

# UPDATE REPORT



DECEMBER, 2014

Mesoamerican Reef Fund [www.marfund.org](http://www.marfund.org) / [info@marfund.org](mailto:info@marfund.org)

Picture by Ian Drysdale

Dear Friends,

We have finished one more productive year and we don't want to let you go to your Holidays without knowing what progress we have had during the year. Please share among your network!

## Conservation of Marine Resources in Central America Project, Phase I



The four protected areas that are part of Phase I of the Project have almost completed their third year of implementation.

During this year, the most relevant advances in the areas, among many others were: the joint work that has begun between administrators, NGOs, stakeholders and coastal communities regarding management and of natural resources, community development and control and surveillance. Alternative productive activities have also started to generate income in some communities. Monitoring and environmental education programs have been consolidated.

Because Phase I will end in December, 2016, in October, the areas began with the development of a Biennial Work Plan that will not only include field activities, but also closing activities in each protected area. With a biennial plan, the areas will be able to include sustainability plans towards continuity after the Project ends. The work plans are now being reviewed for approval.

The mid-term evaluation of Phase I of the Project was held during the months of September, October and November. Key recommendations from this report are being taken into consideration in the biennial work plans, in order to improve and consolidate conservation actions in the areas.

Technical and administrative follow up from our member funds and also our staff has been a key ingredient in the development of the field activities.





## Sixth Request for Proposals

### Reducing Threats and Improving Management in Key Coastal and Marine Protected Areas in the Mesoamerican Reef



For the 6th RfP, the six proposals have very interesting results to date already started field activities and already have some interesting results. Some of these are:

- *Increasing the cost-effectiveness of MPA enforcement in the Port Honduras Marine Reserve, Belize. Toledo Institute for Development and Environment (TIDE)*
  - TIDE's marine reserve Manager created a method for ranger training that identified the basic, intermediate and advanced skill sets and requirements for individuals to become rangers
  - Three training sessions in fisheries laws and public relations for 4 fishermen who will be assisting TIDE with night patrols were conducted.
  - Two joint patrols with the Belize Fisheries Department have been conducted
  - A map showing the areas that are most frequently patrolled as well as the spatial gaps in patrol coverage was developed



*TIDE's enforcement team patrolling within the Port Honduras Marine Reserve*



- Strengthening the Network of fish refuges in the Gulf of Honduras. Tri National Alliance for the Conservation of the Gulf of Honduras (TRIGOH)
  - Three National Fishing Fora organized and developed in: Belize, Guatemala and Honduras
  - Two meetings held with the Fisheries and Protected Areas Authorities of Guatemala and Honduras
  - Fifty percent of the Research Protocol for assessing fish species developed
  - The concept of the Interactive database has been developed.



*Honduran Fishermen and NGOs during the Fifth National Fisheries Forum held in Omoa, Honduras.*

- Support for the protection and conservation of sharks and rays in the Guatemalan Caribbean. Sea and Aquaculture Study Center (CEMA)
  - Forty five disembarkation surveys have been completed with the support of artisanal fishermen
  - Four field trips for diving sightings have been accomplished
  - Six different species of sharks and six of rays have been identified using surveys and dive sightings
  - The first record of a Mako shark (*Isurus oxyrinchus*) in Guatemala was registered in July
  - The first map of ray and sharks sightings locations in Guatemala was developed
  - A shark and ray photographic catalogue of the Guatemalan Caribbean is currently being developed



*Organisms monitored during the Project*



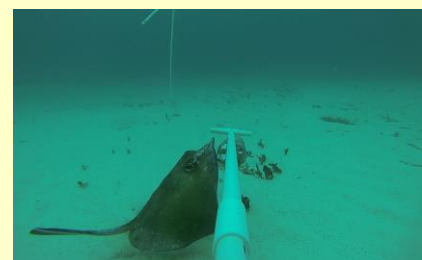
- Consolidation of the proposed fish recovery site in the Cuyamel-Omoa National Park. Cuerpos de Conservación de Omoa (CCO)
  - The guardhouse built during the first phase of this project was equipped and conditioned for the eight naval officers that use it
  - Twelve aquatic and terrestrial patrols have been realized
  - One environmental education workshop has been held for fishermen of the PA
  - Eight talks on good fishing practices have been imparted to fishermen and schools
  - The ecosystem and fish stock assessment inside the fish recovery site is in its final stage



