

BY ENHANCING BIOSECURITY AND CREATING THE ENABLING ENVIRONMENT FOR THE RESTORATION OF GALAPAGOS ISLAND ECOSYSTEMS

PROJECT RESULTS & LESSONS LEARNED

MINISTERIO DEL AMBIENTE Y AGUA















PROJECT START DATE

15 February 2019

EXPECTED COMPLETION DATE

31 December 2021

STRATEGIC OBJECTIVE OF THE GEF'S AREA OF ACTION

(BD2)
Biodiversity
Program 4
Control of Invasive species

EXECUTING AGENCY (FA)

(IC)

Island Conservation

IMPLEMENTING AGENCY (IA)

(CI-GEE

Conservation International GEF project Agency

OTHER EXECUTING PARTNERS

(DPNG/GBA/GC

Galapagos National Park Directorate Galapagos Biosecurity Agency Galapagos Conservancy

GEF PROJECT FUNDING

US\$3,301,472

CO-FINANCING

US \$ 18,395,000

Galapagos Conservancy

GEF ID 9282



MAP OF PROJECT SITES





PUERTO VILLAMIL
Isabela Island



PUERTO AYORA Santa Cruz Island



HACIENDA DE LA PAZ Floreana Island



WOLF VOLCANO Isabela Island



SANTA FE VOLCANO Santa Fé Island



PUNTA SUAREZ Española Island

PROJECT DESCRIPTION

Invasive alien species are one of the most significant drivers of environmental degradation and species extinction worldwide. They are generally considered the primary cause of biodiversity loss in island ecosystems.



THIS PROJECT STRATEGY AIMS TO PROTECT BIODIVERSITY THROUGH LONG-TERM PREVENTIVE AND RESTORATIVE STRATEGIES:



Increasing the effectiveness of biosecurity controls so that new or additional invasive species do not enter the Galapagos



Eradication of existing invasive vertebrate species



Re-establishing the ecologic role of the Galapagos Giant Tortoise in the restoration of habitats through the selection and dispersion of native species across the landscape

THE GALAPAGOS BIODIVERSITY PROJECT CONTRIBUTES TO THESE OBJECTIVES THROUGH ACTIONS IN 3 COMPONENTS

COMPONENT 1

Furthering the development of a state-of-the-art biosecurity system within the Galapagos Biosecurity Agency (ABG)

COMPONENT 2

Solidifying the social license and infrastructure for the protection and recovery of Floreana Island ecosystems to undertake the eradication of invasive vertebrates in a future stage of development

COMPONENT 3

Advancing the recovery of island ecosystems following invasive species eradication through the re-establishment and translocation of Galapagos Giant Tortoises as keystone species to Santa Fe Island as a proxy for future introduction of tortoises to Floreana



THE PROJECT ESTABLISHES THE CONDITIONS FOR RESTORATION ON FLOREANA ISLAND

A global-scale first attempt at restoration involving both eradication and re-introduction of species on a populated island.

PROJECT RESULTS

COMPONENT 1

TAKING THE BIOSECURITY SYSTEM IN GALAPAGOS TO THE NEXT LEVEL

- Biosecurity Action Plan based on the systematic assessment of the Galapagos Biosecurity Agency's (ABG) Inspection, Control System, and its control points.
- Address biosecurity challenges related to the two main transportation systems that connect Galapagos with the mainland across the major routes for the introduction of potential invasive alien species.
- Installation of improved detection equipment, kits to support identification of invasive species and provision of training to inspectors was carried out. The system is approaching completion with the procurement of tracking and inventory scanners, barcoding, and stylized software for record keeping and data analysis with integrated training.

COMPONENT 2

ENABLING CONDITIONS TO START THE ERADICATION OF INVASIVE SPECIES IN FLOREANA COMPLETED

- 7 chicken coops and 3 pig pens designed to control the risk of accidental poisoning as a safeguard to future eradication of rats and feral cats on Floreana Island.
- Updated Operational and Risk Management plans for eradication of rodents were completed.
- The social license was solidified through an ESIA and by the signature of declarations from the Parish Council, local government, central government agencies, and the Project Steering Committee.

COMPONENT 3

RESTORATION OF SANTA FE AND FLOREANA ISLAND THROUGH GIANT TORTOISE RELOCATION AND REPATRIATION

- The Giant Tortoise Restoration Initiative (GTRI) in cooperation with the National Park relocated 155 juvenile giant tortoises from the Santa Cruz breeding center and 31 sub-adult tortoises from Española Island to Santa Fe Island.
- The project also achieved significant progress towards increasing the capacity of the Giant Tortoise Breeding Program through modernizing and expanding the existing tortoise breeding facilities, encompassing a 10-day expedition that located and transferred successfully 31 adult giant tortoises with lineage of the Floreana Giant Tortoise from Wolf Volcano to the breeding program.







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LESSONS LEARNED

- Biosecurity on islands is a multidimensional subject that requires a multitude of different expertise targeting one subject in a coordinated way. The project execution arrangements united a diverse group of international and national experts, with a history of support unique to their role in the project who supported the Galapagos Biosecurity Agency (ABG) in this very particular subject.
- Island Conservation demonstrated their established relationship with the residents of Floreana Island in securing the social license to enable eradication of vertebrate invasive species. Years of intensive community engagement aligned with strategic stakeholder engagement created the conditions for a successful implementation of all project activities and completion of enabling conditions to start the eradication process.
- The ex-situ breeding program managed by Galapagos Conservancy and the Galapagos National Park Directorate expertly lead breeding and translocation activities. The combination of international experts, local capacity, and a high degree of adaptive management proved to be effective for this globally unique restoration initiative for giant tortoises.









THE ENTIRE PROJECT IMPLEMENTATION RENEFITED IMMENSELY FROM CONSERVATION INTERNATIONAL'S PROJECT MANAGEMENT EXPERIENCE AND SYSTEMS.

All partners felt enabled and fortified in the areas of Planning, Budgeting, M&E, and reporting. Good things happen when critical areas of projects are delegated to experts who also have a vested interest in building their own capacities.



















Preventing Extinctions

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