

Australia's Threatened Species Index

Autumn Update

2023



Wallum Sedge Frog
Geoff Heard

Dear *Friend of the TSX*,

We are delighted to provide you with an update on the Threatened Species Index (TSX) – Australia's key source of information on threatened species trajectories.

Release of TSX 2022

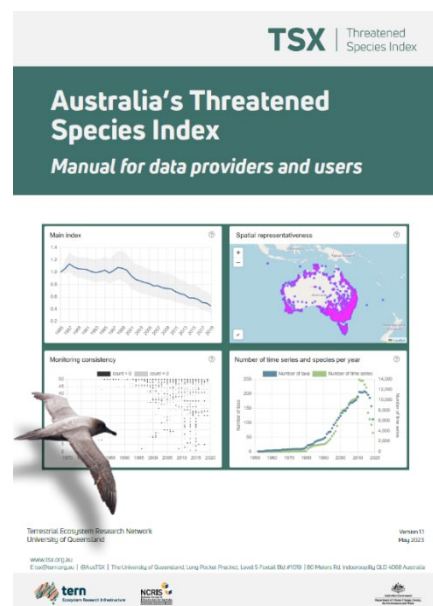
Following consultations with stakeholders across the country, the finalised trends of the 2022 Threatened Species Index were officially released on April 11, 2023. You can view the trends at <http://tsx.org.au/tsx2022> as well as download state- and territory-based factsheets [here](#). At the national scale, threatened and near-threatened species continue to trend downward, with an average decline of 55% in abundance since 1985 for the 278 species represented. Overall, the abundance of threatened and near-threatened species in the TSX database has declined by 3% per annum since 2000.

However, the 2022 index also confirms that management makes a difference to threatened species trajectories. For mammals, actively managed populations are stable, with average abundance in 2019 being over twice that for populations with no known management. For plants, average abundance at actively managed sites is over three times that of populations with no known management. This is encouraging evidence that conservation management can succeed, and demonstrates the value of long-term monitoring for understanding management efficacy.

New TSX Training Package

Over the past few months, the TSX team have been working hard to develop a new TSX training package. This package forms part of the program of work being completed with the Australian Government's Department of Climate Change, Energy, the Environment and Water (DCCEEW).

The package includes both a long-form manual as well as several instructional videos. The manual provides detailed background on the TSX and how it works, and walks data providers and users through data upload and management. The videos compliment the manual by providing guided step-by-step walk throughs of the many different functionalities of the TSX web-interface and trend visualiser tool. You can access the manual and videos [here](#).



Cover page of the new TSX Training Manual

www.tsx.org.au

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The package development was guided by generous feedback from both existing and potential data providers. We hope these training resources will fast-track data upload to the index, and ensure data providers can access the full utility of the TSX for their work. We look forward to seeing the package put to the test, and welcome feedback on it, as we update it moving forward.

2023 TSX Data Call

Over the next few months, the TSX team will be pursuing new monitoring data for the index. In addition to pursuing some priority datasets for birds, mammals and plants, we are excited to announce that we will be pursuing data for a new group, amphibians! You may remember from our [2023 Summer Newsletter](#) that we had two Griffith University undergraduate students, Jacob Devine and Tyler Contor, join us over the summer. They conducted literature reviews identifying threatened and near-threatened frog and reptile monitoring datasets across Australia. Based on the list of monitoring projects that Jacob collated, as well as additional datasets identified by TSX Project Manager Geoff Heard, we have begun reaching out to key custodians conducting frog monitoring across Australia.

If you conduct frog monitoring and believe you have suitable data for the TSX, we'd love to hear from you! Please reach out at tsx@tern.org.au. Of course, we are also interested in building our existing datasets for threatened and near-threatened birds, mammals and plants, so please reach out if you have data for these groups too!!

TSX features in Australia's Environment

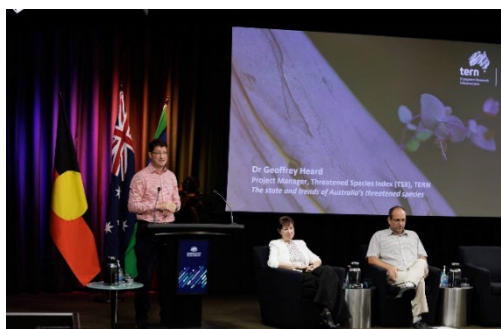


Image from the Australia's Environment 2022 Report launch event at the Department of Education in Canberra.

Australia's Environment is an annual scorecard on Australia's environment providing a summary of key events, environmental conditions and change. Excitingly, the 2022 report included data from the recently released 2022 Threatened Species Index. You can access the full report [here](#) or just the biodiversity chapter (where the TSX is featured) [here](#). As part of the release, Geoff Heard (TSX Project Manager) attended a launch event at the Department of Education in Canberra. Having the TSX be included in Australia's Environment has been a long-term goal for the index, so we are super excited about it!

Threatened Species Spotlight

This newsletter's threatened species in the spotlight is the spectacular Silver Daisy-bush (*Olearia pannosa subsp. pannosa*). The species is currently listed as Vulnerable under the EPBC Act. It is a perennial shrub occurring in mallee and woodland communities across South Australia, Victoria and New South Wales.

Currently, the TSX holds an amazing 52 monitoring time-series for the Silver Daisy-bush, that average



approximately 11 years in length. This monitoring is occurring across many sites throughout South Australia, particularly in the Murraylands and Riverlands regions, led by SA’s Department of Environment and Water. Combined, these surveys reveal that populations are experiencing declines across the board, with no consistent evidence of stabilisation (Figure 1).

So what’s to blame for the decline? Many Silver Daisy-bush populations are severely fragmented and contain only a small number of individuals. As they often occur in narrow road- and rail-side remnants, populations are under threat from maintenance activities, edge effects and severe weed infestation.

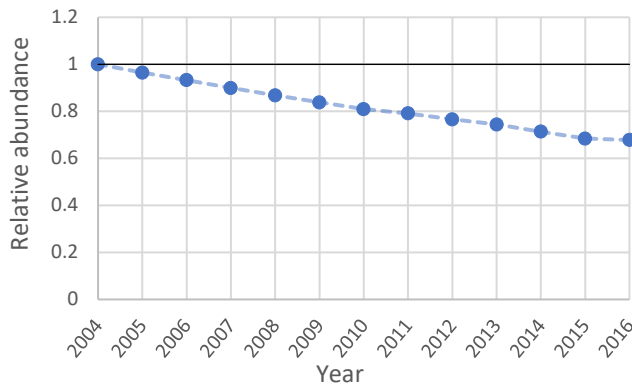


Figure 1. Population trend for the Silver Daisy-bush, 2004-2016

However, considerable work continues to be undertaken to help conserve this species. Management actions for the Silver Daisy-bush include protecting existing habitat through weed control, revegetation and fencing off stock, as well as collecting seeds to establish additional populations. The TSX looks forward to receiving more monitoring data on this species, through which we will hopefully see the positive effects of these conservation actions.

That’s a wrap

Until our next update, the TSX team wishes you all the very best. As always, please reach out to us at any time at tsx@tern.org.au. Perhaps you’ve come across some magnificent archival monitoring data on a threatened species, or wish to make use of the index for your work, or simply want to chat threatened species? Whatever the case, we’d love to hear from you.

Regards,

Tayla Lawrie (TSX Data Analyst) and Geoff Heard (TSX Project Manager)

