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GECKOS

Beaded gecko

Lucasium damaeum

Lucasium damaeum is a small, fast ground gecko from the dry interior of Australia, reddish-brown on the back with chains of pale beads along a cream-coloured dorsal stripe. It is nocturnal, lives on the ground and manages with simple furnishings, but it is rare in enclosures outside Australia.

Family: Diplodactylidae Former name: *Diplodactylus damaeus; Ceramodactylus damaeus* Published 15 November 2026

KEY FACTS

THE ANIMAL

Adult size	**6-8 cm** total length incl. tail
Lifespan	**5-8 years**
Active	**At night**
Lifestyle	**Terrestrial**
Habitat	**Semi-desert and savanna**
Difficulty	**Beginner**

CARE

Min. enclosure	**40 × 30 × 25 cm** L × W × H for 1 adult
Temperature, day	**22-26 °C**
Basking spot	**28-30 °C**
Temperature, night	**16-20 °C**
Humidity	**30-50%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**12-18 months**
Clutch size	**1-2 eggs**
Incubation	**40-75 days** at 27-30 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Lucasium damaeum is easy to recognise by the markings on the back. The base colour is reddish-brown, and along the middle runs a pale, cream-coloured dorsal stripe, framed by pale spots that resemble beads on a string. Down the flanks run a few rows of pale spots, and the dark brown limbs are scattered with small dots. The upper eyelid is white or cream-coloured. The body is slender, the snout rounded, and the tail is a straight continuation of the body. If the animal loses its tail, a new one grows, but it is uniformly brown or more darkly spotted than the original.

The gecko has large eyes without movable lids. They are covered by a transparent scale, and the animal keeps them clean by licking them with its long, flat tongue. In daylight the pupil is a narrow, vertical slit, and in the dark it is round and wide open. The toes are flat and without the adhesive pads that many other geckos have, so it is a ground animal and not a climber.

The species was described in 1896 by Lucas and Frost from animals from Charlotte Waters in the Northern Territory and is the type species of the genus *Lucasium*. The genus is named after the physician and herpetologist Arthur Henry Shakespeare Lucas. For long periods the species stood in the genus *Diplodactylus*, and under that name it still appears in many older books and care guides. The genus *Lucasium* was reinstated in 2007 after a DNA study of the relationships.

Adults are said to be about 7 cm long, so it is a small gecko. There are no weight figures for this particular species. For the closely related ground-dwelling *Diplodactylus* species, 3-5 g is reckoned for an animal with a body of 5 cm, but this has not been measured in *L. damaeum*, and the weight is therefore not in the fact box. The gecko is fast and shy and more an animal to watch than to hold in the hand.

Distribution and habitat

Lucasium damaeum is distributed in the dry and semi-arid interior of Australia, from south-eastern Western Australia across South Australia to southern Queensland, western New South Wales and Victoria. The type locality, Charlotte Waters, lies in the southern Northern Territory, and the species occurs in all the mainland states and the Northern Territory. By far most recorded finds come from South Australia, New South Wales and Victoria, while there are relatively few from Western Australia, the Northern Territory and Queensland.

The distribution is large, and the species is not considered threatened. In the wild it occurs only in Australia.

> **Native range:** Australia.

HABITAT

Lucasium damaeum lives in many kinds of dry terrain: spinifex-covered sand dunes, dry shrubland and savanna woodland. What they have in common is loose, well-drained soil and plenty of places to hide. By day it stays hidden in holes made by insects and spiders, in cracks in the ground, under stones and under fallen branches.

When it gets dark, it comes out onto open ground to hunt. It is fast and covers long distances in search of food. The climate is hot in summer and cool, at times cold, in winter, and the difference between day and night is large. There are no measurements of temperature and humidity in the gecko's hides, so the care advice on temperature is based on experience with related Australian ground geckos.

The threats are loss of habitat and feral predators such as cats, foxes and dogs.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

The care of *Lucasium damaeum* is hardly described in detail, so the advice here is based on experience with the ground-dwelling Australian *Diplodactylus* species, to which the species was formerly counted. Allow at least 20 × 20 cm of floor area per pair, but that is an absolute minimum. For a single gecko 40 × 30 × 25 cm (length × width × height) is a good size, and a pair or one male with up to three females can be kept in a slightly larger enclosure. Floor area matters more than height, because the animal keeps to the ground. Very large enclosures are unnecessary, because the animals use only a small part of the floor, but a tight-fitting lid is important, because the gecko can climb smooth surfaces.

Use a substrate of sandy loam in a layer of 1-5 cm, so that the animal can dig a little. Give it two to three hides: upturned clay saucers, pieces of bark, a small stack of flat stones or half plastic tubes pressed down into the sand as artificial spider burrows. One of the hides should be humid. Plants are unnecessary, and plastic boxes or small aquariums with lids work fine.

TEMPERATURE

No measured temperatures have been published for *Lucasium damaeum*, so the figures here are based on care advice for related ground-dwelling geckos. The enclosure should have a warm side and a cool side. Use a heat mat or heat tape under one end, so that part of the floor reaches 28-30 °C in summer. The rest of the enclosure is kept at 22-26 °C by day. At night the heat can be switched off, so that the temperature falls to 16-20 °C.

Always control the heat source with a thermostat, and measure with a thermometer at both ends. In winter the temperature may lie lower for a period, down to 15-20 °C. This corresponds to the natural annual rhythm and helps get the animals started on breeding.

Read more: Heat and temperature

HUMIDITY AND WATER

Lucasium damaeum comes from dry regions and should not have high humidity. Ordinary room air with 30-50 % humidity is plenty. Do not mist the enclosure, because the thin film of water after misting can spread bacteria and parasites. Use a humid hide instead.

