

Major declines in populations of threatened mammals over the last 20 years, but news not all bad

April 22 2020

Populations of Australia's threatened mammals have declined by over one third (38%) in twenty years (1995-2016), according to new research, but the news isn't all bad because among the losses there have been some significant recoveries.

The findings come from Australia's Threatened Species Index which combines data from monitoring programs across the country to track trends in threatened [species](#) populations. The project is a collaboration with many state agencies, conservation NGOs, and other researchers, who all contribute data to this national collation.

The [index](#) was developed by the Threatened Species Recovery Hub of the Australian Government's National Environmental Science Program and is the first of its kind in the world. The recent addition of mammals to the index has put the spotlight on trends for Australian threatened mammal populations.

Dr. Elisa Bayraktarov from the University of Queensland who leads the research has spent four years developing the index and assembling data on threatened and near-threatened species.

"A key finding is that in areas without any active conservation, on average populations of threatened mammals have decreased by 60% over the last two decades (1995-2016), a loss of well over half.

"But Australia has also achieved some conservation successes in that period, and our results show that where effort is being made it usually pays off.

"When we look across all sites with targeted conservation management we see that on average populations have increased by 46% between 1995 and 2016. This management includes actions such as on-going feral animal control, feral predator exclusion fencing and ecological fire management.

Dr. Sally Box, the Australian Government's Threatened Species Commissioner, said the index "will help provide a better understanding of how our threatened mammals are faring."

"When it comes to recovering Australia's threatened species, new tools and the latest science are critical to understanding trends and determining where we should focus our efforts. The power of this index will only increase as more species and datasets are added," said Dr. Box.

The results also demonstrate the effectiveness of Australia's havens network of fox- and cat-free islands and fenced conservation areas, for protecting populations of threatened species.

"Between 2000 and 2016, populations of 15 threatened mammals at cat- and fox-free sites increased five-fold; a remarkable result," Dr. Bayraktarov reported.

Prof John Woinarski from Charles Darwin University, who is part of the research team, said the growth of populations inside havens shows that when Australian mammals are protected from cats and foxes they do well.

"The burrowing bettong (boodie) and bridled nail-tailed wallaby are

among the species that have had large [population](#) gains inside havens. The recoveries of these species represent some of the most spectacular conservation successes in the world," said Prof Woinarski.

"However, havens cover only 0.1% of Australia's total area, so they are only one part of the solution to Australia's long-term biodiversity loss, and they are not a solution for species that are declining for reasons other than cats and foxes.

"Most of Australia's threatened mammal populations occur outside of havens," he said.

The index currently includes data for 57 mammal species collected at 1186 sites across Australia, but these numbers are growing as new data is added. The Threatened Species Index (TSX) also includes threatened birds, and data on plants are currently being compiled.

The data in the index was collected by government conservation agencies, the Australian Wildlife Conservancy, Arid Recovery, other non-government conservation organisations, university researchers, and the members of the community.

The research team encourages any groups monitoring threatened and near threatened species to [contribute their data](#).

According to Dr. Bayraktarov, the index includes data on 17 threatened bird and [mammal](#) species at about 150 sites that may have been impacted by the recent bushfires.

"We are currently talking to the groups on the ground that are monitoring these sites to see how much they have been impacted," Dr. Bayraktarov said.

"As data from bushfire affected sites is added to the index in future years it will enable the overall impact of the fires on threatened species populations to be understood, in addition to providing a tool to measure their recoveries."

Findings factsheets:

- [A Threatened Mammal Index for Australia](#)
- [A Threatened Mammal Index for New South Wales](#)
- [A Threatened Mammal Index for Victoria](#)
- [A Threatened Mammal Index for Queensland](#)
- [A Threatened Mammal Index for the Northern Territory](#)
- [A Threatened Mammal Index for South Australia](#)
- [A Threatened Mammal Index for Tasmania](#)
- [A Threatened Mammal Index for Western Australia](#)

Provided by National Environmental Science Program

Citation: Major declines in populations of threatened mammals over the last 20 years, but news not all bad (2020, April 22) retrieved 26 June 2024 from <https://phys.org/news/2020-04-major-declines-populations-threatened-mammals.html>

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