

REEF CONNECTIVITY

CORAL REEFS ARE CONNECTED BY THE OCEAN WATERS AND IF MANAGED WELL CAN FUNCTION LIKE A SYSTEM AND HELP NEIGHBORING REEFS RECOVER FROM THE IMPACTS OF BLEACHING, POACHING, OVER FISHING AND POLLUTION

Coral reefs of widely separated islands are also connected but cannot be much help to each other in re-establishing rare species.

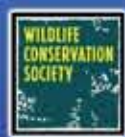
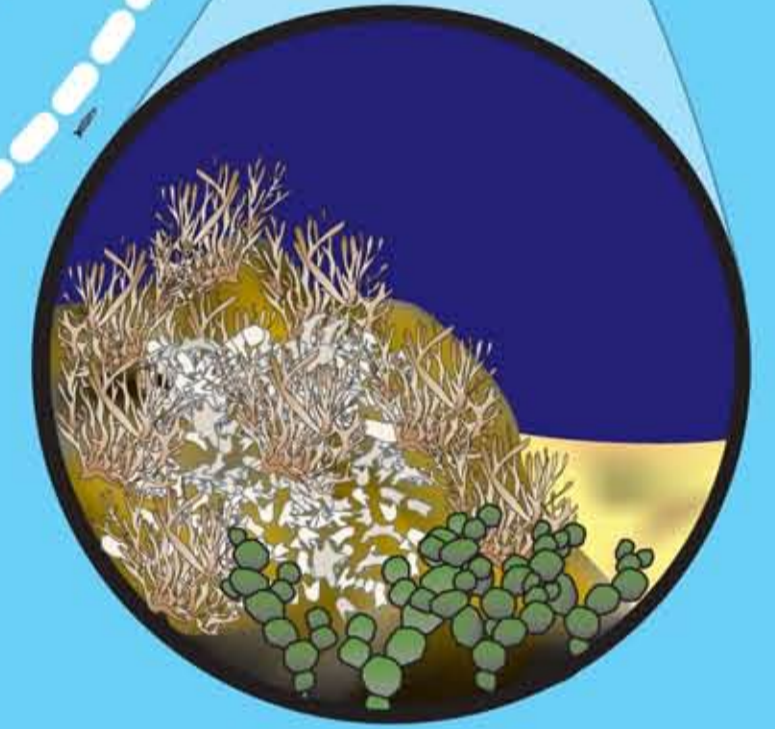
The amount of larvae decreases as they travel from one island reef to another.

Fish larvae travel across from one island to another.

It may take a long time to replenish a reef that has been damaged.

The closer the coral reefs are, the more connected they are, and the better able they are to share juvenile and adult fish.

Neighboring Locally Managed Marine Areas established along the same coast can help each other in replenishment of resources.



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Fiji's coral reefs provide a living for all Fijians. They provide fish for the table or market, provide shelter from storms, help reduce erosion, and provide the basis for our tourism market. So it is very important to manage them in a wise fashion so that present and future generations can benefit from the prosperity that coral reefs bring to Fiji.

One of the ways we can better manage our reefs is through the use of tabu areas, which are also known as marine protected areas. Tabu areas can protect the reef and the fish that live on them because most animals on the reef don't move long distances as adults. Thus, the marine life on the protected reefs are free to grow, thrive, and reproduce without disturbance. However, corals reefs are ecologically connected through the movement of planktonic larvae, which can travel between reefs on ocean currents. Because of these larvae, coral reefs function like a system. When one reef gets in trouble (bleaching, ship strike, oil spill, poaching etc.) it can be repopulated by larvae from other nearby and distant reefs providing ecological stability for all reefs. Therefore, while creating tabu areas is important to protect the economic and cultural heritage of Fiji, it is also critical to understand how Fiji's reefs function as a interconnected system, so that these marine protected areas can remain stable, providing long term stability for Fijian coral reefs.

A recent study conducted by scientists from Boston University, Conservation International and the Wildlife Conservation Society examined how different reefs across Fiji were connected by the exchange of larvae. In general most reefs were most closely connected to their neighbours. In some cases far apart reefs were not as strongly connected to each other as they were to closer reefs. Thus, despite the apparent ease by which larvae could be washed throughout Fiji, the actual dispersal of some larvae may be very small, potentially limiting the ability of reefs to recover from damage or disaster.

Setting up a marine protected area is a good way to protect your local livelihood. However, it is also a good way to be a good neighbour. A marine protected area not only protects your own resources, but the larvae from your protected area will help your neighbours in time of need. In turn, if your neighbours set up protected areas then they can help you out should something bad happen to your reefs. By working together for the common good, we can use science and wisdom to come together with solutions that will help us all protect Fiji's beautiful reefs for today, tomorrow, and the future.