Fill one of the hides with slightly damp sphagnum or damp sand, and check it every week, so that it neither dries out nor goes mouldy. Here the gecko can shed without problems. Put a shallow bowl of fresh water at the cool end, and change the water regularly. The rest of the substrate should be dry.

LIGHTING AND UVB

Lucasium damaeum is nocturnal and does not need any special lighting. Extra lighting is unnecessary for the ground-dwelling geckos of the *Diplodactylus* group. There are no UVB guidelines for this particular species, so it is optional, and no Ferguson zone can be given.

If you want to give UVB anyway, choose a very weak tube, and make sure the gecko can always retreat into a dark hide. Let the daylight in the room govern the daily rhythm, or use a timer of 10-12 hours in summer and shorter days in winter. The night should be dark.

Read more: Lighting and UVB

FEEDING

Lucasium damaeum lives on small insects and spiders and is easy to feed. In captivity the ground-dwelling geckos of the group take crickets, roaches, termites, flies, maggots, moths and waxworms. Use small crickets, nymphs of dubia roaches and preferably a few waxworms for variety. The prey should be about 60 % as large as the animal's head.

Adults are fed every 4th-7th day in summer and every 7th-10th day in winter, when short periods without appetite are normal. Young are fed every 2nd-4th day all year. Dust the insects lightly with calcium and vitamins at every second or third feeding, and give them greens a day or two before they go into the enclosure. Remove insects that are not eaten, so that they do not disturb the gecko by day.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Lucasium damaeum is fast and shy and stays hidden by day. It is a species to watch, not to handle. If you must lift it, do so briefly and low over the floor, because it darts away quickly. Never grab the tail.

The species in the group can be kept singly, in pairs or as one male with up to three females. There is no experience of keeping several *L. damaeum* together, so start cautiously, choose animals of the same size, and divide them if an animal is chased, loses its tail or loses weight. Two males must not be together. The animals are most active at night and can be difficult to see, so sit quietly by the enclosure after dark.

Breeding

SEXUAL MATURITY AND SEXING

The male of *Lucasium damaeum* is recognised by a distinct bulge at the base of the tail, where the two hemipenal pouches lie, and, as in the related species, by a small group of enlarged scales, cloacal spurs, at the top of the bulge. Females may have a slight, smooth bulge, but without a depression in the middle. In related ground geckos the young can be sexed once they have reached 60-70 % of adult body length, which they reach after 6-12 months with good feeding. Adult size is reached after 12-18 months, and breeding can begin when the animals are about 70-80 % grown. These figures apply to the group of ground-dwelling Australian geckos and have not been studied separately for *L. damaeum*.

MATING

In the wild *Lucasium damaeum* breeds from the end of September to December, and the related ground geckos breed from September to February. In them the natural cooling in winter is enough to get breeding started, the pair can stay together all year, and most animals breed at the same time each year.

Mating has not been described for the species, because the animals live so secretively. In a related species a male has been seen biting the female on the neck during the chase just before mating. The first eggs can come four to eight weeks after the temperature rises above 25 °C in spring. Separate the animals if the female seems stressed.

EGG-LAYING AND CLUTCHES

The female of *Lucasium damaeum* lays 2 eggs per clutch, and in the related ground geckos it is occasionally only 1. How many clutches are laid per season is not documented for the species. Other species in the group lay up to five clutches in the course of a season at intervals of 2.5-6 weeks.

The eggs have a soft, leathery shell. In the related species the female likes to bury them in damp sand or lays them under a hide, but in captivity she often lays them on open ground, where they quickly dry out. Place a closed lay box with damp sphagnum or sand in the enclosure, and check regularly for eggs. Give the female extra calcium and insects during the season, and let her rest if she loses weight.

INCUBATION

Place the eggs of *Lucasium damaeum* in a small box with perlite or vermiculite mixed with water in the ratio 1:1 by weight. The box should have a couple of small air holes, and the eggs must not be turned. The related species are incubated at 27-30 °C. Their eggs visibly grow during incubation, and the shell becomes almost transparent just before hatching. There are no incubation data for the species.

In the related species the eggs hatch after about 40-75 days depending on the species. The time is borrowed from them and may differ for *L. damaeum*. Incubation at room temperature works, but takes much longer, and the eggs are more exposed to mould.

Read more: Incubating eggs

REARING THE YOUNG

There are no descriptions of young of *Lucasium damaeum*. In the related species the young have the same markings as the adults, only slightly brighter, and their bodies are 25-30 % as long as those of the adults. Take them out of the incubation box after a day, and move them to a small box with the same kind of substrate as the adults. The young settle better on sand than on kitchen roll.

Feed them every 2nd-4th day with small insects, for example newly hatched crickets, small roaches or termites, which are easy to catch, and remember calcium and vitamins. Keep them separately or in small groups of the same size, and make sure each youngster has a humid hide. With good feeding they become adult after one to one and a half years.

Health and common mistakes

There are almost no published health data for *Lucasium damaeum*, but the ground-dwelling Australian geckos are regarded as hardy. The typical faults are:

- Too little moisture in the hide, so that shedding goes badly and remnants stick to toes and tail.
- Too little calcium and vitamin D3, especially in young animals and egg-laying females. It causes soft bones and tremors.
- A constantly damp or dirty enclosure and misting of the whole enclosure, which can cause bacteria and parasites.
- Sand that is swallowed together with the prey. Feed from a shallow bowl or a flat stone.
- Eggs that dry out on open ground. Give the female a damp place to lay them.
- Too high a temperature or an enclosure without hides, which stresses the animal.

A healthy animal has clear eyes and a plump body and tail. See a vet experienced with reptiles if the gecko loses weight, does not eat for several weeks, seems limp or has visible eggs in the body without being able to lay them.

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.