

## Husbandry Care sheet for the Ground Cuscus (*Strigocuscus gymnotis*)

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### Description

The Ground Cuscus is a marsupial from the order *Diprotodontia* and belongs within the *Phalangeridae*, a diverse family consisting of the other cuscus species and the brushtail possums (*Trichosaurus spp*) and scaly tail possums (*Wyulda spp*). Body weight of the ground cuscus averages at around 2.5 – 3kg and the head and body length is approximately 440mm and tail length 330mm although wild populations show variation depending on their location. They have opposable thumbs on the hind feet, prehensile tails and a bifurcation between the second and third front digits to allow them to move easily within the trees and to feed in a suspensory position.

The pelage is short and dense and is usually some shade of grey, often with white markings on the belly and scrotum. The tail has a coarse, tubercle like appearance at the base and on the dorsal side, with a ridged fingertip patterning on the underside to facilitate gripping. The feet are large with five digits, only the opposable digit on the hind feet is without claws. The ears of the ground cuscus are prominent and naked. The pouch is forward opening and contains four mammae.

### Habitat

The ground cuscus is endemic to New Guinea and Aru Island and inhabits both forests and scrubland. It is most common at elevations of between 500 – 1500m but has been recorded as low as 200m and as high as 2600m. Swampy areas, deltas and floodplains are usually avoided. The ground cuscus is classified as data deficient on the IUCN red list and population trends are unknown.



### Reproduction

The gestation period for the Ground Cuscus is thought to be around 13 days with youngsters leaving the pouch at around 110 days for brief periods. In captivity, youngsters have been observed sleeping separately from the female at around 160 days.

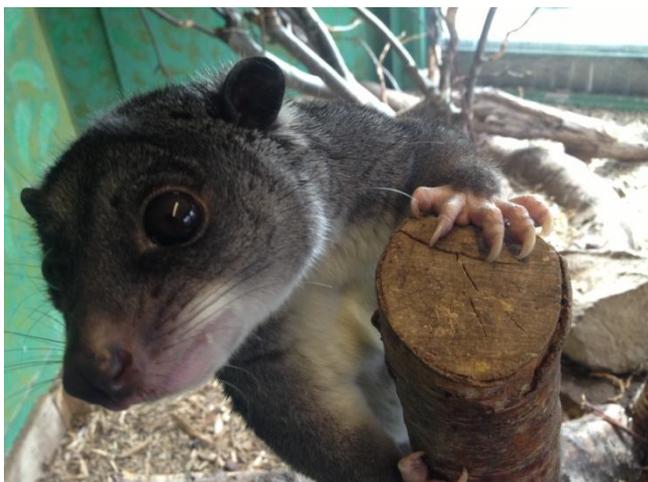
## Housing requirements

The ground cuscus is most commonly housed in nocturnal exhibits, generally with no access to an outside area. Whilst this species is generally regarded as nocturnal, those collections that provide outside access notice bouts of activity throughout the day – particularly early to mid morning. This may well indicate a trend towards cathemeral behaviour in captivity.

Enclosures should be ideally no less than 3x3x3 metres but larger, more complex spaces appear to be beneficial for cuscus, particularly when housed in pairs or in a mixed species exhibit. Height is important as all levels of an enclosure will be utilised.

Boundaries can be mesh – preferably no more than 3cm diameter, glass or strong nylon netting. If mesh or netting is used, a stand-off barrier should be provided to eliminate the risk of bites to visitors. Exhibits can be constructed from almost any material, and nocturnal glass fronted exhibits, wooden framed aviaries and tropical houses have all been reported.

Substrates that can be used are varied. Shavings, bark, leaf litter and other floor coverings are reported. Floors of soil, grass and other natural planting are also used. Whilst many collections house their cuscus in an essentially arboreal exhibit, this species will also forage on the ground so an aesthetically pleasing and stimulating substrate should be considered. Although cuscus have not been observed making burrows, they will certainly use those made by other species so deep substrates may well be beneficial.



Exhibits should be furnished with a selection of climbing apparatus that will allow the animal to utilise the full size of the enclosure. This can be of varying diameters but thicker branching appears to be preferred. Ground cuscus are generally reluctant to climb vertical branching so a variety of sloping apparatus should be included. Although they are capable of jumping short distances from one branch to the next, the branching should be arranged in a series of connected aerial pathways that preferably should have no “blind alleys” or large gaps. This species will utilise caves and retreats at ground level. Outside exhibits can be furnished with a variety of non toxic plant species although cuscus can be quite destructive

if palatable plants are used. Bamboos, palms, sedges and bromeliads appear to be the most resilient and offer the cuscus a degree of shade and privacy.

At least one nest box or sleeping site per animal is recommended. These appear to be used regardless of their position within the exhibits. Most collections appear to favour elevated sleep sites.

Most collections report an enclosure temperature of around 18 – 20 degrees centigrade with relatively high (above 40%) humidity. Hotspots appear to be effective for encouraging cuscus to use certain areas of an exhibit – very useful for a species that may be cryptic in its behaviour and therefore not always the best show for the public. Reversed lighting is generally used for nocturnal exhibits but collections housing this species in low light natural exhibits such as heavily planted tropical houses note that this species may be active at intervals throughout the day. It is also recommended to spray or mist the exhibit periodically to ensure correct humidity levels are maintained.

### **Feeding**

The ground cuscus is primarily a frugivore / folivore but will also take invertebrates, birds, eggs, small mammals and reptiles. The digestive system is less specialised than other cuscus spp, indicative of a more catholic diet. Feeding occurs both in the trees and on the ground with the animal often adopting a suspensory feeding position from its prehensile tail to free both hands for food manipulation. The ground cuscus can move surprisingly quickly in short jumps allowing it to take live prey.

Most institutions offer a varied diet containing fruits, vegetables, invertebrates. Cooked rice and cereal balls Small quantities of meat can be offered on occasion along with eggs, mealworms, crickets and other invertebrates. Pellet feed reported were Diet A, macropod pellets and primate pellets. Supplements used include SA-37, Murnil, Basica, Korvomin, Multio Bio-Veyx and nutrobal

### **Health**

Common signs of ill health include:

- Ground Cuscus may suffer from digestive tract abnormalities due to soft diet – intussusception, a diet with sufficient fibrous content or complex content is essential
- Alopecia, patchy coat or fur loss
- Cataracts or eye damage due to a dry environment

Vaccination protocol: No vaccination protocol needed.

If there are any signs of poor health a vet should be consulted for a diagnosis.

### **References**

IUCN. (2007). *IUCN*. Retrieved March 2, 2013, from IUCN Red List of Threatened Species : <http://www.iucnredlist.org/details/16856/0>

Jamie Craig. Husbandry guidelines for the Ground cuscus (*Strigocuscus gymnotis*). Cotswold Wildlife Park.