

Giant African Millipede

Kingdom: Animalia Phylum: Arthropoda Subphylum: Uniramia Class: Diplopoda Order: Spirostreptida Family: Spirostreptidae Genus: Archispirostreptus

Species: gigas



Photo courtesy of Karen Marzynski

Habitat

- In the Wild: Giant African millipedes are found in tropical and arid coastal forests of eastern Africa.
- Exhibit Location: USS Antiquities, Zoo to You Collection

Characteristics

- The bodies of the giant African millipedes are divided into repeating segments, with 2 legs attached to most segments. The average number of legs is 100 (despite the "milli" prefix).
- Males have a "space" between the legs of the 7th segment, while female legs are the same on all segments. The first segment comprises the head, which has a single pair of antennae, a cluster of "simple" eyes, and a mouth. Breathing pores are located on their sides. A hard, smooth, exoskeleton provides protection.
- They can grow to be up to 12 inches long.
- In order to grow, they must molt, or shed, their exoskeleton. As they molt, they grow additional body segments with legs.
- Lifespan: In the Wild 7 years; In Captivity 10 years

Behaviors

- Giant African millipedes are primarily nocturnal, preferring dark, damp areas where they can spend their time foraging and eating. They move their strong legs in a wave-like motion to burrow under leaves and other organic matter.
- When startled, they will roll into a spiral, protecting their head and legs. They may also secrete a yellowish-brown fluid (hydrogen cyanide), which is a mild irritant to predators. If sufficient amounts are applied, it may be an irritant to people.
- Enrichments at the Zoo: rearrangement of exhibit furniture

Reproduction

- The male walks alongside the female and stimulates her with his legs. If receptive, she allows the male to slip under her. They wrap their entire bodies for about 2 turns, with the male deposits sperm on the female. She transfers the sperm to her eggs.
- Later she makes a nest of compressed soil just below ground level. A few weeks after mating, the female lays hundreds of eggs in this nest. The eggs do not become fertilized until after laying, and are covered with a tough, resistant coating to protect them from predators and poor environmental conditions.
- Sometimes the female will guard the eggs until they hatch (about 3 months later). The young are abandoned after hatching, but grow quickly. Hatchlings have 3 pairs of legs and a few body segments and will take several years to grow to full size.

Diet

- In the Wild: variety of fresh and rotting vegetation and organic matter, small stone or pebble to chew on (exoskeleton is composed of calcium)
- At the Zoo: fruits, vegetables, cuttlebone

Conservation Status

• IUCN status: not listed; CITES Appendix: not listed

- Giant African millipedes are a popular pet and are often found as part of wildlife education programs.
- Captive breeding is easily accomplished.
- Millipedes and other insects are essential for maintaining the balance in nature and health of the living world.
- Predators: snakes, birds, mammals

Did You Know?/Fun Facts

- Giant African millipedes have a symbiotic relationship with mites which live on their exoskeleton and near their legs. They provide the mites with a home and food, and the mites keep the millipede's exoskeleton clean by eating debris off of it. These mites are harmless to people.
- There are over 1000 species of millipedes worldwide.
- One way to distinguish a millipede from a centipede is by the number of legs and segments. Centipedes have 1 pair of legs per segment and legs emerge from the sides of each segment. Centipedes move in snake-like serpentine patterns and are carnivores (meat-eaters). Millipedes have 2 pairs of legs per segments, for the most part, and their legs emerge from underneath each segment. Millipedes move in a straight, forward manner and are herbivores (plant eaters).
- The many legs do not give them speed, but rather power for digging through soil and debris.

Sources:

- Happy Hollow Park Zoo, (2005). Meet the animals: giant african black millipede. Retrieved Oct. 22, 2005, from Happy Hollow Park Zoo Web site: http://www.hhpz.org/zoo/theanimals/introducing.php3/GABMill.
- Woodland Park Zoological Society, (n.d.). Animal fact sheets: giant millipede. Retrieved Aug. 15, 2005, from Woodland Park Zoological Society Web site: http://www.zoo.org/educate/fact_sheets/milli/milli.htm.