



## ICRI Member's Report

### SCIENCE AND CONSERVATION OF FISH AGGREGATIONS (SCRFA)

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](#)).

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](#)):  
No Change

**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](#)):  
No change

**Deployment of mooring devices limiting the mechanical destruction of coral reefs and seagrasses.** (See Goal (3) 4).  
No change

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](#)):  
No

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
- Inadequate planning, zoning and management
- Unsustainable resource extraction
- Tourism and recreation
- Shipping
- Coastal development
- Dredging
- Illegal and destructive fishing
- Fish and coral trade
- Marine debris
- Other. Please specify: **Also, lack of fishery management or enforcement of existing regulations**

- 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 have (1) developed underwater survey techniques (UVC) to assess uncommon wide-ranging fishes, cheaply, easily and safely. Also, (2) we are working with an IT company and the Hong Kong government to develop a mobile phone app to aid enforcement of laws that help conserve CITES App II Napoleon fish (*Cheilinus undulatus*), a valuable aggregating reef fish that is traded internationally. Its control is particularly relevant to coral reef health because the species is one of few to eat Crown of Thorns starfish which is very damaging to coral reefs and, also, it is extensively caught with cyanide which can kill living coral. (3) We have co-authored a large report on the international live fish trade ('Going Going Gone') which is the first major update on this trade in 2 decades and which outlines the many challenges to groupers and reef fisheries generally and their ecosystems.

**Outcomes:**

- UVC surveys were successfully applied over 9 years and the developed technique transferred to fisheries staff in Indonesia. They clearly show recovery starting in one area but ongoing declines in the species in others.
- The app has helped to identify illegal trade of the species into Hong Kong.
- The 'Going Going Gone' report has been widely disseminated and received a lot of press coverage – it appears to have elevated the discussion on this issue. The live fish trade, focused on groupers, is relevant to coral reef ecosystems because groupers are apex predators, a major functional group that is important for shaping biodiversity and coral reef resilience.

<https://www.scrfa.org/images/stories/scrfa/Research/20180201%20Live%20Reef%20Food%20Fish%20Trade%20ExSummaryEng%20FINAL.pdf>

- 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.  
NA
- 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.  
For over a decade we have worked with the Fiji government on reef fish spawning aggregations, particularly groupers which are important members of reef ecosystems (as apex predators) and included traditionally valued species. In 2018, for the first time, the government introduced a seasonal ban to protect spawning aggregations from fishing and conserve stocks of these species.  
See issues identified in item (b) above to explain why it is important to safeguard particular key reef fish species (e.g. Napoleon fish and groupers). Measures that can help manage these species include Marine Protected Areas which would also help coral reef habitat.
- 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.  
NA

### **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.  
Yes, sustainable tourism development must consider supply of local seafood to local communities and the tourism sector. Also, spawning aggregations can be important and valuable attractions for dive tourism and divers like to see big Napoleon fish and big groupers.
- g. **Is your organisation involved in activities to raise awareness and encourage action to support communities reliant on coral reefs?** Please include details below.
1. SCRFA collaborates with GCFI to raise awareness in the Caribbean on reef fisheries and their aggregation, in meetings, and globally also does outreach through communications and website. It is also working with the Caribbean Fisheries Management Council on the first ever regionwide management plan for aggregating groupers and snappers.
  2. We recently completed and released work that SCRFA led in a report that follows the value chain of groupers in Fiji to promote interest in understanding the high value of coral reef groupers to the country and to foster better protection and management of reef ecosystems. 'Value Chain Analysis of the Fiji Grouper Fishery'

<https://www.scrfa.org/images/stories/scrfa/WCS%20Grouper%20VCA%20Report%20081018%20WEB%201.pdf>

These reports are important because they highlight the value of healthy fisheries and healthy reefs, their benefits to humans and their frailties.

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

- a. **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

With the threat of climate change likely to be particular extreme for coral reef ecosystems and fisheries, it is particularly important to ensure they are healthy; this involves both the reef habitat and the species that use and help sustain it.

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

See the 'Going Going Gone' report (mentioned above) which lays out a blueprint for action by trading countries for species that are sometimes caught with damaging fishing methods, and the implications of lack of management.

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

NA

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

Yes, a 10 minute update on the need to ensure sustainable reef fisheries and how this relates to coral reef health and the wider ecosystem. This includes in relation to the live fish trade and the particular vulnerabilities of exploited groupers in this trade, particularly in relation to spawning aggregation habitat.

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

**Other: November GCFI (Gulf and Caribbean Fisheries Institute) meeting, Colombia**

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

'Value Chain Analysis of the Fiji Grouper Fishery'

<https://www.scrfa.org/images/stories/scrfa/WCS%20Grouper%20VCA%20Report%20081018%20WEB%201.pdf>

'Going Going Gone' (executive summary)

<https://www.scrfa.org/images/stories/scrfa/Research/20180201%20Live%20Reef%20Food%20Fish%20Trade%20ExSummaryEng%20FINAL.pdf>

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:

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>.)

Member type (Country / Organisation):	
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