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SKINKS

Cunningham's Skink

Egernia cunninghami

A large, diurnal and highly social skink with a spiny tail from temperate south-eastern Australia. *Egernia cunninghami* lives in family groups in rock crevices, gives birth to live young and hibernates during the cold months. It needs a large, sunlit enclosure with solid rock structures and UVB.

Family: Scincidae Former name: *Tiliqua cunninghami*

KEY FACTS

THE ANIMAL

Adult size	**30-40 cm** total length incl. tail
Weight	**200-350 g**
Lifespan	**20-27 years**
Active	**By day**
Lifestyle	**Rock-dwelling**
Habitat	**Rocky terrain and temperate woodland and meadow**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 60 × 60 cm** L × W × H for 2 adults
Temperature, day	**24-30 °C**
Basking spot	**35-40 °C**
Temperature, night	**12-18 °C**
Humidity	**40-60%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 3
Diet	**Insects, fruit, plants and worms/snails**
Kept	**In pairs or in groups**

BREEDING

Reproduction	**Live-bearing**
Sexually mature	**60 months**
Litter size	**1-8 young**
Clutches per year	**1**
Gestation	**90 days**

PROTECTION AND PAPERWORK

CITES	**Appendix III**
EU annex	**Annex C**
IUCN	**Least Concern (LC)**

About the species

Egernia cunninghami is a large, stocky skink with short legs, a broad head and a long, pointed tail. The scales on the back are keeled from the neck to the tip of the tail, and on the tail they form large, spiny rings. The colour ranges from rusty red and dark brown to deep black with scattered, paler spots, especially around the mouth and on the legs. Animals from northern populations are often smaller and brown or reddish, while southern animals are darker and more strongly patterned.

The body from snout to vent is up to 25 cm in adults, and the total length is 30-40 cm. Adults weigh up to about 350 g. The legs are so short that the animal glides on its belly when it moves. *E. cunninghami* can be confused with blue-tongued skinks (genus *Tiliqua*), but has spines on the tail and is not smooth like them.

The species is diurnal and spends large parts of the day basking on rocks. The species name honours the botanist and explorer Alan Cunningham, who collected the first animals.

Distribution and habitat

Egernia cunninghami occurs in south-eastern Australia, from south-eastern Queensland through New South Wales to central Victoria, on both sides of the Great Dividing Range. A separate population lives in South Australia in the Mount Lofty Ranges and on the Fleurieu Peninsula.

The populations are tied to rock outcrops in forest and open woodland. Land clearing and the removal of logs and stones block dispersal between populations, and the South Australian population is regarded as threatened.

> **Native range:** Australia.

HABITAT

The species lives in forest and open woodland with rock outcrops and large granite boulders. The animals live in crevices, between rocks, in hollow tree trunks and under bark. A family group consists of a pair and several generations of offspring, up to 26 animals in all, which use the same hides and bask together on the same rocks.

The climate is temperate with warm summers and cold winters. The animals are active from about September to April and hibernate during the Australian winter, typically from April to September. Active animals in the wild have a body temperature of 30-33 °C, and they prefer about 35 °C. Adults live mainly on plants such as leaves, flowers and fruit, supplemented with snails, beetles and other arthropods; young animals eat more arthropods than adults.

Care

THE ENCLOSURE

Egernia cunninghami is a large species, and it needs a spacious terrarium. A pair needs at least 120 × 60 × 60 cm (length × width × height). A small group of one male and three to four females needs more.

Build crevices and caves from flat stones, slate and cork, and place them directly on the floor so that they cannot be undermined. There must be at least two hides and one large, flat basking stone. Use bark, coconut fibre and soil as substrate; avoid fine sand, because it can cause eye irritation and intestinal impaction. Keep the substrate slightly moist under one hide. The terrarium must be well ventilated and have a tight, escape-proof lid. A large water bowl where the animal can bathe is a must.

TEMPERATURE

By day the air should be 24-30 °C with a clear gradient from the cool to the warm end. Under a halogen spot lies a large, flat stone whose surface should reach 35-40 °C measured with an infrared thermometer; this matches the body temperature of about 35 °C that the species chooses itself.

At night the temperature may fall to 12-18 °C, as in the temperate home region. The animals tolerate cool nights, but must be able to warm up in the morning.

In the wild the species hibernates from about April to September. Give shorter days and slightly lower temperatures in winter so that the animal follows its rhythm. A proper winter rest is not necessary in the terrarium, and if you want to give a cool period, it should only be for healthy, well-nourished animals.

