

# Koala

*Phascolarctos cinereus*

PHILLIP ISLAND  
NATURE PARKS  
nature  
notes

## Koala

Koalas are marsupials, which are mammals that give birth to very undeveloped young who then complete development in a pouch. They are only naturally found on the mainland of eastern Australia, however they can also be found on several different islands like Phillip Island (Millowl) and French Island, as they were brought across to protect them from hunting in the 1800's. Koalas have a thick coat of fur which varies from a light grey color to a dark grey/brown on the back, with white on the chest and stomach. Their thick fur acts as an insulator from the cold and during inclement weather they huddle into a ball with their back to the wind. On hot days they stretch out along a branch, seek shade on the ground or in non eucalypt trees with dense foliage. Koalas sleep for approximately 20 hours a day due to their low energy diet.

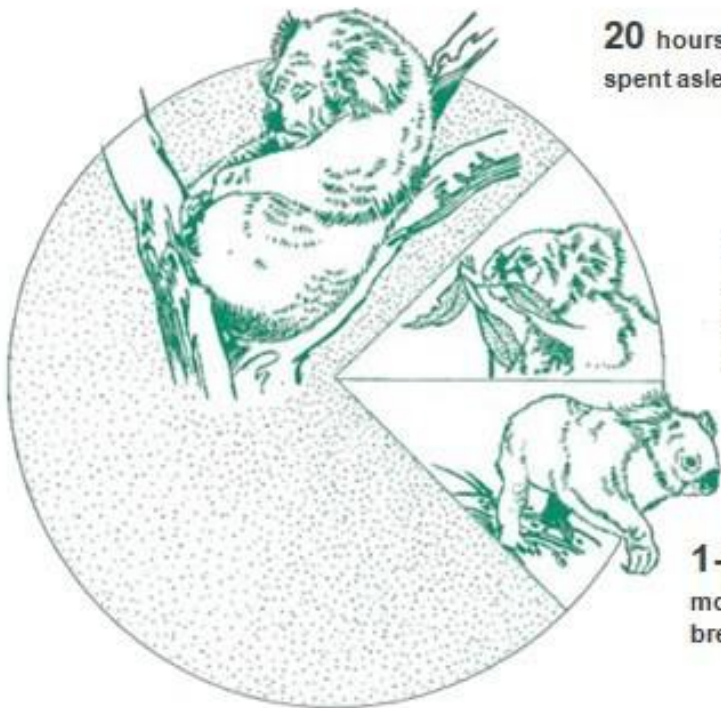
The Bunurong name for Koalas is Gurrborra.

## Koala diet

A koala's main food is eucalypt leaves and on Phillip Island (Millowl), they generally prefer eating coastal manna gum (*Eucalyptus viminalis* ssp. *Pryoriana*), swamp gum (*Eucalyptus ovata*) and blue gum (*Eucalyptus globulus*). However, buds, fruit and even bark are occasionally eaten and they have also been seen feeding on sweet bursaria, black wattle, coastal tea tree, swamp paperbark, and Monterey pine. The 500–1000 grams of leaves koalas eat each day provides them with as much energy as one serving of breakfast cereal does for us! Therefore koalas have developed a low energy lifestyle to compensate for their low energy diet.

Gum leaves contain:

50% water	5% sugar/starch
18% fibre	4% minerals
13% tannins	8% fat



**20** hours (approximately) of the koala's day is spent asleep and resting.

**1-3** hours a day are spent feeding. This occurs in numerous bouts spread across the 24 hours, especially around sunset. Feeding may last from 5 minutes to 2 hours.

**1-3** hours are spent in grooming, moving from tree to tree and during the breeding season searching for a mate.

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A koala's digestive system is geared to get the most energy out of the eucalyptus leaves. They have an organ called a caecum which contains millions of bacteria to help break down the fibre into substances that are easier to absorb. Koalas rarely drink water as they obtain water from the contents and surface of the leaves they eat.

## Breeding

Koalas are capable of breeding when they reach their adult weight – for females this is around two years and in males around three years. However males need to find an opportunity to mate where there is not bigger, stronger, more capable competition. Often males do not start breeding until they are five years old. Koalas mate at a time which allows the young to emerge from the pouch when food is abundant and of the highest quality. In southern Australia, most births are during December –February. Bonds are not formed between males and females for even one season. Once the act of mating is over, the male leaves the tree and the pair have no further contact.



