



**Asian Forest Scorpions Under a Blacklight. © Aquarium Adventure Chicago.*

Scorpions-General (Order Scorpiones)

Scorpions are another extremely large and diverse group of predatory arachnids belonging to the order Scorpiones, which presently consists of over 2,500 recognized species in 22 extant families found throughout the world on all continents except Antarctica. They are also among the oldest groups of arachnids, with their fossil evidence spanning as far back as 435 million years ago (MYA). Perhaps the most distinctive and well known characteristics, or features of almost all of these arachnids are their eight legs, pair or set of claws or pincers known as pedipalps, and their elongated tail segments known as metasoma with a bulbous stinger at the end known as their telson. These characteristics are what help scorpions capture and overpower their insect and other invertebrate prey, as well as aiding them for defense.

Some species have large and heavy pincers or pedipalps for gripping and crushing prey, while other species have more slender and lightly build pedipalps, relying more on their venom for subduing prey. Many species are found in arid to semi arid sub-tropical regions, while others may be more tropical in their distribution and occurrence. Some species are also more fossorial burrowers, while others tend to be more active on the surface. Many species of scorpions also possess fluorescent chemicals in their cuticles and exoskeletons, which cause them to glow a vibrant blue-green when viewed or exposed under certain wavelengths of ultraviolet light (such as those emitted underneath a blacklight).

When it comes to herpetoculture and the pet industry, there are many different species of scorpions to choose from, and they are relatively simple to keep and do not require large enclosures or amounts of space. Some tend to be relatively docile, slow moving, and reluctant to sting, making them good choices for the novice or beginning enthusiast, while others have much more medically significant venom, making them best suited only for the more advanced enthusiasts. This guide will rank the most commonly available species from novice/beginner, intermediate, to advanced as well as provide a generalized overview for caring for scorpions in captivity.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum: Arthropoda

Subphylum: Chelicerata

Class: Arachnida

Order: Scorpiones

Family: Scorpionidae

Subfamily: Scorpioninae

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Lifespans can vary significantly depending on the exact species. Some species of scorpions live for only 2 or 3 years, while others may live up to 20 to 25 years or more.

Housing and Enclosure

Enclosure System: Primarily Terrestrial to Semi-Fossorial. The enclosure provide will depend on the species. Generally, provide a sturdy, secure, and escape proof terrarium or enclosure 5 to 15 gallons in size with a secure top. Some species may be housed communally, but be aware that all species can be potentially cannibalistic. Several of the acrylic displays and enclosures that are now manufactured for housing arachnids, insects, and other invertebrates can also be used. Acceptable substrate to use may also depend somewhat upon the species being maintained. For most of the arid to semi-arid or sub-tropical species, a slightly moist pesticide play sand or aquarium sand, coconut fiber, or potting soil mixtures 3 to 4 inches in depth will work. For some of the more tropical species, use a slightly moist pesticide free potting soil, cypress mulch, coconut fiber, or similar substrates 3 to 4 inches in depth. Make sure the substrate is not too dry or too wet or humid for the species being maintained. Decorations and/or other cage furnishings and hide boxes, cork, or bark slabs can also be included as well for additional retreats that most 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. Most scorpions do best at room temperature between 80 to 85 degrees, although some of the more arid or tropical species may need some supplemental heating. 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. Humidity ranges can also vary with the species being maintained. More arid to semi-arid species may be kept at around 55 to 65% humidity while more tropical species may require more at 60 to 80% humidity.

Feeding, Diet, and Nutrition

Insectivorous to Carnivorous; All scorpions are predatory arachnids, and are primarily insectivorous, meaning they will catch, overpower, and consume insects and other invertebrates. They will also occasionally eat smaller vertebrates as well if they can catch and subdue them. In captivity, most species of 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 scorpion. 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

Handling your scorpion will depend quite a bit on the specific species being maintained. Some species are relatively docile, slow-moving, and reluctant to sting, making them the best candidates for careful handling, while other species may be more defensive, willing to assume a defensive posture and/or sting, and/or are faster moving. More the most medically significant species, free-handling is not advised. All scorpions, as with other invertebrates, are fragile, and can be prone to injury if they are dropped or handled too carelessly. Handling these arachnids should be done so carefully as to allow them to sit and/or walk on the palms of one's hands. Do not grab them, which may cause even docile species to sting, or drop them, which can rupture their internal organs.