HUMIDITY AND WATER

Egernia cunninghami comes from temperate rocky forests, and a humidity of 40-60 % is suitable. Mist the enclosure lightly a couple of times a week, and keep a damp hide at the cool end so that the animal can choose for itself.

A large, stable bowl of fresh water must always be available; the animals drink and bathe in it. Change the water daily, and wash the bowl every week.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Egernia cunninghami is diurnal, basks a lot and needs UVB for as long as the light is on. A 5-6 % UVB tube in a reflector over the basking area, covering about half of the terrarium's length, gives Ferguson zone 3, as for the close relative *Egernia stokesii*. Place the basking spot so that the animal's back is at least 20 cm from the tube. UVB does not penetrate glass or plastic, and the tubes are replaced according to the manufacturer's instructions.

Supplement with strong, white daylight. The light period is about 14 hours in summer and 12 hours in winter.

Read more: Lighting and UVB Read more: Heat and temperature

FEEDING

Egernia cunninghami is omnivorous, but adults are mainly herbivores: in the wild more than 90 % of their food consists of plant material. Young animals eat far more arthropods. Give adults a large proportion of greens and young animals more animal food.

Offer greens and wild herbs such as dandelion, clover, endive and cabbage, chopped vegetables such as courgette, carrot and cucumber, flowers such as hibiscus and roses, and a little fruit as a treat. Add insects such as cockroaches, crickets, locusts and mealworms as well as snails. Small amounts of lean meat or boiled egg can be included, but should not make up much. Wash all greens and wild herbs before offering them.

Young animals are fed daily, adults three times a week in small portions, alternating greens and animal food. Dust insects and greens lightly with calcium, and give a vitamin supplement once a week. A diet with a lot of meat and fat causes obesity.

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

BEHAVIOUR AND HANDLING

Egernia cunninghami is one of the most social reptiles: it lives in long-lasting family groups. A pair can be kept together, and a small group consisting of one male and three or four females works in a large enclosure, especially if the animals have grown up together. Unfamiliar adult males can fight seriously, so a male should not be kept with other males. New animals are introduced only after quarantine and under supervision, and they must be separated if they fight.

The animals become more trusting when fed from tongs, but they are not animals suited to much handling. A threatened animal withdraws into a crevice, puffs itself up and locks itself in place with its spiny scales, so that it is difficult to get out. Calm behaviour and fixed routines reduce stress.

Read more: Quarantine and hygiene

Breeding

SEXUAL MATURITY AND SEXING

The sexes are difficult to tell apart externally, and reliable sexing requires a vet with experience in reptiles. The young become sexually mature after about five years at a snout-vent length of 19-20 cm. In animals with plentiful food it may happen faster, but this has not been documented.

MATING

The species is monogamous, and pairs stay together year after year. Animals in family groups rarely mate with close relatives, so groups of siblings may give poor mating; a pair from different families works best. Mating takes place around November, after the winter hibernation. Whether a cool winter period is necessary for breeding in captivity has not been documented.

Read more: Brumation and the seasons

EGG-LAYING AND CLUTCHES

The species gives birth to live young. A litter is 1-8 young, rarely up to 11. The female gives birth to no more than one litter a year, and not all females breed every year. The young are born in January and February.

INCUBATION

There are no eggs to incubate. Gestation lasts about 90 days as in *Egernia stokesii*, and this fits with mating in November and birth in January-February. Give the pregnant female extra food, calcium and UVB, and keep the terrarium quiet. The female may give birth in the open if the crevices are too narrow, so there must be wide, flat hides.

REARING THE YOUNG

The young are 6-7 cm from snout to vent at birth. In the wild they stay in the family group until they are sexually mature. Give them an enclosure with hides, UVB and small insects and finely chopped greens daily, dusted with calcium. Keep the young under supervision, and separate them from the adults if aggression is seen.

Health and common mistakes

Egernia cunninghami is hardy when temperature, light and substrate are right. The typical problems are:

- Calcium deficiency and brittle bones from too little UVB and a one-sided diet.
- Impaction from fine sand or large pieces of food.
- Obesity from too much meat and fat and little exercise.
- Internal and external parasites, especially in new animals.
- Fighting injuries and stress when kept too closely, especially unfamiliar adult males.

The species can live for over 20 years and up to 27 years. Quarantine new animals for at least a month. The animals hide illness well, so contact a vet with experience in reptiles if there is a change in appetite, weight loss or swellings.

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.