



Stinging Insects: Cicada Killer Wasps



Adult cicada killer Jim Kalisch Department of Entomology University of Nebraska-Lincoln

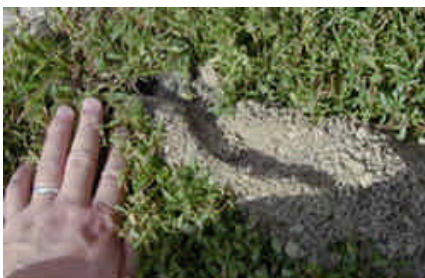
Distinguishing marks:

- large size
- black body with yellow mark across the thorax and yellow stripes across the abdomen

Distribution: North America east of the Rockies, especially in areas where annual cicadas are present

Habitat: disturbed areas, lawns, forest edges, city parks, sandy lots; prefer little or no vegetation

Life cycle: Cicada killers are solitary wasps. Males emerge from pupal cases in mid-July to early August, a few weeks before the females. The males tunnel out of the ground, leaving telltale holes, and select a territory that they actively defend. Females mate soon after emerging, and then begin digging burrows in the ground using their mandibles and legs. The burrows can be several feet deep with numerous branches. Once construction is complete, the female searches in trees and shrubs. Upon capturing a cicada, the female stings it injecting venom. Then, she carries the cicada back to the burrow, where she lays an egg on its living, but paralyzed body. Within two weeks, the egg hatches into a larva, eats the cicada, and develops into a pre-pupa, the stage at which it will spend the winter. Cicada killers are active in late summer, the same time that cicadas are present. By September, most adults have died.



Cicada killer nest
Zachary Huang, <http://cyberbee.msu.edu>

Common name: Cicada killer wasps

Scientific name: *Sphecius speciosus*

Also known as: giant cicada killer, sand hornet

Size: 1-1/8 to 1-5/8 inches long

Commonly confused with: European hornet



Cicada killer, Gerald J. Lenhard, Louisiana State University, www.insectimages.org

Damage: Although visually alarming, these wasps pose little threat. Females are not aggressive and rarely sting, unless excessively provoked. Males often display territorial behavior and will dive-bomb people's heads; however, they have no sting and pose no real threat. Cicada killers often nest in disturbed areas with sandy, open soils, such as lawns, golf courses, flowerbeds, volleyball courts and around swimming pools. A large population of wasps in one area can cause significant damage to lawns.

Benefits: Cicada killers control cicada populations, which may otherwise harm new growth on trees.

Management: Control is rarely needed, except when nests occur in undesirable locations. If control is needed, cultural methods may work best. Since these insects nest in disturbed areas with little or no vegetation, take steps to encourage the growth of dense lawns. Place extra mulch in your flowerbeds and around shrubs to cover sandy soil.

If necessary, apply an approved insecticidal powder to the nest entrance at night when the wasps are in their burrows. Be sure to dress appropriately. Wear eye protection, a long-sleeved shirt, trousers and boots, and secure your sleeves and pant legs. Establish an unobstructed escape route and be ready to move quickly away if any of the wasps fly towards you. If you require illumination, use a flashlight covered with red cellophane for light - wasps cannot see red. Treatment may need to be repeated several times if new wasps move into the area.

Sting: Reports on the sting vary from very mild to extremely painful. If you are stung, cooling the area with ice may be soothing.

Remember! Insect stings can elicit a life-threatening, allergic reaction in some individuals. Check with your physician to determine what symptoms require a visit to the emergency room. Never attempt any control measure if you have a known allergy to insect stings.



Adult cicada killer, Jerry A. Payne, USDA ARS,
www.insectimages.org

Further sources: O'Neill, K.M. 2001. *Solitary wasps: behavior and natural history*. Cornell University Press, Ithaca. 406 pp.

Ross, K.G. and R.W. Mathews. 1991. *The social biology of wasps*. Cornell University Press, Ithaca, New York

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