Submission to the Senate Inquiry on Australia's faunal extinction crisis

The importance of Indigenous Peoples to the conservation of Australia's threatened species

National Environmental Science Program Threatened Species Recovery (TSR) Hub

The Threatened Species Recovery (TSR) Hub includes projects on Indigenous leadership and partnerships for threatened species recovery. The authors of this submission are among the researchers leading this work.

Authors: Bradley Moggridge (TSR Hub Indigenous Liaison Officer), Professor Stephen Garnett (TSR Hub Theme Leader, Charles Darwin University), Dr Stephen van Leeuwen (TSR Hub Indigenous Reference Committee), Assoc. Prof Sarah Legge (TSR Hub Theme Leader, Australian National University), Dr Anja Skroblin (TSR Hub Research Fellow, University of Melbourne), Tom Duncan (TSR Hub PhD student), Professor Sarah Bekessy (TSR Hub CI, RMIT University), Dr Rachel Morgain (TSR Hub Knowledge Broker, Australian National University), Professor Brendan Wintle (TSR Hub Director, University of Melbourne and University of Queensland).

This submission addresses the following term of reference for the Inquiry:

(g) the use of traditional knowledge and management for threatened species recovery and other outcomes as well as opportunities to expand the use of traditional knowledge and management for conservation

Premise of submission

The submission provides context to the Inquiry on the importance of Indigenous Peoples to the conservation of Australia's threatened species. Current policy, management and practice settings need to be changed if the potential for Indigenous people to be fully involved in the conservation of threatened species and communities is to be realised.

Key Issues

- Traditional knowledge and its use for management of threatened species or other aspects of conservation cannot be separated from the traditional Indigenous owners of that knowledge.
- Australia will not halt declines of threatened fauna or meet the Sustainable Development Goals and the Aichi Targets under the Convention on Biological Diversity without active participation of Indigenous people.
- Indigenous Peoples have an enduring commitment and cultural responsibility for the management of their land and wildlife, however the implementation of that commitment is often subverted or frustrated through lack of lack long-term commitment from governments and resources needed to protect their Country and recover threatened species.
- Mandating Indigenous-led threatened species recovery research in future research programs will enhance the value, effectiveness and relevance of those programs for threatened species recovery and bring benefit to Indigenous people.
- Indigenous priorities relating to threatened species cannot be adequately incorporated unless they are included at the planning phase of management and research; co-design and co-delivery of threatened species research and on-ground management is essential to successful

threatened species management and research and to supporting the values and needs of Indigenous communities Caring for Country.

As is proper, the EPBC Act provides a basis for listing of species that are threatened at national level. But many Indigenous communities are also deeply concerned about the decline or loss on their lands of native species that are significant to them because of their cultural, spiritual and/or social-economic value (bush tucker, bush meat, medicinal usage, ceremonial value). If such species do not yet meet the thresholds for listing as threatened at national level, the Act offers no mechanism for the recovery of such culturally significant species. In addition, the Common Assessment Method, which seeks to harmonise listing assessments across the Commonwealth, state and territories, will generally reduce the regulatory burden and improve listing efficiency; however, opportunities to list species important to Indigenous groups at state or territory level may become more constrained.

What is working?

- The Indigenous Protected Area (IPA) and Indigenous Land and Sea Ranger programs are empowering Indigenous people to become involved with threatened species conservation, and to bring the benefits of traditional knowledge and management practices to the recovery of threatened species. Support for these programs represents a substantial injection of employment and economic opportunities to regional and remote Australia, generating a 3-fold return on investment.
- The National Environmental Science Program TSR Hub (authors of this submission) is an example of a research program that has improved its approach to Indigenous engagement and leadership over predecessor programs. NESP requires all Hubs to develop an Indigenous Engagement Plan and invest substantively in Indigenous engagement. In TSR Hub, an Indigenous Reference Group is in place to support an Indigenous Liaison Officer in ensuring meaningful Indigenous engagement and leadership across the Hub's research plan. The success of this model has helped to extend Indigenous research governance structures, which can inform future program design. This highlights the opportunity and importance of engaging Indigenous people in all aspects of threatened species conservation research and management at all phases from conceptualisation and design, through to implementation.

Implications

G1. Resourcing and empowering Indigenous people to participate fully in threatened species management; and to carry out Indigenous led research, enabling them to apply their whole of Country knowledge, will deliver significant benefits for threatened species.

