

Vinegaroon

BY TERRY B. JOHNSON • ILLUSTRATION BY ZACKERY ZDINAK

Scientific Name: *Mastigoproctus giganteus*. From the Greek *mastigo*, meaning whip; *proctus*, referring to the rear end; and *giganteus*, referring to the size. Also known as giant whiptail scorpion, whipscorpion, or whiptail, and often spelled “vinegaroon.”

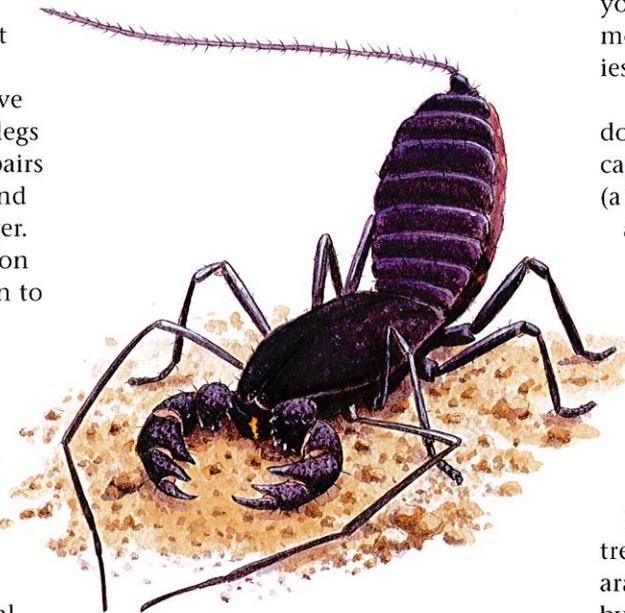
Description: A little creepy looking. Length 1.5 to 3.5 inches for body alone, but up to 6 inches counting legs and tail. Typical arachnid body: hard exoskeleton, with distinct abdomen attached at broad waist to head-thorax (cephalothorax). Mouthparts modified into massive pincers (pedipalps). First pair of legs long; second, third, and fourth pairs not as long as first. Tail skinny and long, but not tipped with a stinger. Eight eyes: two in middle, three on each side of head. Reddish-brown to blackish overall.

Distribution: The 100 or so species of whipscorpions occur in India, Japan, and New Guinea, as well as the southern United States (from Southeast to Southwest) and Mexico. In Arizona, the vinegaroon occurs from the southeastern corner to the central and southwestern part of the State.

Habitat: Desert and lowland areas rangewide. Also grasslands, scrub, and pine or pine-oak forests. In Arizona: desert to grasslands at low to middle elevations. Not as common in mountains. Around houses, likely to show up in cellars, garages, and outbuildings, and other dark, humid settings.

Biology: The vinegaroon is an arachnid, not an insect. It is thus a relative of spiders, true scorpions, and ticks. It is pretty well known in terms of natural history, largely because it is often

misperceived as a pest (instead of a pest controller) and inquiring pest controller minds have studied it widely. Most people don't realize that whiptails are not true scorpions, and have no ability to sting. They can, however, pinch rather painfully, and emit a defensive mist from scent glands at the base of the tail. The puff of spray is irritating, since it is about 85 percent acetic acid (= vinegar,



hence the name “vinegaroon”), with a smaller dose of caprylic acid that helps the spray permeate the usual target's exoskeleton. The mist is not harmful to most people, but those who are allergic to acetic acid should be careful.

Vinegaroons are nocturnal carnivores, emerging from crevices, burrows, and beneath rocks and leaf litter to prowl for crickets, bugs, spiders, and other delicacies. Their vision is weak; they rely on their modified first pair of legs to help feel their way about, and sensing vibrations to alert them

to the presence of prey, or predators. The whiplike tail also serves as a feeler, probing about to help sense the nature of a dark environment.

Female vinegaroons are easy to distinguish from males, at least when their colorless (transparent) offspring are riding on their backs! Actually, females tend to have wider bodies and smaller pincers than males. Females carry their 20-35 eggs in a sac, and the emerging young just stay aboard. The youngsters jump ship after the first molt, which is about when their bodies begin taking on color.

Vinegaroons make nice pets—they don't bark or scratch the furniture. In captivity, they need a little humidity (a layer of peat moss helps with this), and a good supply of insects and other “bugs.” They are frequently on pet price lists. One Arizona company lists the live animal at \$15, and a vinegaroon t-shirt at the same price.

Status: Not a Species of Special Concern in Arizona. No federal status. Arizona population size and trends unknown. Whiptails, other arachnids, and insects are not covered by Title 17, the wildlife statutes for the state, so the Arizona Game and Fish Department has no jurisdiction over them.

Management Needs: None. Healthy habitat is all the management these fascinating creatures need. Well, that and perhaps a little more human appreciation of their value in cricket control, and more drivers who will go out of their way to miss them while they amble across roads. 🦗

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