

ABSTRACT

An Assessment of Hurricane Damage In Negril: A Review And Critical Analysis
of the Reef Check Methodology for Assessing Reefs.

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The Reef Check method is the most widely used method of reef assessment in the world and it was assessed to determine its ability to provide conclusive evidence of damage, after the passage of Hurricane Ivan in September 2004, on four Reef Check monitored sites in Negril. Data from the sites span the period 2001 to 2005.

The main parameters assessed were the mean abundances of *Diadema* and fish and the arcsine transformed percentage cover of coral, nutrient indicating algae and hard substrate which includes rock, rubble and recently killed coral. Although coral damage related to the hurricane was evident on the sites, the method detected no significant changes in coral cover. In contrast to this, the Reef Check method easily detected differences in the percentage cover of nutrient indicating algae and hard substrate after the hurricane. We believe that Reef Check can be a useful tool in assessing hurricane damage if the parameters examined are nutrient indicating algae and hard substrate rather than the traditionally used live coral cover measurement.

Keywords: Loureene Antoinette Jones; Reef Check; Jamaica; Negril; Hurricane;
Coral Reef

A Thesis

Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Science in Natural Resources Management

The University of the West Indies

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2016

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