Pīpiri June 2025

Response to Biodiversity Strategy Implementation Plan and Predator Free 2050 Strategy

Royal Society Te Apārangi

Thank you for the opportunity to provide input on Aotearoa New Zealand's biodiversity and predator free 2050 strategies. We note that the views of our members and stakeholders are many and varied and we have encouraged individual members and groups to make their own submissions.

On behalf of Royal Society Te Apārangi, we have previously engaged experts to consider the importance of biological collections[1]; biodiversity[2]; and challenges for pest management[3] in New Zealand. Based on the expert consensus in these reports, the Society notes the following considerations that we believe warrant greater emphasis.

New Zealand's biodiversity and predator-free aspirations rely on scientific research and capability

The biodiversity and predator-free strategies need to more strongly acknowledge the critical roles of:

- ongoing investment in research to maintain and build the knowledge base for the future and avoiding loss in capability in the near term
- investment in the supporting data infrastructure that provides the evidence base for both strategies[4].

[1] Royal Society of New Zealand (2015). National Taxonomic Collections in New Zealand (Royal Society Te Apārangi: Wellington) https://www.royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/national-taxonomic-collections-in-new-zealand/

[2] Taxonomy Decadal Plan Working Group (2018). Discovering Diversity: A decadal plan for taxonomy and biosystematics in Australia and New Zealand 2018–2028 (Australian Academy of Science and Royal Society Te Apārangi: Canberra and Wellington) https://www.royalsociety.org.nz/assets/Uploads/Discovering-Biodiversity-decadal-plan.pdf

[3] Royal Society of New Zealand (2014). Challenges for Pest Management in New Zealand. Royal Society Te Apārangi: Wellington) https://www.royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/challenges-for-pest-management/

[4] Parliamentary Commissioner for the Environment (2019). Focusing Aotearoa New Zealand's environmental reporting system. https://pce.parliament.nz/publications/focusing-aotearoa-new-zealand-s-environmental-reporting-system/

New Zealand should strive to protect our unique natural resources and environment – our taonga – and to have comprehensive knowledge of its biodiversity that defines New Zealand's evolution, uniqueness and cultural icons; allows New Zealand to sustainably manage its natural resources, biosecurity and economic opportunities; protects New Zealanders' health and wellbeing; and allows New Zealand to stand tall in the international community in meeting its global obligations[1]. New Zealand remains under intense pressure from pests, which threaten our economy and environment[2].

To achieve the ambitions described in both the *Predator Free 2050 Strategy*, and *Implementing New Zealand's Biodiversity Strategy 2025–2030* discussion documents, New Zealand relies on the following key areas.

R&D, science and technology

Science, innovation and technology are at the core of New Zealand's biodiversity and predator-free aspirations. There is an urgent need to innovate for pest eradication, and to develop new approaches and tools for pest management[3]. Likewise, emerging technologies will streamline our environmental monitoring and management. To develop and deploy these new tools, New Zealand needs to support research activities that meet the needs of communities, iwi, commercial interests and other stakeholders.

Scientific and technical capability

Human skills and capability, and intellectual capital in scientific research and technical applications need to be recognised, nurtured, and prioritised as the key assets that will drive all aspects of our biodiversity and predator-free goals. For example, a deficiency in relevant research capability or in the practical skills of those entering the pest eradication workforce would put predator-free goals at risk.

Long-term monitoring, collections, and data infrastructure

A sound understanding of New Zealand's unique biodiversity is critical to achieve both environmental and economic sustainability in the face of our changing climate[2]. Our ability to protect and make the best use of our natural resources depends on sustained, long-term investment. Biodiversity and pest prevalence data need to be collected, managed, and curated to international standards and made freely accessible for public good use. We need robust, authoritative scientific data and collections to understand the status of our land, waters, environment, our health and wellbeing, and our extended economic zone, to manage our resources effectively and respond to emerging opportunities, risks, and hazards.

This will require strategic investments to overcome historical underfunding of environmental and pest monitoring and prediction capabilities, and to protect nationally significant databases and collections, and other critical assets. To develop clear, evidence-based plans, we need to invest in the generation of knowledge and data to enable informed decision making.

By **strengthening the scientific foundations, research capability and skilled workforce** that underpin conservation efforts, New Zealand can significantly enhance its biodiversity and predator-free outcomes.