*Equipment purchased for the guardhouse built within the National Park*

- First evaluation of the megafauna in the Mexican Caribbean: a key indicator of the recovery of biodiversity in fishing shelters. Comunidad y Biodiversidad (COBI)
  - Two COBI staff participated in a megafauna community monitoring training developed in Turneffe Atoll led by the MAR Alliance (Rachel Graham)
  - Sixteen fishers from Sian Ka'an were selected and trained to initiate the community monitoring program of sharks, rays and sea turtles within fish refuges.
  - Seventeen transects monitored and fifteen hours of Baited Remote Underwater Video (BRUV) monitoring recorded within Sian Ka'an
  - Results (in species) by transects monitored:
    - Inside fish refuges: 7 rays, 3 sea turtles, 2 sharks and 23 commercial fish
    - Outside fish refuges: 6 rays, 4 sea turtles, 2 sharks and 23 commercial fish
  - Results (in number of organisms detected) by BRUV monitoring:
    - Inside and outside fish refuges: 20 rays, 2 turtles, 305 commercial fish and one shark
  - These results will be analyzed at the end of the project to determine the effects of fish refuges on sharks and rays.

*One of the rays observed by BRUV monitoring outside fish refuges*





- Banco Chinchorro: Knowledge and elasmobranch conservation through community participation and exchange of experiences. RAZONATURA
  - RAZONATURA and MAR Alliance jointly designed a survey model to get the perception on sharks from fishermen and school children from three schools in Chetumal
  - 26 surveys were completed by fishermen from the three fishing cooperatives: Banco Chinchorro, Andrés Quintana Roo and Langosteros del Caribe
  - 140 children also completed the survey. All surveys are being analyzed
  - Six shark and ray informative presentations were given to the children after completing the survey to measure changes in knowledge and perception later on.
  - A poster of sharks and rays of the MAR region was developed
  - One radio and one TV interview have been performed jointly by RAZONATURA, MAR Alliance and CONANP to provide information regarding sharks and create awareness among the population of Chetumal



*Informative presentations regarding sharks have been performed to children in schools, TV and radio*

These projects are estimated to end between April and June, 2015. We will keep you posted!



## Seventh Request for Proposals

### Development of Initiatives for better management of Coastal and Marine Protected Areas in the Mesoamerican Reef



We received twenty three proposals distributed in the following manner: four from Belize, ten from Guatemala, three from Honduras and six from Mexico. Of these, four proposals were submitted directly by community-based organizations and three others were submitted by NGOs that involved active participation of community-based organizations.

The proposals received from the four countries were:

Belize,

- Sustainable integration (of) marine protected living environments. Submitted by CONCH
- Consolidating MPA enforcement in the Port Honduras Marine Reserve and Payne's Creek National Park. Submitted by TIDE
- A practical approach to long-term lionfish control: developing Belize's national lionfish exploitation strategy. Submitted by the Fisheries Department
- Strengthening the Capacity of the Traditional Fisher Folk of Stann Creek Fisherman's Association, Dangriga. Submitted by SCFA

Guatemala,

- Strengthening the network of fish refuges by involving youth in better fishing practices in the Gulf of Honduras. Submitted by TRIGOH
- Fishermen Committee and Women's Committee of Barra Sarstún involved in the protection and management of fish refuges of Barra Sarstún / Laguna Grande by implementing economic alternatives. Submitted by Barra Sarstún Fishers Committee
- Identification, management and protection of the different species of top predators in the Atlantic reefs of Guatemala. Submitted by Mundo Azul Foundation
- Management Plan for lionfish on the reefs of Cabo Tres Puntas and Motagüilla. Submitted by Mundo Azul Foundation
- Pilot project to restore the Guatemalan Caribbean corals: exploring the feasibility and potential as a tool for management and conservation. Submitted by FUNDAECO
- Strengthening self-management of local fishermen for the sustainable management of Sarstún Temash binational area. Submitted by APROSARSTUN
- Artificial Reef "Reef balls" for protection, nursery and fishing resources in the Atlantic Coast of Guatemala. Submitted by PANADIVERS
- Fisheries Monitoring Community Program for empowerment of communities in the management of resources and the protection of coastal ecosystems. Submitted by CEMA



- Effects of fishing on the population dynamics of the lionfish in key habitat for Guatemala. Submitted by FUNDAECO
- Sustainable management of materials in Izabal, conservation strategy for Punta Manabique and Livingston. Submitted by ADA2

Honduras,

- Promoting the integrated management of RVS Laguna Guaymoreto. Submitted by FUCAGUA
- Managing ecosystems and promoting economic alternatives in the area of fisheries recovery site PAMUCH. Submitted by CCO
- Economic Alternatives for artisanal fishermen of Crawfish Rock. Submitted by BICA-Roatan