G2. Key environmental programs supporting Indigenous people to effect threatened species recovery, such as Working on Country and Indigenous Protected Areas, will be significantly more effective if they obtain the same institutional status and security as Commonwealth protected areas, including long-term funding security.

G3. Threatened species research will be greatly enhanced by including the views of Indigenous people who hold those species as significant. Activities to manage species and threats will be more effective when co-designed and co-delivered with the cultural authority of the owners of the land.

G4. Future revisions of the EPBC Act should provide scope for the listing and recovery of wildlife that is culturally significant and declining on Country, but not yet meeting thresholds for listing as threatened.

G5. Indigenous knowledge and Intellectual property used and accessed through threatened species management or recovery must be protected and remain the property of the original knowledge holder and to ensure that the knowledge provided is given true acknowledgement.

G6. Including Indigenous-led research as a top priority for the future of national environmental science programs would allow Indigenous people to establish their own research priorities and undertake research and monitoring to inform the recovery of threatened species.

G7. Institutions including research and funding institutions need to prioritise and facilitate the opportunity for Indigenous Bio-cultural Knowledge to be included on an equal footing with mainstream western science, through a cultural shift in thinking and pedagogy.

G8. Future research on threatened species, communities and threatening processes should be required to comply with guidelines for ethical research, such as the AIATSIS Guidelines for Ethical Research for Australian Indigenous Studies, and the Department of the Environment and Energy's National Environmental Science Program's Indigenous Engagement and Participation Strategy Guidelines.

Discussion

The NESP TSR Hub has carried out a series of analyses to document 1) the importance of Indigenous-managed land for threatened species conservation; 2) the contribution that Indigenous groups currently make to threatened species conservation management, and future opportunities; 3) the relative priority of threatened species in the broader socio-cultural-environmental management priorities of Indigenous groups; 4) the influence of governance structure on Indigenous involvement; and 5) lessons for partnerships.

1. Indigenous lands are important for threatened species conservation

Globally, Indigenous Peoples manage or have tenure rights over at least ~38 million km^2 in 87 countries or politically distinct areas on all inhabited continents. This represents over a quarter of the world's land surface, and intersects about 40% of all terrestrial protected areas and ecologically intact landscapes (Garnett *et al.* 2018a). As research undertaken as part of the TSR Hub has shown (Renwick *et al.* 2017), of all Australia's terrestrial or freshwater vertebrate species listed as threatened under national legislation, three quarters have projected ranges that overlap Indigenous land tenure (Figure 1). The overlap is particularly high for mammals and birds listed in the National Threatened Species Strategy (Renwick *et al.* 2017).

