

Garden Update

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The interactions of the cicada, the cicada killer wasp, and the velvet ant provide a fascinating look into insect relationships.

The Cicada

As dusk fills with the sound of male cicadas wooing females, so too does the concern for the damage cicadas can do to plants in the landscape. Often mistaken for locusts, the annual cicada is harmless, contributing to the food web as a food source for insects like the cicada killer wasp.

By the time the annual cicada appears in early summer, the insect is already older than one would think, having spent 4-6 years of its life underground as a larva, feeding on the roots of trees, shrubs, and perennials. This feeding causes miniscule damage to plants and does not warrant treatment.

The word “annual” in annual cicada refers to the overlap of generations, with new adults emerging every year. Nymphs appear aboveground, just before they molt into adults. The empty exoskeletons left from molting are found on trees, shrubs, fence posts, and buildings. The high-pitched rhythmic hum made by the males is heard during the daytime into the early evening hours, usually July through August.

The Cicada Killer Wasp

This large ground-nesting wasp is intimidating because of its size but is quite mild-mannered. It will defend itself when encountering threats but given the option, will pay little attention to humans. Females are larger than the males, needing the extra bulk to carry cicadas from trees to their underground nests. The cicada, once stung by the wasp, remains alive but paralyzed as it is pulled underground to the wasp’s burrow where the female wasp lays her eggs on the captured cicada. Hatching larvae then bore into the cicada to feed. The feeding itself is highly organized, with the wasp larvae instinctively feeding on the cicada’s least important organs first so cicadas remain alive, concluding with feeding of the most important organs—and contributing to the cicada’s death—as the wasp larvae mature for pupation.

Cicada killer wasps are ground nesters, digging in places where soil is dry and there is little to no precipitation or irrigation. Managing their numbers or their nests is not necessary because of the wasp’s mild-mannered nature, even in instances where the nest is located close to foot traffic.

The Velvet Ant

The velvet ant is covered in fuzzy rust-colored hairs (called setae) with black patterns of setae found on the thorax and abdomen. “Ant” is misleading because the velvet ant is not an ant at all but a wasp. The females are wingless and resemble an ant while the males are winged. Knowing they are wasps is helpful, if for no other reason than people should have a healthy respect for their sting, which is considered the most painful of all insect stings. The species found in this region of the Midwest is sometimes known as the cow killer, because of the mistaken notion that cows are killed from the sting. Velvet ant adults feed on nectar. Female velvet ants lay a single egg at the entrance of ground-nesting insects like cicada killer wasps and bumble bees, where their larvae feed on the ground-nester larvae. Care **MUST** be taken where velvet ants are seen going into the burrow of a cicada killer wasp. While the ant is quite beautiful and invites a friendly touch from the curious, the stings are painful, and adults and children should be instructed to observe but never touch.