

Final Evaluation Report

Your Details	
Full Name	Nicolas Davalos
Project Title	Galapagos Coral Restoration Initiative
Application ID	34140-1
Date of this Report	28-04-23

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Build and establish pilot coral nursery				Two nurseries were constructed and established, allowing to cultivate 260 corals for more than a year.
Study coral growth, survival, environmental variables and their effect on coral rearing				The project allowed to gather information on coral growth rates, main stressors and temperature survival thresholds for different varieties.
Develop framework for future coral restoration work				The pilot nursery allowed the creation of a solid base for current and future research and restoration work being done in the Galapagos.

2. Describe the three most important outcomes of your project.

- a).** Proving the feasibility of the coral gardening approach in the Galapagos, identifying materials and developing techniques for local conditions.
- b).** Generating the first detailed baseline of coral abundance, diversity and health in Puerto Villamil area, with the identification of more than 3,500 coral colonies.
- c).** Identification of most resilient, fastest growing, and best fitted varieties of corals for rearing. Measurement of survival, health and growing rates for different seasons.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

The greatest unforeseen difficulties were related to social and environmental factors. In the first case, it was difficult at the beginning to find acceptance in the community. This severely complicated the establishment of the project and especially gaining acceptance and trust, which made it hard to find local assistants and volunteers.

The second was the unforeseen effects of the Tonga tsunami which hit the Galapagos in early 2022, as well as the harsh conditions created by La Niña during summer of the same year. These two conditions created strong unforeseen affectations in the project which we had to manage to ensure the project success.

4. Describe the involvement of local communities and how they have benefited from the project.

Once we gained trust from local communities, we managed to involve two persons in the coral gardening project. Eventually the project became an example of marine conservation and restoration work in the locality, and served to showcase conservation efforts to school children, university students and park rangers.

The project even became an important interpretation point for national park guides during their tour operations. In this way it did not only support naturalist guides and tourism operations, but also served to educate tourists, visitors of the area and local population.

5. Are there any plans to continue this work?

Yes, the project will continue to work and expand its operations, with the aim to forming a formal restoration project in the Galapagos.

6. How do you plan to share the results of your work with others?

The project has been sharing its results through social media platforms, presentations and talks, but will also be sharing its results with at least one (possibly two) scientific paper publications, one book publication and a short video.

7. Looking ahead, what do you feel are the important next steps?

The most important next step is securing the funding for the following months or years to expand our impact and shape the project into a formal coral restoration endeavour. The excellent results gathered so far with the development of the pilot project has opened various doors and opportunities in the islands for giving continuation to the project. Nevertheless, funding is of essence to continue our operation.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes, The Rufford foundation was publicised in all the presentations given and was always named and thanked accordingly. This included the presentations given to the Galapagos National Park, the Galapagos Science Center, the International Galapagos Coral Workshop, Re:wild and other conservation institutions, USFQ university students, school children, national park guides and rangers.

The logo has been present in all presentations and in social media posts and promotional video.

9. Provide a full list of all the members of your team and their role in the project.

Margarita Brandt – USFQ Researcher and project PI

Jenifer Suarez – Galapagos National Park Collaborator

Nicolas Davalos – Project Director

Cristopher Gomez – Field Assistant

Jose Barrios – Field Assistant

10. Any other comments?

The project has been the first successful coral restoration intervention done in Galapagos. We have transplanted more than 100 mature corals back to their natural habitat and have gained important knowledge of the conditions needed for coral rearing in the area. The knowledge gained about the environmental conditions, the stressors and threats, the methods, materials and procedures needed for coral rearing in the Galapagos are all unique to the islands and testifies the value of the implementation of the pilot project.

With the success of the pilot project, new doors and opportunities opened for future restoration work in the islands. The project has received attention and is in the process to develop a plan for a formal coral restoration intervention in the Galapagos. Nevertheless, without a sustainable source of income, the project must look for grants and sponsorships for funding future restoration work. We are currently searching for funding mechanisms to support our work and are very interested in applying for a second grant from The Rufford Foundation to give continuity to the project, support our restoration efforts, and increase our research and scientific output.



Mature colony.



Transplanting.



Coral nursery.



Monitoring.