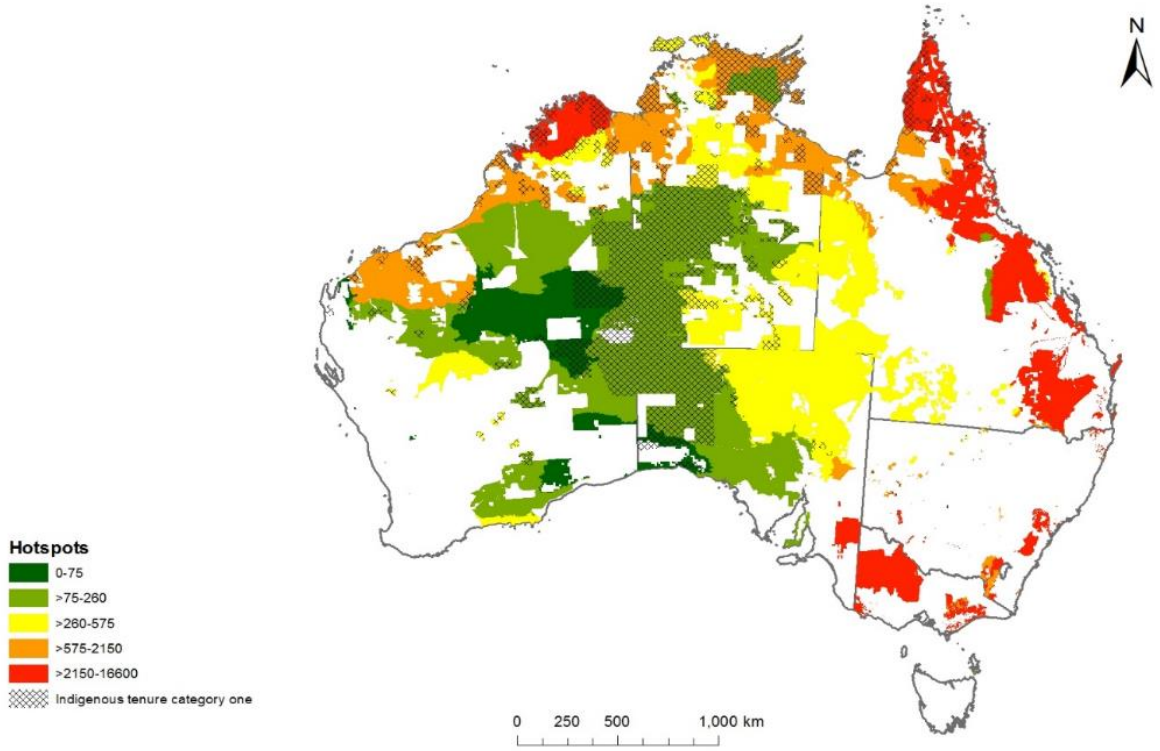

Figure 1. Many threatened vertebrate fauna species exist on Indigenous land tenure – scale shows hotspots of cumulative density and richness of the likely presence of threatened species across grid cells within a bioregion. Note that because the available data on Indigenous tenures is inevitably out-of date, this map under-represents the overlap between threatened species distributions and Indigenous tenures. Source: Renwick *et al.* 2017.

2. Indigenous groups are actively engaged in threatened species projects across Australia

Analyses by Leiper et al (in press) show that, in 2015 and 2016, Indigenous people were formally involved in at least 153 projects on threatened species or communities around Australia that receive funding from the Commonwealth or State governments or large non-government conservation organisations (Figure 2). Of these, 123 were primarily concerned with management of threatened species, 13 involved threatened ecological communities and 17 involved both. Note that this analysis under-represents the overlap of Indigenous groups and threatened species projects. As noted previously, available spatial data on Indigenous tenures are out-of-date. In addition, the analysis does not include the considerable contributions to threatened species management covered by state-based management plans that have been co-developed with Indigenous people; nor does it include projects where the management focus is to reduce the generic impacts of key threats (e.g. fire, invasive species) which are likely to benefit many taxa, including threatened species. Nevertheless, some key patterns emerge:

- Projects are occurring throughout the country particularly in the more remote parts of western and northern Australia.
- Almost a quarter of all animal species, and a more modest percentage of plant species (2%), listed as threatened under Australian environmental legislation are the subject of some formal conservation action by Indigenous people.
- We intersected these projects with occurrence records for 1574 threatened species, identifying that 823 (89.2%) of the 923 taxa recorded from Indigenous lands are not listed in management projects and may represent new opportunities for conservation initiatives by Indigenous people.

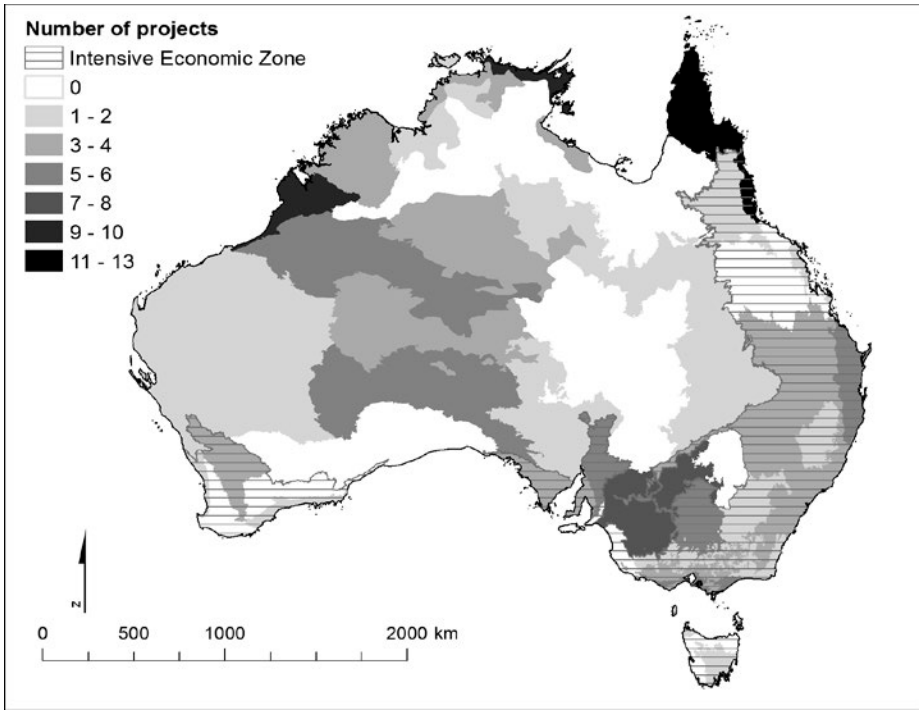

Figure 2. Formal contributions of Australian Indigenous peoples to threatened species management and opportunities for the future shown across bioregions (findings from 2015-6). Source: Leiper *et al.* in press.

