

Reef Check Cebu (Philippines)

Mike and Nora Ross

Tropical Island Adventures (PADI Dive Center S-6445)

Coastal Dynamics Foundation

The island province of CEBU is centrally located in the Philippine archipelago. The fringing coral reefs of Cebu, together with those of the adjacent island provinces of Bohol and Negros, are noted for their high biodiversity and sheer beauty. Here, serving together as US Peace Corps volunteers between 1979 – 81, both Dr. Gregor Hodgson and Mike Ross (now Cebu Reef Check Coordinator) first pioneered some of the basic aspects of the Reef Check protocols and practices in the numerous reefs of this area.

Over the years, the coral reefs of Cebu have been a major attraction to divers from around the world. But in recent years, this attraction has waned with the declining quality of reef conditions and lack of larger marine life and fish due to over-fishing and destructive fishing practices. In addition to their biodiversity and beauty, the coral reefs of Cebu area face a myriad of serious problems, including rampant dynamite and cyanide fishing.

Management of these problems is often complex and challenging, and the financial and skilled human resources needed to conserve these valuable coral reefs is too often inadequate. This can be particularly true at the critical coastal community and local government levels of responsibility. Concerned national government agencies, donor-funded projects, NGOs and academic institutions involved in coastal resource management (CRM) and the marine sciences have been striving to meet these local community needs. With the involvement of Reef Check in recent years, key stakeholders in the form of local resorts, dive operators, instructors and concerned divers are offering new opportunities and resources to help conserve the reefs on which they depend and enjoy.

An increasing number of success stories and local “Reef Check Champions” are providing renewed inspiration for improving reef conservation in the Cebu area and beyond through the Reef Check program. Reef Check Cebu was formally established in 1998 by Mike and his wife Nora, who is a native of Maribago – the traditional center for scuba diving and dive operations on Mactan Island, Cebu. As a PADI certified Open Water Scuba Instructor and Divemaster respectively, Mike and Nora actively coordinate Reef Check operations as an important and growing part of their PADI Dive Center “Tropical Island Adventures” as reflected in their website: www.cebudive.com.



To further support their Reef Check and reef conservation activities, in recent years they have also established a local foundation, called the Coastal Dynamics Foundation which directly involves a growing cross-section of concerned local individuals and Reef Check teams. In

recognition of their innovative efforts to help establish and monitor marine protected areas (MPAs) using the Reef Check program, they have been awarded two succeeding annual grants, for the years 2001 and 2002, by The PADI Foundation. They are currently finalizing a larger grant proposal with the US National Oceanic and Atmospheric Administration (NOAA) that will help introduce socio-economic assessment approaches into current Reef Check and MPA methods. A primary focus of these project activities will be the islands of Mactan and Olango Islands which may represent some of the most accessible, high diversity reefs in the world due to their proximity to Cebu City, the second largest urban area in the Philippines.

With over 20 years of local experience, Mike and Nora have been instrumental in helping to mobilize the largely untapped resources of nearby resorts, fellow dive operators and divers to support innovative reef conservation and monitoring programs using Reef Check. Together, they have discovered that Reef Check is as an easy-to-learn, economical, educational and exciting way to get involved while learning more about local reef conditions and contributing to the Global Coral Reef Monitoring Network (GCRMN). For



example, in this photo of the trained Reef Check survey teams for the remote Capitancillo and Kalangaman reefs off northern Cebu and Leyte, a total of five professional dive instructors and two divemasters share their spirit of team work and accomplishment.

A summary of some of the “Reef Check Cebu” activities completed to date include:

- **Developing local Reef Check capabilities and skills:** The local fisherfolk and coastal community members of Cebu often do not directly benefit from many popular reef uses, such as recreational diving and tourism. As a result, the members of many coastal communities have developed surprisingly negative attitudes towards recreational divers, tourism and related reef conservation activities. For these local fisherfolk, diving tourism, which is a major attraction and source of income in the Cebu area, is often viewed as a luxury sport operated by “outsiders” that provides local communities limited economic benefits or sources of livelihood. Without needed training, most reef surveys and studies are also conducted by “outsiders” and as a result, generally lack local participation and appreciation.

To help overcome this basic but important constraint, Reef Check Cebu sponsors free or highly discounted PADI scuba certification courses and Reef Check training to selected community members. These community members are directly involved in Reef Check surveys and conservation activities after successfully completing their training courses, which are conducted in their local dialects. In addition, introductory PADI “Discover Scuba Diving” courses have been provided to key decision makers, such as local mayors and a vice governor, to help them better appreciate their reef wonders.

In the process, Reef Check Cebu is proud to have helped to develop several “champions” of reef

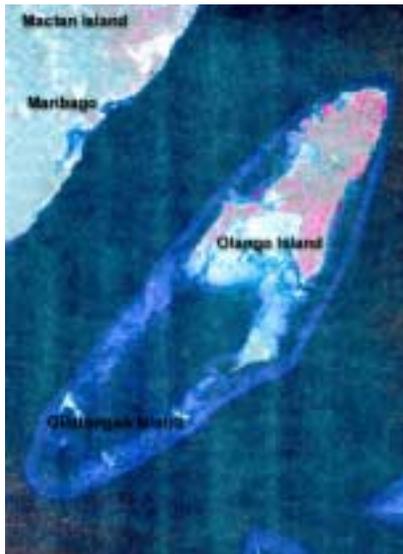


surveys and conservation from the nearby island communities. Examples of these “Reef Check Champions” include “Nong Tuti” Menguito and “Jun” Ochea, who was selected to participate in Reef Check trainers’ training held in Phuket, Thailand in November 2001. Jun, in the foreground of this photo, was a former destructive fisherman from Olango Island who now enjoys training fellow local fisherfolk to conduct Reef Check surveys as well as serving as a highly experienced dive boat skipper for Mike and Nora.

