

**Submission  
No 303**

**INQUIRY INTO KOALA POPULATIONS AND HABITAT IN  
NEW SOUTH WALES**

**Name:** Mr David Carr

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Upper House Parliamentary Enquiry into koalas

Parliament House

Macquarie St

Sydney, NSW, 2000.

**Re: Submission to the Upper House inquiry into koala populations and habitat in New South Wales**

This letter is my submission to the Inquiry into koala populations and habitat in New South Wales. I consent to the committee making this submission and my name public. I would be happy to give a verbal submission to the Committee in person if required.

I am a practicing consulting ecologist with my own business, Stringybark Ecological. I have worked in the field of ecology for the past 35 years across all of Australia, although most of my work and experience has been in northern NSW.

I hold Bachelor of Science and Master of Resource Science degrees from the University of New England and an Advanced Certificate in Urban Horticulture from TAFE. In addition to my consultancy business I am an Adjunct Senior Lecturer at the University of New England. Prior to starting my consultancy business I was the National Technical Capacity Manager for Greening Australia, based in Canberra.

From 2009 until 2018 I was President of Armidale Tree Group and am the current Vice-President. I am a member of the Ecological Consultants Association of NSW; the Australian Network for Plant Conservation; and the Society for Ecological Restoration. I am a qualified Assessor with the NSW Government's Biodiversity Offset Scheme.

For the last ten years I have worked directly on koala conservation projects on the Northern Tablelands and North West Slopes and Plains of NSW. My projects during this time have included:

- Using GPS collars fitted to koalas to track their movements in order to estimate their home ranges near Mt Duval, Armidale. Funded by Office of Environment and Heritage.

- Working with the community to record sightings of koalas, observe koala health, collect DNA samples and observe habitat usage on the Northern Tablelands and North West Slopes and Plains. Funded by Office of Environment and Heritage.
- A systematic survey of koala occupancy around Armidale, Uralla, Walcha and Nowendoc using the scat assessment technique (SAT). This project discovered a number of core populations in the region and identified key koala corridors. Funded by Northern Tablelands Local Land Services
- A systematic survey of parts of the Liverpool Plains using the SAT to identify koala use of the landscape as part of a state-wide modelling of koala habitat by the Office of Environment and Heritage.
- I am currently working with Armidale Regional Council to develop a Koala Management Strategy to guide future development around Armidale.
- Numerous SEPP 44, Threatened Species Conservation Act and Biodiversity Conservation Act assessments for developments including houses, subdivision, industrial projects, roads and mines.

Prior to working directly with koala conservation projects, I have worked with land owners, farmers, community groups, schools, government agencies and industries to provide advice on managing natural areas, which often includes koalas.

In the course of these projects I have made the following observations about koalas in northern NSW:

- I believe that the New England Tablelands bioregion is a very significant koala refuge area for current and future koala conservation. There are stable koala populations throughout the region and koalas appear to be moving throughout the landscape. Although populations have never recovered to levels of a century ago, numbers seem to be low but stable. Koalas in this region are not as prone to being hit by vehicles or killed by digs as they are in more-densely populated areas of the coast. Temperature extremes are not as great as they are in inland areas and rainfall is higher than inland areas (although not at the moment!).
- In the New England Tablelands, Nandewar and Brigalow Belt South bioregions there seems to be large areas of unused or under-utilised habitat. Koala populations in these areas are significantly lower than they were a century ago. I believe that more research is needed to understand why koala populations are not growing to fully utilise the available habitat.
- The main threat to koalas in the New England Tablelands bioregion is fragmentation and habitat loss. Whenever a koala has to move into an area with sparse trees in response to drought or fire or when looking for a mate, it is exposed to greater risk of death or injury from fox or dog predation, trampling by cattle, vehicle strike or desiccation.
- In the Nandewar, Brigalow Belt South and Darling Riverine Plains bioregions one of the most significant threats is extreme heat and dry spells, such as we have experienced in the last few years. In extreme heat koalas need to supplement the water they obtain from leaves by drinking

free water. This puts them at risk of predation or injury as they are forced to search for water on the ground. Extreme heat also means that koalas eat more in order to obtain more water and the heat resulting from the digestion of this food increases their body temperature, putting them at greater risk from heat stress. In recent years we are seeing progressively hotter summers and more sporadic rainfall as a result of climate change and this is unlikely to change in the short term.

