



# The Ecological Restoration Alliance of Botanic Gardens

Five year strategy 2015 – 2020



Alcoa's Jarrah Forest restoration programme, Western Australia



**Connect People | Share Knowledge | Restore Ecosystems**

## Introduction:

The Ecological Restoration Alliance of Botanic Gardens (ERA) is a global consortium of botanic gardens actively engaged in ecological restoration. Members of the Alliance have agreed to support efforts to scale up the restoration of damaged, degraded and destroyed ecosystems around the world, contributing to the Sustainable Development Goals and the United Nations' target to restore 15 per cent of the world's degraded ecosystems by 2020.

The ERA currently has 30 member botanic gardens carrying out ecological restoration projects in a diverse range of ecosystems. It is coordinated by Botanic Gardens Conservation International (BGCI).

## Our mission:

*To mobilize botanic gardens, arboreta and seed banks to carry out science-based ecological restoration by marshalling their expertise, networks, and resources to help achieve the restoration outcomes needed for human well-being and a sustainable future for life on Earth.*

## Our goals:

1. Work with local partners to set up, maintain and document a series of **long-term sustainable exemplar restoration projects** in diverse biophysical, political, and cultural contexts around the globe that provide training and demonstrate the value of a carefully designed, science-driven approach to sustainable ecological restoration.
2. Improve the quality and volume of science-based ecological restoration practice by deploying scientific and horticultural skills to **applied work on the ground**.
3. Conduct ecological restoration research, to **develop an enhanced knowledge base for restoration** and identify and inform best practice.
4. **Disseminate research and lessons learnt from projects**.
5. **Build expertise and restoration capacity** through collaborations between botanic gardens, large and small, as well as with partners in local communities, professional societies, academia, industry, government, NGOs and international bodies.

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## Why botanic gardens?

Botanic gardens are uniquely positioned to play an increasingly important leadership role in ecological restoration on a global scale. Over the centuries, botanic gardens have accumulated a wealth of scientific and applied knowledge on the genetic, physiological, horticultural, ecological and other biological characteristics of plants. Botanic gardens hold an estimated 40% of all plant diversity in their living collections, are long-term custodians of rare and threatened plant species, and manage the most thoroughly documented and diverse repositories of plants, specimens and seeds from around the world.

Botanic gardens have launched, and maintain, successful ecological restoration projects throughout the world. Their expertise in teaching, training and outreach, and their mission for public service gives them the capacity to work with a wide variety of stakeholders, including governments, civil society, industry and local communities, providing the tools and knowledge to achieve long-term ecological restoration goals.



Native plant community nursery, Tharaka District, Kenya

## Ecological restoration projects – principles, key criteria and elements for success:

All projects will adhere to the following set of basic project principles;

- Clearly defined project goals, plans and expected outcomes
- Baseline measurements, monitoring and adaptive management built into project design
- A clear understanding of the stakeholder landscape before and throughout the project duration
- At least one botanic garden involved in a technical role.

In addition, the ERA portfolio of projects will meet the following key criteria;

- Projects will cover a diverse range of habitats and cultural contexts
- Species selection will be guided by reference ecosystems and species assemblages
- Scientific oversight and understanding of ecological processes will be integral to restoration activities during and beyond the restoration project
- Projects will include local community involvement, a clear understanding of the roles and responsibilities of each stakeholder, and a commitment to long-term goals from each stakeholder
- Projects will clearly demonstrate sustainability over the long-term (20 years +).

## Objectives by 2020:

Based on the five goals outlined above, we have set the following short-term objectives:

### Goal 1: Developing a portfolio of exemplar, long-term restoration projects

- A portfolio of at least 200 long-term, exemplar restoration projects established by ERA members in a diverse range of ecosystem types and cultural contexts. Projects will be;
  - Ecological restoration projects, or
  - Projects delivering supporting services that substantially contribute to ecological restoration practice
- ERA membership increased to ensure a diverse coverage of ecosystems, geographic areas and complementary expertise.

### Goal 2: Improving restoration practice on the ground

- A standard set of baseline and trend data indicators developed and applied to all projects.

### Goal 3: Conducting ecological restoration research

- All ERA members carry out ecological restoration research, and results published in peer-reviewed literature.

### Goal 4: Disseminating research and lessons learnt

- ERA research, methodologies, project results, resources and best practice widely, disseminated in a variety of formats including:
  - Regional and international congresses
  - Scientific journal articles
  - Websites and social media
  - Local and national media
  - Annual reports to CBD, UNCCD and UNFCCC focal points, national and local government stakeholders.

### Goal 5: Building expertise and restoration capacity

- A toolkit developed to build capacity for ecological restoration, including:
  - Practical and how-to-guidance
  - Open-access presentations and videos
  - A searchable directory of expertise, activities and contact details for ERA members
  - Restoration related training available from ERA affiliated courses or trainers.
- The role of botanic gardens in ecological restoration and the work of ERA promoted by BGCI, in particular with policy makers such as CBD, UNCCD and UNFCCC focal points, national and local government stakeholders.





*Lepironia mucronata* ('mahampy') restoration, Quebec Madagascar Minerals, Madagascar

## Funding:

At least US\$10 million will need to be mobilized to achieve targets. This will include in kind contributions from member botanic gardens.

## Acronyms:

BGCI	Botanic Gardens Conservation International
CBD	Convention on Biological Diversity
ERA	Ecological Restoration Alliance of Botanic Gardens
FAO	Food and Agriculture Organization of the United Nations
NGO	Non-Governmental Organisation
UNCCD	United Nations Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change