In addition to helping to develop the capabilities and skills of key individuals, Reef Check Cebu is also actively involved in the reef conservation activities of the local community and city governments. These important, volunteer activities include Nora’s active role as the elected private sector representative on the City of Lapu Lapu’s recently organized Fisheries and Aquatic Resources Management Council (FARMC) which is legally mandated for establishing the City’s policies and guidelines for managing their extensive coastal resources and coral reefs. For example, in this photo, Nora assist the local community council, dive operators and resorts of Maribago to map existing uses of their reef areas which have now been declared as the Maribago Marine Park with the support of Reef Check Cebu.



- **Introducing reef awareness and education programs:** While Cebu is literally surrounded by rich coral reefs, the public and private schools of the area basically do not offer any formal education on reef ecology and awareness. Perhaps this lack of general awareness is reflected in a common name for corals in the Cebu dialect which is “bato sa dagat”, a term that can be literally translated as “sea rocks”. Among many local residents, there is a common belief that corals are not sensitive, living organisms.



To help local community members better appreciate the living, dynamic ecology and problems of their nearby reefs, Reef Check Cebu assisted local partners lead by Dr. “Boy” Amores in developing and conducting simple yet exciting educational programs on reef ecology and conservation. These reef awareness and education programs, conducted in the local dialect, proved particularly popular with young students from the coastal communities of both Mactan and Olango Island.

Dr. Amores found it “interesting” when asking the young students what their father’s occupation was. Too often the answers on Olango Island were “dynamite fisherman”, “aquarium fish collector” (using cyanide) and similar lines of work which stresses the need for more extensive reef awareness and education programs for all ages!

For the Cebu International School (CIS), this program was expanded to include various PADI scuba certification courses, orientation on the Reef Check program and community-based management of marine protected areas. This on-going program proved equally interesting to the parents, many of whom are influential business leaders and resort owners of the area. In the process, Mike has rediscovered how exciting and rewarding it is to be able to share his experience with the next generation of divers and Reef Checkers!



- **Helping to introduce innovative approaches to challenging situations:** In addition to organizing and conducting annual surveys of selected areas, Reef Check Cebu has promoted broader application of the program to support reef conservation. Reef Check became actively involved with the on-going USAID-funded Coastal Resources Management Project (CRMP; see www.oneocean.org) which is conveniently based in Cebu. Reef Check methods were integrated into the CRMP monitoring activities for selected MPAs that directly involved the training and participation of local community members. As “seeing is believing”, these participants have now seen and realized first-hand the impressive results of protecting their reefs.

In addition to seeing the remarkable improvements in coral and fish life in the reef areas that they are protecting, an innovative approach was introduced at the Gilutongan Marine Sanctuary which now provides significant economic benefits and new sources of livelihood to that community. The 15-hectare Gilutongan MPA has become one of the most popular diving sites in the Cebu area since it was formally established and enforced in 1998. Since then, coral and fish life have improved dramatically and the reef now includes many large “target” species of fish, such as “jacks” and groupers, that are rarely seen on other, unprotected reefs in the area.

Based on surveys of local dive operators and community consultations, “user fees” were introduced for divers and snorkelers visiting the sanctuary. These fees, averaging about US\$ 1 per diver, now generate about US\$ 20,000 per year for the local community, which utilizes the funds to support operation of the sanctuary as well as other related activities identified by the community. In addition to this “direct” source of new community income, an “indirect” source of income was introduced by helping to organize the local fisherfolk into a cooperative that helps to enforce the sanctuary rules while also serving as vendors to the visiting tourists.

The Gilutongan Marine Sanctuary is very effectively managed and monitored by a “Reef Check Champion” – Nong Tuti Menguito. Following his PADI diver training, Nong Tutu was trained in Reef Check methods and has actively lead the survey and data analysis teams for the last four years, using dive equipment and support services provided through Reef Check Cebu.



Highlighting his unique character and accomplishments, Nong Tuti was recently featured in a Reader's Digest article. His beloved sanctuary has now become a popular site for other communities and scientists to visit, study and learn more about this exciting success story and new model for conserving reefs and enhancing economic benefits to local communities by using Reef Check.

The initial results of the Gilutongan experience were presented for the Reef Check Cebu coordinator at the 9th International Coral Reef Symposium held in 2000 in Bali. These results and lessons learned will be updated as a case study to be presented by Nong Tuti during the 2nd International Tropical Marine Environment Management

Symposium (ITMEMS 2) to be held in Manila in November 2002.

• **Supporting local reef conservation, MPA management and coastal law enforcement:**

Based within Cebu's center for dive operators and resorts, Reef Check Cebu has been instrumental in mobilizing the active support and resources of these key stakeholders. In addition to the Reef Check program, the status and recognition provided with the grant awards from The PADI Foundation has proven very helpful in generating and sustaining these important sources of support for a range of local activities, including:



- Reef Check training programs and surveys involving local community members
- Development of new Reef Check protocols for monitoring the marine aquarium trade
- Formal establishment of the first marine protected area (the "Maribago Marine Park") within Lapu Lapu City
- Annual underwater clean-ups and placement of mooring buoys
- Consultations on delineating municipal water boundaries
- GPS / GIS mapping of proposed MPAs
- Coastal law enforcement patrols
- Boat registration and safety drives

Extensive use of the internet has allowed Reef Check Cebu to be directly involved with and/or provide local information and advice on a wide range of proposed reef conservation projects and activities.