

**Submission
No 177**

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

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Koalas are under serious and increasing threat across NSW. Despite koalas being listed as “vulnerable” in 2012 under the Environmental Protection and Biodiversity Conservation Act 1999, koalas still have virtually no protection from land clearing and habitat loss.

Koala habitat as well as ecologically significant key habitat is being logged under a Private Native Forestry Agreement in Limpinwood in the Northern Rivers region of NSW.

Koala habitat in Campbelltown is being lost at a rapid rate due to ongoing development.

Over development is destroying wildlife corridors and wiping out koala habitat in the Macarthur region leaving koalas and other wildlife wandering the suburban streets trying to get from A to B, putting them in danger of being killed by cars and dog attacks.

Koalas in southeast Queensland are on the brink of extinction due to excessive tree-clearing.

Excessive tree-clearing is threatening to wipe out the last remaining populations of our precious east coast koalas. Queensland’s Koala Coast has already lost over 80 per cent of its koalas.

Koala habitat is being torn down so fast that in some areas they are now locally extinct. Is this the legacy you want to leave?

If koalas die out on our watch, we will have let down our children, our grandchildren and, destroyed one of the unique and iconic species that makes Australia great.

This would be a permanent international embarrassment to Australia in view of the whole world. I want to be a proud Australian, not an internationally embarrassed Australian.

We need the New South Wales Government to urgently restore laws, to protect koalas and their homes from excessive tree-clearing.

Trees are central to koalas existence and survival. They provide food and shelter and house their society. Koalas are extremely social animals and deserve the best chance the New South Wales Government can give them.

It's rare that you can point to one specific problem that, if changed, could make a world of difference, but the changes in the land clearing laws, is the smoking gun that has threatened the future of an entire species.

I have done a lot of research into this issue and it really is a common sense decision to do your best, to try and save the international icon of Australian fauna, not the minimum amount of effort.

It is up to you, our elected politicians to ensure the future population of the koalas, not only survive, but thrive.

Below are most of the research links I have regarding the koala populations and their habitats. Start with these 35 links and if you want more I can provide them to you, on the condition that you read each word of each link.

Really though, if that is not enough evidence for you, nothing will be.

Nationals - koala numbers laid bare

<https://www.newcastleherald.com.au/story/5963835/nationals-koala-numbers-laid-bare/>

Brandy Hill Quarry's proposed expansion is likely to have a 'significant' impact on the national koala population

<https://www.newcastleherald.com.au/story/6182152/koalas-in-the-spotlight-after-port-stephens-quarry-expansion-report/>

The Great Koala National Park proposal: 26 years in the making - Part 1. Coffs Coast Outlook. June 5, 2018:

<https://coffscoastoutlook.com.au/the-great-koala-national-park-proposal-26-years-in-the-making-part-1/>

The Great Koala National Park plan. National Parks Association of NSW (NPA) conservation organisation:

<https://npansw.org/npa/campaigns/great-koala-national-park/the-great-koala-national-park-plan/>

WWF Australia. September, 2018: koala extinction risk nsw - WWF-Australia

<https://www.wwf.org.au/ArticleDocuments/351/pub-Koala-extinction-risk-NSW-28sept18.pdf.aspx>

Great Koala National Park will 'destroy' the North Coast. By Sam Flanagan. Coffs Coast Advocate. March 16, 2019:

<https://www.coffscoastadvocate.com.au/news/great-koala-national-park-will-destroy-the-north-c/3673555/>

Koalas face extinction in New South Wales by 2050 due to land clearing, scientist warns. By Patrick Wood. ABC. September 10, 2018:

<https://www.abc.net.au/news/2018-09-07/koalas-face-extinction-in-nsw-due-to-land-clearing/10212236>

Government ridicules WWF claim koalas extinct by 2050. By John Ellicott. The Land. September 7, 2018:

<https://www.theland.com.au/story/5632638/wwf-report-says-native-veg-laws-will-kill-off-koalas/>

How AKF and Government got their Numbers. Australian Koala foundation

<https://www.savethekoala.com/our-work/how-akf-and-government-got-their-numbers>

Environment and Communications References Committee senate inquiry: The koala-saving our national icon.