Koala babies are called joeys and are born 34–36 days after conception. They are about 19mm in length and weigh approximately 0.5g (about the size of a jelly bean). Only the forelimbs and lips are well developed - vital for the climb to the pouch and suckling once in the pouch. For the first 22 weeks after birth the joey remains within the pouch without emerging. From this time until 36 weeks it will grow and become more independent, spending more and more time out of the pouch. At 36 weeks it weighs about one kilogram and no longer fits in its mother's pouch.



A joey spends much of the time sitting on the mother's back, but returns to the mother's belly in cold, wet weather and to sleep. At around 6-8 months the mother gives her joey some of her droppings called 'pap'. This process passes along special micro-organisms the joey will need to help break down toxins present in the eucalypt leaves. Koalas are weaned at approximately 12 months old and are fully independent at 18 months.

## Koala Conservation Reserve (KCR)

The KCR was opened in 1992 to provide a protected population of koalas for viewing by local and international visitors and to aid the conservation and research of the koala population on Phillip Island (Millow). Koalas are restricted to existing mature vegetation — an area of about six hectares. The KCR is managed by Phillip Island Nature Parks, a Victorian Government entity, that protects and manages approximately 20% of Phillip Island. The money raised through tourism goes towards helping to protect a variety of flora and fauna through environmental management, education, and research.



Koalas as a species are not endangered, however they are officially listed as endangered in QLD, NSW and ACT. The greatest threat to koalas is habitat loss. This has resulted from land clearing,

climate change, housing and roads.

Other threats include disease, road kills and dog attacks. Chlamydia is a disease that is spread through sexual activity and direct contact of infected surfaces. It can lead to infection of the koalas urinary tract, reproductive tract, respiratory tract and eyes. It may result in blindness or infertility and sometimes death. Although there is no cure, captive koalas may be treated with medication to relieve the symptoms. Research into Chlamydia in koalas continues.

## Koalas for our future

To ensure a future for our koalas, steps must be taken to help conserve the environment they live in. With deforestation causing habitat loss, there are ways that you can help koalas. Recycling paper and cardboard and buying recycled paper products like printer paper, toilet paper, paper towels and greeting cards, will reduce the amount of trees being cut down to make these products. If you live in an area that koalas inhabit, then make sure your pets are kept safely enclosed and plant koala friendly gum trees in your backyard or surrounds. Drive carefully on the roads, especially at night, as this is the time that koalas usually move around. If we are to ensure the survival of the species, we need to start better managing our environment.



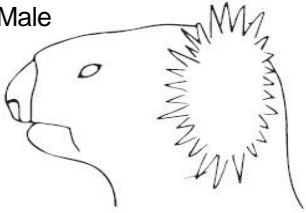
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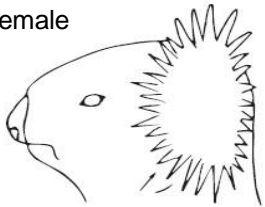
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Male and female koalas have different head shapes, females with a rounded forehead and shorter nose as compared to the male with a flatter head and more of a 'roman' nose.

Male



Female



Koalas have large ears and a great sense of hearing, which they need to detect any predators or threats in the area. Males need to listen for any challenging bellows from other males who might want to invade their territory.

Koalas don't have great eyesight, so they rely on their other senses to survive. They use their sensitive sense of smell to seek out the best quality eucalyptus leaves to eat. Their sense of smell is so acute, they can detect other eucalypt forests from over 1km away.

Koalas can be very loud and noisy when being vocal, with males bellowing and females making a high pitched scream.

Koalas have thick fur which acts as a great insulator from cold or hot conditions. Over winter they grow a thicker coat and huddle in a ball, with their back to the wind to help retain heat. Koalas in the southern part of Australia have thicker, darker fur as opposed to those found in the north.

Male koalas are usually larger in size. In Victoria the average weight of a male is 11.8 kg compared to 7.9 kg for a female. Males are easily distinguished by their active sternal (chest) gland which leaves a brown stain marking the chest.

On each of their forepaws, koalas have two thumbs and three fingers to help them grip tightly to the trees. They have long, sharp claws and strong limbs to climb their way up tree trunks and along branches to find leaves to eat.

Like its closest relative the wombat, a koala has a cartilaginous pad at the end of its spine which provides an 'in-built seat' to sit comfortably in forks of trees. They also have thicker fur in this area for added extra padding.