3. Indigenous Traditional Owners care about more than threatened species alone – care is about Country, place, action and a range of use and non-use values

In all cases that we surveyed, Indigenous people were concerned about species or places that are not on the national list of threatened species and ecological communities, and in many cases these features of concern were not receiving adequate attention. According to respondents, a successful threatened species project will integrate broader objectives than threatened species, including cultural values, and will personally benefit the people and community involved. People involved with collaborative threatened species projects across Australia listed the following kinds of cultural benefits through our survey: strong foundation of life and society, knowledge revival, sharing and recording (including about the use of fire), financial and logistical support for ceremonies, employment, training, role models for younger generations, being able to heal the land, awareness of collaborations between western science and Indigenous knowledge and improved hunting resources.

Indigenous participants recorded a range of personal benefits that they receive from threatened species projects across Australia, including a sense of purpose, work, feeling alive and strong, feeling healthy, learning about country and animals, learning new technical skills and training, teaching the younger generation, the opportunity to spend time on country. At the same time, the ecological benefits of these projects are diverse, including: successful re-introductions and increases in population and health of the species of concern, decrease in threats such as feral predators and weeds, more awareness of species and environmental issues in the area, fire management, improvement of ecosystem health, better knowledge of species. It is important that these kinds of broader benefits to culture and ecosystems are specifically integrated into collaborative threatened species projects.

4. The way governance structures are designed influences if and how Indigenous people are included in projects and threatened species management decisions

Duncan *et al.* (in press) show that agencies and local Indigenous communities differ in their perceptions of conservation values and their respective roles in managing those values (Figure 3). Agencies perceive clearly defined boundaries between cultural heritage, significant species and fire management, and the currently low engagement rates of local Indigenous communities in the latter two categories imply that many agencies perceive cultural heritage to be the only legitimate focus of Indigenous participation. In contrast plans led by Indigenous communities highlight that these communities perceive their role in conservation management as much more than protection of particular cultural heritage sites, with maintenance of cultural heritage values encompassing the wider cultural landscape and associated indicators of cultural health, such as language or transmission of knowledge and presence of culturally significant species.

The review of plans also revealed that threatened species are generally not considered management priorities in plans led by Indigenous communities. Species management priorities in IPA plans centre on culturally significant species rather than threatened species. This suggests that the current potential for local Indigenous communities to participate in conservation management on equitable terms depends upon the establishment of conservation areas in which governance is driven by local

Indigenous communities. Meanwhile improving levels of engagement of Indigenous Peoples in conservation areas managed under agency governance regimes requires these agencies to better recognise Indigenous worldviews in planning conservation approaches.

