

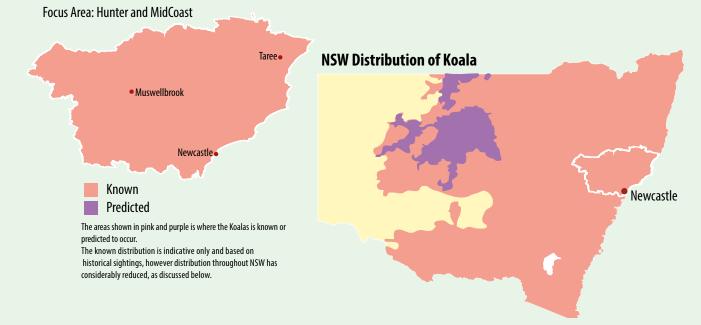


# Koala

## {Phascolarctos cinereus}

Koalas are a tree dwelling, leaf-eating marsupial; its closest relative is the wombat. The Koala's diet consists of about 70 eucalypt species and 30 non-eucalypt species. Koalas have a specialised digestive system to break down and absorb nutrients from the large quantities of leaves they consume. They are mostly nocturnal, sleeping up to 18 – 20 hours each day to conserve the energy they must use to digest their food. Early European settlers hunted Koalas for furs which drastically affected Koala numbers and led to localised extinction in some areas.

Koala populations are fragmented across much of NSW, and are in danger of population decline, towards extinction.



# Are Koalas found near you?

Koalas are found in a variety of habitats both sides of the Great Dividing Range from the Atherton Tablelands west of Cairns in Queensland, to the Mount Lofty ranges in South Australia. Populations have become very fragmented since European settlement.

In the Hunter and Mid Coast regions, this species is mainly found within 40km of the coastline, with significant populations located between Nelson Bay and Newcastle, north through Medowie, and between Upper Myall and Smiths Lake. A significant population is located around Taree and nearby Hallidays Point. There are also clusters of recent records around Clarence Town, northwest of Bulahdelah and around Wollombi — Laguna.

# Why is this species important?

Each day a Koala can eat around 500g of toxic eucalyptus leaves which most other animals cannot tolerate. This helps to trim back trees and recycle nutrients back to the soil.

They are an iconic species that benefit Australia's economy. It has been estimated that they create over 9,000 jobs and contribute between 1– 2.5 billion dollars per year to tourism.

Koala's conservation status is currently listed as vulnerable by both the New South Wales and Australian Governments.

### Habitat

Although usually solitary animals, Koalas individual home ranges overlap extensively. The size of each Koalas range depends on the quality of habitat. Within healthy forest on good soil and with adequate moisture, breeding females often dominate better quality habitat so energy is conserved when rearing young whilst males are often pushed into poorer quality habitat. In poor quality habitat a Koalas range may be several hundred hectares. Under most conditions, Koalas move between trees a few times each day. Dispersing individuals, mostly young males, may cover distances of 10km.

# Mid Coast and Lower Hunter (Main koala food trees)

### **Primary food tree species**

Tallowwood *Eucalyptus microcorys*Forest red gum *E. tereticornis*Swamp mahogany *E. robusta* 

### Secondary food tree species

Narrow-leaved red gum *E. seeana*Slaty red gum *E. glaucina*Small-fruited grey gum *E. propinqua*Red mahogany *E. resinifera*Mountain mahogany *E. notabilis*Grey box *E. moluccana* 

Yellow box *E. melliodora* **Stringybarks/supplementary species** 

Stringybark *E. tindaliae*Thin-leaved stringybark *E. eugeniodes*White stringybark *E. qloboidea* 

Craven grey box *E. largeana*Grey gum *E. biturbinata*Large-fruited grey gum *E. canaliculata*Steel box *E. rummeryi*Rudder's box *E. rudderi* 

Parramatta red gum E. parramattensis

Orange gum E. bancroftii

Cabbage gum E. amplifolia

White-topped box *E. quadrangulata* 

Blue-leaved stringybark *E. agglomerata* Diehard stringybark *E. cameronii* 

### Upper Hunter (Main koala food trees)

### **Primary food tree species**

River red gum E. camaldulensis

### Secondary food tree species

Dirty gum *E. chloroclada*Blakely's red gum *E. blakelyi*Bimble box *E. populnea*Pilliga box *E. pilligaensis*Fuzzy box *E. conica*Mallee red gum *E. nandewarica* 

Western grey box *E. microcarpa*Yellow box *E. melliodora*White box *E. albens*Dwyer's red gum *E. dwy*E. volcanica

E. polyanthemos

Orange gum E. prava

Tumbledown gum *E. dealbata* 

#### Stringybarks/supplementary species

E. macrorhyncha Narrow-leaved stringybark E. sparsifolia

Shade trees in the Upper Hunter are particularly important for this species. Trees with dense canopies, that offer cooling micro-climates – known as shade trees, are important for koalas as they provide protection from dehydration during Summertime. When planting koala food trees, mix in shade trees too this will keep koalas healthy. For the Upper Hunter shade trees include: Kurrajong (*Brachychiton populneus*), River Oak (*Causarina cunninghamiana*) and Wilga (*Geijera parviflora*).



