

Australia is home to some of the world's most marvellous species

Australians are proud of our amazing wildlife and nature. We are known worldwide for our unique landscapes.

Our country is home to more than one million species, most of which occur nowhere else in the world. Most of our mammals, reptiles, frogs, invertebrates, flowering plants, and freshwater fish are endemic – that is, they live only in Australia.





The Bramble Cay melomys (above) and white-chested white-eye (below) have both gone extinct after being listed for protection as threatened species Photo: CC State of Queensland (upper); John Gould Library (lower)

Protecting species threatened with extinction

However, much of our priceless natural legacy has been lost; and losses are continuing. At least 100 endemic Australian species have become extinct since 1788. We are losing species, forever, at a rate of about four per decade. If our levels of investment and management stay as they are in future, that rate is likely to continue, more likely, to increase due to the impacts of climate change.

We could and should do much more to protect our species threatened with extinction.

Australia seeks to protect native species by listing those with a high likelihood of extinction as threatened. Australian national listing occurs under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The EPBC Act aims to protect native species by preventing extinction and promoting their recovery.

However, the Australian Government has not met this EPBC Act objective. Since the year 2000, five Australian animals have become extinct - after they were listed as threatened. These birds, bats, skinks, rodents and insects, like the Christmas Island forest skink and the lovely white-chested white-eye of Norfolk Island, will never be seen again.



Pink-tailed worm lizards are currently listed as vulnerable to extinction Photo: Matt from Melbourne, CC BY 2.0



Lessons from the recent past

These five species have disappeared because, at least in part, there was not enough effort to protect and conserve them.

These losses show that listing species threatened with extinction under the EPBC Act alone will not prevent them becoming extinct, let alone lead to recovery.

Conservation, especially of species that are threatened with extinction, requires targeted and appropriate investment and effective management of threats such as invasive species and climate change.



Carnaby's black cockatoo is one of 110 priority species Photo: Ralph Green, Flickr CCBY NC ND 2.0



The superb parrot is listed as vulnerable to extinction but is not prioritised in the Threatened Species Strategy | Image: Kevin Murray, CC wikimedia

Identifying priority species shouldn't mean we neglect the rest

The Australian Government has recognised 1,869 species – 1,374 plants and 495 animals – as in danger of extinction. It has listed them as threatened.

In 2022, the Australian Government revised its Threatened Species Strategy. The associated action plan listed 110 threatened species as priorities for investment. The Threatened Species Strategy also identifies 20 priority places for conservation investment and prioritises the management of critical threats such as feral cats, foxes and climate change. These actions will benefit many threatened species and ecosystems.

The Australian Government consulted widely in developing its Threatened Species Action Plan. Prioritisation was based on extinction risk, likely effectiveness of conservation actions, species uniqueness and importance to people (including as cultural values of First Nations people).

Unfortunately, this prioritisation leaves 1,759 threatened species (94% of all those listed) as not prioritised. And, while some of these unprioritised species occur within the set of 20 designated priority places within the strategy, most do not.

Investment by Australian governments overall is only about one tenth of what is required to recover all threatened species. These resources are spread too thin to save all our threatened species. So, selecting 110 species as priorities for Australian Government investment means that the remaining species – the vast majority – are unlikely to have the funding they need for their protection.

Species that were not prioritised under the Threatened Species Strategy include 278 species listed as Critically Endangered – those with the highest risk of extinction. They include the spotted handfish, the northern corroboree frog and the nabarlek rock-wallaby.

There are currently too few priority species and too few resources for conservation. The need far outweighs the available resources. This situation urgently needs to change if we are to avoid watching more precious species, like the white chested white-eye, go extinct.

The solution

Our unique animals, plants and natural places deserve to be valued and protected, now and for future generations.

To achieve this, the Australian Government needs to meet its legislative obligation to prevent extinction and promote the recovery of threatened species.

This will take two key activities:

- 1. More funding to conserve and protect larger numbers of species threatened with extinction.
- 2. Better managing widespread threats to species, such as habitat loss, climate change, pests and weeds. The EPBC Act needs to be improved to ensure we do a better job of protecting species threatened with extinction.

Protecting 6% of species threatened with extinction is a start. But we need much more to be done.



The Critically Endangered northern corroboree frog has missed out on being prioritised for action under the Threatened Species Strategy Photo: Peter Taylor, TSR Hub

Species facing the risk of extinction: the numbers

100

endemic Australian species have become extinct since 1788

5

Animals listed as threatened under the EPBC Act have become extinct since the Act's establishment in 1999

110

threatened species are prioritised for investment by the Australian Government 4

the average number of native species lost per decade

1,869

Australian species are recognised as in danger of extinction by the Australian Government

1,759

threatened species are left behind

READ MORE -

PAPER: Woinarski JCZ et al. (2019) Reading the black book: the number, timing, distribution and causes of listed extinctions in Australia. *Biological Conservation* **239**, 108261. PAPER: Wintle BA et al. (2019) Spending to save: what will it cost to halt Australia's extinction crisis? *Conservation Letters* **12**, e12682.

REPORT: '2022-2032 Threatened Species Action Plan: Towards zero extinctions' (2022) Department of Climate Change Energy the Environment and Water, Canberra.

The Biodiversity Council has been established to connect Australian communities and decision-makers with knowledge and solutions to protect our unique biodiversity. It is founded by 11 universities including its host the University of Melbourne, with support from The lan Potter Foundation, The Ross Trust, Trawalla Foundation, The Rendere Trust, Isaacson Davis Foundation, Coniston Charitable Trust and Angela Whitbread.

Story by John Woinarski from Charles Darwin University



