**“Rehabbing Two Elusive ‘Large’ Gliders: Yellow-Bellied & Greater Gliders”**

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The key to successful rehabilitation of the Southern Greater Glider and Yellow Bellied Glider is to adequately educate yourself with their biology! Even for short term care - the care must mimic and transition the animal e.g.: fitness, food identification etc. to enable success - post release.

Do not attempt these two intrinsic species if you cannot:

• commit the time

• veterinary care

• natural foliage/feed source

• adequate enclosure space.

**Yellow Bellied Glider (Petaurus australis australis) Status = ‘of least concern’**

Weight - Males: 600-700grams; Females: 450-550grams Head/body length: 27-32cm; large pointed ears.

Tail length: 43-48cm (dark, fluffy).

Dark grey colouring, with upper parts olive grey; underparts yellow, cream with an orange tinge. Male Yellow Bellied Gliders have a distinct head scent gland that has a strong pungent odour for scent marking (it doesn’t wash off fingers easily). The gliding membrane attaches from the foreleg to the hindleg.

Home range in Gippsland: 20-85 hectares. Population density 0.02-0.28 (Individuals per hectare). This variation in movement is due to their dependence upon flowering trees and bark shedding which is found in a mixed eucalyptus forest.

Yellow Bellied Gliders use their front teeth (incisors) to chew triangular incisions in trunks of trees to enable access to feed on the sap. This may leave remnants of bark clumps at the base of tree known as ‘chew-balls’. Yellow bellied Gliders are more active than Greater Gliders spending most of their time foraging.

Breeding is from August-April and joeys (consisting of one or two individuals) are weaned at 5months.

Known to the Aborigines as ‘chibur’. These gliders are very vocal and growl, gurgle and hiss. When threatened they will scream. Their usual chatter is a recurring ‘hucking’ sound. They can glide up to 150metres.

The life span of Yellow Bellies is 5-6 years although one was recorded as living in captivity until the age of 16.

¹ Aging is estimated with teeth wear patterns taken from the wear on the upper incisors.
¹ (Jackson, Australian Mammals, Biology and Captive Management, 2003)

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**Southern Greater Gliders (Petauroides Volans) Status = vulnerable**

Weight - Males: 800-1100grams; Females: 750-1200grams Head/body length: 34cm

Tail length: 30-40cm (long and black and acts as a rudder when gliding).

Home range in Gippsland, Victoria: 1.4 hectares males, 1.3 hectares females. Females in Gippsland overlap home ranges, whereas males do not.

Originally confused ² with Petaurus australis, the Southern Greater Glider is morphologically and genetically distinct from Northern Greater Glider. The Southern Greaters’ ‘persian’ type coat is dorsally black with a white under belly. The gliding membranes (known as patagium) connect from the elbow to the heel. The front feet have toes that are opposing and the hind foot has an opposable thumb to enable grooming. This species is found in tall, moist forest of high elevations.

The young remain in the pouch for up to six months. The joey is then carried as back young for approximately another four months. They are independent at 12 months of age, but not sexually mature until their second year.

Greater gliders feed on eucalyptus – with gum species I have found being favoured: Manna Gum (E. viminalis), Silvertop Gum (E. Siberi), Peppermint Gum (E. Radiata), Blue Gum (E. Globulus). This species specifically seeks the nutrients in eucalyptus leaves with nitrogen level requirements of 1.1-1.6g%. Their gut system, incorporating a large caecum, mimics that of the koala - inclusive of the symbiotic bacteria to assist breaking down the food particles. They do not eat flowers.

They are known as the ‘sheep of the forest’ due to their lack of ability to hide. This makes for easy observation with spotlighting, and ‘eyeshine’. They can glide up to 100metres!

Their call is very soft, although they will grunt and shriek when threatened. Adult Greaters’ have a stringent spicy-cinnamon smell.

Breeding season is from March-June. There is no second peak of breeding. They give birth to one offspring.

These animals inwardly stress and will lower their body temperature similar to an animal entering torpor. Providing a temporary heat source whilst first in care, is crucial to enable activity, feeding and healing.

A Greater Gliders’ life span is estimated at four years ³ . Although ‘undisturbed’ may live for 11 years. Teeth wear class (wearing of the cusps of the teeth) is used to estimate age in this species (similar to that of the koala).

Both these glider species are dependent on Eucalypts and hollow bearing trees and reside in wet sclerophyll forest.

Threats and predators include tree felling, fire, barb wire fences, mistletoe, foxes, wild dogs.
² (Jackson, Taxonomy of Australian Mammals, 2015)
³ (Kerle, 2001)

 Natural predators include Spot-tail Tiger Quoll, Lace Monitors and Powerful and Sooty Owls (all listed as threatened/endangered species) as well as wedge tailed eagles.

Access and collection of feed for both these species, can be challenging and time consuming. Unwell gliders may have parasites burdens, suffer disease and or bacterial infections.

They require adequate habitat to enable dispersal. Sub adults, particularly males, can find themselves struggling to establish territory.

It is detrimental that their muscle tone is adequately developed if they have been hand raised or spent significant time in care.

Large rehabilitation cages are a must! Captive recommendations: Minimum floor area 20 sq metres, per individual, with a height of 3 metres and an additional 10 metres floor area per each additional animal. However larger is best - we are prepping an animal for survival in the wild. They need fitness, strength and gliding experience in order to survive, once released.

Post monitoring of released individuals helps to determine success, with the animal integrated into the natural population.

***References***

*Jackson, S. (2003). Australian Mammals, Biology and Captive Management. Collingwood, Vic: CSIRO. Jackson, S. (2015). Taxonomy of Australian Mammals. Sydney: CSIRO.
Kerle, A. (2001). Possums. Sydney: UNSW Press.
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