The use of Senate inquiries for threatened species conservation

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Summary Global biodiversity continues to decline at a steady rate, especially in Australia where 10% of the land mammal population has become extinct since European settlement. The Environment Protection and Biodiversity Conservation Act (EPBC) list of threatened species is Australia's version of the IUCN red-list; however, not all species fit easily within the EPBC guidelines and criteria for listing. Recently, a high-profile Senate inquiry was used to bring about the listing of the koala, *Phascolarctos cinereus*, although it had previously been deemed ineligible for threatened species status. We are concerned that the use of Senate Inquiries will become more frequent now that a precedent has been set. We suggest they are not an appropriate means of threatened species conservation because they are politically topical, not necessarily based on expert opinion and do not carry any need for legislative response. Successful species conservation should be based on sound ecological knowledge embedded within a transparent and logical decision framework.

Key words: conservation policy, EPBC Act, listing criteria, Phascolarctos cinereus, senate inquiry, threatened species.

Global biodiversity continues to decline at a steady rate and it is essential that transparent, scientific and timely methods are used to assess and monitor the conservation status of species and ecosystems (Butchart *et al.* 2010; Keith *et al.* 2013). Currently the IUCN Red List of threatened species is the most comprehensive global standard to evaluate species conservation. The IUCN Red List assesses conservation needs based on criteria such as population size, population trends over a given time period, on-going threats and small geographic ranges (IUCN, 2014). Since its inception, the Red List has identified more than 60,000 threatened species, although there are methodological criticisms including insufficient data and bias towards terrestrial vertebrate species which affects the species listed, and currently 17% of species assessments are outdated (Rondinini *et al.* 2014).

Australia has one of the worst extinction rates in the world since European settlement on the continent in 1788. Twenty-nine land mammal species (10%) have become extinct in just over 200 years, the most recent being the Christmas Island Pipistrelle, *Pipistrellus murrayi*, in 2009 (Woinarski *et al.* 2014). It is also possible, that despite a recovery plan, the Bramble Cay Melomys, *Melomys rubicola,* has slipped into extinction over the past decades. More than 20% of Australian mammal species are currently threatened with extinction (Woinarski *et al.* 2014). Across all taxa, there are 398 Australian species on the Environment Protection and Biodiversity Conservation (EPBC) Act list of threatened fauna (Department of the Environment, 2015a).

The EPBC Act species profile and threats database (Department of the Environment, 2015b) seeks to provide species level assessment data on an Australia-wide scale, with listing decisions determined by the Minister of Environment upon advice from the Threatened Species Scientific Committee (TSSC). The list of threatened species protected under the EPBC is now somewhat outdated and biased towards well-known and charismatic species (TSSC, 2013; Walsh *et al.* 2013), much like the IUCN Red List. In addition, not all species fit easily within the EPBC listing criteria. Some species are migratory and their listing varies with location (e.g. the Grey-backed Storm-Petrel, *Garrodia nereis*, is listed by the IUCN as endangered as a breeding population but of least concern visiting Australian territory, and is unlisted under the EPBC Act), while for others there is insufficient data or ineffective use of the data available, particularly if declines are relatively recent (e.g. Partridge Pigeon, *Geophaps smithii,* and Western Grasswren, *Amytornis textilis myall*) (Garnett *et al.* 2011). For others, such as widely distributed species, local threats may lead to rapid declines or extinctions in some areas, but stable or increasing populations in others, meaning that these species do not fit the criteria used to change a conservation listing. This has been the case with the Koala (*Phascolarctos cinereus*) over recent decades.

However, if a species is deemed ineligible for EPBC listing, but has a high public profile, like the Koala, there has recently proved to be an alternative avenue

for considering its conservation status, namely the referral to a Senate inquiry, which provides recommendations to the Commonwealth government. The Koala was assessed and deemed ineligible for EPBC listing by the TSSC just one month prior to the onset of a Senate inquiry, but in 2012, as result of recommendations by the Senate inquiry report (Senate 2011), the conservation status of the Koala was reviewed by the TSSC (2011) and updated from unlisted at the Commonwealth level to 'vulnerable' over a part of its range due to rapid population declines. While in the case of the Koala, the Senate inquiry led to a conservation listing, we question its appropriateness as a means for assessing species conservation.

