



Reef Check Australia's Whitsundays Citizen Science Project

Interim Report
April 2020



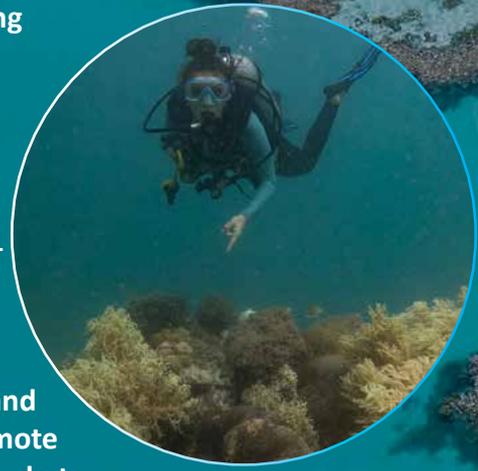
The Reef Check Australia Whitsundays Citizen Science Project is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation.

Project Introduction

Reef Check Australia (RCA) is an environmental charity dedicated to protecting Australia's reefs and oceans by engaging the community in hands-on citizen science and education initiatives. In April 2019 RCA were successful in their application for funding through the Great Barrier Reef Foundation's (GBRF) Community Reef Protection grants ([Link](#)).

This funding has enabled RCA to continue collecting reef health data on long-term sites in the Whitsundays region and expand citizen science activities in the region. We are working with project partners to expand the number of volunteers engaged in Great Barrier Reef Marine Park Authority's (GBRMPA) Reef Health and Impact Survey (RHIS) methods. We are also aiming to train and engage Reef Ambassadors as enthusiastic community leaders looking to promote information about the condition of our coral reefs and what communities can do to help.

This report summarises project activities undertaken in the Whitsundays region over the life of RCA's Whitsunday Citizen Science Project between April 2019 and March 2020.



Multiple Monitoring Methods

An integral element of the project is the monitoring of reef health using multiple citizen science research methods. We have attempted to implement multiple monitoring methods across the region. Data is then fed into respective program databases to be used in regional reports, reef health summaries and potentially to support management decision making and resource allocation.



Reef Check Australia

Reef Check surveys are conducted along an 80m transect line laid along a constant depth and reef habitat type. RCA's survey methods collect quantitative data for substrate cover, key invertebrate species, target fish species, as well as anthropogenic and natural impacts in reef habitats. Read more at www.reefcheckaustralia.org/methods

GBRMPA Eye on the Reef

The Eye on the Reef Reef Health and Impact Survey is a quick and efficient way to provide a snapshot of reef health at any time on any Reef. It is a quantifiable survey method that assesses reef health in a series of five-metre radius circles (a total of 78.5 square metres). Read more at www.gbrmpa.gov.au/our-work/eye-on-the-reef



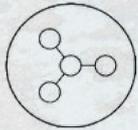
CoralWatch

The CoralWatch Coral Health chart integrates global coral health into a simple and engaging tool to enable opportunities for hands-on experience collecting scientific data on coral bleaching. CoralWatch is an easy-to-use tool to quantify changes in coral colour associated with coral bleaching on the reef. Read more at www.coralwatch.org/index.php/monitoring/survey-methods/

National Environmental Science Programme (NESP) Aesthetics

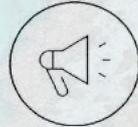
Project partner Reef Ecologic has been collecting additional data to determine the efficacy of citizen scientists rating coral reefs based on aesthetic values alone. We are testing whether health and beauty ratings from citizen scientists are equivalent to those of ratings given by marine scientists and artificial intelligence. If successful, a whole new monitoring regime could be developed where casual observations on the aesthetic beauty of a site will provide a new way of collecting up to date information on reef health. ([Link](#))





