

## Roger's Aquatics & Pet Supplies: Madagascar Giant Day Gecko

*Phelsuma grandis* is among the largest species of geckos. As the common name implies, they originate from Madagascar, but populations have been established in Florida and Hawaii. Females are typically 8 – 10 inches long, while males can reach up to 12 inches. They can live 15 – 20 years under proper care. Unlike other gecko species, day geckos are diurnal, meaning they are awake during the day. These geckos are not recommended for keepers looking for something to handle, as they slough off their skin as a defense mechanism.

### Enclosure: Size, Substrate, and Accessories

A terrarium that is at least 24 inches tall, by 24 inches long, by 18 inches wide should be provided. Exo Terra makes terrariums of these exact dimensions, and they are front opening, which is ideal for fast arboreal species such as the giant day gecko. Larger terrariums can always be used as well, and will be appreciated by the gecko.

A humidity holding substrate is a must. Plantation soil, Eco Earth, and ReptiSoil are all great options. A moss and leaf litter layer can also be added to help hold humidity, as well as to spruce up the terrarium. It is important to note that there is a risk of impaction with any animal that is being housed on loose substrate. Typically, impaction only occurs with animals that are dehydrated, not receiving adequate lighting or diet, or in some other way are unhealthy, and it is much rarer than people think, but if you choose to keep your animal on loose substrate you should familiarize yourself with the signs of impaction and see what local vets deal with reptiles. The substrate should be changed out every 3 – 4 months, unless it is bioactive.

In the wild, giant day geckos inhabit tropical forest areas. They especially love log hollows and other hiding spots. Lots of branches and plants should be placed in the terrarium to provide proper basking areas for the geckos, and for a sense of security.

### Lighting and Heat

During the daytime, the temperature should be between 80° F – 88° F (26.6° C – 31.1° C), with a basking area of 90° F – 92° F (32.2° C – 33.3° C). This is easily achieved using a daylight basking bulb of an appropriate wattage. The wattage used will depend on the size of the terrarium as well as the temperature in your home. At night, the temperature can drop into the 70s F (20s C). Most households should be this temperature at night, but if needed, a ceramic heat emitter can be added to maintain the temperature. A proper thermometer should always be used to measure the temperature. Too hot, and the animal could overheat. Too cold, and they won't grow properly or won't digest properly. Digital is preferred, since it is more accurate.

A 5.0 UVB bulb should be provided. This type of lighting is essential in maintaining proper vitamin D3 levels, which allows them to properly absorb and metabolize calcium, regulates the immune system, and promotes proper organ development. Since these lights are aren't quite the same as the sun, providing a calcium with added D3 once in a while is beneficial. UVB lights should be replaced every 6 – 12 months.

All lighting should be on for 12 hours a day. At night, all visible light should be off.

### Diet and Supplements

Giant day geckos primarily feed on nectar and juice from ripe fruit in the wild. In captivity, they easily take to Repashy or Pangea gecko diets. Freshly made food should be offered every two days. They will also feed on



crickets, hornworms, waxworms, and butterworms once or twice a week. Feeder insects should be dusted with a quality calcium with D3 supplement. All feeder insects should be gut loaded 1 – 24 hours before being fed.

### Hydration and Humidity

The humidity should be maintained between 55 – 65%. Misting the terrarium once or twice a day should be enough to maintain this. The gecko will usually take the opportunity to drink during this time. A proper hygrometer should always be used to measure the humidity levels. Digital is preferred, since it's more accurate. A dry out period between mistings is important, as constant dampness can lead to skin infections.

A water dish should be available at all times. The water should be replaced every second day, and the bowl should be bleached once a week to prevent the growth of bacteria.

### Cohabitation

Males should never be housed together as they will fight. Females can sometimes be housed together, if a larger tank with more hiding spots is provided. Male/female groups should be avoided unless there is the intention to breed, and the means to raise and, if needed, keep all the babies. The male should still have his own tank to return to so that the females may have a break from the stress of breeding.

### Sexing

Males will have a set of V-shaped pores at the base of their tail, as well as a set of hemi-penal bulges. They will also be slightly larger than females, and may have a chunkier neck and jowl set.

### Checklist of Supplies

- ✓ Enclosure
- ✓ Lid for enclosure
- ✓ Substrate
- ✓ Minimum 2 plants
- ✓ Minimum 2 branches
- ✓ 1 hiding spot
- ✓ Heat lamp and bulb
- ✓ UVB bulb and fixture
- ✓ Thermometer
- ✓ Hygrometer
- ✓ Calcium with D3
- ✓ Insect keeper
- ✓ Insect diet
- ✓ Insect gut load

