



CHARISSA REXROAD D.V.M.

TERESA GREGORY D.V.M.

JERRY SUDDETH D.V.M.

THE CARE OF DAY GECKOS

The day geckos (*Phelsuma spp.*) are a brightly colored group of small diurnal (day active) lizards native to Madagascar and surrounding areas. There are about 60 species and subspecies in the genus. These are true geckos, defined by having adhesive toe pads that make them excellent climbers. They have no eyelids; instead their eyes are covered with a transparent speculum similar to snake eyes. Day geckos tend to be fairly nervous animals and do better with minimal handling.

Geckos need a fairly tall enclosure for climbing. Cage furniture should include branches and plants for hiding and exercise. Plants which work well include pothos and mother-in-law's tongue (also known as snake plant). A tight fitting lid is essential to prevent escape - they are excellent climbers and will usually head to the ceiling if they get out! Geckos should be housed individually because they can often be very aggressive with one another.

Cage temperature should be about 77-82 degrees F, with a basking area at about 85-95 degrees. Maintain cage humidity at 60-80 percent. Misting the cage twice daily will provide increased humidity and also give the gecko water droplets to drink. Most geckos will not drink from a standing water source. Be sure to let visible water dry before respraying.

Full spectrum lighting or access to unfiltered sunlight is needed for vitamin D synthesis and calcium utilization. Without proper lighting, nutritional secondary hyperparathyroidism (AKA metabolic bone disease) can occur. Be sure to replace full spectrum bulbs every 6 months, as they lose their effectiveness after that time even if they still appear to be working.

Day geckos are primarily insect eaters. In the wild, they also feed on pollen and nectar. In captivity their diet can consist of insects such as small crickets, wax worms, etc. Be sure to gut load crickets by feeding them a balanced diet such as commercial cricket food or game bird chow, or even Total cereal, plus small pieces of orange or carrot for moisture. Peach or apricot baby food can be fed to the gecko to help replace the nectar they would naturally eat. Mix a calcium supplement with the baby food a couple of times weekly, or daily if the gecko is

6321 WEST HIGHWAY 146
CRESTWOOD, KENTUCKY
40014

502-241-4117
FAX 502-241-9777

crestvet@bellsouth.net
www.crestwoodvethospital.com



Photo from <http://www.elversreptiles.com/avaiable.php>

Most species of geckos reach maturity at about 8 months, but you should delay breeding until the female reaches her full size at about one year of age. When you first introduce the male and female, maintain them on an 8 hour light/16 hour dark cycle at 74-77 degrees F. After about 2 weeks of these conditions, switch to a 12 hour light/dark cycle and increase the temperature to 82-85 degrees, dropping to 77 degrees at night. This should help stimulate breeding condition. Monitor the pair closely for signs of fighting. The female especially can be aggressive if she is not ready for breeding.

Be sure that the female is on an excellent diet with plenty of calcium prior to breeding. She will usually lay 2 eggs per clutch, and can lay a new clutch as often as every 3-4 weeks. Do not allow her to lay too many clutches without resting, as that can result in calcium deficiencies and stress related problems. To help slow egg laying, decrease the photoperiod back to about 8 hours of light per day.

After the eggs are laid, remove them to incubate. Place them in moist vermiculite (one part vermiculite to one part water by weight), and put this mixture in a small container with a plastic lid. Punch a few holes in the lid for ventilation. Incubate the eggs at 77-85 degrees, with variations within that range to encourage an even distribution of male and female offspring. Incubation lasts about 60 days.

Once eggs are hatched, separate the young to prevent aggression. Maintain high humidity the first 24 hours, until after the first shed. High death losses often occur during this period, especially if the young are unable to shed properly. The increased humidity will help make the shed easier.

Parasites and stress lead to major losses in recently imported geckos. Purchasing captive bred geckos will avoid much of this problem. All recently acquired geckos should have a stool sample checked for parasites and proper anti-parasitic medications should be administered.

Nutritional secondary hyperparathyroidism (AKA metabolic bone disease) can occur if calcium is deficient or if there is inadequate full spectrum lighting. Without full spectrum light, they cannot convert dietary vitamin D to a usable form, and therefore cannot absorb and use calcium. Signs of nutritional secondary hyperparathyroidism include easily fractured bones, deformed or swollen long bones, a soft lower jaw, and occasionally muscle tremors or even seizures.

Wounds commonly occur due to aggression between geckos. The tail will easily dislodge if it is pulled. If this occurs it should regenerate quickly. Other skin wounds are fairly common from fighting. Geckos have fairly fragile skin; even rough handling can cause tears.

Annual veterinary health exams and fecal parasite checks should be performed to keep your gecko healthy and hopefully detect any problems at an early stage.

Teresa Gregory, DVM