Garden Update
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The Cicada Killer Wasp

The size of the cicada killer wasp is alarming to many people, prompting phone calls and emails to Nebraska Extension Offices with questions of how best to eradicate them. The female, at 2 inches long and with three bright yellow stripes on her abdomen, is one of the largest insects in our landscape. The male is large too, though smaller than the female at 1-½ inches long, and is stinger-less. Both males and females are pollinators, moving pollen as they feed on flower nectar.

The cicada killer wasp gets its name from, as you would guess, killing cicadas. The female cicada killer wasp has a stinger that she uses to inject venom into cicadas, not killing the cicadas but instead paralyzing them. She then flies the cicada to her nesting area, dragging it underground. The nest she digs herself, locating it 12-15 inches below ground in loose dry soil. The female wasp, knowing the gender of her eggs, will see to it that male eggs each get one cicada as a food source, while the female eggs, because they develop into larger insects than their male counterparts, will get two cicadas each. A hatching larva will bore into the paralyzed cicada, feeding on the cicada's internal organs. Larvae will feed over a ten-day period, leaving behind empty cicada exoskeletons when finished. In readiness for winter, larvae spin a cocoon around themselves for winter protection. Pupation and emergence as adults take place in the spring.
Female cicada killer wasps are mild mannered, often going about their business and paying little attention to human movement in the area. They will defend themselves if treated roughly so leaving them to conduct their activities unhampered is a good idea. The male cicada killer wasp is territorial and because he is stinger-less, will scare away people and would-be predators by buzzing around them. This is all for show, however, because males cannot sting.

The dry open-soil areas beneath large shrubs or under roof eaves, around rock retaining walls, and sometimes in vegetable gardens are places where cicada killer wasps like to dig their tunnels. Tunnel openings are ½ inch across, slightly mounded, and made up of loose soil. Once the female has completed her egg-laying and cicada-provisioning, she will close the opening to the tunnel, leaving eggs to hatch and larvae to develop on their own.

Treatment to manage cicada killer wasps is often not necessary and broadcast insecticide applications in the area where they burrow are not effective. Changing the environment where wasps prefer to nest is an effective means of ensuring they re-locate—wetting down the area with water, filling empty spaces with plants, and mulching with a 2–4-inch layer of wood chips.

A common predator of cicada killer wasp larvae are the immatures of the velvet ant. This ant is not an ant at all, but a wasp, sporting velvety rust-colored hair on its body. While colorful to look at, the velvet ant has a venomous sting that is one of the most painful of all insect stings/bites. Velvet ants should never be picked up for closer examination.

More information about the cicada killer wasp may be found here: Cicada Killer Wasp | Nebraska Extension in Lancaster County (unl.edu) .