<https://www.savethekoala.com/sites/savethekoala.com/files/uploads/old/pdfworddocs/conservationreport.pdf>

Use of expert knowledge to elicit population trends for the koala (*Phascolarctos cinereus*), by C. Adams-Hosking et al. *Diversity and Distributions - A Journal of Conservation Biogeography*. 2016.
<https://onlinelibrary.wiley.com/doi/full/10.1111/ddi.12400>

Ecological historian argues koala population decline is not a crisis. ABC Radio. RN Breakfast. November 27, 2017:
https://abcmedia.akamaized.net/rn/podcast/2017/11/bst_20171127_0753.mp3

Acoustics provide new insights on koalas in hinterland forests. NSW Department of Primary Industries. July 30, 2018:
<https://www.dpi.nsw.gov.au/about-us/media-centre/releases/2018/acoustics-provide-new-insights-on-koalas-in-hinterland-forests>

Species Profile and Threats Database

Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) — Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=85104

Adams-Hosking, C., et al. 2016. Use of expert knowledge to elicit population trends for the koala (*Phascolarctos cinereus*). *Diversity and Distributions*, 22, 249-262.
<https://onlinelibrary.wiley.com/doi/full/10.1111/ddi.12400>

Iluka subpopulation is believed extinct, while the Tweed/Brunswick, Hawk's Nest/Tea Gardens and Pittwater koala subpopulations are all endangered.
<https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/2016/koala-phascolarctos-cinereus-population-tweed-brunswick-rivers-endangered-population-listing>

Advice to the Minister for Sustainability, Environment, Water, Population and Communities from the Threatened Species Scientific Committee (the Committee) on Amendment to the list of Threatened Species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
<http://www.environment.gov.au/biodiversity/threatened/species/pubs/197-listing-advice.pdf>

Extracted from Fig 1 in McAlpine, C., et al. 2015. Conserving koalas: a review of the contrasting regional trends, outlooks and policy challenges. *Biological Conservation*, 192, pp.226-236
<http://koalagroup.asn.au/wp2016/wp-content/uploads/2017/05/McAlpine-et-al.-2015-Conserving-koalas-A-review-of-the-contrasting-trends-outlooks-and-policy-challenges-Biologic.pdf>

Predavec, M., et al. 2018. Using repeat citizen science surveys of koalas to assess their population trend in the north-west of New South Wales: scale matters. *Australian Mammalogy*, 40, 47-57.
https://www.researchgate.net/publication/315114872_Using_repeat_citizen_science_surveys_of_koalas_to_assess_their_population_trend_in_the_north-west_of_NSW_scale_matters

Clearing of native vegetation in NSW jumps 800% in three years. YES LIBERALS - THIS WAS DONE ON YOUR WATCH!

<https://www.theguardian.com/australia-news/2018/aug/04/clearing-of-native-vegetation-in-nsw-jumps-800-in-three-years>

14ha of koala habitat bulldozed each day

<https://districtbulletin.com.au/koala-habitat-destruction-triples-after-nsw-protection-axed/>

Paul, D, and Hughes, B. (2016). Proposal for a Western Woodlands Koala Park: Identification of Critical Conservation Lands – A landscape approach to preserving Koala populations in western New South Wales. Report prepared for the Western Woodlands Alliance, 92 pp.

https://npansw.org/wp-content/uploads/2019/03/WWF-Koala-Habitat-Conservation-Plan_UPDATED.pdf

25% death rate after the 2009 heatwave around Gunnedah NSW found by Lunney, D., et al. 2012. Koalas and climate change: a case study on the Liverpool Plains, north-west New South Wales. Wildlife and climate change: towards robust conservation strategies for Australian fauna'. (Eds D. Lunney and P. Hutchings.), pp.150-168

<https://www.publish.csiro.au/pc/pc16004>

Also, 80% decline in Qld Mulgalands koalas during the millennium drought found by Seabrook, L et al, 2011. Drought-driven change in wildlife distribution and numbers: a case study of koalas in south west Queensland. Wildlife Research, 38, 509-524.

