Submission:
Tasmania's Threatened Species Strategy

Dr Jennifer Sanger

December 2023

ABOUT THE TASMANIAN INDEPENDENT SCIENCE COUNCIL

The Tasmanian Independent Science Council is dedicated to science-based policy reform to ensure the long-term health of Tasmania's environment. The Council includes scientists and professionals who provide independent, non-government advice, focusing on policy reforms of significant State interest. We seek to inform public debate and influence legislative reform to improve outcomes for terrestrial, freshwater and marine ecosystems.

Summary of recommendations

1. A stronger vision is needed, one that aims to reverse species' decreases.
2. Better representation of marine species in the new *Threatened Species Strategy*.
3. Implement strict new legislation that adequately protects threatened species, and includes the Precautionary Principle.
4. The State Government must negotiate amendments to the RFA to remove the exemption of forestry operations from the EPBC Act.
5. An Independent Authority needs to be created to enforce compliance of new legislation.
6. Biodiversity offsets must be exempt from planning, and must only be used as a last resort, under strict monitoring and evaluation protocols.
7. While catchment scale planning is important, Threatened Species planning should focus on individual species to ensure individual species' needs are met.
8. Simply protecting habitat is not enough, in some cases disturbance regimes need to be continued to support the persistence of some species.
9. Increased funding is needed to ensure that threatened species are managed appropriately in Tasmania.
10. Listing Statements are prioritised over Recovery Plans and must include enforceable outcomes.
11. The ability to uplist State-listed species or sub-species immediately to ensure consistency with the Federal Government.
12. More comprehensive and regular *Tasmanian State of the Environment Reports*.
13. Fast-track the Private Land Conservation Program and provide greater funding and resources for its implementation.
14. Undertake a review of the Tasmanian Reserve Estate to ensure that threatened species' habitats are well represented.
15. Immediately increase the number of no-take marine reserves around Tasmania to meet the criteria for a CAR marine reserve system, including increasing the area of no-take zones in all bioregions.
16. Significantly and immediately increase funding and resourcing for threatened species management.
17. Remove decision making power of the Minister and introduce an appeal processes into the Tasmanian Act, similar to that under Commonwealth legislation.

Introduction

The Tasmanian Independent Science Council welcomes the opportunity to provide feedback on the *Threatened Species Strategy Discussion Paper*, which will provide the basis for the new Tasmanian Threatened Species Strategy.

TISC welcomes the steps taken to revise the Threatened Species Strategy, noting that the current strategy is now 23 years old, and there are emerging issues and new insights that can be adopted to ensure the best management of our threatened flora and fauna.

The new discussion paper outlines some good improvements, with some necessary updates to key threats, the notable of these being climate change. The discussion paper highlights some good actions and updates to the 2000 Strategy – however, we feel that these are insufficient to protect Tasmania's threatened species appropriately.

Tasmania, as with mainland Australia, is in an extinction crisis. Over the next few decades, climate change will compound and exacerbate existing threats to our threatened species, and we will see a rapid increase in species extinctions. Further, there are already species that were once common that are currently experiencing rapidly decreasing populations. Tasmania currently has 700 listed threatened species, but this number is likely to increase substantially in the near future.

Marine ecosystems were not well represented in the 2000 Threatened Species Strategy and barely rate a mention in the current *Discussion Paper*. Tasmanian waters are warming four times faster than the global average, and the pressures of expanding fish-farming in coastal waters is putting Tasmanian endemic marine species at risk. Action needs to be taken to ensure that marine threatened species are properly managed. This could start with an adequate marine reserve system.

If the Tasmanian government is serious about protecting threatened species, then we need to see extensive legislation change, substantial investment and action. As such, we think a stronger Vision statement for the strategy is needed, one that commits to strong action, such as that of "No New Extinctions" adopted by the Federal Government. We must prioritise reversing species' decreases, rather than merely minimising them.

1. A stronger vision is needed, one that aims to reverse species' decreases.
2. Better representation of marine species in the new *Threatened Species Strategy*.

