Australia's faunal extinction crisis

Senate Inquiry

Standing Committee on Environment and Communications

Submission from

Australian Veterinary Association Ltd

To:

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

Phone: +61 2 6277 3526
Fax: +61 2 6277 5818
ec.sen@aph.gov.au

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The Australian Veterinary Association thanks the Secretary of the Environment and Communications References Committee for the opportunity to make comments on this important matter.

About us

The Australian Veterinary Association (AVA) is the national organisation representing veterinarians in Australia. Our 9500 members come from all fields within the veterinary profession. Clinical practitioners work with companion animals, horses, livestock and wildlife, conservation and zoo animals. Government and institution employed veterinarians work with animal health, public health and biosecurity. We also have members who work in research and teaching in a range of scientific disciplines. Veterinary students are also members of the Association. The AVA has a range of special interest groups (SIGs), allowing members with shared interests or expertise to develop their practice and skills in a specific area. These include Conservation Biology, Animal Welfare and Ethics, Public Health, Equine and Cattle and Sheep special interest groups.

Underlying Principles

Australia's faunal extinction crisis must be approached in the context of the following principles:

Ecologically Sustainable Development (ESD)

Australia's *National Strategy for Ecologically Sustainable Development (1992)* (ESD) defines ecologically sustainable development as: 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased' (Guidelines for reporting, EPBC Act 1999).

ESD has four main principles:

- the precautionary principle
- the principle of intergenerational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms such as the "polluter pays" principle

ESD is not a balance and trade-off chosen at any point of time according to the commercial demands, but a biological constant required for the future sustainable management of the planet (p 15 HIS_EDO 2018).

Intergenerational Equity

Intergenerational equity is a concept that says that humans 'hold the natural and cultural environment of the Earth in common both with other members of the present generation and with other generations, past and future' (Weiss, Edith Brown 1990, 'In fairness to future generations', *Environment*, vol. 32, no. 3, Apr., p8.).

Biodiversity

Biodiversity is the variety of all living things; the different plants, animals and microorganisms, the genetic information they contain and the ecosystems they form. Biodiversity is usually explored at three levels - genetic diversity, species diversity and ecosystem diversity. These three levels work together to create the complexity of life on Earth (Museum of Australia).

Responses to the Terms of Reference

a. the ongoing decline in the population and conservation status of Australia's nearly 500 threatened fauna species

Response
Australia's first Threatened Species Commissioner, Gregory Andrews reflected on Australia's current conservation crisis, "Hope in the face of extinction" (*Recovering Australian Threatened Species*. 2018 CSIRO Publishing. Editors Stephen Garnett, Peter Latch, David Lindenmayer and John Woinarski). Current Australian environmental policy, legislation and funding levels can only 'hope' to turn the conservation crisis around, but given the current settings, few conservationists think this is likely.

If the Australian Government were to undertake a major infrastructure development, like the Snowy Mountains Scheme founded on the "hope" it would succeed, there would be a Royal Commission of enquiry. The Snowy Mountains Scheme succeeded in its objectives because it operated on good engineering practice, was adequately funded and well managed by the Chief Engineer, Sir William Hudson.

On the few occasions when the same rigour and adequate funding has been applied to conservation problems in Australia, satisfactory outcomes have been achieved. For example, the eradication of invasive species on Macquarie Island to restore the natural ecosystem has been a remarkable achievement (Keith Springer, 2018 In *Recovering Australian Threatened Species*. 2018 CSIRO Publishing). The success of this project was in part attributed to the adequacy of funding ($20 million AUD) and rigorous peer review of the program. Investment in projects founded on 'hope', with little chance of success, is wasteful and diminishes the opportunity to reverse the current conservation and biodiversity crisis in Australia.

To meaningfully address Australia's threatened species the same principles must apply:

- the issues to be rigorously addressed
- adequately funded
- and continuously monitored

An example of where this has not been done adequately is the Threatened Species Strategy 2015. The strategy set a target of culling 2 million feral cats across Australia without evidence of what effect this level of culling would have on the listed threatened species. The level of feral cat control required is very species-specific and even a low density of cats can have a marked effect on threatened populations. This is a factor recognised by the construction of feral cat exclosures for sensitive threatened species.

b. the wider ecological impact of faunal extinction;

Response
Biodiversity in all its complexity is essential for the maintenance of ecosystem services, clean and adequate water supplies, clean air, soil fertility and stability, carbon sequestration and to address climate change. Human health and prosperity as well as that of the natural world is ultimately dependent upon addressing faunal extinctions. A healthy fauna can only exist in conjunction with a healthy flora and microbiota.