Mexico,

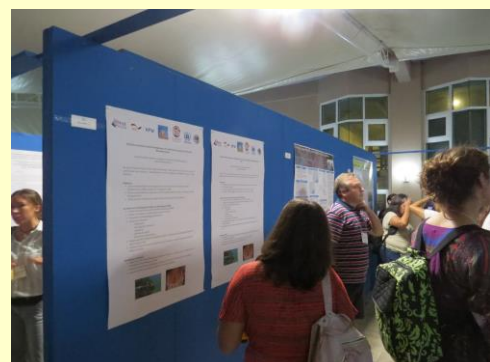
- Strengthening inspection and surveillance in Yum Balam. Submitted by CEMDA
- State of two coral reefs in the Mexican Caribbean and bases for their conservation. Submitted by CICIMAR
- Strengthening fisheries organizations for better management of marine ecosystems. Submitted by COBI
- Evaluation and community management of fisheries in Laguna Yalahau, Quintana Roo. Submitted by INAPESCA
- Diploma in Participatory Management of Marine Protected Areas of the Mexican Caribbean. Submitted by Moxviquil
- Consolidation of a Reef Restoration Team in Arrecifes de Xcalak National Park. Submitted by OCEANUS

The evaluation of these proposals will take place at the end of January, 2015 and we hope to have the results by March, 2015 at the latest.

## **67<sup>th</sup> Annual meeting of the Gulf and Caribbean Fisheries Institute – GCFI –**

From November 03 - 07, the Gulf and Caribbean Fisheries Institute held its 67<sup>th</sup> Annual meeting in Barbados. MAR Fund participated in two events. For the poster session the MAR strategy for the control of lionfish was presented.

*MAR lionfish Strategy exposed during the poster session of the 67<sup>th</sup>  
GCFI meeting*





Claudio Gonzalez, Technical Coordinator of MAR Fund, presented the study *Added-value of the assessments of management effectiveness in four PAs of the Mesoamerican Reef* within the framework of the session called 'MPA Science and Management'. This study was undertaken for the following protected areas: Yum Balam Flora and Fauna Protected Area, in Mexico; Port Honduras Marine Reserve, in Belize; Punta de Manabique Wildlife Refuge, in Guatemala, and Sandy Bay West End Special Marine Protection Zone, in Honduras. These are the target areas of Phase I of the Project Conservation of Marine Resources in Central America.

The methodology used in this assessment was modified to include key stakeholders, technical and administrative staff of the protected areas in addition to the administrator. Governance and socioeconomic indicators were also evaluated.

During this same session, Estrella Malca of CIMAS-RSMAS, University of Miami / NOAA SEFSC Early Life History Lab, a partner and collaborator of MAR Fund in the MAR Connectivity Network, made a presentation on *Capacity building of MPAs and connectivity in the Mesoamerican Reef: "Larval" fish recruitment*. She shared the results of the first and second simultaneous connectivity exercises developed within the MAR region.

More information below.



*Estrella and Claudio in the 67<sup>th</sup> Gulf and Caribbean Fisheries Institute annual meeting*



## MAR Connectivity Network



From August 22 – 28, the third regional and simultaneous exercise was developed to obtain comparable baseline information on juvenile/larval fish recruitment along coastal and marine protected areas of the MAR.

For this exercise, the protected areas did not get any technical or financial support from the organizing committee, proving their interest and conviction in the importance of this exercise in the management of their resources.

The third exercise involved:

- Nine protected areas participated: Yum Balam Flora and Fauna Protection Area, Isla Contoy National Park, Sian Ka'an Biosphere Reserve and Arrecifes de Xcalak National Park, in Mexico; Turneffe Atoll and Port Honduras Marine Reserve, in Belize; Río Sarstún Multiple Use Area and Punta de Manabique Wildlife Refuge, in Guatemala; and Sandy bay West End Special marine Protection Zone (Roatan), in Honduras.
- Forty two people participated among the nine areas.
- A total of 177 larvae and juvenile fish were collected, belonging to 16 families, 21 genera and at least 26 species.
- This exercise provided ten more taxa to the global list obtained during exercises 1 and 2.

The information is being analyzed and the final report of the three exercises will be shared in 2015.

### Contact us

You can learn about us and our initiatives through our website ([www.marfund.org](http://www.marfund.org) and [www.fondosam.org](http://www.fondosam.org)) and Facebook page (<https://www.facebook.com/MARFund?sk=wall>). If you wish to share information or have any comments and/or questions, please do not hesitate to write to us at the following address: [cgonzalez@marfund.org](mailto:cgonzalez@marfund.org).

**THE MAR FUND TEAM WISHES YOU HAPPY HOLIDAYS AND ALL THE BEST FOR 2015!**