



**The Greenwich Sentinel*

Giant Millipedes (Order Spirostreptida)

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 detritivores, 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

Order: Spirostreptida

**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

Depending on the genera and species, giant millipede species can occur in a very wide distribution throughout much of the world. They can be found throughout North and South America, the Caribbean, much of Africa, southern Europe, southern through southeastern Asia, and Australia and New Guinea. More specific range and distribution is of course dependent upon the exact species, but giant millipedes can be found in temperate, to tropical and subtropical areas, although most are found in the tropics or sub-tropics. They occupy a variety of humid, moist, and shaded micro-environments amongst decaying leaf litter, logs, rocks, fallen tree bark, and other plant matter and vegetation, and may be found in deciduous, tropical, or sub-tropical forests, rainforests, or woodlands, agricultural areas, gardens, residential and human habitations, mountainous areas, to savannahs, grasslands, semi-arid deserts and scrublands, and open woodlands.

Commonly Kept Species Guide

Throughout the world, there is an incredible and vast array and diversity of different millipede species, varying tremendously in their sizes, colors, and overall biology and natural history. There are estimated to be at least 12,000 or more different species of millipedes on planet Earth, and when it comes to the larger, “giant” millipede species, several different genera and species (or taxon) are available or can be found for sale in the United States, Canada, and elsewhere in the world.

It is important to ensure that any millipede species is legally obtained or acquired from a responsible and ethical source, particularly any of the African, Asian, or other non-native species, which may be subject to importation and/or possession restrictions in the U.S. and Canada, and which are factors which may make acquiring any of the non-native species more difficult. There are, however, still many native species of giant millipedes in the U.S. which can also be kept and are available in the hobby. Not many guides to commonly kept species of giant millipedes are out there, other than a few blog posts about them, and this guide will attempt to increase the knowledge of species most commonly available. This mini-guide lists some of the more commonly seen and well-known or available species of pet “giant” millipedes”.



American Giant Millipede

Narceus americanus

Max Length: 4 inches

Average Lifespan: 2 to 3 years

Coloration: Gray to Brown

Native to: Eastern and Midwest US and Canada



Smokey Oak Millipede

Narceus gordanus

Max Length: 4 inches

Coloration: Dark Gray

Native to: Southeastern US



Ivory Millipede

Chicobolus spinigerus

Max Length: 4 inches

Average Lifespan: 5 to 10 years

Coloration: Black and White stripes

Native to: Florida to South Carolina



Bumble Bee Millipede

Anadenobolus monilicornis

Max Length: 4 inches

Average Lifespan: 3 to 5 years

Coloration: Black and Yellow stripes

Native to: South America (but naturalized to the southern US)



Sonoran Desert Millipede

Orthoporus ornatus

Max Length: 7 inches

Average Lifespan: 10 years

Coloration: Dark Brown to Yellow

Native to: Sonoran Desert of western US and Mexico



African Giant Black Millipede

Archispirostreptus gigas

Max Length: 15 inches

Average Lifespan: 5 to 7 years

Coloration: Black or Dark Brown

Native to: East Africa



Giant African Millipede

Spiropoeus fischeri (formally *Mardonius parilis acuticonus*)

Max Length: 8 inches

Average Lifespan: 5 to 7 years

Coloration: Black or Dark Brown

Native to: Africa



Ghana Chocolate Millipede

Ophistreptus guineensis

Max Length: 10 inches

Coloration: Brown

Native to: Ghana and Nigeria



Flame Leg Millipede

Trigoniulus macropygus

Max Length: 4 inches

Average Lifespan: 2 to 3 years

Coloration: Dark Black and Red body with Yellow legs

Native to: Philippines



Thai Rainbow Millipede and Vietnamese Rainbow Millipede

Apeuthes (Tonkinbolus) spp

Max Length: 4 inches

Average Lifespan: 5 to 7 years

Coloration: Blue-Gray stripes with Red legs

Native to: Southeast Asia



Scarlet Millipede

Trigoniulus corallinus

Max Length: 2 to 3 inches

Average Lifespan: 4 to 6 years

Coloration: Rusty Red

Native to: Malaysia and Indonesia



Giant Fire Millipede

Pelmatojulus excisus

Max Length: Up to 7 inches

Average Lifespan: 4 to 6 years

Coloration: Vibrant red, yellow, or orange alternating black.

Native to: Ghana, Africa.



Spike-Tail Millipede

Thyropygus allevatus

Max Length: Up to 12 inches

Average Lifespan: 7 to 10 years

Coloration: Yellowish-brown, orangish-brown, dark brown or olive-brown.

Native to: Southern, Southeastern Asia, Sri Lanka.

There are probably other genera and species that are kept as well, although less commonly, and not all are good beginner's species.

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

Enclosure System: Primarily Terrestrial to Semi-Fossorial. 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 detritivorous, 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 do not 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

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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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African Giant Millipedes, Archispirostreptus gigas subject to US. Department of Agriculture importation restrictions only. Further information on the legalities of purchasing, selling, and acquiring these invertebrates can be viewed here prior to obtaining any of them if a United States resident. Otherwise, not currently subject to any other applicable federal laws or regulations. Also consult with your local, municipal, and state ordinances and regulations for any ownership restrictions.

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