

# THREATENED SPECIES SCIENTIFIC COMMITTEE

Established under the *Environment Protection and Biodiversity Conservation Act 1999*

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Stephen Palethorpe  
Committee Secretary  
Senate Standing Committee on Environment and Communications  
PO Box 6100  
Parliament House  
Canberra  
ACT 2600

06 September 2011

Dear Mr Palethorpe,

Thank you for the opportunity to respond to the supplementary submission by the Australian Koala Foundation (AKF) referring to the TSSC's answers to Questions on Notice resulting from the Melbourne Hearing (Senate inquiry website - Answers to Questions on Notice #29). The TSSC will restrict this response to the main issues concerned with its deliberations.

The TSSC evaluated the AKF methodology because it represents a novel approach that had not been peer reviewed before it was provided to the TSSC. The TSSC recognises that while a part of the AKF methodology relating to habitat modelling has been published, this is not the case for the other main component of the methodology relating to linking such habitat modelling to estimates of total population size, which is a very significant area of uncertainty. The TSSC stands by its evaluation of the AKF methodology and resulting estimate of the Australian koala population (<https://www.savethekoala.com/pdfworddocs/conserve/Methodology.pdf>).

The AKF's rebuttal of the TSSC evaluation makes four additional substantive claims that we address seriatim below.

1. *That the TSSC "may have a complete lack of understanding of modelling in ecology".*

That this claim is incorrect can be verified by searching the publications of its members on any scientific indexing database.

2. *That the surveys of Lunney et al. in New South Wales were inappropriate.*

The Lunney et al. study was not a phone survey, as described by the AKF supplementary submission, and was published in a respected peer-reviewed journal. The TSSC's use of the Lunney et al. data in its Answers to Questions on notice was not as a population estimate *per se* but rather as evidence of why the TSSC is concerned about the validity of the AKF estimates for NSW. The AKF has not provided an explanation of how their estimate of 5,600 to 9,400 koalas in NSW can be consistent with 4904 reported sightings of koalas in that state over two years in a postal survey with only a 7.7% return rate.

3. *That the TSSC's burden of proof is so high that it would permit listing only for species for which total population counts are known; and/or that the TSSC has raised the burden of proof to an unprecedented level specifically for the koala.*

Although the total population size is known reliably for some listed species (mostly those with populations of fewer than 100 individuals), this is by no means the norm. Instead, most listings are based on the evidence of changes in relative abundance detailed from surveys and monitoring representatively across the range of the species, or estimates of distributional area. The amount of evidence required is not necessarily related to the volume of data or the biological studies undertaken on the candidate species: rather, it depends on the extent to which the available information informs the assessment relative to the specific qualification criteria. The burden of proof required for the koala is no more nor less than for other candidate species.

4. *That the TSSC uncritically accepted the koala population estimates provided by the Victorian and South Australian government.*

The TSSC's listing advice and accompanying letter to the Minister clearly noted that there is great uncertainty in estimates of the size of, and trend in, the national koala population (<http://www.environment.gov.au/biodiversity/threatened/nominations-fpal-extensions.html#koala>). These documents acknowledged the imprecision in the population estimates for Victoria and for much of Queensland. Indeed the inadequacy of the data was a principal cause of the TSSC's challenge in reaching a conclusion about the status of koalas.

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**Secretariat:** Species Listing section

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The TSSC does not consider its estimates of the national koala population as definitive, but rather the best amalgam that could be made in 2010 from disparate sources of highly variable quality. The TSSC recognises that the population estimates and subsequent determination of the status of the koala will evolve as more robust and complete information becomes available.

The TSSC remains open to constructive dialogue with the AKF and looks forward to their methodology being published in a peer reviewed journal.

Thank you for the opportunity to provide more information. We have chosen not to respond to the non-substantive issues raised in this letter.

Sincerely,

Helene Marsh FTSE

Professor

Chair, Threatened Species Scientific Committee

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