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Dune Scorpion (*Smeringurus mesaensis*)

Common, Dunes Denizens of the Southwest

Dune scorpions are a medium to large species of scorpion occurring in the southwestern United States and into the Gulf Coast of northern Mexico. These scorpions range in color from pale yellowish to cream colored, with a darker prosoma and mesosoma (or cephalothorax). Dune scorpions are a popularly kept species of scorpion in the pet industry, although this species of scorpion will often sting more readily than some other more docile species. As with many other scorpions, dune scorpions also contain properties within their exo-skeletons that enable them to glow a turquoise bluish-green under a fluorescent UV light. These scorpions also possess additional sensory hairs on their claws, legs, and tail that enable them to detect the vibrations of potential prey through the air and the ground.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum: Arthropoda

Subphylum: Chelicerata

Class: Arachnida

Order: Scorpiones

Family: Vaejovidae

Genus: *Smeringurus*

Species: *Smeringurus mesaensis**

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Dune scorpions can attain longevity of 5 to 10 years or more if cared for correctly.

Distribution and Habitat

The dune scorpion is a species of moderate to slender built, medium sized to large scorpion indigenous to the southwestern United States, and into the Gulf Coast of northern and northwestern Mexico. Within this range, these species of scorpions can be found in open desert to semi-desert and coastal dunes habitats, as their common names imply, where they occupy self-excavated burrows, burrows constructed by other animals, and underneath vegetation, rocks, logs, and other ground debris.

Conservation Status

Not Evaluated for the IUCN Red List (NE) or otherwise Data Deficient (DD).

Legal and Regulatory Status (*Subject to Change)

Consult with your local, municipal, and state ordinances and regulations for any ownership restrictions.

Experience Level Required

Intermediate/Moderate.

Size

Dune scorpions are medium sized scorpion species, reaching anywhere from 3 to 4 ½ inches on average.

Housing and Enclosure

Provide a sturdy, secure, and escape proof terrarium or enclosure 5 to 10 gallons in size with a secure top for one or two adult scorpions. Several of the acrylic displays and enclosures that are now manufactured for housing arachnids, insects, and other invertebrates can also be used. Dune scorpions can be kept communally provided sufficient enclosure space, food, and other resources. Acceptable substrate to use can include slightly moist pesticide play sand or aquarium sand, coconut fiber, or potting soil mixtures 3 to 4 inches in depth. Decorations and/or other cage furnishings and hide boxes, cork, rock, or bark slabs can also be included as well for additional retreats that these nocturnal to crepuscular and secretive scorpions prefer. A fairly small, shallow water dish can also be provided, and should be cleaned regularly.

Temperature, Lighting, and Humidity

Most species of scorpions have simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it can be greatly beneficial for your scorpion's health, immune system, and overall wellness. Dune scorpions do best at room temperature between 75 to 85 degrees. Maintain humidity at 55 to 60% with some sphagnum moss as well if needed. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, or UTH (under tank heating element). More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Feeding, Diet, and Nutrition

Insectivorous to Carnivorous; In the wild, dune scorpions are primarily insectivorous, meaning they eat insects and other invertebrates. They will also occasionally eat smaller vertebrates as well if they can catch and subdue them. In captivity, these scorpions can be fed a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. This will promote optimal exoskeleton growth and development. Any uneaten food items should be cleaned and removed after a day or two. Their feeding frequency will depend on the age, size, and overall health of your animal. Use care as to not overfeed even invertebrates, as obesity and other health related issues can still become an issue with them. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

<http://www.madisonherps.org>

Dune scorpions are generally not an overly aggressive scorpion species, although this genus will oftentimes sting more readily than some other species if cornered or provoked. These scorpions can inflict a painful sting, but the venom from this species is typically weak to mild, causing pain and some localized swelling. Scorpions in general are fragile animals, and accidentally dropping one can result in the rupture of its internal organs and/or exoskeleton, causing death to your scorpion. Although the dune scorpion's venom is relatively mild, with most being lesser than or just about equal to a bee sting, medical attention should still be sought from any apparent allergic reaction to a sting from this or any scorpion species.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact the Madison Area Herpetological Society at info@madisonherps.org

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility. MAHS cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety, including any and all MAHS logos and disclaimers. Last updated on: 15 December 2018.

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