



Australia's extinction crisis

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Committee

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Invasive Species Council

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About the Invasive Species Council

The Invasive Species Council was formed in 2002 to advocate for stronger laws, policies and programs to keep Australian biodiversity safe from weeds, feral animals, exotic pathogens and other invaders. It is a not-for-profit charitable organisation, funded predominantly by donations from supporters and philanthropic organisations.

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Introduction

The Invasive Species Council welcomes the opportunity to provide a supplementary submission to the reconstituted inquiry into Australia’s extinction crisis. This submission builds on our original submission to the inquiry from September 2018.

Australia has some of the most unique ecosystems and wildlife in the world. Most Australian terrestrial plant and vertebrate animal species are unique (endemic to Australia) – some 95% of frogs, 90% of reptiles, 87% of terrestrial mammals, 87% of ants, 68% of freshwater fishes and 50% of birds. Australia has far more endemic reptiles than any other country, more endemic ants, the world’s second highest number of endemic mammals and birds, and the third highest number of endemic trees.^{1 2 3}

The evolutionary uniqueness of our wildlife coupled with the sheer number of endemic species makes Australia one of the few mega-biodiverse countries in the world. However, despite this incredible diversity of life, Australia is in the grips of a growing extinction crisis.

It is well understood that as a nation we lead the world on the extinction of mammals. Australia is second globally when it comes to the decline of biodiversity. Since European colonisation Australia’s wildlife has been besieged – by voracious new predators, large scale habitat destruction, dramatically intensified or suppressed fire patterns, dominating new herbivores and aggressive weeds, intensive exploitation of water, forests and oceans and, more recently, a rapidly changing climate.

The major drivers of biodiversity decline are well documented - invasive species, habitat destruction, adverse fire regimes and climate change top the list of the most significant threats to nature.⁴

If we are to protect what is most distinctive about this country – our unique plants, animals and ecological communities – it is clear we need an ambitious, systematic, well-funded and nationally coordinated threat abatement system.

¹ AntWiki. Welcome to AntWiki. [cited 9 Aug 2022]. Available: https://antwiki.org/wiki/Welcome_to_AntWiki

² Global Rankings for Endemics. [cited 1 Aug 2022]. Available: <http://Intreasures.com/rankings.html>

³ BGCi. State of the World’s Trees. Botanic Gardens Conservation International; 2021

⁴ Ward M, Carwardine J, Yong CJ, Watson JE, Silcock J, Taylor GS, et al. A national-scale dataset for threats impacting Australia’s imperiled flora and fauna. *Ecology and Evolution*. 2021.

Invasive species are a major driver of extinction in Australia

The 2021 State of Environment report highlighted the plight of our wildlife and ecosystems, with our national list of threatened species and ecological communities continuing to grow and now almost numbering 2000 in total. The threats facing nature in Australia are varied and compounding (for example, the destruction of a habitat reduces the refugia for available wildlife, increases vulnerability to invasive species incursions and reduces the capacity for species to move through the landscape). Acknowledging the complex and interrelated nature of threatening processes, it is important to note that invasive species impacts have been the dominant driver of extinction for Australia's native animals.

The majority of known and presumed extinctions in Australia are of vertebrate animals. It is currently thought that this number (including extinct in the wild) totals 62 species: 34 mammals, 11 birds, 8 reptiles, 7 frogs and 2 fishes. Invasive species have been the primary driver for the majority of these extinction events, accounting for the loss of 74% of vertebrate animal extinctions since European colonisation. This figure increases dramatically for Australia's threatened mammal species, where invasive species are thought likely to have been responsible for 88% of the total extinction events, primarily due to the predation impacts of feral cats and foxes.

Of the 15 animal extinction events that have occurred since 1960 (including extinct in the wild but surviving in captivity), 12 have been primarily driven by invasive species.⁵ This includes contemporary extinction events such as the Christmas Island pipistrelle, Christmas Island blue-tailed skink and Lister's gecko, which have all occurred since 2000.

A failing system

Australia needs a concerted national focus to overcome the major threats that our native plants and animals have in common. Tackling major threats that are driving the decline of threatened species will also safeguard many other species not yet recognised as threatened, help recover environmental health, and benefit industries such as agriculture and tourism.

More than 100 species have recently been assessed as facing a high (>50%) risk of extinction in the next 10–20 years, more than the total number of confirmed extinctions since European colonisation.

Australia already has a national system for responding to threats to nature. Under Australia's national environmental law, the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*, the Australian Government can list key threatening processes and prepare threat abatement plans to tackle these key threats. In theory, this should be one of Australia's most powerful mechanisms for protecting biodiversity – for stopping extinctions, preventing the decline of more species, and returning ecosystems to good health and building resilience. Yet threat abatement as a key policy response to the growing biodiversity crisis has languished and the system has been severely underutilised over the 22 years of the legislation's operation.