Better Protection and Stronger Enforcement

Tasmania urgently requires legislation that properly protects threatened species and their habitats. Habitat loss and fragmented habitats have been identified as the primary threats to Australia's flora and fauna for decades. Sadly, the required protection for threatened species in Tasmania is largely absent.

TISC notes with concern that the Precautionary Principle is not mentioned anywhere in the *Discussion Paper*. To protect threatened species, we need strict laws that protect their habitats, which includes adoption and implementation of the Precautionary Principle. Developers and industries must not be able to incrementally destroy critical habitats as has been the case to date. We need tough legislation with strict enforcement that prevents further habitat losses.

Stricter legislation to safeguard threatened species depends both on Federal and State laws. Bilateral agreements between Tasmania and the Commonwealth, notably the Regional Forest Agreement (RFA) negotiated to exempt Tasmanian forestry from controls under the EPBC Act, must be amended to ensure strong protect of threatened species and their habitats.

Enforcement of these new laws must be undertaken in an impartial manner overseen by an Independent Authority. All loopholes and exemptions for specific projects or industries must be removed. Development and natural resource extraction are at direct odds with habitat protection. We need to see a fundamental shift in prioritisation by the government if we are to succeed in the recovery of threatened species in Tasmania.

Offsets must not be relied upon to mitigate habitat loss. Biodiversity offsets have been described as, "*a licence to trash nature*" and there are significant issues around their integrity, with c.60% of Australian biodiversity offsets ineffective (May 2016). Offsets should only be used as an absolute last resort, and need to be actively accessed and monitored to ensure they are effective. The recently enacted *Nature Repair Act 2023* explicitly disallows use of biodiversity offsets to be associated with projects that earn biodiversity credits under this legislation.

Recommendations:

3. Implement strict new legislation that adequately protects threatened species, and includes the Precautionary Principle.
4. The State Government must negotiate amendments to the RFA to remove the exemption of forestry operations from the EPBC Act.
5. An Independent Authority needs to be created to enforce compliance of new legislation.
6. Biodiversity offsets must be exempt from planning, and must only be used as a last resort, under strict monitoring and evaluation protocols.

Species vs Ecosystem Protection

There is a case for ecosystem- or catchment-scale approaches instead of focusing on individual threatened species. However, there is considerable evidence to suggest that this may not be the appropriate approach to maintain biodiversity (eg Kirkpatrick 2011). Broad-scale management plans may neglect individual species in favour of an unachievable restoration of habitat integrity, leading to species' losses (Kirkpatrick and Gilfedder 1995). From a management perspective, ecosystems are difficult to define. Individual species can be clearly distinguished - most were recognised by traditional owners. They are therefore easier to monitor without ambiguity, providing a more rapid tool for assessing the efficacy of management actions.

Habitat loss and fragmentation are the primary causes for species decreases in Australia, and catchment-scale management addresses this problem. However, one must be careful that other stressors (eg disease) or prey availability that are species-specific are not overlooked in ecosystem- or catchment-scale management. There is also concern that ecosystem-scale management of threatened species may promote the use of offsets to ensure development goes ahead (Kirkpatrick 2011).

There are concentrations of threatened species in some parts of the Tasmanian landscape that relate to environmental history (Kirkpatrick and Brown 1984, Atkinson and Kirkpatrick 2020). The species within these concentrations have widely varying ecological requirements beyond avoiding habitat loss. In fact, many species in these concentrations and elsewhere depend on the perpetuation of anthropogenic disturbance for their persistence, with their remaining populations concentrated in over-grazed paddocks, cemeteries, gravel pits and roadsides under exotic trees (eg Kirkpatrick 2007), or, as in the case of many threatened mammals and birds, they are dependent on the animal pests or anthropogenic vegetation for their survival (eg Daniels and Kirkpatrick 2012, Kirkpatrick et al. 2022).

Focusing on ecosystem- or catchment-scale management may appear to be a cost-effective option and may allow for the management of multiple species, an easy and attractive option for land managers. However, cost effectiveness must not be the primary motivating factor in the design of management plans. We need significant investment in threatened species planning at the individual species level.

