



## ICRI Member's Report

### Reef Check Foundation

Reporting period December 2017 – November 2018

1. **Reporting on the ICRI Plan of Action 2016-2018.** *Your responses will help inform the Secretariat about members' contributions toward the previous Plan of Action.*

- a. **Please list any relevant examples from your organisation/country of investment/projects to protect and restore the natural infrastructure of reefs and mangroves.** (See Goal (1) 2 [ICRI Recommendation for supporting investments in the natural infrastructure of reefs and mangroves to increase climate resilience](#)).

Reef Check continues its core mission of training citizen scientists to monitor coral reefs globally, and to encourage the use of our monitoring data for improved management and conservation of coral reefs. In 2018, Reef Check Teams trained 563 new EcoDivers, 41 new Trainers and 4 new Course Directors. Reef Check Teams completed 242 surveys of coral reefs in 22 countries and territories.

Reef Check Teams actively engage local management authorities and communities in activities that improve the health and wellbeing of coral reefs and the people that depend on them. For example, in Haiti, Reef Check helped to secure the formal declaration of two new marine protected areas, Baraderes, and Jeremie-Abricots MPAs. Both of these sites include extensive mangrove and seagrass ecosystems and the two best coral reefs in Haiti. Reef Check assisted in the preparation of GEF proposals with a value of over \$50 million to fund the implementation of these new parks. In another example, in Grenada, Reef Check's partner Caribbean Reef Buddy received a GEF Small Grant to implement a social sensitization and education campaign that created a local fishery for the invasive lion fish (*Pterois spp.*). Additional examples of projects and activities that protect to protect coral reefs may be found on our website, at <http://reefcheck.org/reefcheck-newsletter>.

- b. **Has your organisation/country made any progress in the following areas to target anthropogenic pressures?** Please give detail below. Note: If no change since your last ICRI member report, please write 'no change'.

- Encourage ban of plastic microbeads in cosmetic products.** (See Goal (3) 2 & [See ICRI Recommendation to reduce plastic microbeads pollution in marine environment](#)):

Reef Check uses its social media channels (including Facebook, Instagram, and Twitter) to regularly post informational pieces on the issue of marine debris and plastic pollution. We encourage our global network of partners and supporters to take personal actions to combat plastic pollution.

**Improve regulation and enforcement to reduce direct anthropogenic damage due to dredging and physical alteration of reef structures.** (See Goal (3) 3 & [ICRI Recommendation to reduce damage due to dredging and dumping on coral reefs](#)):

**Deployment of mooring devices limiting the mechanical destruction of coral reefs and seagrasses.** (See Goal (3) 4).

Reef Check Dominican Republic has established a mooring buoy system in La Caleta Marine Protected Area that has significantly reduced physical damage to corals from dropped anchors.

- c. **Did your organisation/country celebrate International Year of the Reef?** Please give details below. (See Goal (5) 1 & [ICRI Recommendation designating 2018 as the third International Year of the Reef](#)):

The Reef Check network celebrated the International Year of the Reef with events and social media presence. Many Reef Check Teams organized a specific program of activities around IYOR, for example Reef Check Dominican Republic (<http://www.reefcheckdr.org/iyor-2018.html>), Reef Check Malaysia (<https://www.iyor2018.org/organization/reef-check-malaysia/>) and Reef Check Australia (<https://www.iyor2018.org/organization/reef-check-australia/>). A collection of some of our events are listed on our website here: <http://www.reefcheck.org/involved/iyor2018.php>

2. **Contribution to the ICRI Plan of Action 2018-2020 and upcoming ICRI general meetings.** *Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the draft ICRI Plan of Action 2018-2020.*

**Theme 1 – Promote effective and adaptable solutions to improve the protection of coral reefs**

- a. **Which of the below topics do you consider to be the three top challenges that your organisation faces in managing coral reefs?** Please select from the options below:

- Climate change impacts #1
- Inadequate planning, zoning and management
- Unsustainable resource extraction #2 Over fishing
- Tourism and recreation
- Shipping
- Coastal development
- Dredging
- Illegal and destructive fishing
- Fish and coral trade
- Marine debris

- b. **Please list any examples of innovative management practices that your organisation/country is involved in, such as use of VMS, drones & ecological mooring devices.** Include their limits, conditions of implementation, financing and an assessment of their results and links for more information if possible.

We often use drones for resource assessments in combination with ground truth surveys of both coral reefs and mangroves. Reef Check Dominican Republic has recently been involved in the use of baited traps with video arrays to document remaining populations for sharks. We have for many years used hydrophones to track dynamite fishing in Malaysia and report blasts to authorities along with coordinates.

- c. **Please list any examples of innovative funding for management that your organisation/country is involved in.** Include their limits, conditions of implementation, financing and an assessment of their results and links for more information if possible.

Reef Check pioneered the use of a paid certification program to raise funds to cover the costs of expansion on a global scale. Now we are using impact investment to increase our reach via a simpler intro program.

- d. **Please list any examples of leading practices, techniques and strategies for building reef resilience that your organisation/country is involved in.** Include their limits, conditions of implementation, financing and an assessment of their results and links for more information if possible.

Many of our Reef Check Teams are engaged in improving management practices that increase reef resilience, including the installation of buoys to prevent physical damage of reefs, the training of dive shops in proper dive etiquette to reduce reef damage by tourists, and the better management of fisheries to maintain trophic balances and secure ecosystem resilience.

- e. **Please list any examples of leading practice reef restoration mechanisms that your organisation/country is involved in.** Include their limits, conditions of implementation, financing and an assessment of their results and links for more information if possible.

