Koala Habitat

Koalas

The Koala is listed as a 'vulnerable' species under the *Threatened Species Conservation Act 1995* (TSC Act). This is due to the severe decline in Koalas across NSW, having disappeared from between 50 – 75% of their former range. Koalas in NSW now occur mainly on the north coast and are uncommon, rare or extinct in other parts of the State. Additionally, the species has a poor recovery potential (low breeding rate) and is subject to many on-going threats.

John Turbill

Koala

Where do they live?

Koala habitat is generally poorly represented in the State's National Park and Nature Reserve system with many important areas of habitat occurring on private lands.

Koalas feed almost exclusively on the leaves of a small number of trees, mostly eucalypts. In any one area only a few types of trees are favoured as the main food source and not all individuals of these tree types are eaten.

Generally Koala habitat quality is influenced by factors such as soil nutrient, topography, rainfall and past disturbances.

Identifying Koala Habitat

Koala habitat can be identified by:

- the presence of Koala food trees;
- historical or recent Koala records;
- the presence under trees of Koala faecal pellets (scats);
- the presence of Koala scratches on trees.

Presence of Koala Food Trees

The draft State Koala Recovery Plan (NPWS 2003) includes a list of Koala food trees in NSW. These trees are listed below in Tables 1 & 2 according to the Koala Management Areas (KMAs) in which they occur. Map 1 illustrates the Northern Tablelands and North Coast KMA boundaries in relation to Catchment Management Authority boundaries.

Map 1

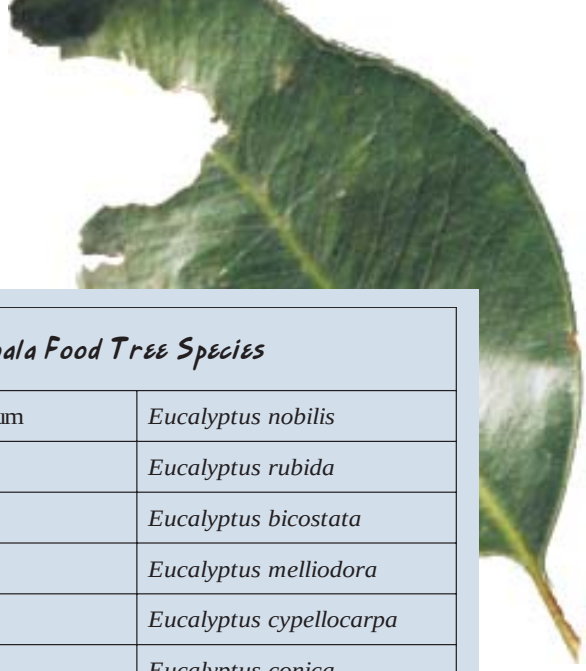


Table 1: Koala Food Tree Species
North Coast Koala Management Area

Primary Koala Food Species	
Tallowwood	*Eucalyptus microcorys*
Forest Red Gum	*Eucalyptus tereticornis*
Swamp Mahogany	*Eucalyptus robusta*
Parramatta Red Gum	*Eucalyptus parramattensis*
Orange Gum	*Eucalyptus bancroftii*
Cabbage Gum	*Eucalyptus amplifolia*
Secondary Koala Food Species	
Narrow-leaved Red Gum	*Eucalyptus seeana*
Slaty Red Gum	*Eucalyptus glaucina*
Small-fruited Grey Gum	*Eucalyptus propinqua*
Red Mahogany	*Eucalyptus resinifera*
Mountain Mahogany	*Eucalyptus notabilis*
Grey Box	*Eucalyptus moluccana*
Yellow Box	*Eucalyptus melliodora*
Craven Grey Box	*Eucalyptus largeana*
Grey Gum	*Eucalyptus biturbinata*
Large-fruited Grey Gum	*Eucalyptus canaliculata*
Steel Box	*Eucalyptus rummeryi*
Rudder's Box	*Eucalyptus rudderi*
White-topped Box	*Eucalyptus quadrangulata*

Table 2: Koala Food Tree Species
Northern Tablelands Koala Management Area

Primary Koala Food Tree Species	
Ribbon Gum	*Eucalyptus viminalis*
Forest Red Gum	*Eucalyptus tereticornis*
Cabbage Gum	*Eucalyptus amplifolia*

Secondary Koala Food Tree Species	
Forest Ribbon Gum	*Eucalyptus nobilis*
Candlebark	*Eucalyptus rubida*
Eurabble	*Eucalyptus bicostata*
Yellow Box	*Eucalyptus melliodora*
Monkey Gum	*Eucalyptus cypellocarpa*
Fuzzy Box	*Eucalyptus conica*
White Box	*Eucalyptus albens*
Red Box	*Eucalyptus polyanthemos*
Eucalyptus interstans	*Eucalyptus interstans*
Moonbi Apple Box	*Eucalyptus malacoxylon*
Brittle Gum	*Eucalyptus michaeliana*
Brittle Gum	*Eucalyptus praecox*
Orange Gum	*Eucalyptus prava*
White-Topped Box	*Eucalyptus quadrangulata*
Grey Gum	*Eucalyptus punctata*
Narrow-Leaved Black Peppermint	*Eucalyptus nicholii*
Large –flowered Bundy	*Eucalyptus nortonii*
Mountain Mahogany	*Eucalyptus notabilis*
New England Peppermint	*Eucalyptus nova-anglica*
Snow Gum	*Eucalyptus pauciflora*
Broad-Leaved Sally	*Eucalyptus camphora*
Bundy	*Eucalyptus goniocalyx*
Apple-Topped Box	*Eucalyptus bridgesiana*
Wattle-leaved Peppermint	*Eucalyptus acaciiformis*
Tenterfield Woolybutt	*Eucalyptus banksii*
Dwyer's Red Gum	*Eucalyptus dwyeri*
Blakely's Red Gum	*Eucalyptus blakelyi*
Mountain Gum	*Eucalyptus dalrympleana*
Tumbledown Gum	*Eucalyptus dealbata*
Brittle Gum	*Eucalyptus mannifera*
Eucalyptus retinens	*Eucalyptus retinens*
Eucalyptus volcanica	*Eucalyptus volcanica*

Koalas may also use other trees for food and shelter and during times of drought.

