

Providing new information to guide Ecosystem Restoration

We know we need to do more to protect, restore and connect Aotearoa New Zealand's unique ecosystems and biodiversity, but where do we start?

Land managers, decision-makers, community environmentalists, and policy-makers are all wrestling with questions such as: where do we start, what do we prioritise, where do we get good data, and whose information do we trust? In the vacuum of information on ecosystem restoration planning at landscape scale, the Eco-index programme is delivering a new ecosystem restoration information service to level-up biodiversity decision-making, monitoring and verification across the motu.

Who is Eco-index?

Eco-index was set up in 2020 as a research programme in New Zealand's Biological Heritage National Science Challenge. Fuelled by its interdisciplinary expertise, the Eco-index team is working to reverse the decline of native biodiversity by sharing cutting-edge information and digital tools. To unlock the full potential of their biodiversity information service, the Eco-index will continue as an independent entity after the National Science Challenges conclude.

Answering fundamental questions at catchment scale

Everyone has a part to play in reversing the decline of our native biodiversity and there are growing motivations to do so. The Eco-index is making the task easier and more efficient by providing critical information that land managers like iwi, industry, community groups and councils need. With a focus on native ecosystems at catchment scale, the Eco-index team are applying scientific methods to answer questions like:

- Where should we start our ecological restoration efforts?
- What ecosystem types should we prioritise?
- What should our long-term goals be in order to make a difference?
- How much will it cost to restore native ecosystems?

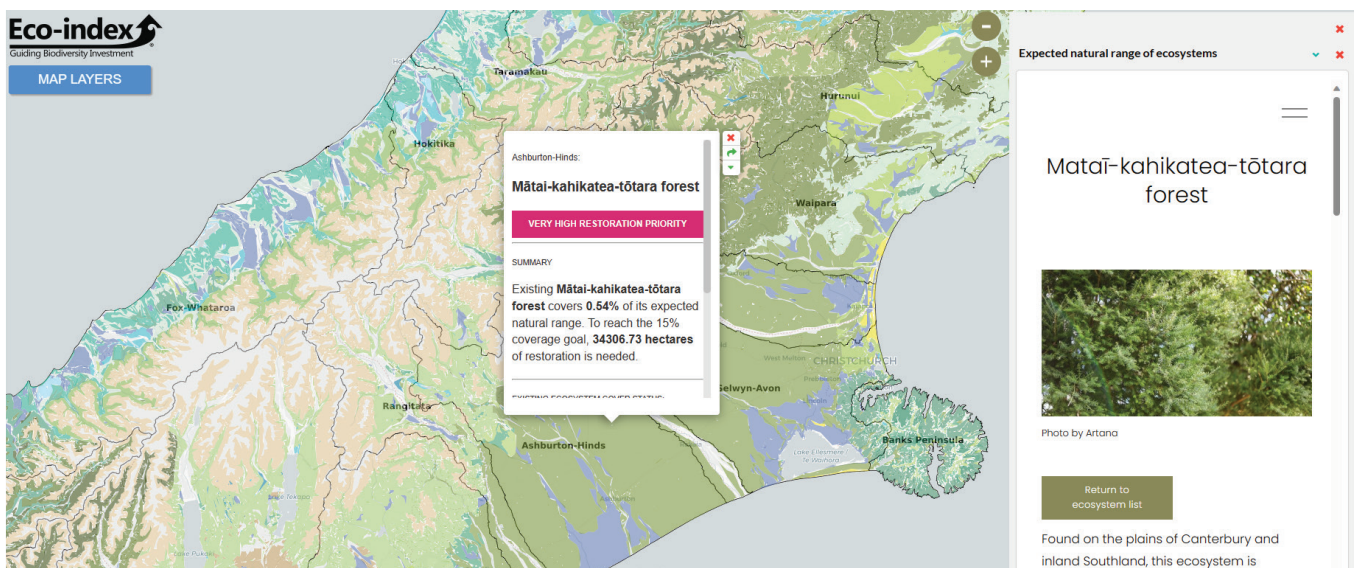
The Eco-index Digital Toolkit

The Eco-index digital toolkit is underpinned by a [vision](#) for biodiversity in Aotearoa NZ to be Protected, Restored and Connected by 2121. But the Eco-index team understands that land managers need more than just a vision, so they developed a digital toolkit that includes a free, interactive Ecosystem Reconstruction Map, a dynamic Restoration Heat Map, ecosystem restoration costings, ecosystem service valuations and more.

The Ecosystem Reconstruction Map was the first tool released from the Eco-index digital toolkit and anyone can visit www.eco-index.nz to explore the science-based guidance it provides. The map has information on the expected natural range of native ecosystems across Aotearoa New Zealand alongside ecosystem reconstruction targets and priority areas for every ecosystem type in every catchment.

Next in line for release are the ecosystem reconstruction costing and ecosystem service valuations in 2024.

Subscribe at www.eco-index.nz/subscribe so you don't miss these next launches!



Case study: a game changer for The New Zealand Merino Company

The New Zealand Merino Company (NZM) began a partnership with Eco-index in 2022 to understand the current extent of native ecosystems across its growers' properties and how the Eco-index Ecosystem Restoration Targets could inform its own native biodiversity strategy.

Land cover analyses by the Eco-index team found that of the 2,400,000 hectares of farmland within the NZM farm group, 40% supports native ecosystems, mostly on hilly terrain and just over 12,000 hectares of ecological restoration is required to reach the minimum 15% goal across all 700 of its supplying properties. This new information unlocked biodiversity planning opportunities and highlighted priorities for NZM, particularly around protecting current native biodiversity and restoring the most threatened lowland ecosystems.

Eco-index also assisted NZM in the development of an impact investment proposal that encouraged global stakeholders to finance biodiversity initiatives aligned with the Eco-index guidance, with the intention of scaling up on-farm opportunities that benefit biodiversity.

Would you like to level-up your biodiversity decision-making?

Visit www.eco-index.nz to check out the latest science-based guidance and subscribe to hear about the latest digital tool releases!