



## **KEEPING ADVICE SHEET**

## Terrestrial Geckoes

## Binoe's Gecko

Heteronotia binoei



**Binoe's Gecko** (*Heteronotia binoei*) – Maximum length 12.5 cm. Category 2.

**Three-lined Knob-tail Gecko** (*Nephrurus levis levis*) – Maximum length 15 cm. Category 3.

NATURAL HABITS: Binoe's Gecko occurs over much of Australia, excluding the southwest and southeast corners, in a wide variety of habitats, including in association with human habitation, particularly open rubbish strewn areas. Three-lined Knob-tail Geckos occur in arid sand dune and sandplain habitats from the central west coast of WA, east into New South Wales and Queensland.

Geckos are primarily nocturnal, although the Binoe's Gecko has been observed in the wild active in the day.

**HOUSING:** An adult pair of either of these geckos will require a top-ventilated, indoor vivarium of at least 40 x 20 x 30 cm in size. Do not mix small and large individuals together as cannibalism may occur. Aquariums and plastic storage containers are ideal for this. Enclosures must be secure and escape proof.

CAPTIVE ENVIRONMENT: Cage furnishings should include hiding places in the form of pieces of bark, small rocks and leaflitter. Course sand or gravel as a substrate several centimetres deep will allow digging. Short lengths of plastic pipe can be partially buried to provide non-collapsible burrows. Most geckos prefer to thermoregulate while remaining concealed, so ensure that any cover is positioned so that there will be a temperature gradient along its length.

TEMPERATURE & LIGHTING: To stimulate nocturnal behaviour and improve your ability to observe them at the same time, install a red or blue light globe to provide warmth at night. This can be replaced with a white globe in the day. A gradual cline of temperatures is desired, so place the globe at one end of vivarium. Experiment with different wattage globes to achieve a warm spot of about 28°C, but if using a plastic container, ensure that the wattage is not too high, or the globe too close, to melt the plastic.

**WATER:** A shallow water bowl should be provided at all times; include a small, half-submerged stone, which will provide a damp place and contribute to vivarium humidity. Lightly spray the interior once a week with a water atomiser as geckos may only drink by licking up the droplets.

**FOOD:** A variety of insects such as adequately sized mealworms, crickets, grasshoppers, cockroaches and moths should be offered. Many ground geckos feed on termites too. Food should be dusted with a calcium/vitamin supplement and offered every 2-3 days in a small, shallow container.

CAPTIVE BEHAVIOUR/BREEDING: These geckos adjust readily to captivity despite being shy in the wild. Keep handling to a minimum by restricting it to that required for general husbandry. Always handle your gecko carefully by the body so that it does not drop its tail. The male is usually smaller and has two obvious hemipene bulges at the base of the tail, either side of the vent. Female Binoe's Gecko may develop cheek swellings caused by calcium storage in preparation for egg production. Breeding will occur in the spring and summer if cooled off for a few weeks in the winter. They deposit one or two eggs in a clutch, with two or three consecutive clutches each season being common. When the eggs have developed sufficiently to be seen through the female's belly, create a suitable laying site for her, consisting of a small area of slightly damp soil at least 4 cm deep. By providing this, the female is less likely to become egg bound. Males may fight during the breeding season and require separation at this time to avoid damage to each other.

**DISEASES:** A clean artificial reptile environment with the appropriate husbandry mentioned above will usually result in your pets remaining healthy. Quarantine newly acquired animals for at least a month before introducing them to those already being kept.

REPTILE MITES: Reptile mites are the scourge of many keepers. They can rapidly multiply and quickly kill a reptile. If an infestation is found, it is imperative that you take immediate action to eradicate it. Although small (a large female may be one-third the size of a pin head) they will be obvious on white paper as miniature black tick-like animals. If you find you have an infestation, it is important to kill it in situ. This can be achieved by placing a Sureguard Ministrip™ within the respective cage for at least 8 hours before cleaning. Then follow-up with two 8hour cycles two days apart. DO NOT expose your pet to the pest strip for any longer or you may kill it.

**FURTHER READING:** Care of Australian Reptiles in Captivity – John Weigel. Reptile Keepers Association, Gosford, NSW.