

AGRRA: Synergism with the Caribbean Marine Biodiversity Program



Atlantic and Gulf

Judith C. Lang¹, Giselle S. Hall², Kenneth W. Marks¹, Lynnette M. Roth¹, John E. Knowles³, Patricia R. Kramer¹, Philip A. Kramer⁴ ¹(Atlantic and Gulf Rapid Reef Assessment Project), ²The Nature Conservancy, ³UNDP/GEF CLME+ Project, ⁴Florida Institute of Oceanography



The USAID-funded Caribbean Marine Biodiversity Program (CMBP), implemented by The Nature Conservancy and a consortium of local NGOs (C-CAM, FoProBiM, CEBSE, SusGren), is a fiveyear program to reduce threats to marine biodiversity across the region. Initiatives are: to create an enabling environment for marine conservation through facilitating sustainable finance mechanisms; work with governments for a more sustainable fisheries sector; introduce alternative livelihoods for fisherfolk; and promote effective governance and management of marine managed areas in high biodiversity seascapes. AGRRA has partnered with CMBP to collect ecological (benthos, fish, coral) data at five high-priority locations across the region.

Dominican Republic









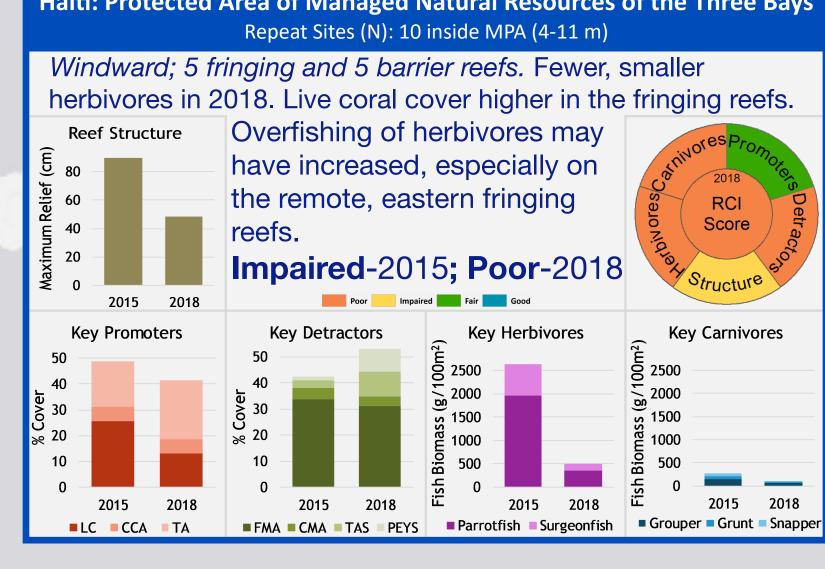




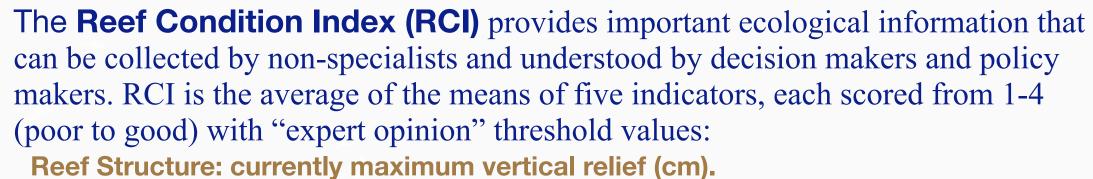








Dominican Republic: Sanctuary for the Marine Mammals Repeat Sites (N): 7 inside MPA (2-10 m); 4 outside MPA (4-10 m) Sheltered Windward shoal reefs. Parrotfish and grunt biomass and, especially outside the MPA, live coral cover lower in 2018. Parrotfish still caught, despite 2017 ban. Sediment in heavy rains killed many corals at western sites in 2017. Impaired-2015; Poor-2018



Key promoters: live coral (LC), crustose coralline (CCA) and sparse turf algal (TA) cover (scaled %*).

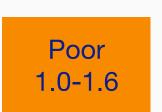
Key Detractors: fleshy (FMA) and calcareous (CMA) macroalgal, turf algal sediment (TAS) or cyanobacteria (CYAN) mat, peyssonnelid (PEY) and "aggressive" invertebrate (AINV) cover (scaled %*).

Key Herbivores: parrotfish and surgeonfish biomass (gm/100 m²).

Key Carnivores: grunt, grouper and snapper (gm/100 m²).

*Scaled % = deep (> 5 cm) sand or mud, seagrasses and sand-dwelling algae are removed from benthic cover analyses.