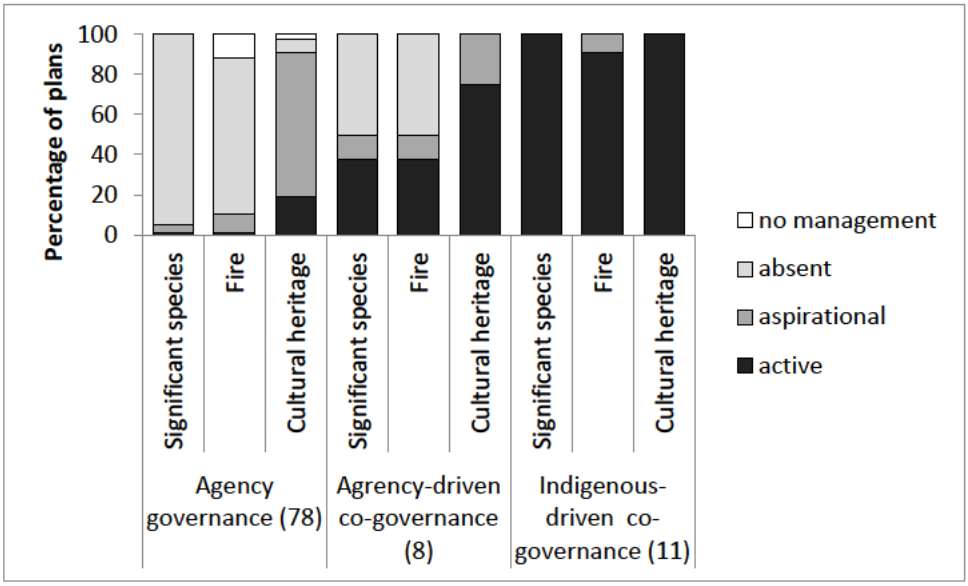

Figure 3. Commitment to Indigenous engagement in significant species, fire and cultural heritage management in conservation plans prepared for conservation areas under three types of governance regime in Australian regions with high potential for Indigenous involvement (bracketed figures are the number of plans analysed).

5. Collaborators and funding agencies need to understand and integrate diverse Indigenous held motivations and engagement models for environmental management partnerships

Our survey, along with work by Austin *et al.* (2018), Garnett *et al.* (2018), and Robinson *et al.* (2016), show that people who wish to collaborate with Indigenous managers in threatened species projects should understand and integrate appropriate engagement models, motivations and perspectives held by Indigenous people. Indigenous people wish to be involved with effective two-way communication from the project outset (co-development), and be included in the co-design of the project, not just in implementing some aspects of the project. In many cases there is room for improvement in communication, relationship building, and governance models in existing collaborative projects. Ideally environmental management partnerships that promote the use of Indigenous peoples' Bio-cultural Knowledge to manage Country and inherently threatened fauna needs to occur with the free, prior and informed consent and the full and effective participation of those owners of the knowledge and thus the owners of Country.

Garnett *et al.* (2018) argue that conservation needs a social license to operate because there are winners and losers from conservation interventions with political trade-offs for those authorising the activity, whether that be the state or the community. This trade-off is complex –there is growing international recognition that safe, clean, healthy and sustainable environment is integral to the full enjoyment of a wide range of human rights. However, there is growing concern that Indigenous and minority groups are paying the highest cost for maintaining our planet's high conservation areas and species. As stated in Barbour and Schlesinger (2012), the issue for many has been the lack of resources and finding a place in the world of contemporary ecological research and land

management. Such a license is not necessarily agreement only with the communities in places from which species are likely to be taken from and to but also the broader group of societal players with an interest in the process even if not directly affected.

Austin *et al.* (in press) highlight that in the context of developing conservation alliances with Indigenous communities, gaining a social license to operate can work for pragmatic opportunities but can lead to shallow and short-term engagement with local communities. Agencies and conservation organisations can enable Indigenous agendas and aspirations for their country to guide conservation partnerships and programs, as part of their corporate social responsibility to a given region and the local communities who live in it. This fundamental shift away from a narrow conservation-driven agenda allows Indigenous communities to direct conservation and on-country enterprise priorities and activities as part of a negotiated alliance. This has critical implications for how conservation and research programs are designed and how funding is allocated, placing a premium on the importance of Indigenous-led and community-directed research and planning.

As Robinson *et al.* (2016) conclude, Indigenous collaborative environmental management and services agreements need to pay heed to the very active relationship Indigenous peoples have with nature instead of considering nature a 'service provider'. Rather than focusing on how ecosystem services can be valued, commoditised or measured, partnership negotiations could instead focus on the reflexive and active human–environment relationships that 'service' one another.

While this may mean that some benefits from Indigenous-led conservation schemes are not of interest to non-Indigenous investors, these benefits nonetheless need to be supported because they are critical to sustaining the current and future well-being of Indigenous cultures and country and the shared responsibility to sustain our environment.

6. Investing in Indigenous Caring for Country delivers significant social and economic returns

IPAs now number 74, covering 67 million hectares, or 45% of the National Reserve System, and 8.7% of Australia's land area (Department of the Environment and Energy 2016). The Australian Government's Working on Country program currently supports almost 120 Indigenous ranger groups, working across a range of mostly Indigenous tenures, employing over 830 full-time ranger positions (Department of the Prime Minister and Cabinet 2016). This investment is repaid in spades to the Australian community: analyses of the Social Return on Investment of the IPA program show that these are delivering around 3-fold returns to the Australian community (Social Ventures Australia 2016).

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