

Good coral cover and high biodiversity in non-MPA reefs of the Verde Island passage as basis for increased protection and conservation

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Abstract

The Verde Island Passage (VIP) is a region in the Philippines with a high index of biodiversity. Baseline coral reef assessments were conducted in four provinces along the VIP (Batangas, Marinduque, Occidental Mindoro, and Oriental Mindoro) to compare coral reef abundance and biodiversity in Marine Protected Area (MPA) and non-MPA sites. The average abundance of coral and other substrates (*e.g.*, macroalgae, sponges, rock, sand/rubble) were measured, and the number of coral genera were identified for each site. Batangas showed equal coral cover and coral species richness for MPA and non-MPA sites. Marinduque showed equal coral cover for MPA and non-MPA sites, and the non-MPA site had higher species richness. Occidental Mindoro showed higher coral cover and species richness in the non-MPA site compared to the MPA site. Oriental Mindoro was the only exception that showed higher coral cover and species richness in the MPA site compared to the non-MPA site. The findings indicate that many non-MPA coral reefs in the VIP have potential to become MPAs, thus warranting their protection and conservation. Continued monitoring and assessment should be done to build on the growing database of biodiversity data that is being compiled for the VIP.

Keywords: coral reef, biodiversity, Verde Island Passage, Marine Protected Areas (MPA)

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