<http://www.wwf.org.au/ArticleDocuments/353/pub-current-status-of-the-koala-in-queensland-and-new-south-wales-19may17.pdf.aspx>

Lunney, D., Stalenberg, E., Santika, T. and Rhodes, J.R., 2014. Extinction in Eden: identifying the role of climate change in the decline of the koala in south-eastern NSW. Wildlife Research, 41(1), pp.22-34.

<https://bioone.org/journals/Wildlife-Research/volume-41/issue-1/WR13054/Extinction-in-Eden--identifying-the-role-of-climate-change/10.1071/WR13054.short>

or

https://www.researchgate.net/publication/269392065_Extinction_in_Eden_Identifying_the_role_of_climate_change_in_the_decline_of_the_koala_in_south-eastern_NSW

Reckless, H.J., Murray, M. and Crowther, M.S., 2018. A review of climatic change as a determinant of the viability of koala populations. Wildlife Research, 44(7), pp.458-470.

<https://bioone.org/journals/wildlife-research/volume-44/issue-6%E2%80%937/WR16163/A-review-of-climatic-change-as-a-determinant-of-the/10.1071/WR16163.short>

or

https://www.researchgate.net/publication/318453862_A_review_of_climatic_change_as_a_determinant_of_the_viability_of_koala_populations

McDowell, N.G. and Allen, C.D., 2015. Darcy's law predicts widespread forest mortality under climate warming. *Nature Climate Change*, 5(7), p.669.

<https://media.nature.com/original/nature-assets/nclimate/journal/v5/n7/extref/nclimate2641-s1.pdf>

De Villiers 2015 PhD thesis cited in McAlpine, C., et al. 2015. Conserving koalas: a review of the contrasting regional trends, outlooks and policy challenges. *Biological Conservation*, 192, pp.226-236.

<http://koalagroup.asn.au/wp2016/wp-content/uploads/2017/05/McAlpine-et-al.-2015-Conserving-koalas-A-review-of-the-contrasting-trends-outlooks-and-policy-challenges-Biologic.pdf>

Adams-Hosking, C., et al, 2011. Modelling climate-change-induced shifts in the distribution of the koala. *Wildlife Research*, 38, 122-130.

<https://espace.library.uq.edu.au/view/UQ:244371>

Senate Standing Committees on Environment and Communications 2011. The koala—saving our national icon.

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed_inquiries/2010-13/koalas/report/c02.

In Sect 2.48

The population estimate of 10 million koalas prior to 1788 was provided by Bill Phillips, *Koalas: The little Australians we'd all hate to lose*, Australian Government Publishing Service, Canberra, 1990, pp 20–26.

In addition, the Australian Koala Foundation relied upon historical records to reveal “...at least 8 million Koalas were killed for the fur trade, with their pelts shipped to London, the United States and Canada between 1888 and 1927”: <https://www.savethekoala.com/about-us/news-events/akfshocking-figures-reveal-devastating-impact-koala-fur-trade>

The koala is now considered functionally extinct:

<https://www.savethekoala.com/deborahs-diary/important-announcement>

Scientific review of the impacts of land clearing on threatened species in Queensland

<https://environment.des.qld.gov.au/wildlife/threatened-species/documents/land-clearing-impacts-threatened-species.pdf>

On available evidence koalas could become extinct in NSW between mid and end of the 21st century due to a combination of as-yet poorly abated threats:

- Increasing habitat destruction and fragmentation due to recent repeal of the Native Vegetation Act; forest fragmentation increases mortality of koalas from disease, stress and such ground based sources as cars and dogs;
- Disease;
- Climate change induced changes in forest composition, fire frequency, droughts, heatwaves and foliar nutrition.

Climatic and disease threats and to some extent degradation effects operate even over protected areas, meaning that even protected subpopulations may also be sent into decline, despite being free of the risk of direct habitat destruction.

Climate change is a global problem that requires a global response.

However, one key threat that can be effectively abated at the state or national level of government is habitat destruction. Unfortunately, the repeal of the NSW Native Vegetation Act has only worsened this threat.

It is up to this government to rectify the problems they have caused.