

Guanaja reefs, Honduras.

RESULTS OF 2019

ON THE PROTECTION AND CONSERVATION OF THE MESOAMERICAN REEF

'he Mesoamerican Reef System (MAR) faces many challenges stretching across the four countries: Mexico, Belize, Guatemala, and Honduras. These challenges include ocean pollution due to liquid and solid waste, overfishing, storms, hurricanes, and the rapid spread of the white syndrome, a disease that has a fatal impact on a wide range of stony corals.

Despite these challenges, there has been significant progress that contributes to threats. reducing acknowledge the partners who work tirelessly in the region. We also thank the donors who drive the MAR towards these results.

We are glad to share with you some of the milestones of 2019.

- Workshop "Development of a Regional Strategy for the Conservation and Restoration of Mangroves in the Mesoamerican Reef"
- Second Biennial Meeting of the MAR Restoration Network
- Monitoring and protection of a fish spawning aggregation network in the Mesoamerican
- Training for emergency response in the four MAR countries
- Projects of the eleventh request for proposals of the Small Grants Program begin activities
- Emotional closing events of the Project Conservation of Marine Resources in Central America, Phase II
- The twelfth Small Grants Program request for proposals was launched online
- MAR Fund contributes to promoting the 4Rs approach (Refuse, Reuse, Recycle, and Recover)
- First Biennial Conference of the Belize Marine Fund
- MAR Fund contributes to the production of media coverage on the MAR
- Confirmation of the white syndrome in the MAR region brings experts and key stakeholders together

Aworkshop on how to develop a regional strategy for mangrove conservation and restoration in the Mesoamerican Reef was held in September 2019, in Guatemala City, with the support of the German Embassy in Guatemala and the "Integrated Ridge-to-Reef Management of the Mesoamerican Reef" Project (MAR2R/CCAD/WWF).

The workshop was organized by MAR Fund and the Smithsonian Institute. A total of 69 key stakeholders, representing 43 organizations from and outside the region, attended the activity and worked for two and a half days on two areas: the analysis of the current situation of the mangrove ecosystem in the MAR and the action proposal for its conservation and restoration.

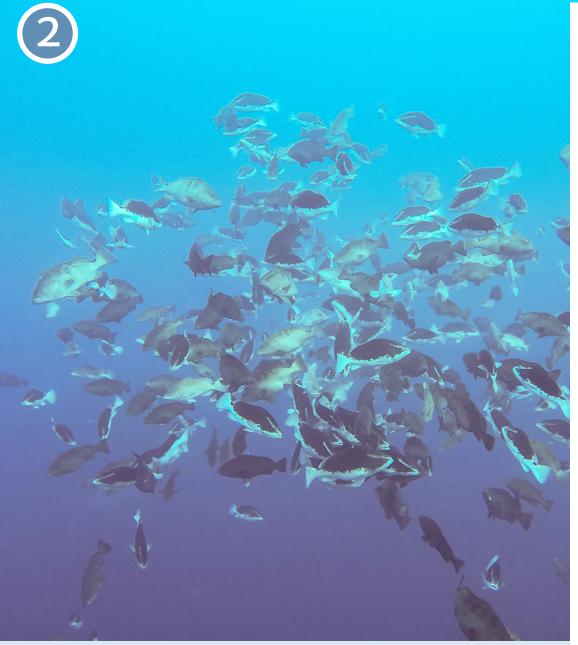
The event's minutes, as well as other relevant products, can be downloaded from this link: http://bit.ly/37k2W1W



The workshop involved group activities on the mangrove ecosystem.

Photo by MAR Fund

Workshop "Development of a Regional Strategyfor the Conservationand Restoration of Mangroves in the Mesoamerican Reef"



Fish aggregation in Belize.

Photo by Alex Tewfik.

Monitoring and protection of a fish spawning aggregation network in the Mesoamerican Reef

In June 2019, the French Fund for the Global Environment (FFEM, for its initials in French) signed a financial agreement with MAR Fund for the project "MAR Fish: knowledge, monitoring, and protection of Mesoamerican Reef's Fish Spawning Aggregations." This new initiative is a significant achievement for the MAR, and we are grateful to the FFEM for its trust and support.

This project promotes the recovery of fish populations in the MAR region by strengthening the protection and monitoring of a regional network of spawning —or reproductive— areas of commercial species. Please visit:

http://bit.ly/2NOGh6h

Also, in June 2019, The Summit Foundation added to the support of MAR Fish. Resources were approved to complement key activities of the project, such as the implementation of a regional workshop to standardize and validate a monitoring protocol, the monitoring of fish spawning aggregation sites, and raising awareness on their ecological importance.

Two workshops were carried out as part of the project. The first one, in Guatemala City, on April 11th and 12th, 2019. The result of this activity was the project's Action Plan.

The second workshop was held in Cancún, Mexico, on November 21st and 22nd, 2019. NGOs representatives, academics, and fishermen from the four countries in the region attended the event, with the goal to standardize and validate the monitoring protocol to be implemented in the MAR region.