Australia's policy and legislative responses must ensure that sufficient priority is applied to the long-term intergenerational security of the environment. The production of our agricultural and fisheries industries depend on maintaining a healthy fauna and biodiversity more broadly.

c. the international and domestic obligations of the Commonwealth Government in conserving threatened fauna;

Response
The Commonwealth government must play a leadership role in Australia meeting its obligations under such treaties as CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) and the Convention on the Conservation of Migratory Species of Wild Animals which aims to conserve terrestrial, marine and avian migratory species throughout their range. We need more detail as to how the Commonwealth will align state and regional actions with national priorities and international obligations and the incentives, policies and intergovernmental forums that will drive these actions.

d. **the adequacy of Commonwealth environment laws, including but not limited to the Environment Protection and Biodiversity Conservation Act 1999, in providing sufficient protections for threatened fauna and against key threatening processes**;

Response
The lack of adequate progress on Australia's environmental crisis could be attributed to the inadequacy of environmental law or the extent to which the existing environmental laws are not enforced and implemented. We are of the opinion that significantly more progress can be achieved within the existing legal framework but recognise that others feel it timely to review environmental legislation more thoroughly. Significant work in reviewing the shortcomings of Australia's environmental law has been undertaken by others and is commended (EDO NSW and Humane Society International Australia, Next Generation Biodiversity Laws – Best practice elements for a new Commonwealth Environment Act (2018), Humane Society International Australia Lit, Sydney).

Within the existing legal framework significant opportunities exist: Existing 'tools' created by EPBC 1999 are not being effectively used and managed.

The Register of Critical Habitat established under EPBC Act 1999 contains 5 registered critical habitats the last of which became effective in 2005. No additional Critical Habitats have been listed since. Three of the five listings relate to Albatross species in the southern oceans. Efforts to address seabird bycatch has led to significant improvement for Albatross (Baker, G B & Robertson G. Management of seabird bycatch leads to sustainable fisheries and seabird populations. In *Recovering Australian Threatened Species*. 2018 CSIRO Publishing. Editors Stephen Garnett, Peter Latch, David Lindenmayer and John Woinarski). Better utilisation of Critical Habitat listing highlights opportunities for conservation.

e. the adequacy and effectiveness of protections for critical habitat for threatened fauna under the Environment Protection and Biodiversity Conservation Act 1999;

Response
(1) Failure to monitor and follow up listed threatened species and ecological communities and implement meaningful recovery plans.

Examples:
Brigalow Bioregion (*Acacia harpophylla*) dominant or co-dominant bioregion was considered by the Threatened Species Scientific Committee (TSSC) and listed as a Threatened Ecological Community on 4/4/2001. Under the Act the TSSC decided a recovery plan was required (17/11/2009). No recovery plan has been adopted as of 7/2018. In this time the remnant vegetation of the Brigalow region has declined from 10% to 5% of the region. Approved Conservation Advice was effected on 17/12/2013 but only contains reference to the Cane Toad.

The Blue Gum High Forest of the Sydney Basin Bioregion would be another example. It was listed as Critically Endangered on the Threatened Ecological Communities List in 2005. In this case sharing of responsibility and funding appear to be responsible for the lack of action. The recovery plan required under the EPBC Act has not been completed in the last 13 years.

(2) Recovery Plans

On the latest information available on the Australian Government website (01/05/2013) 69 recovery plans require to be prepared. http://www.environment.gov.au/system/files/pages/db44db52-4646-43a2-9256-a587caca34f9/files/fauna-plans-required-prepared.pdf It appears clear that staffing and resources available within the Department of the Environment are not adequate.

(3) Land Clearing

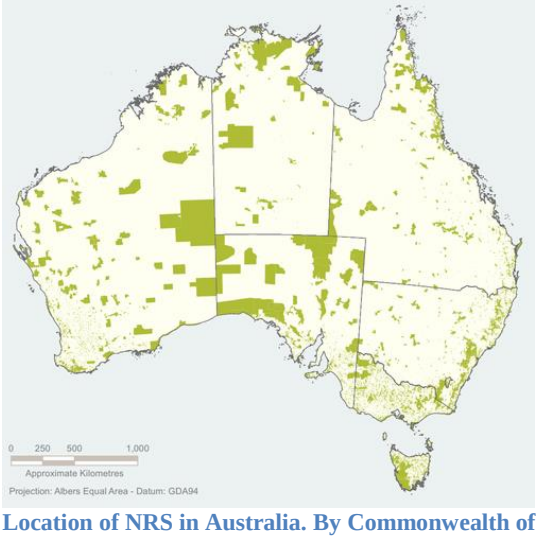
Key Threatening Processes listed under EPBC Act 1999 are important as they extend across multiple bioregions and affect multiple species within bioregions. Addressing these issues through threat abatement plans for these Key Threatening Processes have an amplified effect on a number of species and bioregions. This is seen in the following examples: competition and land degradation by rabbits; predation by feral cats and land clearing. Conservation biologists generally agree that of all of these processes, native habitat destruction is a key. The Endangered Species Scientific Sub-committee, the forerunner of the TSSC, concluded, "land clearance has been the most significant threatening process in Australia since European settlement." http://www.environment.gov.au/biodiversity/threatened/key-threatening-processes/land-clearance