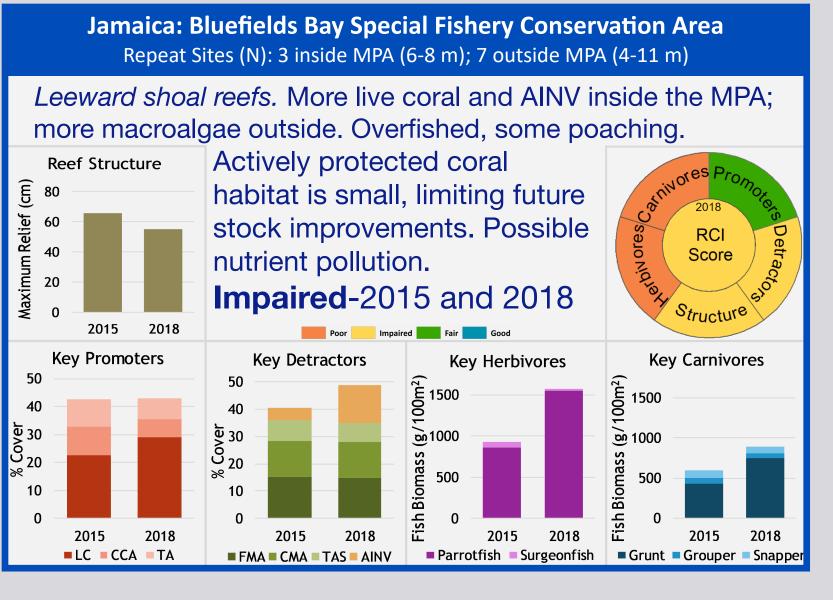
RCI Grade Thresholds*



1.8-2.4

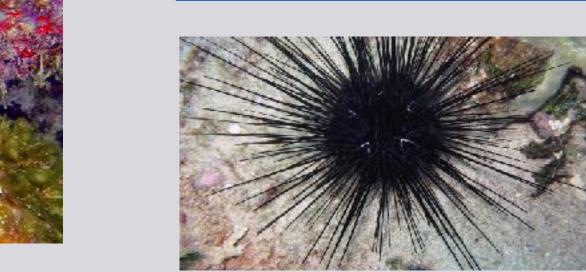
3.4-4.0

Jamaica



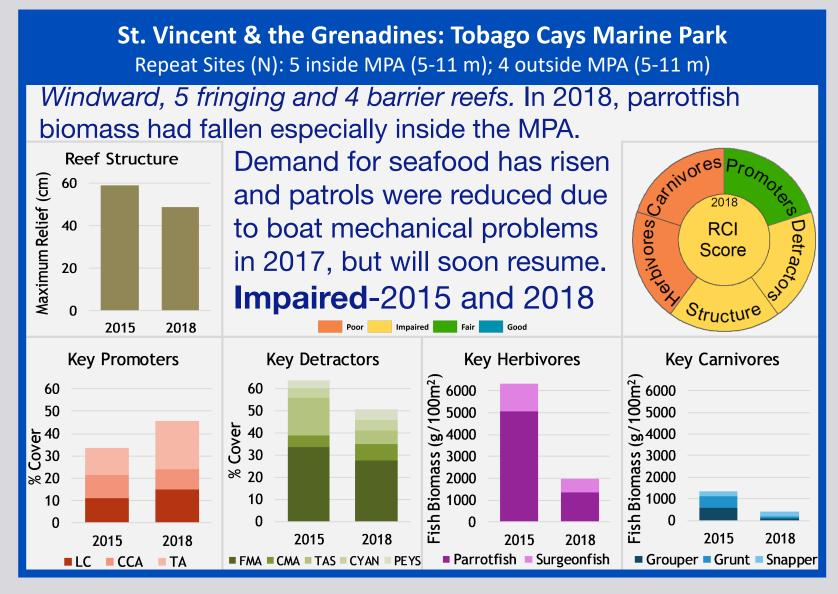


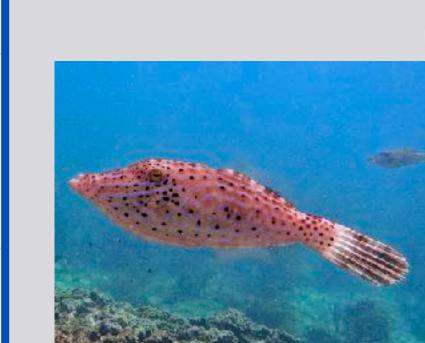






*Incorrect numbers corrected on 2020-04-02.







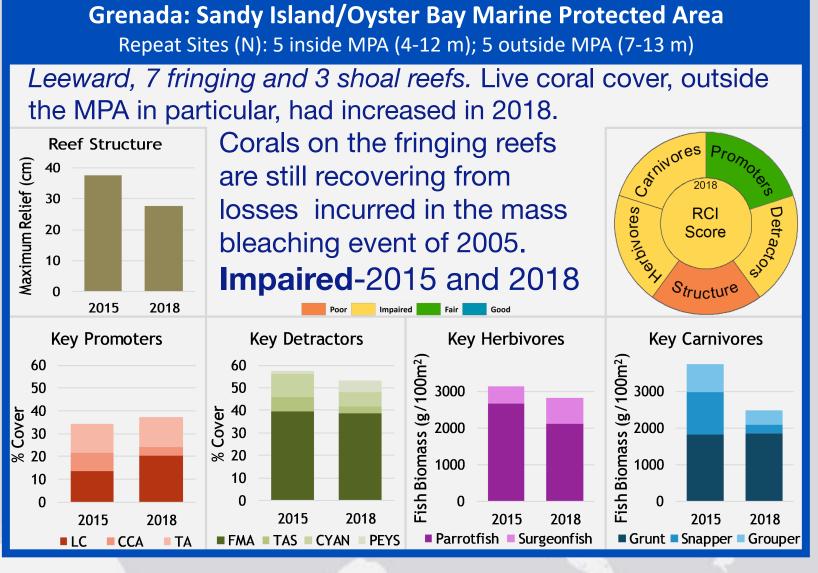
St. Vincent Grenada



Training in reef ecology and monitoring techniques was conducted in the network nations (all but Haiti) and at four other Eastern Caribbean islands.

Data collected in these five, uniquely different reef seascapes are contributing to national marine databases and educational outreach.

Summary Reef Condition Reports (2016, 2019), shared with governments and colleagues, are informing local adaptive management responses (e.g., zoning decisions in Haiti). To minimize further losses, regional and globalscale stressors also need prioritized reductions without further delay.









Ocean Research and Education Foundation for support.

T. Calver, E. Doyle, A. Ebanks-Chin, C. Morrall, A. Reyes, S. Voegeli, S. Williams for photos.







