

## Scorpions



Arizona bark scorpion. Photo courtesy of Alex Wild, alexanderwild.com

Scorpions are arachnids and like all arachnids they have eight legs, although it looks like ten, and a body divided into two regions, the cephalothorax (the head plus thorax) and the abdomen. In scorpions, the last six segments of the abdomen make up the tail and the last segment is modified into a sting. In addition to the eight legs, scorpions have large crab claw-like pedipalps, and large paired, comb-like structures (pectines) that are part of their mouthparts. On the ventral (bottom) surface of their body, they have four pairs of appendage-like book lungs that they use to breathe. The book lungs must be kept moist in order to exchange gases (oxygen and carbon dioxide) between the air and their body fluids.

The scorpion exoskeleton is different from that of similar groups. Something about it causes scorpions to fluoresce bright blue to green under ultraviolet light. So in the desert its easy to find them at night with a black light.

Adult scorpions generally live two to three years. They do not begin producing young until they are nearly a year old. Females produce between 20 and 30 live young at a time. Young scorpions are carried on the female's back for the first 5-15 days of life.

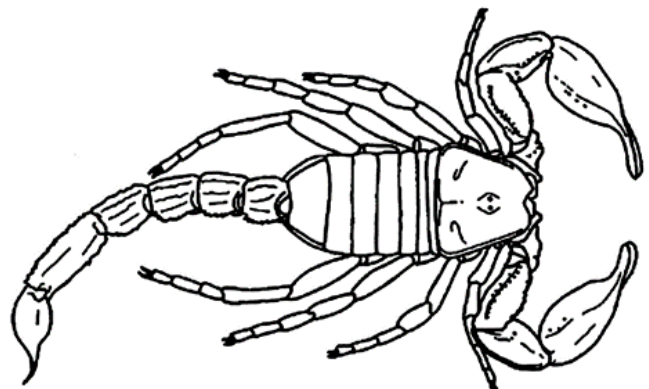
Scorpions are nocturnal predators. During the day they hide under stones, logs or boards, or in cracks and holes in the ground. They prey on ground-dwelling insects and other small animals.

Scorpions will occasionally wander into homes, particularly in new housing developments. New housing developments often encroach upon the scorpions' normal habitat and as a result these animals will blunder into homes searching for prey and shelter. Within several years, scorpions will no longer live in these areas because of the lack of suitable habitat and prey.

The majority of California scorpion species average about 2 inches long as adults, however, some exotic species can be as long as 6 inches. Scorpions occur throughout the milder parts of California, including the Sierra foothills and the coastal mountains. Most of the species of scorpions in California pose no more threat to humans than do ordinary bees and wasps.

One can generally estimate the threat imposed by a scorpion by assessing the size of a scorpion's claws relative to its body size. Species with long slender claws are generally active predators and immobilize their prey with a potent sting (photo to the left). The sting of these species is painful to humans, and, in one species found along the southern Colorado River, can be dangerous.

Scorpions with thick heavy claws (drawing below) are generally sit-and-wait predators. They can sting but tend to use their claws to immobilize prey. The sting is generally harmless to humans in these species. This is the commonest group of scorpions in California.



California foothills scorpion.