Despite the primacy of this matter the complexity of the federal/states relationship and the pressures of development have stalled meaningful progress on a national level. The issue is so important that no matter how complex, it must be pursued. Without addressing key drivers, efforts made at the periphery will be wasted and threatened species will continue their extinction profile.

f. the adequacy of the management and extent of the National Reserve System, stewardship arrangements, covenants and connectivity through wildlife corridors in conserving threatened fauna;

Response
The NRS model needs to be used to secure additional protected reserves in important bioregions in Eastern and Southern Australia which have suffered most from land clearing and degradation of natural habitats. Currently extensive reliance is placed upon property owners to be custodians of wildlife and wilderness. Their responsibility should not replace the need of the Commonwealth and States to protect, in perpetuity, areas essential to maintain biodiversity and faunal reserves and for these reserve areas to represent each significant bioregion.

The NRS is an important program in assessing bioregions. It provides a tool by which important bioregions can be monitored and managed to potentially help the preservation of biodiversity and fauna. However, it is noted that the largest areas listed are in arid and semi-arid areas of Commonwealth, States and Indigenous Protected land. Reserve areas in SE Australia under maximum human development pressure are underrepresented. For the full benefits of the NRS to be realised, aggregation and connection of areas within threatened habitats needs to be achieved.



Location of NRS in Australia. By Commonwealth of Australia, CC BY 3.0 au, https://commons.wikimedia.org/w/index.php?curid=27600255

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;

Response
The use of traditional knowledge and management skills for threatened species recovery is an important element to be utilised where that knowledge has remained intact. It is noted however that important threatening processes like introduced feral animals (cats, foxes, goats, cane toads), weed species, introduced pasture grasses and fire regimes have changed the management challenges. The continued rate of change requires adaptation of methods. New research and science including captive breeding, translocations, exclusion fencing and adapted fire regimes provide tools not available to traditional owners. Traditional and contemporary knowledge needs to be utilised side by side.

h. the adequacy of existing funding streams for implementing threatened species recovery plans and preventing threatened fauna loss in general;

Response
The existence of the 'faunal crisis' and decline in biodiversity is noted in successive Australian State of the Environment Reports and the States` equivalent reports, and attests to the inadequate response to the problem. While policy, legislation, education and funding are all crucial, at the end of the day funding is the most crucial. It is unacceptable that factors critical to Australia's food security, biosecurity and sustainability (Ecologically Sustainable Development) frequently come down to the actions of selfless volunteers and donations.

Current and forward budget estimates suggest funding will be reduced even further, worsening the faunal crisis.

Portfolio Budget Statements 2018-18. Portfolio Budget Statements 2017-18 Budget Related Paper No 1.7. Environment and Energy Portfolio. Program 1.1 Sustainable Management of Natural Resources and the Environment
Total Expenses

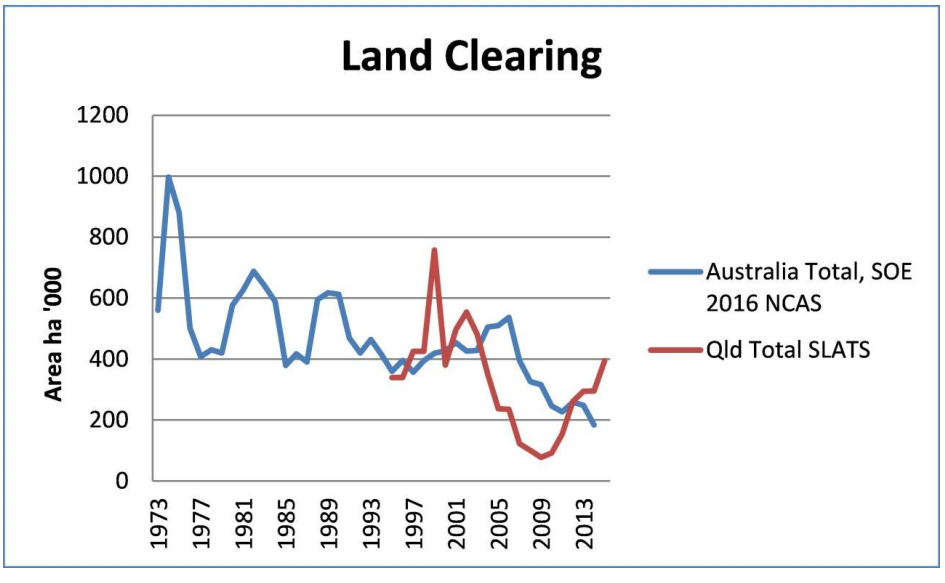
2017-18 $479m
2018-19 $370m (budget)
2019-20 $295m (budget)