Thanks to the generous support of the Oak Foundation, the Overbrook Foundation, The Paul M. Angell Family Foundation, the French Fund for the Global Environment, and the German Cooperation through KfW, 11 proposals where approved in the eleventh Small Grants request for proposals. The undergoing projects began field activities between March and May 2019.

Three of the projects are the continuation of others previously funded by the Small Grants Program: 1) Solid waste management in Roatán, Honduras, implemented by the Bay Islands Conservation Association (BICA), which has been very successful at engaging the community and local authorities to respond to this critical issue; 2) Better practices for sustainable tourism in Quintana Roo, Mexico, implemented by Amigos de Sian Ka'an (ASK), which continues to strengthen suppliers of tourism services, and 3) Protection of blue carbon sinks located in the Yum Balam Flora and Fauna Protection Area in Mexico, implemented by Casa Wayúu. The blue carbon projects are implemented in Yum Balam and Cozumel, and both are in constant communication and have received matching funds from other sources, as well as assistance from the Advanced Research Center (CINVESTAV, for its initials in Spanish), an entity with expertise on the matter.

The MAR Leadership Program (www.liderazgosam.org) is another one of the funded projects. The 2018 generation of leaders has 20 participants (12 women and 8 men) distributed by country as follows: 6 from Mexico; 2 from Belize; 8 from Guatemala, and 4 from Honduras. This generation has formed into teams, each one designing and implementing a project in the region. The theme of this cohort is Sustainable Fisheries. The projects implemented by the teams include protection of sharks and rays, and sustainable recreational fisheries, among others. Two examples of the teams' achievements are the development of the National Action Plan for Chondrichthyans in Guatemala and the establishment of a women's cooperative called "Mujeres del Mar" in Mexico.

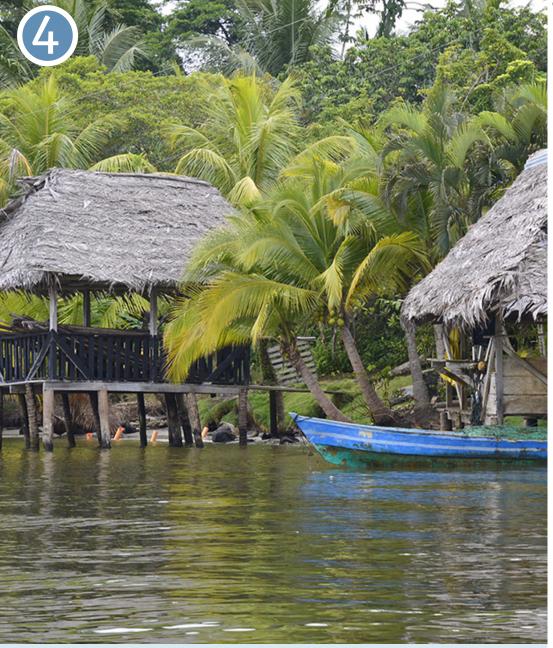
Two other projects focus on the characterization and protection of a reef discovered five years ago in a surprisingly healthy condition.



Tourism in Guanaja, Honduras.

Photo by José Manuel del Busto Miralbés

Projects of the eleventh request for proposals of the Small Grants Program begin activities



Barra Cocolí in Livingston, Izabal, Guatemala.

Photo by Lucy Calderón/MAR Fund

The twelfth Small Grants
Program request for proposals
was launched online

n August 20th, 2019, the twelfth Small Grants request for proposals was launched thanks again to the generous support of the Oak Foundation, the Overbrook Foundation, The Paul M. Angell Family Foundation, the French Fund for the Global Environment, and the German Cooperation through KfW.

For the first time, proposals were required to be submitted exclusively online. A system was implemented to enable the reception, review, and feedback of the proposals, in an interactive and dynamic way between applicants and project staff.

On this occasion, two areas were considered for support due to their importance: 1) Monitoring and conservation of fish spawning aggregation sites, and 2) Solid and liquid waste management. The first one was not limited to protected areas. For the second one, 18 coastal and marine protected areas prioritized for the MAR were eligible.

The deadline for submitting proposals was October 15th, 2019. A total of 23 proposals were received, divided as follows: 7 from Mexico, 2 from Belize, 7 from Guatemala, and 7 from Honduras.

The Grant and Evaluation Committee met in Guatemala on December 10, 2019, to analyze the submitted proposals. They recommended nine of them for approval, amounting to a total of USD 263,363. Of these, six address spawning aggregations, and three focus on waste management. The Committee made some minor recommendations and, if the possible beneficiaries agree with the suggestions, they will be considered by the Board of Directors for their final approval by the end of January 2020.

On October 7th, 2019, the Belize Marine Fund (BMF) organized its first Biennial Conference in Belize City. During the conference, BMF members and beneficiaries shared their success stories, as well as their experience during the implementation of projects and lessons learned.

The event gathered 50 participants from 24 key organizations, financial agencies, civil society, and government representatives active in the field of marine conservation in Belize.

