

Biodiversity threats managed by cost effective new framework

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Fire management performed with a drip torch. Credit: Sarah Legge

Scientists from the University of Western Australia have developed a

framework for organizations wanting to mitigate biodiversity threats, in a way that costs out several existing threat management strategies.

Conservation organizations at regional, state and national levels in Australia will benefit from a new [framework](#) aimed at managing biodiversity threats. The framework, published in *Journal of Applied Ecology*, is more [cost effective](#) than some existing threat management strategies, and thus, researchers hope that the framework will be useful in stopping the extinction of threatened species.

Lead author Dr. Chuanji Yong explains, "Costs will always be at the center of environmental decision-making. However until now, there has been no consistent way to estimate the resources needed to manage key biodiversity threats. Our [project](#) is more cost effective than 18 of the most important threat management strategies for saving Australia's biodiversity."

Working with threat management experts, the team defined both the actions and [costs](#) required to manage several biodiversity threats. Existing cost records, for example, those from the NSW Saving Our Species program, provided the scientists with information about the financial aspects required for their new framework.

The study found that some threats are more expensive to manage than previously thought—with habitat restoration ultimately being the most costly action. The authors concluded that Australia needs to be more strategic about conservation investments, the country also needs to reconsider how to avoid impacts on biodiversity in the first place.

Dr. Josie Carwardine, co-leader of the project said "The cost of conservation is critical across all scales. Therefore the approach provides invaluable decision making information and can help people at any scale to realistically budget and plan for their biodiversity aspirations."

More information: Chuanji Yong et al, The costs of managing key threats to Australia's biodiversity, *Journal of Applied Ecology* (2023). [DOI: 10.1111/1365-2664.14377](https://doi.org/10.1111/1365-2664.14377)

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