CORAL REEF CONSERVATION

2017 Strategic Actions
Letter from the Executive Director

During 2017, Coral Reef CPR advanced our coral reef conservation goals through continued research, education and awareness, and a large-scale coral gardening and restoration effort. We partnered with three resorts in the Maldives on three different atolls, focusing on enhancing the recovery of reefs badly damaged by the 2016 coral bleaching event. We worked to eliminate harmful predators that were killing the few remaining corals that had resisted bleaching. We led Rescue a Reef Missions to combat outbreaks of crown of thorns starfish and cushion starfish, and we removed thousands of coral eating snails. We introduced a novel technique to grow corals to the Maldives, and successfully planted over 13,000 corals in ten nurseries on Raa, Baa and South Male Atoll. Over the year, we’ve witnessed more than 97% survival of these corals, and the most incredible growth. Many are now ready to outplant onto the reef. We also focused on restoring damaged reefs and building new reef systems.
We’ve created vibrant, flourishing reefs on two Anantara properties with over 70 different stony corals, leather corals, sea anemones and other invertebrates and more than 125 species of fish. These habitats had few surviving corals and were littered with rusting metal frames used in “Adopt a Coral” programs. Guests now have the opportunity to snorkel on a healthy coral reef, and also view natural coral reefs from an underwater restaurant, without getting wet.

One key strategy involves our educational programs, presenting seminars and workshops to the next generation of Reef Guardians - Maldivian High School students - as well as divers and guests, and invited their participation in our reef conservation efforts.

2018 represents a crucial point for coral reefs. During the 3rd International Year of the Reef we must address human threats and improve the health and resilience of reefs or they will disappear. We have identified a novel approach to reef conservation, partnering with luxury resorts to rehabilitate and protect their coral reefs as part of their Corporate Social Responsibility (CSR). Thousands of resorts effectively “manage” reefs around their properties for their guest’s enjoyment, and healthy reefs are paramount to their long term marketing interests, yet reefs worldwide have been badly degraded and guests are noticing. Coral Reef CPR offers an inexpensive, successful approach to transform this perception through low tech, low cost options, but resorts must embrace and support these efforts to achieve the long-term conservation everyone seeks.

Andy Bruckner, January 2018
MISSION

To understand and reduce threats affecting coral reefs, promote sustainable management of reef resources, and rehabilitate degraded reef ecosystems.

Through our Holistic Approach to Reef Protection (HARP) we partnered with three resorts in the Maldives to conduct coral gardening, restore degraded reefs, build new reef systems, and educate key stakeholders. We strive to involve guests and volunteers in our efforts and create new citizen scientists that can become Reef Guardians, promoting our efforts worldwide.
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WHERE WE WORK

Anantara Dhigu

SEA Restaurant

Aquabar Snorkel Trail

Anantara Dhigu

SEA Restaurant
We worked on three atolls in 2017, Raa, Baa and South Male, completing conservation projects at Anantara Dhigu, Anantara Kihavah and Huruvahli (Carpe Diem). We evaluated bleaching recovery and removed crown of throns starfish and cushion starfish from Lhaviyani, Ari, Baa, North Male and South Male Atoll (left).
In 2017, we planted 13,304 corals in ten nurseries on three atolls. Over the year, we’ve seen over 97% survival and many corals are now ready to transplant back onto the reef. We have more than 25 species of *Acropora* and seven other genera in our nurseries.
Coral Gardening

coral growth over cable tie in 1 week!
Through three *Rescue a Reef* programs with Carpe Diem Maldives Pvt. and work at several resorts, we removed 10,601 crown of thorns starfish and 3,638 cushion starfish from reefs with outbreaks of these coral-eating predators. A total of 66 volunteers helped our reef clean-up efforts.
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During 2017, we restored the reef surrounding Anantara Kihavah SEA Restaurant, creating a thriving reef system on the ledge surrounding the restaurant and on reef slope off the west and east side. We transported over 1500 stony corals to the site, some up to 200 kg, as well as dozens of sea anemones, leather corals, soft corals, false corals, sponges and giant clams. All of the corals were rescued from sand mining sites, or had been detached from the reef and were located in sand/rubble channels or were under attack by coral eating snails and starfish. This area now supports 55 species of corals and more than 125 reef fish species.
A deep channel located off Aquabar, Anantara Dhigu was littered with rusting “adopt a coral” frames and a patch reef that sustained 100% mortality and was being buried by sand. This site was snorkeled by guests routinely, and serves as an important nursery habitat. In 2017, we removed all the metal frames and trash, built a reef framework using dead coral skeletons, and constructed a coral reef with diverse stony corals, soft corals, leather corals, anemones, giant clams and other animals, including large patches of staghorn coral which had disappeared from other sites. Within a week over 1000 fish colonized the reef. The snorkel trail now provides guests with a chance to see a healthy, thriving shallow coral reef.
BUILDING A SNORKEL TRAIL
The Maldives supported one of the world’s largest shark fisheries in the world until populations collapsed and the fishery was closed in 2010. One of our new research efforts involves an assessment of the status of reef shark populations and their patterns of habitat use. We’ve mapped the known occurrence of shark populations and identified important nursery habitats. Recently we identified an unusual occurrence of abnormal skin pigmentation in young of the year black tip reef sharks.
We educated 61 Maldivian High School students and 96 resort guests on coral reefs and involved them in our coral nursery work.
2017 REPORTS AND PUBLICATIONS

Holistic Approach to Reef Protection
Restoration of undersea habitat around SEA Restaurant
Aquabar Snorkel Trail
Impact of Coral-Eating Snails
Assessment of Huruvahli, Raa Atoll
Restoring the underwater habitat at SEA Restaurant

HARP Field Reports

http://bit.ly/2mY0cCk
http://bit.ly/2mVYssss
http://bit.ly/2DmDpGs

Restoration of undersea habitat around SEA Restaurant
Financial Statement
For the fiscal year ending on December 30, 2017

**SUPPORT & REVENUE**

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Total Support and Revenue 19810

**EXPENSES**

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Total Expenses 22109

Net revenue -2299

\(^1\) All of the HARP programs undertaken by Coral Reef CPR were done on a voluntary basis. A single consultancy supported partial salary for on staff member and one contractor.

\(^2\) Most travel and program costs were supported through in-kind support provided by ANantara Kihavah, Anatara Dhigu, and Carpe Diem

\(^3\) All administration was completed on a voluntary basis.