

No.18.

Keeping Giant Millipedes

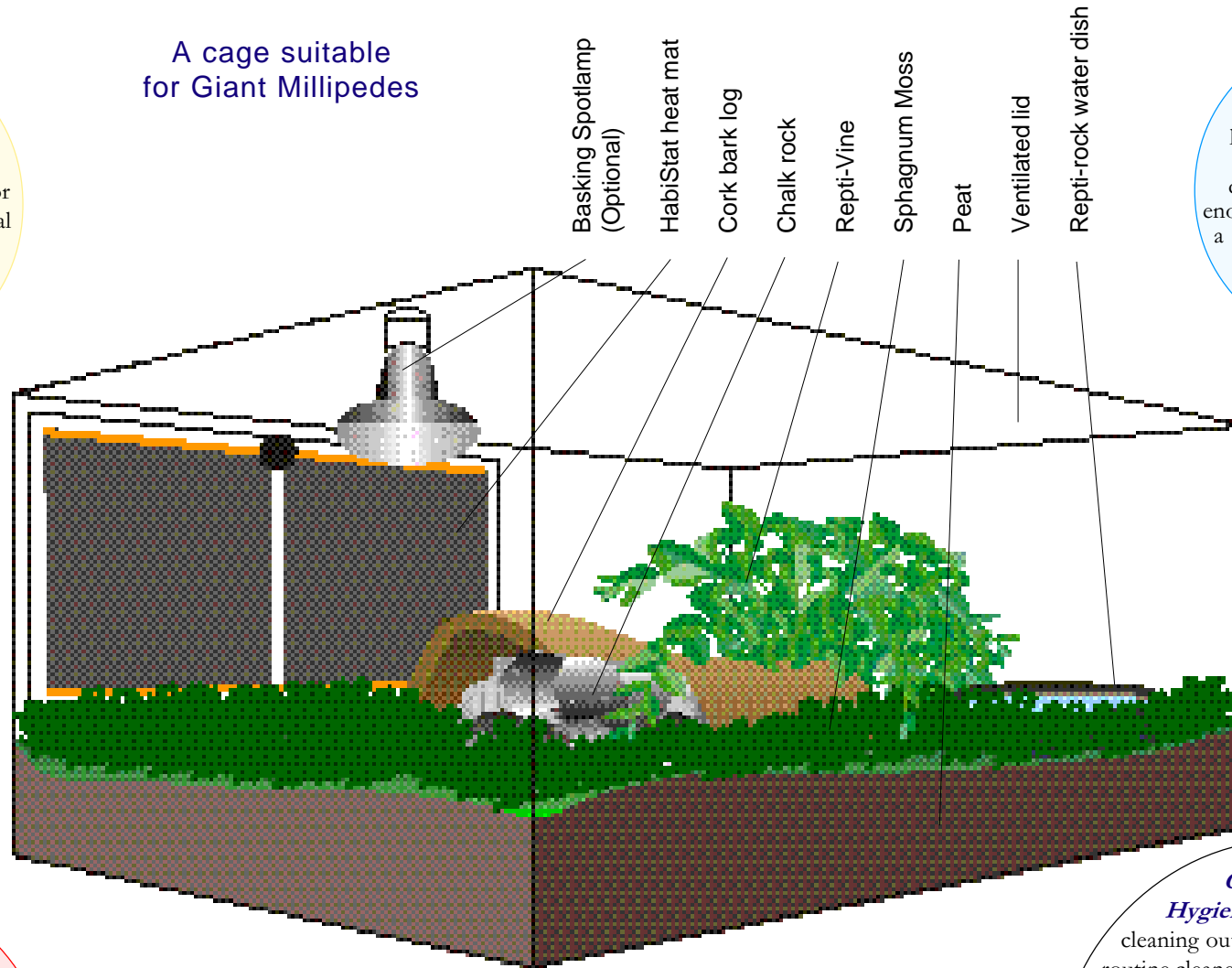
An Introductory
Information Leaflet

in association with
EURO REP
L I M I T E D

Europe's Premier
Reptile Product Company

A cage suitable for Giant Millipedes

Cage Set Up The cage should be set up to allow an active millipede plenty of scope to climb, warm itself, move to a cooler place and look for food. They may want an occasional drink and to secrete themselves into refuges and hide. They may also burrow in a soft substrate.



Lighting Most millipedes shun bright lights, so artificial light in the cage should be subdued. Often, just the daylight filtering in will be enough. If more light is needed, a small *Spotlamp* may be used and in which case it will double as an effective day time heater.

