# The Eco-index: A tool to guide investment in biodiversity restoration

Mō tātou, ā, mō ngā uri ā muri ake nei – For us and our children after us

#### **About us**



We have expertise in Aotearoa New Zealand ecology, sustainability, economics, social science, communication, database infrastructure, artificial intelligence, statistical modelling and strategy. Our 2020-2024 programme is supported by a \$3.1 million investment from the government-funded National Science Challenge "New Zealand's Biological Heritage - Ngā Koiora Tuku Iho" which partners with all of Aotearoa New Zealand's Crown Research Institutes and universities.

The Eco-index team is led by Dr John Reid (Ngāti Pikiao, Tainui, JD Reid Ltd.), Dr Kiri Joy Wallace & Penny Payne (Te Pūtahi Rangahau Taiao - Environmental Research Institute, University of Waikato).

#### A better approach is possible

New Zealanders value their unique natural environments, but national and regional reporting shows that our native biodiversity is degraded and continuing to decline. To reverse this trend, we are developing a new approach alongside land managers and experts from a broad range of fields. We are bringing fresh thinking to the restoration of ngā taonga katoa o te ao tūroa (our natural heritage).

#### Thinking long term

To guide long term change, the Eco-index team have developed a 100-year National Biodiversity Vision that creates a benchmark for flourishing native biodiversity. At the core of this vision is a goal to restore, connect and protect 15% of original native ecosystems across Aotearoa New Zealand by 2121. The vision is backed by a published review of the key goals from groups across Aotearoa as well as national and international science, strategy, and policy.

#### **Digital dashboards**

Land managers will interface with the Eco-index via digital dashboards that present key biodiversity investment and biodiversity data for the nation, regions and iwi. Dashboards will provide an understanding of how and where current biodiversity investments are being made, how biodiversity is currently trending and where future efforts could be best directed.

### Informing biodiversity investment

We are creating both a national Eco-index and tailor-made eco-indices for different land management sectors. Our objective is to link current investment in biodiversity with the impact being achieved on the ground and to identify the best investment opportunities for reversing biodiversity decline.

The Eco-index will guide land managers toward incremental investments that can cumulatively create intergenerational impact. In time, the Eco-index will indicate our country's biodiversity performance, much like GDP indicates economic performance.

#### **Cutting-edge approach**

To help the country understand our native biodiversity and restoration efforts on a national scale, we are embracing the new age of remote sensing by applying cutting-edge Artificial Intelligence tools to satellite and aerial imagery. This new approach will provide cost-effective, time-efficient and accurate observations to inform decision making.

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We give equitable consideration and implementation of Te Ao Māori understanding, values, approaches, and opportunities.

#### **Our values**

We embrace the values of the BioHeritage National Science Challenge -Ngā Koiora Tuku Iho:

Mahi whaipainga

Ngākaunui / Uekaha / Ngakau Whakapuke

Whanaungatanga

Manaakitanga

Mana Motuhake / Tino Rangatiratanga

Whakapapa

Kaitiakitanga

Mātauranga

Tohungatanga / Ngā tiketiketanga o te pai

Mahi rangapū

#### How we apply our values:

We care about making a difference for Aotearoa

We are passionate and enthusiastic about our work

We work as a family

We have fun together

We build trust and create a place that others want to be a part of

We build mana in others around us to enhance the mana of the whole

We recognise and empower sovereignty and autonomy

We recognise interconnections

We have an intergenerational vision

We enable stewardship of our biological and cultural heritage

We recognise the value of blending traditional and modern knowledge

We apply excellence to everything we do

We work respectfully in partnership



#### Get in touch

Enquiries can be directed to Communication & Relationships Manager Catherine Kirby: catherine@eco-index.nz

or the Biological Heritage National Science Challenge team: support@bioheritage.nz