- The other significant threat to koalas in the Nandewar, Brigalow Belt South and Darling Riverine Plains bioregions is fragmentation and habitat loss. Illegal land-clearing prior to 2016 and now legal land clearing under the so-called Biodiversity Conservation Act and the Local Land Services Act is having very significant negative effects on koala populations in the Croppa Creek, Pallamallawa, Moree Plains and probably other areas. Koalas in these areas rely on a limited range of species (mainly *Eucalyptus populnea* and *E. camaldulensis*) for food. They also use other vegetation types, including Belah Woodland, for shade and shelter in hot weather. Both *Eucalyptus populnea* Woodlands and Belah Woodlands have been targeted for land clearing in recent years. When this habitat is lost and during hot, dry weather, koalas retreat to riparian vegetation, predominantly *E. camaldulensis*. These vegetation stands are then put under extreme browsing pressure which can lead to tree death.
- Wild fire appears to have a devastating effect on koala populations which may take many years to recover from. The Pilliga is a good example with in excess of 16,000 koalas in the mid-2000's to recent estimates of less than 10 koalas. This is a result of both catastrophic fires, extreme heat and drought. I also spoke to farmers in the Kingstown-Balala area south west of Uralla who observed that koalas were absent for 45 years from the region after catastrophic fires in the 1960's and were just starting to return.
- Travelling Stock Routes are disproportionately important for koalas and many other threatened species in regional NSW. Recent changes by Local Land Services to allow 5 year leases with permanent grazing are degrading this irreplaceable conservation asset. These routes often protect the last remaining remnants of native vegetation in good condition inland from the Great Dividing Range. Their degradation will be a lasting stain on the legacy of the current Liberal-National government.
- I have observed that koalas are well-loved and valued by most people, including most farmers. There is a fear that if farmers report the presence of koalas on their property, their land will be taken and turned into a National Park. This is stopping engagement with government and community groups who could provide advice and assistance to improve koala management.

I believe that we are at a turning point for the conservation of koalas as well as many other threatened and common species. Conservation has a low priority at the best of times, but under the current NSW government it has been given little more than lip service. The significant investment of money into koala and threatened species management through the Saving Our Species program is admirable. However, the achievements of this program will pale into

insignificance when compared to the damage done by land clearing and climate change.

The current lax regulations around rural land clearing will lead to the extinction of many of our unique plants and animals and push many more to the brink. Already, in areas such as the Moree Plains with less than 5% native vegetation remaining we have seen many species become locally-extinct in my lifetime.

I have worked with farmers for the last 25 years and know many who are passionate stewards of the land and wish to maintain their land in its best condition. However, there are also many farmers who allow their land to degrade, leaking soil and nutrients into creeks, destroying native vegetation, and decimating biodiversity. I believe we need an effective policy mix of regulation and incentive to ensure that farmers, who manage most of the land in NSW, can also look after native vegetation and biodiversity. Currently we are doing very badly on the regulation front, however, incentives have significantly improved. The incentives offered through the Biodiversity Conservation Trust are a one thing this government has introduced that has the potential to achieve good outcomes for land managers and conservation, including koala conservation.

I also understand that koala populations on the coast and hinterland are threatened by urban development and an increase in old-growth logging proposed by the government.

I strongly believe that if we are to conserve koalas and other threatened species, we need an immediate halt or significant reduction in land clearing. As a next-best option, land clearing should only be permitted if it is offset by creation of a protected area elsewhere using the mechanisms available under the Biodiversity Conservation Trust. All land clearing should be subject to offsets, not just that done for developments covered by the Environmental Planning and Assessment Act.

Recently, the NSW Government recognised that Koala populations are in steep decline and developed a strategy to begin to address this. Unfortunately, the strategy and current government policy fails to address the number one threat to koala populations - habitat loss and fragmentation.

We must ensure koala's remaining habitat is protected and restored, but right now the opposite is occurring. In NSW areas of core koala habitat called 'koala hubs' have been mapped by the Office of Environment and Heritage but are still being cleared for logging, agriculture and infrastructure and the pace of the destruction is increasing.

If we are to still have koalas in NSW in 50 years we must:

- Immediately and permanently protecting all 'koala hubs' from clearing for agriculture, logging or development.
- Significantly reduce land clearing, or ensure all land-clearing is offset using the mechanisms of the Biodiversity Conservation Trust.

- Taking immediate and strong measures to slow climate change by rapidly transitioning from a fossil-fuel economy to an economy driven by renewable energy.
- Permanently secure koala habitat, threatened species habitat and significant vegetation on TSRs under regional National Parks.
- Reject the Government's proposal to open up old growth forests to logging on the NSW North Coast.
- Creating the Great Koala National Park on the NSW mid-north coast.
- Continue to fund research into koalas and their habitats.

The future of koalas in NSW depend upon decisive action by the current government with support from the broader community, rather than the tokenistic approach currently being taken. While the SOS investments are a good start, there are two elephants in the room – increased land clearing and climate change. Until something is done about these, koala populations will continue to decline.

Yours sincerely,

David Carr

Principal Ecologist

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