Background Heat Use a heat mat between half and two thirds the size of the cage to provide background heating. The hottest spot in the cage should not be above 30°C while the coolest should not be below 25°C. Use a *HabiStat Mat-Stat* if the temperature is too hot but put the whole cage in a cooler place if the temperature is not cool enough.

Food: Giant Millipedes are vegetarian animals with a strong preference for fungi and stale and rotting food. They can also be fed fruit, salads and other vegetables. They will sometimes take moistened flour based foods like bread and biscuit. A convenient diet is a mash of rabbit pellets with a little powdered chalk made into a paste with some water.

Cleanliness and Hygiene: The cage will need cleaning out but **only** infrequently. A routine cleaner for **all** nonporous surfaces would be *Vetaclean*, followed by a thorough rinse. All **other** materials should be replaced when soiled. Any first aid the millipedes may be need, can be given by **dabbing** the wound with *Vetadine*. As far as human hygiene is concerned, *Vetasept Surgical Scrub* will clean hands and surfaces while *Vetasept Hand Rub* will allow adequate cleansing and disinfection even in cases when water is unavailable.

Giant Millipedes...

...Biology

Millipedes make excellent pets for those looking for an unusual animal. They are interesting animals that are best enjoyed by observation and whilst quite easy to maintain, will certainly present a challenge to those wishing to breed and rear them from generation to generation. They are suitable for young people, if supervised by a responsible adult and will not demand much in terms of resources or finance to keep them properly.

The Giant Millipedes are essentially larger tropical examples of the millipedes found in many other habitats including British gardens and woodland. They are important in the recycling processes as they break up dead and dying plant material so that decomposing bacteria and fungi can complete the release of nutrients back into the environment. If it were not for these serial decomposers, much of the energy needed to fuel nature would be trapped in a stagnant backlog

...Housing

The Giant Millipede can be housed in many types of container but all of them must be able to withstand the warm humid conditions that are necessary. An aquarium or plastic pet cage would make a suitable home and one sized 40 cm x 25 cm x 25 would house three or four adult millipede or several smaller specimens.

An escape-proof top is necessary and preferably one that allows for some ventilation. Purpose-built metal tops for aquaria (with space for a *Basking Spotlamp* fitting) are available. There also needs to be some method of general heating. A *HabiStat*TM heat mat taped to

the rear wall would provide most of the heat needed but could be supplemented with a small *Basking Spotlamp* for day-time use in the larger cage.

Although providing heat from a light source is convenient, it does have one drawback. The millipedes are mainly active in darkness and it is then that they feed most readily. Thus in bright light the millipedes may feed less and grow more slowly. A coloured lamp like a *Red Night Spotlamp* could be used. A temperature of between 25°C and 30°C should be aimed at.

The base of the container should be covered with some sort of substrate into which the millipedes can burrow. Sphagnum or sedge peat will stand up to the warm damp environment without rotting. Alternatively, a potting compost guaranteed free of insecticides or fungicides could be used. A layer about 10 to 15 cm will give sufficient depth for the animals to burrow. To create a suitable micro-environment, the set up could be refined by installing a layer of sphagnum moss over the substrate.

A light misting may be appreciated, as high humidity may be an essential factor. Millipedes should be able to freely approach water, usually provided in a water dish. They will drown if they cannot escape a smooth sided dish, so a *Repti-rock* water dish, which is designed to allow small animals to crawl back out, is recommended.

The environment should also contain other surfaces over which the millipedes can move. Cork bark logs will offer softish but irregular surfaces and as they are hollow, will double as convenient hides.

Shopping List

Not every thing is needed to begin with, usually one item from each of the categories marked •. As a basic starting point the following essentials are considered the minimum needed:

Plastic Cage, Heat Mat, Thermometer, Repti-Sand & Peat

After a while as your collection and experience grows other alternatives and extras can be used.

- **Plastic Fauna Boxes**
- **HabiStat Heat Mats** (4x5/4w, 6x11/7w, 11x11/12w, 17x11/20w, 23x11/28w, 29x11/35w, 35x11/42w & 49x11/55w) & **Strips** (17x6/10w, 23x6/15w, 35x6/22w & 47x6/30w)
- **HabiStat Thermostats** (Mat-Stat/100w, Temperature/300w, Twin/2x300, Pulse Proportional/600w, Dimming/600w & Night Time Drop Function)
- **HabiStat Night Eye, Sun & Moon** switches
- **HabiStat Cool Control thermostats & MiniFan**
- **Thermometers** (Alcohol, dial, minimum maximum & electronic digital)
- **Hygrometers** (Dial & electronic digital)
- **Cork Bark**
- **Curio Wood**
- **Peat**
- **Repti-Sand**
- **Repti-Vine**
- **Repti-rock water dishes**
- **Basking Spotlamps** (Normal, Daylight & Red)
- **Basking Spotlamp Holders**
- **Vetaclean**
- **Vetasept Surgical Scrub**
- **Vetasept Hand Rub**
- **Hand Spray**
- **Books & Leaflets**

