Extinction risk in Australasian mammals: Trends and management priorities

Chris N. Johnson¹, John C. Woinarski², Andrew A. Burridge³, Sarah M. Legge⁴

- 1. University of Tasmania, Hobart, Tasmania, Australia
- 2. Charles Darwin University, Darwin, Northern Territory, Australia
- 3. Department of Parks and Wildlife, Perth, Western Australia, Australia
- 4. National Environmental Science Program Threatened Species Recovery Hub, University of Queensland, Brisbane, Queensland, Australia

Australia's mammal fauna has suffered large historical declines. Of 315 taxa of land mammals extant at the time of European arrival, at least 29 are extinct, while 27.5% of all species are either extinct or currently threatened with extinction. Recent evaluations for the Australian Mammals Action Plan and the 2015 Global Mammal Assessment show that the conservation status of Australian mammals continues to decline. Among marsupials and monotremes, 14 species moved between threat categories from 2008 to 2016, and all but one of these changes was a decline; there was a similar trend in rodents. The most pervasive threat is predation by feral cats, followed by inappropriate fire regimes, predation by red foxes, habitat loss and fragmentation, and climate change and extreme weather events. In this paper, we review the nature of these threats and their changing impacts on the mammalian fauna of Australia. We then provide an overview of current conservation research and management priorities for Australian terrestrial mammals, and evaluate prospects for mitigating threats at regional and continental scales. For most species from New Guinea there is too little information to determine changes in threat status, but it is clear that overexploitation is the predominant threat for many species. We highlight examples of community-based conservation programs that have been successful in reducing this threat.



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ABSTRACT BOOK