### **ARE MURDER HORNETS HERE?** Not likely in Illinois

# ILLINOIS Extension

## **Asian Giant Hornet (AGH)**



#### **DO WE HAVE THEM IN ILLINOIS?**

**No.** Right now, AGHs have only been observed in very small numbers in parts of the Pacific Northwest. Agencies in this region are taking aggressive action to eradicate this early introduction and prevent spread out of the region.

### INTRODUCTION

There has been a recent surge of interest in an invasive insect pest, the **Asian Giant Hornet** (AGH), or *Vespa mandarinia*. AGHs are the largest hornets in the world and are identifiable by their size and distinct bright yellow or orange heads. While well known for their large stingers and painful sting, they are not generally aggressive to humans. As with any stinging insects, however, those with allergies should take caution. Native to Asia, AGHs have so far only been observed in small numbers in parts of Washington State and British Columbia, and it is **unlikely they will spread to Illinois** in the near future.

#### **HOW ARE THEY IDENTIFIED?**

AGHs bear many similarities to other wasps and hornets that live in Illinois. In Illinois, the most likely wasps to be confused with AGHs are **European hornets, bald faced hornets, paper wasps, yellow jackets, and cicada killers**. All of these wasps are commonly found in the US, are smaller, and have key differences in their appearance.

Without a side-by-side comparison, it can be difficult to use size as a criteria; however AGHs are up to **1.8 inches long — about the length of 2.5 pennies lined up**—much larger than these other wasps. European hornets look similar but are usually a maximum of only 1 inch long (about the size of a quarter).

While there is color variation in AGHs, they usually can be identified by their bright orange or yellow head. AGHs build large paper 'football'-shaped nests high in trees, similar to those built by European and bald faced hornets. Paper wasp and yellow jacket nests look very different.





YELLOW JACKET

(VESPULA SPP)



(POLISTES FUSCATUS)



EUROPEAN HORNET

(VESPA CRABRO)





HONEY BEE (APIS MELLIFERA)

#### ARE THEY REALLY MURDER HORNETS? DO THEY POSE A RISK TO HUMANS?

PAPER WASP

The popular press has dubbed AGHs as "murder hornets" due to their large size, highly predacious life history, and painful sting that has resulted in some human deaths. While AGH's can deliver a large volume of venom with a sting, the **venom itself does not appear to be more dangerous than that of other wasps**. Like most other wasps, they are not overly aggressive towards humans unless their nest is threatened or they are otherwise provoked. Those with confirmed or suspected insect sting allergies should, of course, take caution around these and other wasps and follow guidelines recommended by a medical provider.

One notable challenge with removal of AGH colonies is that their large size and long (~1/4 inch) stinger makes it more likely for them to **sting through thick clothing**, including bee suits. Like with other hornets, care should be taken to use appropriate personal protective equipment if removal of a wasp nest is undertaken.

#### SHOULD I REMOVE A WASP NEST?

AGHs have not been found in Illinois and are unlikely to occur in the near future. In regions where they have been detected, eradication efforts are underway. Other wasps that are likely to be observed in Illinois usually do not require removal unless they pose direct risks to humans, pets, or livestock.

Most wasps are not aggressive unless provoked and can be safely left alone. **Wasps are important insect predators that feed on nuisance and crop pests.** While mostly predacious, many wasps also perform some pollination when they collect nectar from flowers. If a wasp nest does need removed, take caution and consult with professional pest removal services, if necessary.

#### **RISKS FOR HONEY BEES**

Like all hornets, AGHs are highly predacious, mostly on other insects. AGHs are set apart from other hornets, however, due to their specialization in attacking and feeding on honey bee colonies. As a group, **AGHs can devastate a much larger bee colony** within the hour; these dramatic attacks on bees have increased their notoriety and influenced their 'murder hornet' moniker.

In their native range, the Asian honey bee (*Apis cerana*) has adaptations to deal with these predators, attacking destroying the hornet 'scouts' and preventing them from leading the entire hornet colony to the hive. The Western honey bee (*Apis mellifera*), originally native to Europe and now common throughout the world, lacks such adaptations. In areas where AGHs are being reported, **beekeepers are recommended to remain vigilant**. In Illinois, beekeepers often observe wasps, bees, and flies stealing food from open bee hives, but these are rarely a risk to the colony.

#### **SOURCE:**

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#### FOR MORE INFORMATION:

USDA New Pest Response @ https://cms.agr.wa.gov/ WSDAKentico/Documents/PP/PestProgram/ Vespa\_mandarinia\_NPRG\_10Feb2020-(002).pdf

#### PHOTOS:

Yellow jacket: by Pollinator CC by SA 3.0 <u>https://commons.wikimedia.org/wiki/</u> File:Vespula\_0078.JPG#/media/File:Vespula\_0078.JPG

Paper wasp: by D. Gordon E. Robertson CC by SA 3.0 <u>https://en.wikipedia.org/</u> wiki/Polistes\_fuscatus#/media/File:Northern\_Paper\_Wasp\_ (Polistes\_fuscatus), Cantley.jpg

European hornet: by Trancelius CC by SA 3.0 <u>https://commons.wikimedia.org/</u> wiki/Vespa\_crabro#/media/File:European\_hornet\_lateral\_view.jpg

Bald Faced Hornet: by A.C. Tatarinov CCA 2.5 Generic <u>https://</u> commons.wikimedia.org/wiki/File:Dolichovespula\_maculata\_fg01.jpg

Honey bee: by Parvinder S. Parmar CCA by 4 <u>https://commons.wikimedia.org/</u> wiki/File:Honey\_bee\_with\_pollen.jpg

Asian Giant Hornet: Washington State Department of Agriculture

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