes. Orange color can range from light, almost yellow, to dark orange

- **Habitat:** These hornets are usually found in forests and mountain areas and create nests by enlarging existing burrows or occupying decayed trees.
- **Food:** The hornet feeds primarily on other insects, such as caterpillars, as well as tree sap and honey.
- These hornets are aggressive predators and will hunt medium- to large-sized insects such as other hornet species, large beetles and mantises. However, they're especially known for feeding on honey bees and have the capability to quickly decimate local populations that they come into contact with.
- Their stinger is longer and more dangerous than that of most other stinging insects, containing neurotoxins and capable of puncturing a beekeeping suit.