The benefits of a strong threat abatement focus for protecting and restoring the environment have been demonstrated. The seabird bycatch by longline fishing has dropped from many thousands of albatrosses and petrels a year in the 1990s to fewer than 50, largely thanks to the implementation of measures outlined in the threat abatement plan for the incidental catch of seabirds (see case study at [Attachment 1](#)). Another success has been the eradication of invasive animals from many islands, creating safe havens for threatened wildlife. This includes world heritage listed places such as Macquarie and Lord Howe Islands. These cases demonstrate that with coordinated efforts, adequate

⁵ Woinarski J, Braby M, Burbidge A, Coates D, Garnett S, Fensham R, et al. Reading the black book: The number, timing, distribution and causes of listed extinctions in Australia. *Biological Conservation*. 2019;239: 108261.

resourcing and sound legislative basis, meaningful conservation interventions can be made to abate major threats and restore ecosystem health.

But for most threats the system is failing – the 22 threats currently listed under the EPBC Act are far from comprehensive, many threats lack a threat abatement plan or other national response, and many abatement plans are poorly implemented. The system is starved of funding and requires resources and ambition to drive meaningful change.

Averting extinctions

There are two major mechanisms under the EPBC Act for saving Australia’s threatened biodiversity: one focused on recovery (listing threatened species and ecological communities and preparing recovery plans) and the other focused on threats (listing key threatening processes and preparing threat abatement plans). This complementary, 2-pronged approach allows for both ‘a broad, coordinated approach’ to tackling threats and a focus on ‘restricted range or species-specific threats’.⁶

Both systems are essential and both are failing to prevent biodiversity losses and extinctions, for overlapping reasons – an unsystematic listing process, limited planning, poor implementation of plans, and a failure to apply fit-for-purpose responses.

The report *Averting Extinctions* at [Attachment 1](#) was developed following detailed consultation with experts in conservation planning and threat management. Endorsed by five major national environmental groups, it outlines the evidence for strengthening Australia’s threat abatement system.

The report identifies three broad reforms areas that need to be addressed if we are to improve threat abatement under the EPBC Act:

1. **improving the statutory processes** to list threats and apply effective threat abatement responses
2. **securing adequate funding for threat abatement** - focussing on defining the level of funding needed for effective threat abatement, the economic benefits of abatement and the potential sources of funding.
3. **inspiring a strong national commitment to threat abatement** – focused on intergovernmental commitments and cooperation, nationally coordinated and collaborative threat abatement, community participation and independent oversight of progress

With the Australian Government committing to respond to the independent review of the EPBC Act there is an important opportunity to reform and strengthen Australia’s threat abatement system and conservation planning frameworks. The key recommendations summarised below, and detailed report at [Attachment 1](#), outline the systemic changes needed to tackle the major threats to nature and address Australia’s growing extinction crisis.

⁶ Threatened Species Scientific Committee. Independent Review of the Environment Protection and Biodiversity Conservation Act 1999. Submission from the Threatened Species Scientific Committee, a Statutory Committee Established by the EPBC Act; 2020.

Recommendations

Improving the statutory processes for threat abatement

1. Introduce a requirement to the EPBC Act for the comprehensive listing of threats to matters of national environmental significance, on the advice of the Threatened Species Scientific Committee (or an equivalent independent scientific body or process), with threats classified hierarchically as:
 - a) Key threatening processes (overarching processes such as habitat loss and invasive species).
 - b) Threats of national environmental significance (more specific threats within each key threatening process such as land clearing for specific purposes and invasive ants).
 - c) On listing, the TSSC (or equivalent) must outline the measures needed to abate the threats.
2. Develop an emerging threatening process (ETP) category under EPBC Act to facilitate precautionary or urgent interventions to prevent emerging threats from becoming established threats.
3. Amend the EPBC Act to list key threatening processes as matters of national environmental significance
4. Establish an implementation taskforce for each threat response and systematically monitor and report on threat abatement progress.
5. Develop fit-for-purpose national abatement response mechanisms for all listed threats, including national and regional plans, and policy and regulatory responses.

More effective and efficient implementation of threat abatement planning

6. Introduce a requirement for a threat abatement plan or national strategic plan to be prepared for a listed threat unless alternative plans, strategies, policies or programs are in place that will be effective in abating the threat.
7. Streamline the process for preparing recovery and threat abatement plans, and reduce the time frames in which they must be finalised.
8. Explicitly enable multiple Threat Abatement Plans to be made for listed Key Threatening Processes.
9. Ensure that the proposed Commonwealth Environmental Protection Agency has a direct oversight and assurance role in reporting to the Australian Parliament on the implementation of planning instruments, including threat abatement and recovery plans and any future planning instruments (such as regional recovery plans).

Secure adequate funding for threat abatement

10. Investigate the economics of threat abatement – the annual costs of effective abatement and the economic consequences of abatement failures and successes.
11. Substantially increase public spending on threat abatement and threatened species recovery and allocate funds based on a transparent prioritisation process.

Nationally coordinated action

12. The Australian Government should work with the states and territories to develop an intergovernmental agreement that commits governments to abate major threats to nature collaboratively.
13. Facilitate national collaborations by governments, Traditional Owners and community and cross-sectoral stakeholders on abating threats to nature.
14. Introduce independent oversight of the national threat abatement system through a role such as a statutory commissioner or inspector-general.
15. Set ambitious and inspiring goals for abating Australia's major threats to nature.