3032

Data points collected



360

Hours of volunteer work



93

Participants Engaged



48

Communications outputs



49

Surveys completed

April 2019 - March 2020

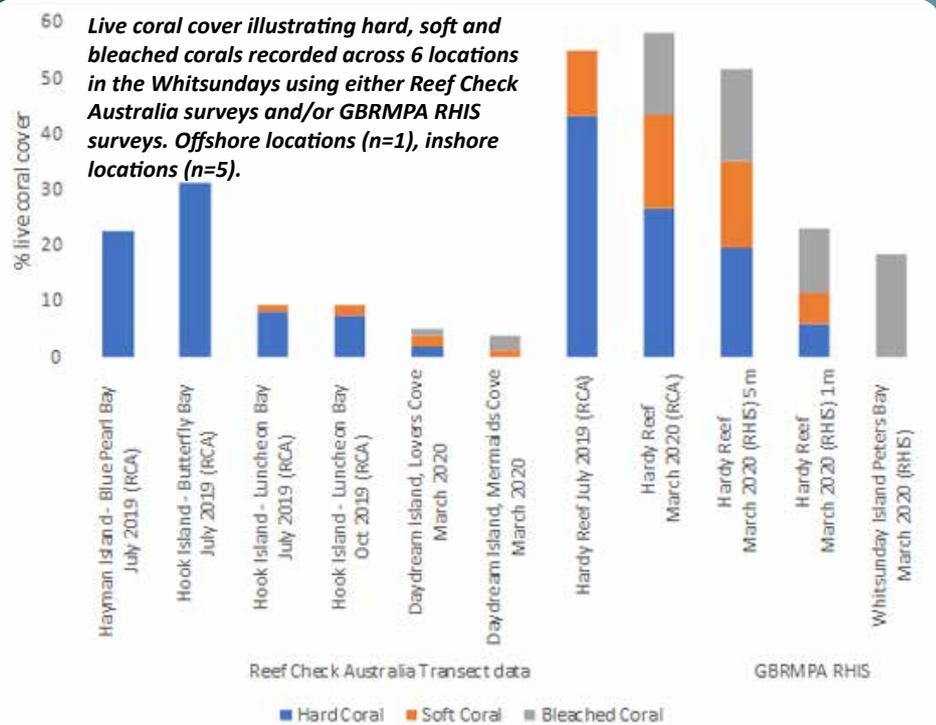
Monitoring Sites

Since July 2019, Reef Check Australia volunteers visited eight sites across six locations in the Whitsundays. Locations included Hardy Reef (Offshore, 2 sites), Hayman Island, Blue Pearl Bay (Inshore, 1 site), Hook Island Butterfly Bay (Inshore, 1 site), Luncheon Bay (Inshore, 1 site) and Daydream Island (Inshore, 2 sites). In addition volunteers also surveyed Whitsunday Island, Peters Bay (Inshore, 1 site). Peters Bay was surveyed using the RHIS method only.



Key Findings

- Live coral cover was higher at Hardy Reef (Offshore) than inshore reefs.
- Many inshore reefs illustrated reasonable coral cover, however at some locations diversity of species remains very low.
- Coral bleaching was having substantial impacts at both inshore and offshore locations through February and March 2020. Across 4 sites surveyed in March, 32% of the coral populations were bleached.
- Incidences of coral disease were very low (recorded at only one inshore site).



A full summary of RCA data will be available in the 2019-2020 RCA Regional Annual Report August 2020.

Traditional Owners Engagement and Participation

Over the past few months Reef Check Australia and partners Reef Ecologic and Reef Catchments have been working with and consulting Traditional Owners in the Whitsundays region to increase their involvement in supporting monitoring and management of culturally relevant sites and species.



Ngaro Traditional Owners joined Reef Check Australia in surveyor training, and reef monitoring at both inshore and offshore sites in the Whitsundays region. Both Adrena and Kurtis learned about reef monitoring and what it takes to collect reef health data. They shared stories of Traditional Owner sea-country connections and provided advice on new monitoring sites that provide cultural relevance completing spatial coverage in the Whitsundays region. In the coming months we will begin monitoring these new sites, hopefully in partnership with the Ngaro Traditional Owners in the region.

Reef Check Surveyor Training

Two Reef Check Australia survey training programs were conducted in the Whitsundays region during this reporting period totalling six newly trained surveyors to help gather data about the health of local reefs. We also had a Reef Check Ambassador, a project partner from Reef Catchments and two Traditional Owners, Adrena Pryor, and Kurtis Dow participate in the March 2020 training activities learning about Reef monitoring, how we provide information to management about the health of the Reef and what we can all do to support its ongoing resilience and upskilling in different areas.



Reef Check Ambassador Training

Reef Ambassadors are reef role models who actively empower their communities to better understand and help protect marine environments at a local level. The program mentors volunteers to develop their knowledge and skills in reef ecology, communications, behaviour change principles, and project planning to support positive locally relevant action for the reef. In February 2020 we conducted the first Reef Check Australia Ambassador workshop in the Whitsundays and four new RCA ambassadors joined the team. Using their new community engagement skills, our new Ambassadors partnered with local yoga and fitness studios to schedule Earth Hour events in both Bowen and Airlie the following month however COVID-19 proved challenging.



Acknowledgements

This project was made possible by a network of dedicated volunteers, generous dive operators, wise advisors, innovative collaborators and supportive funding agencies. Thank you to the dedicated citizen scientists who have contributed to survey activities. Project activities were conducted on the traditional lands of the Ngaro and Gia People. We acknowledge the Traditional Custodians and their connections to land, sea and community. We pay our respect to their elders past and present and emerging.

Thank you to industry supporters who provided in-kind support during these survey activities and volunteer training events including: Cruise Whitsundays, Explore Whitsundays, Coral Sea Marina Resort and Daydream Island Resort. Thank you also to project partners Reef Ecologic and Reef Catchments.