Environment Protection and Biodiversity Conservation Amendment (Save the Koala) Bill 2021 Submission 4



The Ecological Society of Australia Ltd (ESA, <u>www.ecolsoc.org.au</u>) is the peak group of ecologists in Australia, with over 1000 members from all states and territories. Our members work in universities and other research institutions, government departments, NGOs, private industry and consultancies. We are a national not-for-profit organisation formed in 1959.

Submission regarding: *Environment Protection and Biodiversity Conservation Amendment (Save the Koala) Bill 2021*

Threats to koala (Phascolarctos cinereus) populations

As with much of Australia's biodiversity, the koala population has continuously declined since European settlement (Ashman et al. 2019). Reasons for this decline are varied (Ashman et al. 2019, Reckless et al. 2018), but generally fall under one of four threatening processes that interact:

- Habitat loss
- Urbanisation
- Disease
- Climate change

Loss of suitable habitat is considered the biggest contributor to the current precarious situation of northern koala populations (Queensland, New South Wales and Australian Capital Territory). Clearing of suitable habitat often occurs due to encroaching urbanisation, or to facilitate development projects e.g. mining and oil operations (McAlpine et al. 2015).

Benefits associated with the proposed amendments

- 1. Protection of ecological communities encompassing suitable koala habitat helps to address habitat loss, one of the four main threatening processes for koalas.
- 2. Protection of ecological communities that are suitable koala habitat could benefit other species. A wide distribution of tree species is listed as koala habitat under section 527F Definitions relating to koalas in the proposed amendment bill. These tree species can also provide suitable habitat for other threatened species. For example, koalas use *Eucalyptus globulus* and *Eucalyptus ovata* trees for resting, feeding and social interactions (Marsh et al. 2013). The endangered swift parrot (*Lathamus discolor*) relies upon these two tree species for breeding in Tasmania prior to migrating to the southern mainland for nesting and foraging in the same species (Webb et al. 2012). In this case, protection of this koala habitat could benefit another threatened species.

Risks associated with the proposed amendments

- 3. Perverse outcomes may arise from singling out the koala (or any individual species) for protection under the *Environment Protection and Biodiversity Conservation (EPBC) Act (1999)*. This form of preferential treatment for the koala as a single species implies that the species is objectively more important than other species, regardless of its scientifically assessed threat status. It is possible that more harm could emerge for a wider range of native species as a result of aiming to treat this individual species preferentially. For example, land clearing that avoids impacts to koala habitat may result in increased clearing of habitat for other species. As an alternative, **strengthening habitat protection measures that encompasses a holistic framework such as the protection of ecological communities could ensure more comprehensive biodiversity conservation including the koala alongside numerous other species.**
- 4. Although koalas are listed as a vulnerable species, their status is not uniform across Australia (McAlpine et al. 2015). Southern koala populations (Victoria and South Australia) are stable or even

increasing (McAlpine et al. 2015) and high-density populations have become over-abundant in some locations (Whisson et al. 2020). Such populations are actively managed to reduce the population in order to halt overgrazing of food trees (Ramsey et al. 2021). The proposed amendments could conflict with conservation goals at these local scales.

5. The proposed amendments address only one of the four main threatening processes facing koalas. Adoption of the amendments could result in a perception that koala protection is now under control, and thus reduce efforts to address the remaining three threatening processes. Without coordinated effort to address all threatening processes, koalas could continue to decline.

FOR FURTHER INFORMATION

The ESA welcomes the opportunity to provide further information or to discuss our submission in more detail. We may be contacted using the details below:

Submission prepared on behalf of the ESA by its Policy Working Group and approved by the President, 7 April 2021.

Supporting evidence

Ashman, K. R., Watchorn, D. J., & Whisson, D. A. (2019). Prioritising research efforts for effective species conservation: a review of 145 years of koala research. *Mammal review*, *49*(2), 189-200.

Jager, H. I., & Coutant, C. C. (2020). Knitting while Australia burns. *Nature Climate Change*, *10*(3), 170-170. Johnson, R. N., O'Meally, D., Chen, Z., Etherington, G. J., Ho, S. Y., Nash, W. J., ... & Belov, K. (2018). Adaptation and conservation insights from the koala genome. *Nature genetics*, *50*(8), 1102-1111.

Lam, S. S., Waugh, C., Peng, W., & Sonne, C. (2020). Wildfire puts koalas at risk of extinction. *Science*, *367*(6479), 750-750.

McAlpine, C., Lunney, D., Melzer, A., Menkhorst, P., Phillips, S., Phalen, D., ... & Close, R. (2015). Conserving koalas: a review of the contrasting regional trends, outlooks and policy challenges. *Biological Conservation*, *192*, 226-236. Marsh, K.J., Moore, B.D., Wallis, I.R., & Foley, W.J. (2013). Continuous monitoring of feeding by koalas highlights diurnal differences in tree preferences. *Wildlife Research*. 40, 639–646.

Ramsey, D. S., Watters, F., Forsyth, D. M., Wood, M., Todd, C. R., Molsher, R., & Cassey, P. (2021). Long-term fertility control reduces overabundant koala populations and mitigates their impacts on food trees. *Biological Conservation*, *253*, 108870.

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

Webb, M.H., Holdsworth, M.C., & Webb., J. (2012). Nesting requirements of the endangered Swift Parrot (Lathamus discolor). *Emu - Austral Ornithology*, 112(3), 181-188.

Whisson, D. A., & Ashman, K. R. (2020). When an iconic native animal is overabundant: the koala in southern Australia. *Conservation Science and Practice*, 2(5), e188.