Without detailed project-by-project costing a precise figure cannot be provided, but it would be anticipated that adequate and continuous funding of two or three orders of magnitude more is required. The funding needs to be applied in a structured, prioritised and open and transparent way with independent peer review.

i. the adequacy of existing monitoring practices in relation to the threatened fauna assessment and adaptive management responses;

Response
Timely and reliable monitoring and reporting are key to effective management and the publics' understanding of government policy and progress. Constant changes in programs and transition to non-comparable datasets makes this difficult and it appears that governments use these opportunities to obfuscate.

For example, the lack of agreement in land clearing data provided under Queensland's SLATS (Statewide Landcover and Trees Study) and the Australian Governments NCAS (National Carbon Accounting System) is a case in point. Evans (*Deforestation in Australia: drivers, trends and policy responses*. *Pacific Conservation Biology* 22, 130-150. https://doi.org/10.1071/PC15052) explains that, "In the absence of a robust quantitative evaluation, it is not yet clear whether deforestation rates have significantly changed following other recent policy changes in New South Wales, Victoria and Western Australia.". It is also noted that comparable NCAS data had not been updated since 2013.



j. the adequacy of existing assessment processes for identifying threatened fauna conservation status;

Response No comments made

k. the adequacy of existing compliance mechanisms for enforcing Commonwealth environment law; and

Response No comments made

l. any related matters.

Response
1) Environment Ministerial Portfolio
The Environment Ministry is a complex portfolio dependent upon an adequately funded team of environmental experts and administrative staff. The current accelerating rate of change in climate, biodiversity and threatened species requires additional resources to be applied. This has not been evident (see c (2)). In addition, a potential conflict of priorities exists in aggregating ministerial responsibilities which are in essence competing, as currently exists with the Minister for Environment and Energy. The Environment portfolio should be a free-standing Ministry.

2) Biosecurity and Wildlife Security

Many Key Threatening Processes driving Australia's faunal crisis are the result of inadequate biosecurity measures. Some are historic thoughtless actions where the consequence of those actions was either not considered at all (fox, cat and goat) or given inadequate resources to control (woody weeds, European wasps, Fire Ants).

Australia's current wildlife health system is embedded in our biosecurity/agriculture framework. The system focuses on surveillance and preparedness for diseases with wildlife as part of their ecology that may impact upon Australia's agricultural trade and market access. Diseases of wildlife that impact upon Australia's biodiversity and environment have to date been given a low priority. Though much good work has been done, there is an immediate need: to bring environment into Australia's wildlife health system; to improve education and knowledge of diseases with wildlife as part of their ecology that may impact upon Australia's environment and biosecurity; and to prepare for and respond to these risks to further develop Australia's national wildlife health system to support Australia's overall animal health.

Irrespective of biosecurity processes, disease is a growing threat to Australian fauna and biodiversity (e.g. Tasmanian devils and facial tumour disease, Bellingen River turtle virus, chlamydia in koalas and sarcoptic mange in wombats). Focus and support should be provided to improve knowledge and capacity in the areas of wildlife disease preparedness and response. In particular, we would recommend that there is

- recognition that all interventions with wildlife carry disease risks for wildlife individuals and populations, humans and domestic animals. Biosecurity risks should be understood, identified and managed
- a focus on, and use of, national guidelines on wildlife biosecurity, including mandatory use of wildlife disease risk assessments prior to translocation of wildlife species
- support for development of baseline information on health and disease for existing wildlife populations, both threatened and secure, in order to be able to interpret and respond to threats as they occur. We are aware of and support the Australian Department of Agriculture and Water Resources`, "National priority list of exotic environmental pests and diseases" project and
- support for a nationally agreed approach to respond to wildlife disease events, in particular those that may pose a threat to biodiversity or the environment.

Contact details

Contact: Dr Michael Banyard
President, Australian Veterinary Conservation Biology (AVCB)
Email: avcb@ava.com.au

Dr Laurie Dowling
Executive Officer, AVCB
Email: execqld@ava.com.au