Our partner in Colombia, Corales de Paz, is actively engaged in developing and testing coral gardening techniques. More information may be found here: <https://www.coralesdepaz.org/restauracion-coralina-reserva-de-biosfera-seaflower/>

### **Theme 3 – Support communities reliant on coral reefs**

- f. **Is sustainable tourism development a significant challenge for your organisation?** If so please include detail below of the kinds of challenges faced and your strategies to deal with them.

There is a growing market for sustainable tourism, and for sustainable dive tourism. The dive industry can make significant progress to ensure that diving is always conducted in a sustainable manner that does not negatively impact marine habitats (for example, use of mooring buoys, sustainable concentration of divers on reefs, non-destructive behaviour of divers underwater), and that the diving industry itself operates as sustainably as possible (for example, using renewable energy sources,

limiting or eradicating use of single use products). But there is still much work to be done to ensure that all parts of the diving industry become partners in protection and conservation. The recent International Sustainable Scuba Diving Workshop in Genoa, Italy, hosted by Reef Check Italia onlus, brought together members of academia, conservation and the dive industry to discuss these subjects and brainstorm potential solutions. Many of our Reef Check Teams are actively working on this issue, and are partnering with organizations like Green Fins to address the issue of sustainable tourism in the diving industry.

- g. Is your organisation involved in activities to raise awareness and encourage action to support communities reliant on coral reefs?** Please include details below.

Community-based conservation is at the heart of Reef Check's mission. First, Reef Check trains citizen scientists: we believe in the power of community members to understand their natural resources and become engaged to make a positive difference in how reefs are managed and cared for. Second, our Reef Check Teams are locals that tailor their Reef Check activities to address the needs of their communities. Some Reef Check Teams create new fisheries for invasive fish species, others create education programs for local schools, others train fishermen to use minimally impactful fishing methods, or teach fishermen how to make a living through ecotourism. Reef Check Teams engage their local communities to become socially and politically active, from engaging in beach clean ups, to advocating for better management of marine protected areas, to protecting their natural resources from harmful exploitation.

#### **Theme 4 – Help to reduce anthropogenic threats to coral reefs, particularly those that occur at a global or regional scale**

- h. What activities is your organisation involved in to elevate awareness of the global nature of the threat of climate change to coral reefs?** Please include details below

Reef Check's core EcoDiver curriculum teaches citizen scientists about the impact of climate change and ocean acidification on coral reefs. All EcoDivers are trained to identify coral bleaching, and understand why it is happening. Reef Check has worked hard to support the International Society for Reef Studies (ISRS) and the ICRI to make this case at the highest levels of international diplomacy.

- i. Has your organisation made any progress in dealing with destructive fishing and trade?** Please include details below.

Reef Check worked in concert with partner organizations for 10 years to certify the marine aquarium trade. While the project was successful at leveraging the creation of MPAs, and training the main US and European importers to reduce mortality through best practices, the lack of laws in the US restricting cyanide-caught fish being imported thwarted the ultimate goal of reducing this practice.

- j. Has your organisation made any progress in dealing with marine debris?** Please include details below.

Many of our Reef Check teams are engaged with the issue of marine debris. Recently, Reef Check Malaysia has embarked on a partnership with the Coca-Cola

Foundation to address this issue in Malaysia.

3. **Would you like to report on your activities during the ICRI GM?** Please give details below.

Reef Check would be glad to report on its successful projects and initiatives of 2018 at the ICRI GM. If funding is made available, we would be glad to attend in person. Alternatively, we would be happy to present by video conference.

4. **International events.** Please list any upcoming international events relevant to ICRI which someone from your organisation plans to attend in 2018-2019.

- ICRI GM, Monaco, 5-7 Dec 2018
- Conference of the Parties to the United Nations Framework Convention on Climate Change, 3-14 Dec 2018
- Reef Futures 2018: A Coral Restoration and Intervention-Science Symposium, Florida, 10-14 Dec 2018
- Global World Heritage Marine Managers meeting, Alaska, US, 26-31 May 2019

5. **Publications.** Please list relevant publications and reports you have released during this reporting period.

Reef Check concentrated its publication efforts during 2018 on rocky reef and kelp forests ecosystems, under the Reef Check California program. We plan to have publications and reports directly related to coral reef ecosystems in 2019. Here are our publications for 2018:

Ainoa Vilalta-Navas, Rodrigo Beas-Luna, Luis E. Calderon-Aguilera, Lydia Ladah, Fiorenza Micheli, Villy Christensen, Jorge Torre. A mass-balanced food web model for a kelp forest ecosystem near its southern distributional limit in the northern hemisphere. *Food Webs*, Volume 17, 2018, e00091, ISSN 2352-2496  
<https://doi.org/10.1016/j.fooweb.2018.e00091>.

Freiwald J, Meyer R, Caselle JE, et al. Citizen science monitoring of marine protected areas: Case studies and recommendations for integration into monitoring programs. *Mar Ecol*. 2018;39:e12470. <https://doi.org/10.1111/maec.12470>

Claisse JT, Blanchette CA, Dugan JE, et al. Biogeographic patterns of communities across diverse marine ecosystems in southern California. *Mar Ecol*. 2018;39:e12453. <https://doi.org/10.1111/maec.12453>

6. **ICRI Member Feedback.** What do you find most valuable about the ICRI member reports? If you have any ideas for improvement please list below:

We are particularly interested in:

- Upcoming meetings, conferences, workshops
- New and ongoing projects, particularly in : citizen science, monitoring, marine protected areas, restoration, climate change, and data use

7. **General Information.** (Note that this information will be posted on the ICRI website on your member page: <http://www.icriforum.org/about-icri/members-networks>.)

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