

KOALA



notes

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The koala (*Phascolarctos cinereus*), often mistaken for a bear, is unique to Australia. It is a marsupial whose closest relation is the wombat. Fossil ancestors of the Koala date back 15 million years. The name 'Koala' is derived from an Aboriginal term translated to 'the animal that does not drink'. The natural life of a Koala spans between 15 and 18 years.

Koalas are arboreal, which means they are tree dwellers. Koalas are folivores (foliage eaters), feeding on the leaves of eucalypt trees. They move around and feed at night with peak activity being just after sunset. An adult consumes up to 1 kilogram of leaves per day and it must spend up to 19 hours per day sleeping in the fork of a tree to allow digestion to occur. Eucalypt leaves provide a high fibre, low protein diet and the koala's digestive system has evolved to cope with this diet. The Victorian Koala prefers to eat Grey gum, Blue gum, Manna gum or Swamp gum. However, Koalas are able to feed on a much larger range of eucalypt species if available and have been known to eat

non-eucalypt species when eucalypts are sparse. Koalas obtain sufficient water from their food and therefore rarely leave the trees to drink. They will drink however, when it is hot and water is available.

Koalas found in South Eastern Australia are fairly robust (adult males average 11.8 kg, females 7.9kg) with dark grey, shaggy fur. Koalas found in Queensland and New South Wales are smaller (adult males average 6.5kg, females 5.1 kg) with reddish or tawny fur. The Koalas at the Adelaide Zoo are native to Victoria.

Most marsupials have a pouch, (some only have a flap of skin), designed for rearing their young, which opens upwards. However, a Koala's pouch faces downward, like a wombat's. It is believed that this makes the journey to the pouch easier for the joey and therefore more successful. The less the distance to travel, the better chance the offspring has of reaching its destination under the stress of its mother climbing around the tree. The

mother assists the passage by licking the area of fur the joey is to travel.

Koalas have sharp claws, which dig into the trees and assist in climbing. Two thumbs oppose the rest of the fingers and a large toe opposes others to give a stronger grip. Movement along the ground is not specialised, but a Koala can move quite swiftly when alarmed.

Koalas have a very short tail, which is rarely visible. A thick pad of fur-lined gristle covers it. This acts as a cushion, which is useful, since a Koala sits in the fork of a tree for such lengthy periods.

Australia's extreme temperatures represent a challenge for many animals to regulate their body temperature. A fine, dense undercoat and a longer, shaggier topcoat helps to insulate the body. In addition, a Koala will occupy a tree with a thick canopy of leaves and move to lower levels to minimise the effects of wind, rain and hot temperature.

Females are sexually mature at the age of 2 years, and males aged 3-4 years. Breeding occurs between September and February, when bellowing mating calls are frequent. The gestation period is 35 days. Only one offspring is produced per year, weighing an average of 0.5 grams and is about the size of a peanut at birth. It remains in the pouch for 7 months, suckling on one of the two teats. Weaning takes place in the last months of pouch life. The infants diet change is initiated by feeding on soft faeces from the mother. These contain micro-organisms, which are vital for digestion and must be introduced through the mother's faeces, as the young are not born with them. For the next 12 months, the young marsupial travels on its mother's back, feeding on a combination of Eucalypt leaves and the mother's milk. Around 19 months after birth it moves away from the area in which it was born.

Males have a large scent gland located on their chest (sternal gland). They rub their chest on a tree to mark their territory, and to attract females. Both sexes sometimes dribble urine at the base of or on the trunk of a tree to attract the opposite sex in the breeding season, or to mark territory at other times of the year. There is usually only one adult Koala continually occupying a feeding tree. If you hear wails, screams and snarls it is probably because territory is being threatened. Koalas may look cuddly, but they can protect themselves effectively with their teeth and claws.

In recent studies of Koalas in the wild it is suggested that the debilitating disease, Chlamydia, is a regulating factor of Koala populations. When numbers of Koalas begin to increase in an area, food availability diminishes. The stress on the animals will cause the females immunity levels to lessen and increase the chance of them becoming ill, which in turn will not enable breeding to take place. In the same studies it is also suggested that animals live in a loose social structure with individuals knowing each other within a territory.

Victorian Koalas were introduced to Kangaroo Island and the Adelaide Hills. The Adelaide Zoo currently provides habitat for a small number of Victorian Koalas. They were re-located from Kangaroo Island where Koalas were out-stripping their environment of food resources. SA Water has a eucalypt plantation at Bolivar, which, along with donations from the public, provides a healthy supply of food for our Koalas.

Keepers are involved in continual husbandry activities such as weighing and observation of faeces to ensure the Koalas are in excellent health. In addition, the Adelaide Zoo is committed to the ongoing research and conservation of this unique Australian animal.

