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Giant Millipedes (Class Diplopoda)

Many Legged Natural Wonders

Millipedes belong to a very large and diverse order of arthropods found in temperate to tropical or sub-tropical regions most of worldwide depending upon the species. They consist of roughly 12,000 species in 16 orders and approximately 140 families of numerous shapes, sizes, and lengths. Most millipedes can be characterized by their cylindrical, elongated and/or flattened bodies with 20 or more segments each consisting of two pairs of joined legs, although the exact number of legs typically varies depending upon the taxon and genera of millipedes. The name "millipede" is derived from the Latin meaning of "one thousand" feet or legs, although no millipedes actually have this many appendages. Depending on the species, millipedes can vary in color from blackish, brown, reddish brown, to golden yellow-orange. Most are blackish, brown, or reddish brown, although some can have bright aposematic warning coloration indicating their potential or actual toxicity depending on the species. Most millipedes can curl themselves up into a ball when threatened, and can emit a foul smelling fluid or liquid from microscopic pores along each of their body segments when handled or disturbed. Most species of millipedes are slow moving detrivores, feeding on dead and decaying plant and animal matter and assist with soil and nutrient decomposition and breakdown, although some will consume fungi, while others may be omnivorous, and others still may be carnivorous and predatory. Most species of millipedes are also secretive burrowers, with different taxon having evolved or developed different means of burrowing into loose, damp, humid substrates. Several of the larger species of millipede from several different orders and genera are the most popular to keep species as pets in the herpetocultural hobby and industry due to their larger size, slow moving and docile nature, and can make for very low maintenance pets to keep.

Taxonomy

Life: All living, physical, and animate entities
Domain: Eukaryota
Kingdom: Animalia
Phylum: Arthropoda
Subphylum: Myriapoda
Class: Diplopoda
**Taxonomy subject to change and revision.*

Lifespan and Longevity

Lifespan may vary depending on the size and species of millipede, but larger millipedes found in the pet trade may live up to 5 to 10 years under the correct conditions.

Distribution and Habitat
Most are typically terrestrial ground dwellers, and depending on the species, can be found in temperate, arid, or tropical regions except Antarctica. Some of the more popularly kept species are endemic to Africa and the Americas.

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).

Experience Level Required
Novice/Beginner to Advanced (depending on species).

Size
Millipedes can range in size from 2 millimeters to well over 12 inches in length, depending on the species.

Housing and Enclosure
Provide a sturdy and secure escape proof enclosure, such as a 5 to 10 gallon terrarium for most commonly kept species of millipedes. Several of the acrylic displays and enclosures that are now manufactured for housing arachnids, insects, and other invertebrates can also be used. There are many substrates that can be used to house millipedes including orchard bark, potting soil, sphagnum moss, play sand, or any combination thereof for tropical to desert species of millipede. Furnishings can be provided, but ensure any live plants chosen are non-toxic to millipedes and are sturdy and firmly planted. A feeding dish, shallow water dish, and hiding spaces should also be created or provided as well.

Temperature, Lighting, and Humidity
Temperature and humidity requirements can vary for millipedes depending on the species and where they originate. Most tropical species of millipedes, however, can be maintained at or around room temperature of 75 to 80 degrees F, seldom to exceed 85 degrees F. Some desert species requiring higher levels of supplemental heating can be provided a low wattage under tank heating element (UTH), incandescent bulb, or radiant or ceramic heat emitter as well. 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. Millipedes are primarily nocturnal to crepuscular, and do not require any additional UVA/UVB lighting or heating.

Feeding, Diet, and Nutrition
Detritivorous to Omnivorous; In the wild, many species of millipedes are omnivorous to detrivorous, feeding on various fruits, fungi, vegetables and other plant material, and dead or decaying plant, soil, and animal material. Some species can be more predatory, and consume smaller invertebrates as well. A variety of greens, fruits, and vegetables can be provided to millipedes including melon, cantaloupe, honeydew, bananas, lettuces, collard and mustard greens, tomatoes, squash, and other fruit or vegetable matter. Although most millipedes typically donot require additional calcium and vitamin D3 supplementation, providing it can help with their exoskeleton growth and development. 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

Most millipedes tend to be docile and slow moving, and can be easily handled without them biting or actively defending themselves. Care should be taken to avoid dropping or otherwise roughly handling your millipede, however. When threatened, most millipedes will roll into a ball and may emit a foul smelling odor. Some species' secretions can be toxic or mildly irritating, and some care should be taken to prevent ingestion or entry into any mucous entryways.
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.