Recommendations:

7. While catchment scale planning is important, Threatened Species planning should focus on individual species to ensure individual species' needs are met.
8. Simply protecting habitat is not enough, in some cases disturbance regimes need to be continued to support the persistence of some species.
9. Increased funding is needed to ensure that threatened species are managed appropriately in Tasmania.

Planning and Resourcing

Listing Statements and Recovery Plans are identified in the *Discussion Paper* as key planning tools. Such planning tools are needed to guide proper management of threatened species in Tasmania. The *Discussion Paper* acknowledges that Listing Statements require substantial resources to develop, and that Recovery Plans can be a drawn-out process due to consultation and engagement with multiple stakeholders, and often fail to produce prescriptions that meet Tasmania's need.

TISC recommends that Listing Statements are the priority for threatened species in Tasmania. Currently, there is little evidence that Recovery Plans are effective at protecting threatened species (Bottrill 2011). Listing Statements should be stronger and include enforceable outcomes. While these are resource intensive to develop, there is a clear need for higher funding to ensure these are completed promptly.

Increased flexibility is required in implementing the management of threatened species in Tasmania. If a listed threatened species (or sub-species) is up-listed by the Federal Government under their legislation, then the listing for the species (or sub-species) under Tasmanian legislation must be immediately up-listed to ensure consistency.

Reactive efforts to triage threatened species diverts critical resources away from other efforts and strategies that are in place. Pro-active strategies will always be cheaper and more effective than *ad-hoc* reactive responses to situations where extinction is deemed imminent.

The lack of a contemporary *State of the Environment Report* for Tasmania makes any assessment of the efficacy of the current *Tasmanian Threatened Species Strategy* impossible. No SOE Report has been produced since 2009. Inadequate funding for the 2024 *SOE Report* means that it is unlikely to produce appropriate assessments for Tasmania's currently-listed threatened species to serve as a foundational basis for future *Reports*.

Recommendations:

10. Listing Statements are prioritised over Recovery Plans and must include enforceable outcomes.
11. The ability to uplist State-listed species or sub-species immediately to ensure consistency with the Federal Government.
12. More comprehensive and regular *Tasmanian State of the Environment Reports*.

Private Land Management

TISC welcomes the new objectives in the *Discussion Paper* for private land management through landholder stewardship programs. It is important that the *Strategy* includes effective governance mechanisms for encouraging conservation efforts by private landowners statewide. This is critical given many of the key biodiversity hotspots, such as in the Midlands, are outside the formal Reserve Estate (Kirkpatrick et al. 2017).

There is a need to make greater use of conservation covenants, under the *Nature Conservation Act 2002* (and Part V of the *Land Use Planning and Approvals Act 1993*). Unfortunately, we have seen a delay with the state government's Private Land Conservation Program owing to lack of resources and political resistance to expanding covenants. Covenants are acknowledged to be a key tool in conservation and are an important and simple way to expand the Reserve Estate. The increased use of covenants by private landholders will contribute to Australia's UN commitments to protecting 30% of land by 2030.

Recommendations:

13. Fast-track the Private Land Conservation Program and provide greater funding and resources for its implementation.

Review of the Reserve Estate

The Tasmanian Reserve Estate fails the Comprehensive, Adequate and Representative (CAR) criteria. There are many areas in Tasmania that are over-represented, such as button grass plains, and many habitats, critical to threatened species, that are significantly under-represented. Blue Gum, the state's Floral Emblem provides critical feeding habitat for the Critically Endangered Swift Parrot, yet is massively under represented within the Reserve Estate.

Significant changes are also needed to ensure that marine areas are adequately reserved. Only 1.1% of Tasmania's waters are no-take marine reserves, excluding Macquarie Island. This fails to meet the 10% threshold required for a CAR marine reserve system. Of the nine marine bioregions in Tasmania, only four contain no-take marine reserves and many habitats remain unprotected. Of concern, there are no Marine Protected Areas from Port Davey to King Island, the entire north coast and within the Furneaux Group (Carr and Minshull 2020).