Senate inquiries in Australia assist in the maintenance of government accountability, by investigating specific matters of policy or performance (APH 2013). Of the 43 parliamentary committees, matters concerning threatened species and the environment are referred to the Standing Committee on Environment and Communication, comprised of politicians appointed for the life of the parliament to provide recommendations for improving the policies under review. To date, only two senate inquiries into species conservation have occurred, the Koala inquiry and an inquiry into the effectiveness of threatened species protection (TSSC 2013). However, given recent policy modifications and proposals that allow increased exploitation in reserves and weaken laws on vegetation clearing and oversight into endangered species (Ritchie 2013), and the continuing decline of Australia's biodiversity, this may become a more well utilized route, as lobby groups seek outcomes for specific species.

We agree with the need to 'throw light in dark corners' (APH, 2015) and do not question the outcome of the Koala inquiry, solely the way in which the outcome was achieved. Our contention is that senate inquiries are unlikely to be an appropriate forum for addressing the deficiencies of threatened species policy for a number of reasons. First, an inquiry is dependent on a referral from a legislative body (the Senate committee included). These are usually focused on politically topical issues and driven by interested factions or constituencies, and may not respond to urgent issues relating to threatened species if they are not concurrent with the political agenda at the time. This may well lead to actions and resources being spent on one species, when another species might be of much greater conservation concern. In addition, while this may be feasible for iconic species, such as the Koala, most threatened species do not engender the same level of concern from the public and politicians (Tisdell & Nantha 2007).

Second, while the information is synthesized in one prominent forum, the inquiry generally reflects stakeholder submissions and evidence, rather than carrying out its own independent research. This leads to the question of how much confidence there is that the inquiry report (Senate 2011) and its recommendations are relevant, impartial and ecologically sound, when politicians are often unfamiliar with the science they are overseeing. This approach is unlikely to provide a good basis upon which to assess the conservation status of species.

Third, although Senate inquiries provide recommendations to the government and the Australian government is meant to respond to every inquiry within 6 months of its completion (APH 2013), there is no legislative obligation to implement any of the recommendations put forth. This is important if Senate inquiries do become a more common path for investigating the conservation status of Australian species. For example, the Senate inquiry into the Koala ended in 2011, and the species was subsequently recommended for listing in part of its range by the TSSC, but the full response by the Australian government (Commonwealth of Australia, 2014) was not completed until November 2014, and did not commit to any tangible actions beyond the scope of existing programs, with the exception of facilitating the development of national guidelines for estimating Koala populations.

Although in the case of the Koala, the use of a Senate inquiry did appropriately lead to a listing of the species over part of its range, we are concerned that Senate inquiries are not the appropriate forum for addressing the conservation status of threatened species. An inquiry may provide a misleading impression of action, the recommendations are unlikely to be based on detailed ecological evidence due to the lack of relevant expertise of many of those submitting to the inquiry, and they may be focused on species of interest to lobby groups, which may not reflect the species of true conservation concern. More importantly however, we need to base species conservation on sound ecological knowledge within a transparent and logical decision framework. The power of the inquiry comes from its ability to collate information and bring attention to current issues. However, there is no room in species conservation for policy actions that are not comprehensive, nor provide a solid ecological basis for improved management decisions. We believe that the current system used by the TSSC is likely to have the most successful conservation outcomes, provided that the listing process, including identification and funding of research gaps that hinder conservation listing decisions, is made more timely and effective.

Australian Senate inquiries may be a politically expedient means of threatened species conservation, but they also have the potential to subvert the process for considering the status of native species and could lead to outcomes that are not necessarily based on objective evidence. If, however, senate inquiries into species conservation continue in the future, then we recommend an encompassing review process for at-risk and declining species, an independent review of the threats, processes and ecology by the senate committee of the species under inquiry, and an over-sight mechanism to ensure inquiry recommendations are incorporated into management and recovery planning.

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