

Name _____

Date _____

Reproductive Strategies

Animal Profile:

SAND SCORPION (*Paruroctonus mesaensis*)

Sinister beasts are underfoot when the sun goes down in the dunes of the Mojave Desert. The sand scorpion, which spends its days in a burrow underground, emerges to sting, kill and munch its prey. Shine an ultraviolet light into the night, and the ground will come alive with yellow-green glowing scorpions, out devouring beetles, crickets, other scorpions, and even cannibalizing their own kind. If it's the right time of year, glowing scorpions might also be dancing the night away.

Yep, that's right, sand scorpions dance during courtship. Males grasp the females by their pinchers, or pedipalps, and move them around in circles. After dancing for a while, the male deposits a packet of sperm on a stick or other surface. Then, he moves the female until she is on top of the sperm. She takes in the sperm and fertilizes her eggs internally. The dance ends here, and the male usually skitters off to find more mates. But every now and then, the female rears back, stings the male, and eats him for her next meal!

Young sand scorpions spend about 12 months developing inside their mother before they are born live. After they're born, they quickly crawl onto their mom's back where they stay until they're big enough to leave the burrow. On average, a sand scorpion mom has about 33 newborns hitching rides on her back. But things aren't always easy there either, and sometimes the young eat each other or the mom eats the young. Clearly, stingers don't make life trouble-free for the sand scorpion, but they're still able to be a very successful organism in their dry, sandy habitats.



Philip H. Brownell, Ph.D.

Sand scorpion (*Paruroctonus mesaensis*) capturing a burrowing cockroach. Photo taken under UV illumination..



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Scorpions (*Tityus trinitatis*) engaged in courtship dance.



<http://scorpion.amnh.org>

Mother scorpion (*syntropis*) carrying babies on her back.



<http://scorpion.amnh.org>

Spermatophor from a male scorpion.