EURO REP L I M I T E D

The Cottage in the Wall, Dawley Road, Hayes, Middlesex. UB3 1EF
Telephone: +44 (0) 20 8573 4311, Fax: +44 (0) 20 8561 1650
email: care@eurorep.co.uk website: www.EuroRep.co.uk



the adults. They have fewer segments and as they grow more segments are added at each skin shed. These skin changes are also performed in the safety of an underground chamber fashioned from a cement of soil and droppings.

Not much information is available on these pets but a few booklets have been published. There is even some interesting facts and pictures on the Internet.

...Health & Disease

The millipedes will die if kept too cold or too dry. Care should be taken when deciding if a millipede is dead or not. When inactive due to adverse conditions the millipedes burrow down and curl up into a tight coil.

Dead millipedes usually spill out a rather offensive putrefying liquid. If, however,

they die and break up, this may indicate that the millipedes are being kept too dry and this should be corrected. Most problems will be caused by inappropriate conditions and are solved with experience.

It has been reported that mites can live on the millipedes and these may need removing. Sometimes various other pests such as springtails or nematode worms may infest the cage and although not posing a direct threat to either millipedes or humans, they might spoil a good display. All such pests can be removed by completely cleaning out the tank and renewing the contents. To remove all pests from the millipedes themselves, they should be rinsed in running warm water before returning to the tank.

Text, illustrations & layout design
© Euro Rep Ltd. / British Herpetological Supply 1999



A source of calcium carbonate is the other essential cage item. Millipedes have a requirement for calcium to build the thick cuticle, so this mineral is very important. Note that ordinary 'blackboard' chalk should not be used, as this is not calcium carbonate. A dish of *Repti-Sand* or a piece of cuttlefish bone would be an easy way of supplying this mineral. A more aesthetically pleasing method would be to include a rock of limestone or chalk as part of the cage decor. Do not use live plants to decorate the tank as they will be eaten or severely damaged.

...Husbandry

Millipedes can be kept in groups, usually of similar sized individuals but sometimes different sizes or even different species will live together if not too crowded.

Many will just curl up motionless for most of the day, so plenty of hides and retreats should feature in the cage design. If the animal is to be observed during periods of activity, this can be arranged by coupling the heating and lighting to a reverse day/night cycle. The *HabiStat Moon Switch* will switch on electrical items at night and off during the day. Keeping the whole set up in a very dark location and controlling the *Basking Spotlamp* via the *Moon Switch* would be one way of achieving these ends.

These animals do not really like being handled, so if it is necessary to move them, pick them up carefully and handle them as little as possible. In time, some individuals may tolerate a little more handling and to condition the millipede to human contact, allow it to walk over the hand without grasping it. Once it is accustomed to this intrusion, it may not be so ready to curl up when contacted. Some

millipedes are protected by an irritating fluid that they expel when stressed. This may stain the skin if contacted but as far as pet millipedes are concerned, this defence is almost never encountered.

...Food & Feeding

Giant Millipedes will eat a huge variety of food. In the wild they mainly eat fresh or rotting leaves, roots and fungi but any sort of fruit, salad or other vegetable matter may also be offered. The food should remain in the cage for a reasonable time without deteriorating or causing a smell. Also, if a lot of loose, wet food is consumed, the millipedes' waste droppings tends to be rather offensive.

A good diet for pet millipedes that will also last for some time without causing offence is a mash of rabbit pellets mixed with about 10% *Repti-Sand* as a source of calcium carbonate. This paste will last for a couple of days without deteriorating. Food should always be available.

Water is occasionally sipped from droplets on the leaves but if a moist diet is offered, drinking water is often ignored.

...Reproduction

Millipedes are quite difficult to sex as they have to be uncurled. This in itself is a dangerous procedure as the animal is easily damaged. It is best to let the animal walk over a piece of glass and look up at the region just behind the head. Mature males have two modified legs on segment seven. A gap in the leg pattern at this point will indicate a male.

Eggs are deposited in a burrow and encapsulated in a chamber made with a mixture of soil and droppings. The young hatch and are smaller, paler versions of