



COPRA: Conservation and Integrated Management of Phanerogam Seagrass Meadows of the Glorieuses Marine Nature Park and their Functional Role for Marine Turtles

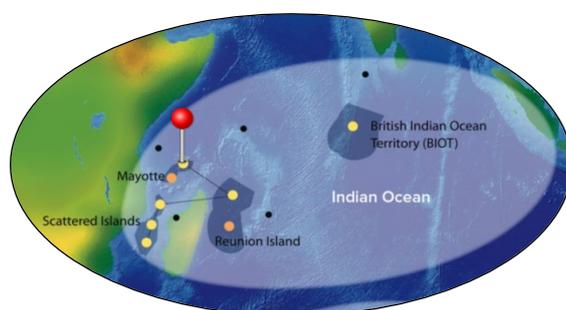
Targeted territory: Glorieuses archipelago and Geyser Bank (Scattered Islands), French Southern and Antarctic Lands

Total project budget: 420,680 Euros

BEST 2.0 grant awarded: 399,646 Euros

Duration: January 2017 – April 2019 (28 months)

Lead organisation: French Agency for Biodiversity (AFB)



**AGENCE FRANÇAISE
POUR LA BIODIVERSITÉ**
ÉTABLISSEMENT PUBLIC DE L'ÉTAT

Background:

The western Indian Ocean is home to large seagrass beds, highly productive ecosystems which are critical habitats for iconic and often threatened species such as dugongs and sea turtles. Marine meadows provide numerous ecosystem services and play a fundamental role in the ecological balance of coastal areas.

Located at the northern entrance to the Mozambique Canal, the Glorieuses Marine Nature Park, whose management is resourced by the French Agency for Biodiversity, covers more than 43,000 km². Created in 2012, the Park encompasses the Geyser Bank and the Glorieuses archipelago (Grande Glorieuse and Île du Lys), both of which are administratively attached to the District of the Scattered Islands of the French Southern and Antarctic Territories. Their geographical isolation and the historically limited human occupation of Grande Glorieuse has ensured the preservation of the marine environment.

The conservation of seagrass beds, habitats conducive to the development of juvenile green turtles *Chelonia mydas*, is among the priority objectives of the Park's management plan and is consistent with the National Action Plan for marine turtles in the French territories of the southwest Indian Ocean. More specifically, in the southwest Indian Ocean, seagrass beds are exposed to numerous anthropogenic pressures. Those identified in the waters of the Park could be a valuable point of reference for understanding the causes of regional dynamics or regressions.

Description of the Project:

The project aims to conserve seagrass beds of marine phanerogams as a support for biodiversity and the maintenance of populations of marine turtles in the Park. It is a follow-up to preliminary studies that mapped the distribution of the Park's herbariums and revealed their role as a habitat for juvenile green turtles.

The project has three operational objectives:

1. Improve knowledge of seagrass beds, particularly *Thalassodendron ciliatum* formations, and their functional role for sea turtles:

- Supplement the existing inventories;
- Put in place monitoring of the spatio-temporal dynamics of *Thalassodendron* meadows;
- Study the interspecific relationships within the Glorieuses seagrass meadows and evaluate their functional role for marine turtles, in particular for *Thalassodendron*;
- Assess the heritage value of *Thalassodendron* meadows at a regional scale.

2. Initiate a regional seagrass monitoring network

- Identify work being carried out in the southwest Indian Ocean;
- Networking actors: defining and harmonizing protocols for monitoring at the regional level;
- Network monitoring stations and testing protocols;
- Contribute to the national toolkit for the development of methodologies for monitoring and assessing the health status of seagrasses in the overseas territories.

3. Strengthen the management of the Park for a better protection of the herbarium

- Identify and map conservation issues;
- Propose management measures.



Intended results:

- Increased knowledge of seagrass beds and their functional role for sea turtles, in particular *Thalassodendron ciliatum* meadows.
- Regional monitoring networking for seagrass established; a key step in the study and understanding of the overall dynamics of these ecosystems.
- Management of seagrass meadows reinforced through specific measures in the management plan of the Marine Nature Park of the Glorieuses and the valorization of the results obtained.

CONTACT

Laure MONTCHAMP

Agence française pour la biodiversité

laure.montchamp@afbiodiversite.fr