# **Threats**

In the 1890s to 1930s hunting decimated Koala populations, with more than 4 million Koalas killed for their fur, including 800,000 in Queensland in August 1927. In NSW, the decline in Koala populations between 1990 and 2010 was estimated at 33%. Koalas prefer forests growing in better soils, possibly due to the better nutritional value within tree leaves. As this forest type cleared to make way for development and agricultural pursuits, Koalas are struggling within small isolated patches of forest.

### Threats include:

- Loss and fragmentation of habitat,
- Predation or attack from wild and domestic dogs as well as livestock such as cattle and horses.
- Low genetic diversity in isolated populations,
- Mortality due to vehicle collision,
- Malnutrition,
- Heat waves,
- Drought,
- Fire,
- Disease and
- Dehydration.

Stress caused by multiple threats can cause Koalas to be more susceptible to disease. Chlamydia is a highly infectious bacterial disease that is severely affecting Koala health. Infections of the respiratory tract, eyes, urinary tract and reproductive tract can lead to blindness, infertility in female Koalas and may be fatal. Visible symptoms include discharge from the eyes and wet bottoms.

Climate change is expected to lead to increased frequency of high temperatures, changes to rainfall, increasing frequency and intensity of droughts, and increased large scale wild fires over much of the Koala's range. As Koalas have no ready means of avoiding weather extremes it is thought

they are more susceptible to these changes. Planting koala feed and shade trees provide valuable habitat for this species enabling them to move between remaining vegetation patches ensuring their ongoing survival

### Identification

Koalas can live up to 14 years in the wild. The largest Koalas found in this area reach about 10kg in weight. They communicate with their young by making soft clicking, squeaking sounds or gentle murmuring. They are also capable of making load screams. They make low grunting growls to defend home range, particularly doing the breeding season in spring-summer. Breeding season in the Hunter & Mid Coast area is August — April depending on weather. Mature breeding males can be easily identified by a brown scent gland on the centre of their chest which is used to mark their home trees.

Koalas thick and woolly fur helps to protect them from winter and summer extreme temperatures while also serving to repel moisture when it rains. Colouration of their coats varies from light grey to brown. Koalas in the southern areas of Australia are larger and tend to have a darker, thicker coat than those in the north. White patches of fur usually occur inside the ears, on their chin, neck and chest, inside front limbs, occasionally on the hind limbs and in various patterns on their rump.

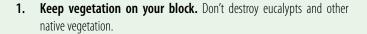
The Koala has front and hind limbs of nearly equal length. Although it has no tail, the Koala has a great sense of balance and is an excellent climber. Long claws and rough pads on palms and soles assist in gripping tree trunks and branches. The Koala's large, leathery nose has a highly developed sense of smell that can differentiate between types of eucalyptus leaves and the levels of toxicity contained within them.





# You can help Koalas.











3. Carry the phone number for your local wildlife rescue group with you in case of sick or injured Koalas — see below.



**Put out bowls of clean and shallow water** in known Koala habitat in times of drought or extreme heat.



**Watch for Koala signs** on the roads. They have poor eyesight and seem to be oblivious to the threats posed by motor vehicles, trucks and trains.



**6. Keep dogs, cattle and horses** out of known koala habitat..



7. **Report** sightings using the "I Spy Koala" App available on the Apple App store or Google App store



### Rescue groups

**Koalas In Care Inc** — 24hr Koala Rescue (Mid Coast LGA area) — 0439 406 770

### **Port Stephens Koalas:**

1800 775 625

### **Native Animal Trust Fund/Hunter Wildlife**

(Lower Hunter area) — 0418 628 483

#### Wildlife In Need of Care

(Port Stephens area) — 1300 946 295



**International Fund for Animal Welfare,** Wildlife Rescue App: https://www.ifaw.org/australia/our-work/animal-rescue/help-rescue-wildlife-nsw-download-our-app







#### **Hunter Local Land Services:**

P: 1300 795 299

E: admin.hunter@lls.nsw.gov.au W: www.hunter.lls.nsw.gov.au

# Department of Planning Industry and Environment:

P: 131 555

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### Atlas of Living Australia

W: www.ala.org.au







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