



Whipscorpions (Vinegaroons) (Order Thelyphonida)

Pseudo-Scorpions with an Acid Punch

Whipscorpions are also known as Vinegaroons or sometimes uropygids, although they are a group of arachnids that are not true scorpions. As of 2006, there have been over 100 whipscorpion species described, and with more yet to be. These unusual arachnids superficially resemble scorpions, but unlike true scorpions, they lack a telson (or true stinger), and instead have a whip like flagellum at the end of their abdomens. They also have a well-defined pair of pedipalps (pincers) like scorpions, and 3 pairs of walking legs. The front pair of appendages are not used for walking, but rather for navigation and sensory purposes to locate prey in their dark, humid environments. Most species are found in tropical to sub-tropical environments throughout most of worldwide, where they will dig underground burrows using their pedipalps under rocks, logs, and other downed, wood, vegetation, and debris. Despite their fearsome appearance, whipscorpions are not venomous, but can spray or secrete a vinegar like acedic and caprylic acid-like substances as a defense that produce an irritating odor similar to vinegar, hence their other common name, "Vinegaroon" from glands located at the base of their flagellum.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum: Arthropoda

Subphylum: Chelicerata

Class: Arachnida

Order: Thelyphonida

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Whipscorpions, or vinegaroons can attain longevity of 5 to 10 years or more if cared for correctly.

Distribution and Habitat

Whipscorpions, or vinegaroons are a largely cosmopolitan order of unusual arachnids found in tropical to sub-tropical regions throughout most of worldwide. While more precise ranges are largely dependent upon the genera and species of these odd arachnids, members of this order can occur from tropical to sub-tropical North and South America, Africa, Asia, and portions of Australia. Within these ranges, these unusual arachnids can be found in a variety of dark, humid,

<http://www.madisonherps.org>

and moist tropical to sub-tropical, to semi-arid habitats, where they occupy self-excavated burrows, burrows constructed by other animals, and underneath vegetation, rocks, logs, and other ground debris. They may also occupy areas of dense foliage and vegetation, tree hollows and cavities, and among the branches, trunks, and loose vertical bark of trees and other shrubby vegetation.

Conservation Status

Conservation status dependent upon the species. Some species are IUCN Least Concern (LC). Some are IUCN Near Threatened (NT), Conservation Dependent (CD), Vulnerable (VU), Endangered (EN), to Critically Endangered (CE). Some 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

Novice/Beginner to Intermediate/Moderate.

Size

Depending on the species, whipscorpions, or vinegaroons can be small to large arachnids which can range in size from about 1 to 6 inches.

Housing and Enclosure

Whipscorpions, or vinegaroons, are secretive, nocturnal to crepuscular arachnids that usually will show aversion to excessive light. They are also more active wanderers than most tarantulas or other commonly kept arachnids, and should be provided with adequate space. Provide a sturdy, secure, and escape proof terrarium or enclosure 5 to 20 gallons in size with a secure top for one or two adult whipscorpions. Several of the acrylic displays and enclosures that are now manufactured for housing arachnids, insects, and other invertebrates can also be used. These arachnids can be kept communally provided sufficient enclosure space, but may cannibalize if these conditions are not met. Whip scorpions will burrow in 6 to 8 inches of substrate when provided. Acceptable substrate to use can include slightly moist pesticide free potting soil, cypress mulch, sphagnum moss, coconut fiber, or similar substrates. Sufficient hiding opportunities for these reclusive arachnids and other cage furnishings and hide boxes, cork, or bark slabs, and similar furniture should also be included as well. A fairly small, shallow water dish can also be provided, and should be cleaned regularly. Depending on the species, maintain humidity at 70 to 90% with some sphagnum moss as well for tropical species, while humidity can be lower at around 65 to 75% for desert or arid dwelling species.

Temperature, Lighting, and Humidity

Most species of vinegaroons 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 vinegaroon's health, immune system, and overall wellness. Vinegaroons do best at room temperature between 65 to 85 degrees. 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, vinegaroons 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 unusual arachnids 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

Despite their fearsome appearance, these whipscorpions do not have fangs, stingers, or venom, but can spray or secrete an irritating vinegar like acidic substance when threatened or roughly handled. They can be handled, may also give the occasional pinch or nip with their enlarged pedipalps if roughly handled as well. As with most invertebrates, they are also fragile animals, and accidentally dropping one can result in the rupture of its internal organs and/or exoskeleton, causing death to your whipscorpion.

****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.

***Copyright Madison Area Herpetological Society, 2017**