Recommendations:

14. Undertake a review of the Tasmanian Reserve Estate to ensure that threatened species' habitats are well represented.
15. Immediately increase the number of no-take marine reserves around Tasmania to meet the criteria for a CAR marine reserve system, including increasing the area of no-take zones in all bioregions.

Role of Government

Even with the best threatened species management plans and strategies, there are no prospects for biodiversity conservation if the plans and strategies are ignored by government. Tasmania currently has abundant and clear scientific evidence and recommended, prioritised solutions for many of Tasmania's threatened species. Regrettably, the Tasmanian Government continues to refuse to implement these recommended actions for many threatened species, including (but not limited to) Red Handfish, Maugean Skate and Swift Parrot, amongst many.

The long-term starvation of funding and resources from NRE and PWS has had a significant adverse effect on biodiversity management and conservation in Tasmania. The Tasmanian Government must fund and resource threatened species management to avoid any prospects for further species' extinctions within the State.

TISC believes that it is critical to remove the power of the Minister to (a) determine threatened species listings, and (b) to approve necessary actions to protect critical habitat for threatened species. The introduction of an appeal process into the Tasmanian Act as is the case for the Commonwealth Act, would remove the political interference so prevalent in Tasmania's threatened species management.

Recommendations:

16. Significantly and immediately increase funding and resourcing for threatened species management.
17. Remove decision making power of the Minister and introduce an appeal processes into the Tasmanian Act, similar to that under Commonwealth legislation.

References

Atkinson J, Kirkpatrick JB 2020. A short distance to the last glacial coast best explains a Tasmanian centre of endemism. Frontiers of Biogeography 12.4, e47438. https://escholarship.org/content/qt5c58s0hn/qt5c58s0hn.pdf

Bottrill MC, Walsh JC, Watson JE, Joseph LN, Ortega-Argueta A, Possingham HP 2011. Does recovery planning improve the status of threatened species? Biological Conservation 144, 1595-1601. https://doi.org/10.1016/j.biocon.2011.02.008

Carr E, Minshull L 2020. *Towards a sustainable marine management regime: An update on Tasmanian progress.* The Australia Institute. https://australiainstitute.org.au/wp-content/uploads/2020/12/P964-Towards-a-sustainable-marine-management-regime-for-Tasmania-Web.pdf

Daniels D, Kirkpatrick JB 2012. The influence of landscape context on the distribution of flightless mammals in exurban developments. Landscape and Urban Planning 104, 114-123. https://doi.org/10.1016/j.landurbplan.2011.10.003

Kirkpatrick JB 2007. Collateral benefit: unconscious conservation of threatened plant species. Australian Journal of Botany 55, 221-224. https://www.publish.csiro.au/BT/BT06104

Kirkpatrick JB 2011. The political ecology of soil and species conservation in a 'Big Australia'. Geographical Research 49, 276-285. https://doi.org/10.1111/j.1745-5871.2011.00696.x

Kirkpatrick JB, Brown MJ 1984. The palaeogeographic significance of local endemism in Tasmanian higher plants. Search 15, 112-113. http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=9674435

Kirkpatrick JB, Driessen MM, Jarman PJ, Jakob L 2023. Influences of adjacent suburbia, fire regimes and vegetation on the mammals of a peri-urban reserve. Urban Ecosystems. https://doi.org/10.1007/s11252-023-01355-7

Kirkpatrick JB, Carter O, Faulkner F, Gilfedder L, Potts W 2017. An irreplaceability map for Tasmanian priority plant species. Papers and Proceedings of the Royal Society of Tasmania 151, 59-63. https://eprints.utas.edu.au/23813/

Kirkpatrick JB, Gilfedder L 1995. Maintaining integrity compared with maintaining rare and threatened taxa in remnant bushland in subhumid Tasmania. Biological Conservation 74, 1-8. https://www.sciencedirect.com/science/article/pii/0006320794001227

May J, Hobbs RJ, Valentine LE 2016. Are offsets effective? An evaluation of recent environmental offsets in Western Australia. Biological Conservation 206, 249-257. https://doi.org/10.1016/j.biocon.2016.11.038