



Designation:
Muroto-Anankaigan Quasi-national Park
Location:
Kaiyo, Kaifu-gun, Tokushima Prefecture
Year Initiated: 2003

Takegashima Island Marine Park Nature Restoration Committee (as of March 2009)

The Committee takes actions for recovering the coastline ecosystem with corals as a key community.
Date Established: 9 Sept. 2005
Members: 54
Date Issued the Overall Plan: 31 Mar. 2006
Date Issued the Implementation Plan: In preparation



Restoration area

Takega-shima Island

Goal Restore the natural environment that can sustain healthy populations of the green acropora (*Acropora tumida*)



Turbid water with suspended silt



Coral bleaching

Takegashima Island and its surrounding sea are located between Tokushima and Kochi Prefectures and affected by the branch of the Kuroshio Current. The area was designated as a marine park (Awa-takegashima Marine Park) in 1972 because of its high seawater clarity and scenic underwater views decorated with biological communities such as a large colony of vividly green acropora corals and the lettuce coral

(*Pavona decussata*).

Existing offshore breakwaters calm the bay water but reduce water exchange between the sea and bay. This, combined with diminished water clarity, has impaired the quality of the marine park. Based on the overall plan for coral community restoration, actions are underway in mountains, rivers, and the sea.

Approaches

- ▶ Improve the marine environment in and around the marine park →①
- ▶ Identify the ecology of the green acropora →②
- ▶ Ameliorate terrestrial runoffs
- ▶ Revitalize the regional fishery in harmony with the marine park

To achieve the restoration goal, planned or ongoing actions include establishing a technique for breeding and rearing the green acropora; improving shoreline hydrographic conditions by modifying existing breakwater structures; and implementing watershed-scale restoration such as assisting proper thinning in forest plantations.



① Improving hydrographic conditions by modifying the breakwater levees

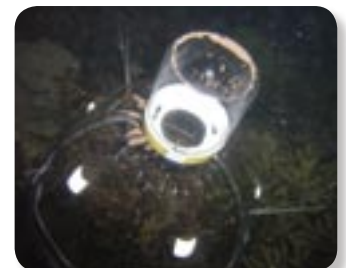
The levees at the bay inlet have lowered current velocity and ocean-bay water exchange, adversely affecting the marine ecosystems represented by coral communities. To mitigate this situation, levee modification is being designed.



An existing breakwater levee

② Identifying the ecology of the green acropora

This project is now developing a technique for culturing the green acropora near Takegashima Island. In 2006, eggs were successfully collected for the first time in Tokushima Prefecture. The eggs were grown to larvae in the Kuroshio Biological Research Foundation, Kochi Prefecture, which were then transferred to and reared in the sea.



The green acropora egg mass in a collecting device

Related Web Sites

Takegashima Marine Park Nature Restoration Project: <http://www.takegashima.jp/>