****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****

Good Beginner's/Novice Level Species: The most relatively docile and slow-moving species. Reluctant to sting or assume a defensive posture. Generally have the most mild venom.

Emperor Scorpion (*Pandinus imperator*): Tropical rainforests and savannahs. Western Africa. Medium-Sized to Large; 4 to 9 ½ “.

Asian Forest Scorpions (*Heterometrus spp.*): Tropical to sub-tropical savannahs and rainforests. Southeastern Asia. Medium-Sized to Large; 4 to 6”.

Good Intermediate Level Species: Species that are somewhat more aggressive, willing to sting and/or assume a defensive posture, and/or may be faster moving. Sting can be painful, but generally not sufficient to be medically significant.

Red-Clawed Scorpion (*Pandinus cavimimus*): Tropical rainforests and savannahs. Tanzania in Eastern Africa. Similar to the Emperor Scorpion in appearance, but somewhat more aggressive. Medium-Sized to Large; 4 to 9 ½ “.

Israeli Golden Scorpion (*Scorpio maurus*): Arid to semi-arid deserts, scrublands, savannahs, to dry forests. Northern Africa and the Middle East. Medium-Sized to Large; 2 to 3 ½ “.

Desert Hairy Scorpions (*Hadrurus spp.*): Arid to semi-arid deserts, scrublands, savannahs, and dry woodlands. Southwestern United States and Central America. Medium-Sized to Large; 4 to 6 ½ “.

Flat Rock Scorpions (*Hadrogenes spp.*): Semi-dry or semi-arid deserts, savannahs, woodlands, dry forests, and grasslands. Southern and Eastern Africa. Medium-Sized to Large; 4 to 9”.

Bark Scorpions (*Centruroides spp.*): Many tropical to sub-tropical, and/or arid to semi-arid regions of the New World. While more precise ranges and locality information is dependent upon the exact species, species of bark scorpions generally occur throughout the southern United States, Mexico and throughout Central America, the Caribbean and Antilles, and into northern South America. Some of the more potent and medically significant species in this genus are better suited for Advanced keepers. Small to Medium-Sized; 1 ½ to 3 ½ “.

African Burrowing Scorpions (*Opisthophthalmus spp.*): Drier, arid to semi-arid deserts, scrublands, and grasslands, to open forests and savannahs. Most are found predominantly in Southern Africa. Some species can have a more potent sting and venom, and are better suited for Advanced keepers. Medium-sized to Large; 1 ½ to 6”.

Stripe-Tailed Scorpion (*Paravaejovis spinigerus*): Arid to semi-arid rocky deserts, scrublands, rocky hillsides, open woodlands. Southwestern United States, Gulf Coast, northern and northwestern Mexico. Also known as the Devil, or Striped Devil Scorpion. Medium-sized; 2.3 to 3”.

Dune Scorpion (*Smeringurus mesaensis*): Southwestern United States, the Gulf Coast of northern and northwestern Mexico. Open desert to semi-desert and coastal dunes habitats. Medium-sized to Large; 3 to 4 ½ “.

Advanced Species: Species which tend to be much faster moving, more willing to sting and/or assume a defensive posture, and/or have medically significant venom to humans. Not for Beginners.

Thick-Tailed Scorpions (*Tityus spp.*): Several species in the genus significantly venomous. Central and South America. Variety of habitats depending on the species, from tropical rainforests and woodlands, to urban environments, or arid mountainous regions. Medium-Sized to Large; 3 ½ to 5”.

Deathstalker Scorpions (*Leiurus spp.*): Saudi Arabian Peninsula, Northern Africa, and the Middle East. At least one species in Western Africa. Most species live in arid to semi-arid regions or savannahs. Small to Medium-Sized; 1.2 to 3”.

African Fat-Tailed Scorpions (*Androctonus spp.*): Northern and Western Africa, Middle East. Medium-Sized; 3 to 4”.

Contact

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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. We 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.

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