Koala food trees are generally ranked in their importance as either primary, secondary or supplementary.

Primary tree species are those that show significantly higher use by Koalas than other eucalypt species. Protection of these trees is essential for Koalas.

Secondary tree species generally exhibit a lower level of use than Primary tree species with use level being affected by a number of complex variables such as soil nutrient, soil moisture, topography and occurrence of any Primary tree species.

Supplementary tree species are an important resource used occasionally or seasonally by Koalas.

KOALA HABITAT SIGNIFICANCE

ACTION - Where one or more of the trees listed in Table 1 or 2 as primary and/or secondary food trees occur, the area should be considered as potential Koala habitat and further investigation should be carried out to determine Koala usage.

Historic and recent records

Historic and/or recent recordings of Koalas in an area can be assessed from present and past landowners, neighbours or local wildlife carer groups.

Additionally, information on whether any records occur on or near the site can be found on the Atlas of NSW Wildlife. (See the Department of Environment and Conservation (DEC) website for Atlas information).

To check whether Koalas are present in the trees on your property the canopy and branches of individual primary and secondary trees should be searched from at least two opposite observation points.

KOALA HABITAT SIGNIFICANCE

ACTION - Where there is an existing record or recent sighting of a Koala the area should be recognised as Koala habitat.

Koala Scats

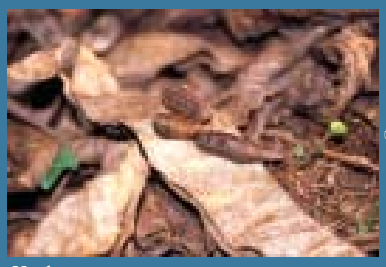
Another way to determine if Koalas are present is to look for their distinctive droppings (faecal pellets or scats). This should be done by carefully searching the ground under each primary and secondary food tree, between the dripline of the canopy and the trunk (see Box below). You should spend at least 2 minutes per tree searching the ground on and within the leaf litter to determine if scats are present.

KOALA HABITAT SIGNIFICANCE

ACTION - Where any Koala scats are found under a tree, this area should be recognised as Koala habitat.

NPWS

Undertaking a Koala scat search



Shane Ruming

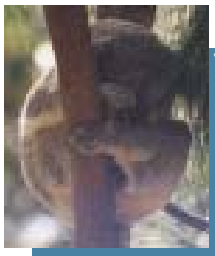
Koala scats

NPWS

The hard, firmly packed scats of the Koala may vary in colour and contain fairly coarse fragments of leaf cuticles, chiefly of eucalypt species. Fresh Koala scats may smell of eucalyptus oil, but when dry have little odour (Triggs 1996).

Scratches

Koalas may also leave distinctive scratches (claw marks) on the bark of trees that they climb. These scratches are more visible on smooth barked trees and may persist until the trees shed their bark. It can be difficult to confirm that scratches on the bark of any tree are from a Koala rather than possum or a goanna. Generally, marks characteristic of Koalas will be pock-like marks left from the sharp tips of their claws when holding their weight or longer rake marks when climbing more quickly up or down the tree (Triggs 1996).



John Turbill

Koala resting

KOALA HABITAT SIGNIFICANCE

ACTION - Where Koala scratches are observed, it is likely that the area has been recently used by a Koala and further investigation should be carried out to confirm whether the area is Koala habitat.

What can you do?

A number of things can be done to protect Koalas in the wild;

- protect and manage trees known as habitat for the Koala,
- plant Koala food trees and promote regrowth of Koala habitat,
- be a responsible dog owner and restrain your dogs after dusk,
- drive slowly in Koala areas and watch for Koalas crossing roads at night,
- report injured or sick Koalas to your local wildlife carer group or DEC.

References and Further Reading

- NPWS (2003), *Recovery Plan for the Koala (Phascolarctos cinereus). Draft Plan for Public Comment*. NSW National Parks and Wildlife Service.
- Phillips, S (2000), *Tree species preferences of the Koala (Phascolarctos cinereus) as a basis for the delineation of management areas for recovery planning in NSW*. A report to the NSW National Parks and Wildlife Service.
- Phillips, S and Callaghan, J (submitted), *The Spot Assessment Technique: determining the importance of habitat utilisation by Koalas (Phascolarctos cinereus)*. Australian Koala Foundation GPO Box 2659, Brisbane Queensland 4001 Australia.
- Triggs, B (1996), *Tracks, scats and other traces: a field guide to Australian mammals*. Oxford University Press, Melbourne.

- For further information about the Atlas of NSW Wildlife or to access data contact the NPWS Wildlife Atlas Data Unit on 9585 6684.
- DEC website: www.environment.nsw.gov.au

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Koala scratches

Further Information

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