

Submission to the Senate Standing Committee on Environment and Communications

Inquiry into the effectiveness of threatened species and ecological communities' protection in Australia

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Current assessments of the status of Australian vertebrate fauna (I will deal here only with vertebrate fauna, my research focus) suggest that Australia is faring badly in the management of its threatened species. Extinctions and declines are not restricted to the past, and there are many examples where management is failing to conserve and protect viable populations. Predictions also suggest that the situation may only get worse for some groups (e.g. birds; Garnett & Crowley 2005). There have however been many success stories, and these should be celebrated in the public arena to demonstrate that dedicated efforts can result in species conservation. These should also be considered when evaluating what works and what does not work.

For many species, basic information required for management is lacking, highlighting that there is a dire need for increased research funding and capacity in order to obtain the information needed to manage threats, reverse declines and secure populations. Where threats are identified there is often inadequate resources to deal with managing them. Recovery plans are often of little actual direct benefit (see Bottrill *et al.* 2011), and actions identified in recovery and action plans are more often than not inadequately implemented, if implemented at all, with insufficient resources available for management actions.

I will outline below a series of points which in my view inhibit the effective conservation and management of Australia's threatened species.

- Ecological, biodiversity and conservation funding within Australia is inadequate to secure populations of threatened species and ultimately remove them from the *EPBC* list. This starts at the level of basic research. For a species such as the Spertooth Shark (*Glyphis glyphis*), we do not even know the habitat requirements of adults, as mature individuals of the species have never been found. Without knowledge of habitat use and movement patterns we cannot identify threats and therefore cannot prescribe appropriate management actions to mitigate threats. For this species there is current ongoing research, but I use this species to highlight that it is one of many with inadequate knowledge to mitigate threats, particularly in the marine and aquatic environments.
- Recovery plans, although often well meaning, are inadequately funded and have an unreasonably short lifespan. Conservation and management of threatened species needs to be considered in all cases in the long term (10s to 100s of years) and not in the short term (3-5 years). Recovery plans are variable in their content and in some cases take several years to be prepared (due to a lack of staff and resources; the *Pristis* and *Glyphis* multi-species recovery plan is a current example). The implementation of recovery plans is not a requirement of the *EPBC*, nor is implementation monitored. Amendment of the *EPBC* to include implementation is required. A standard format for recovery plans is also recommended, one which includes actions around research, monitoring and management. Upon listing of a species, a recovery plan should be required within 1 year of listing, and be supported by a recovery team which is adequately resourced to undertake the recommended actions. See Bottrill *et al.* (2011) for a further discussion of the recovery planning process, who states that '...[recovery] planning needs to be supported by adequate

resources for implementation and evaluation’ and that there is a ‘...lack of basic accounting of recovery planning efforts’.

- Funding for threatened species research and management needs to be over a time-frame adequate to allow recovery. This will vary on a case by case basis, but a framework should be put in place to allow calculations of time-frames required for recovery. Conservation success stories will provide clues for the level of commitment required for different groups.
- There are recent documents such as Action Plans (e.g. Garnett *et al.* 2010) and resource guides (e.g. Curtis *et al.* 2011) which outline management actions required for a wide variety of taxa; these can assist in recovery planning.
- Resources (funding, training and knowledge) are inadequate in our Commonwealth protected area estate to manage and conserve threatened species. Three examples highlight this point without the need for detailed discussion: small mammal declines in Kakadu National Park, the status of vertebrate fauna on Christmas Island, and Green Parrots on Norfolk Island. In the case of Christmas Island, some two-thirds of the island is national park, managed by the Commonwealth, and yet threats abound, and species continue to go extinct (e.g. Christmas Island Pipistrelle, Coastal Skink). Commonwealth national park management plans should include specific threatened species management actions, for all threatened species occurring within their bounds.
- Australia’s extinction record is one of the worst in the world, particularly for mammals and birds, and many other species are threatened (while noting that many conservation success stories are also evident for birds where there has been dedicated funding). The Tiwi Island subspecies of the Hooded Robin may have gone extinct without any apparent public acknowledgement (see Garnett *et al.* 2011). A near complete lack of awareness of taxa such as this is a serious impediment to species conservation. That we can possibly lose taxa without even a ripple of interest in the public and media highlights that public awareness and understanding of threatened species needs to be addressed at all levels of government.
- The Threatened Species Scientific Committee (TSSC) needs to be expanded to cope with the number of EPBC listing proposals. Instead of a single group, the TSSC should be comprised of several subcommittees organised around taxa (plants, birds, mammals, fishes etc), which reports to an overarching TSSC.
- The process of nominating, evaluating and ultimately listing species on the EPBC, where this is appropriate and valid, and then implementing management is often protracted. I draw an example from a paper by White and Kyne (2010): “The nomination of species to the Commonwealth EPBC Act or to protective legislation at the state level is a detailed and lengthy process and may take many years. For example, the conservation status of *Centrophorus* spp., following the considerable declines documented off the Australian east coast by Graham *et al.* (2001), was highlighted earlier this decade (Pogonoski *et al.*, 2002; Cavanagh *et al.*, 2003). As of late 2009, these species were still going through the nomination process. This is a considerable time lag between the initial documented declines (data from 1996 to 1997; Graham *et al.*, 2001), assessment of conservation status at national (Pogonoski *et al.*, 2002) and international levels (Cavanagh *et al.*, 2003), nomination to the EPBC Act, and if successful, the eventual development of recovery plans and implementation of effective management. Such a slow process could well prove detrimental to threatened species if the reasons for the initial population collapses are continuing.” Note that a decision is still pending regarding the EPBC nomination of two of these gulper shark species (management options have however been considered by fisheries managers and some management put in place).
- Listing processes, and in particular threatened species categories and criteria need to be consistent between state, territory and commonwealth legislation to ensure a consistent approach, consistent listings, and consistent management. This follows recommendations in the Hawke review of the EPBC.

- The effective management of Australia's threatened species will require increased and enhanced bilateral and multinational collaboration. This is particularly relevant for the conservation of migratory shorebirds, for example, an inadequate Australian diplomatic response to the loss of critical shorebird migration habitat in the East Asian Flyway.

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