



Survey guidelines and recommendations for priority threatened species

A project to provide field survey guidelines and recommendations for priority threatened species in Australia's Threatened Species Action Plan 2022-2032.

This project will develop best practice field survey guidelines and recommendations to assist practitioners working in threatened species conservation and recovery. These will support targeted efforts and provide resources to measure, share and achieve tangible outcomes for conservation. Data collected using robust, standardised methods will improve our knowledge of threatened species and help drive threatened species recovery at landscape scales. This project is an important step towards establishing monitoring protocols and data repositories to improve accessibility and sharing of threatened species data.

Underpinning the Threatened Species Action Plan 2022-32

The Australian Government Department of Climate Change, Energy, the Environment and Water is working with the NCRIS-enabled Terrestrial Ecosystem Research Network project (TERN Australia) to design survey guidelines and recommendations for monitoring priority threatened species. This work contributes to monitoring targets under the Threatened Species Action Plan 2022-2032.

The project forms an extension to a suite of related projects the Department has underway with TERN, including the development of standardised monitoring protocols and field collection apps and data management systems for ecological field data and vertebrate pest data. It will also deliver software enhancements to the Threatened Species Index, a centralised platform for threatened species data collection and robust measures of change in the relative abundance of threatened species.

The project will collate existing literature and knowledge to identify key biological and ecological information needed to guide the monitoring requirements of each of the Action Plan's 110 priority threatened species (22 birds, 21 mammals, 9 fish,

6 frogs, 11 invertebrates, 11 reptiles and 30 plants). The priority threatened species were selected using a multi-criteria decision analysis process, and collectively represent Australia's diverse land, sea and freshwater environments.

Monitoring standards and techniques currently used by ecologists and practitioners will inform identification of best-practice methods and provide general survey guidelines for the 110 priority threatened species. In addition to the general survey guidelines, detailed species-specific guidelines and recommendations will be provided for 20 species (4 birds, 8 mammals, 1 frog, 5 reptiles, and 2 plants) that most need urgent attention and/or standardisation across broad distributions.

The survey guidelines and recommendations will enable more consistent monitoring efforts. From this, we will see improved accuracy in tracking species population trajectories, a better understanding of the performance of conservation strategies and return on investment, and more accurate reporting on the state and trends of threatened species.



Photo: Northern Quoll (*Dasyurus hallucatus*) (Brad Leue)

Contributions from the experts and a path forward

The current monitoring methods used by landholders, communities, First Nations peoples, the private sector, non-government organisations, regional NRM groups, post-graduate students, researchers and scientists working on the recovery of priority threatened species will be considered and integrated. Experts from across the country will be able to provide input through workshop opportunities and close collaborations to guide the development of the guidelines using their knowledge and understanding of the species and experiences implementing monitoring survey techniques.

The guidelines developed for many of the priority species will also benefit other threatened species that share their habitat. The survey guidelines and recommendations will be shared publicly and made available to anyone working on threatened species projects, including those funded through Australian Government investments. The guidelines will be progressively integrated into updates of conservation planning documents.

Data captured from surveys that follow the guidelines and recommendations for priority threatened species will be compatible with national biodiversity information standards, enabling rigorous data management. This will facilitate careful and considered data sharing with trusted sources to identify the necessity for additional monitoring or research needs, and adaptive management strategies, whilst maintaining the protection of sensitive data. In addition, data obtained will enable accurate reporting of species trajectories and broader environment reporting, such as the State of the Environment Report, and also be used to inform priorities for future investment in biodiversity conservation and threatened species recovery.



Photo: Western ground parrot (*Pezoporus flaviventris*) monitoring (Fiona Fraser)

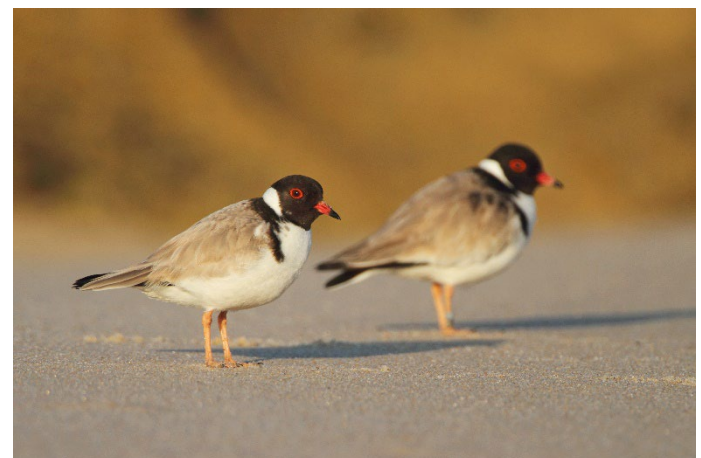


Photo: Hooded plover (*Thinornis cucullatus*) (Dean Ingwersen)

For further information, please visit: tern.org.au/threatened-species-guidelines/ or email tern@adelaide.edu.au



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