



Fig. 1



Fig. 2



Fig. 3

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Reef sites

Coral-seagrass interaction in an anthropogenically enriched lagoon

It is well-recognized that macroalgal competition can limit coral growth and abundance under various ecological conditions (Johannes et al. 1983, Lewis 1986, Tanner 1995, Miller and Hay 1996), but there are no reports of direct seagrass interactions with reef corals. Recent studies in Laamu Atoll, Republic of Maldives suggest that anthropogenic enrichment of lagoon systems adjacent to traditional fishing villages fosters increased seagrass cover in comparison to lagoons adjacent to uninhabited islands or to non-fishing villages (Miller and Sluka, unpublished data). Generations of fishers cleaning their catch on beaches (Fig. 1) so that the tide flushes the waste into the lagoon (Fig. 2) appears to have resulted in significant enrichment of lagoonal sediments. Because the preferred catch of Maldivian fishers is pelagic tuna, this activity represents a net nutrient import to the atoll system. The apparent seagrass proliferation has been observed to encroach upon corals of lagoonal patch reefs (Fig. 3). Though the impact of seagrass competition on these patch reef corals has not been investigated, it may pose a threat to lagoonal patch reefs adjacent to fishing villages.

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