The conference's agenda included combined presentations with debates and commentaries, where 15 short presentations focused on the four key areas that the BMF has supported since 2017: 1) Efficient marine protected areas (MPA) that contribute to a functional national system of protected areas; 2) Reduction of pressures on marine resources; 3) Effective marketing of Belize's reef at a national and international scale, and 4) Innovation in financial sustainability.

Presentations covered topics related to fisheries management, coral reef conservation and restoration, better efficacy of MPA management, protection of critical species, involvement of youth in conservation, and innovation in financial sustainability through impact investments. The Foundation for the Eco-development and Conservation (FUNDAECO, for its initials in Spanish), the Turneffe Atoll Sustainability Association (TASA), and The Nature Conservancy (TNC) delivered additional presentations.



Coral reefs in Belize.

Photo by The Ocean Agency/XL Catlin Seaview Survey

First Biennial
Conference of the Belize
Marine Fund



During the past decade, the rise in water temperature caused by climate change, pollution, and the impact of fisheries, as well as the unsustainable coastal development, continue to threaten the fragile MAR ecosystem. And the rapid progression of the stony coral tissue loss disease (SCTLD), also known as white syndrome, contributes to this threat.

This disease was first discovered inFlorida in 2014, and by 2018, cases of this disease were detected across the Caribbean and MAR region. The white syndrome, which produced high mortality rates in more than 20 stony coral species, was confirmed in corals of Quintana Roo by mid-2018 and in northern Belize by mid-2019.

MAR Fund, through the BMF and the Reef Rescue Initiative (RRI), held a work meeting on October 8th, 2019, titled "Health and management of Mesoamerican Reefs: Response to the crisis of the coral tissue loss disease," in order to provide input for an action plan that would counteract the effects of white syndrome in the region.

The activity brought together over 50 experts, authorities, and key stakeholders of the MAR region, the United States of America, and

Dominican Republic. During the event, information was delivered on the current condition of reefs regarding the white syndrome and future impact on the Mesoamerican Reef. Also, an exchange of experiences was conducted to respond to this crisis to which there is no ultimate solution yet.

The main topics addressed were the following:

- **1**. History and treatment of the disease, by the Smithsonian Institute.
- **2**. Status of the disease in the region, by the Healthy Reefs Initiative.
- **3**. Management experiences in Mexico, by the National Commission of Natural Protected Areas (CONANP in Spanish).
- **4**. Disease management and successful opportunities, by the Universidad Nacional Autónoma de México (UNAM) and the National Oceanic and Atmospheric Administration (NOAA).
- **5**. Spread of the disease, by the Dominican Reef Network.
- **6**. Communication around the disease, by the Atlantic and Gulf Rapid Reef Assessment (AGRRA).

The various presentations given by

international experts and the group work provided the opportunity to share knowledge, strengthen the communication, as well as to identify priority actions in the region towards the restoration of the coral ecosystem.

Among the following are the proposed priority actions:

- **a.** Engage and inform the national and regional authorities on the situation, including the Central American Commission for Environment and Development (CCAD in Spanish), cooperating partners, and other projects.
- **b**. Prepare local and regional action plans, built on successful cases and experiences.
- **c**. Maintain the platform of the Reef Restoration Network (www.coralmar.org) active and updated and engage more local stakeholders.
- **d**. Produce information material, guides, or manuals for the detection and treatment of the disease.

Additional information on the subjects is found in the following links:

- https://coralmar.org/
- http://bit.ly/2ReyxfN
- http://bit.ly/30HEhBN

Confirmation of the white syndrome in the MAR region brings experts and key stakeholders together

Reef Restoration Network was relaunched in 2017, through a regional meeting held in Mexico. A second regional meeting of the Network was held on the 9th and 10th of October, 2019, in Belize, to exchange information and international experiences on the restoration of reefs, to approve the Network's Bylaws and Strategic Plan and to set up a new Executive Committee 2020-2021. Representatives of over 60 stakeholders and 30 institutions attended the biennial meeting.

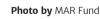
We congratulate the new Executive Committee. whose members are Ana Giró, Guatemala coordinator from Healthy Reefs Initiative; Anastazia Banaszak from the Universidad Nacional Autónoma de Mexico: Lisa Carne from Fragments of Hope, Belize; Gabriela Ochoa from CORAL-MarAlliance. Honduras, and Carlos Rodríguez from MAR Fund. We would also like to thank them for their commitment to the Network's efforts.

Find out more at: http://bit.ly/30NCPOr





Attendants of the Second Biennial Meeting of the MAR Restoration Recovery.





From left to right: Carlos Rodríguez, Ana Giró, Gabriela Ochoa, Anastazia Banaszak, and Lisa Carne, members of the Executive Committee of the Restoration Network 2019–2021.

Photo by MAR Fund

Second Biennial Meeting of the MAR Restoration Network



Participants in the training event to respond to damages caused by hurricanes, in the department of Izabal, Guatemala.

Cover of the Early Warning and Rapid Response Protocol to be replicated in the MAR region.

Trainingfor emergency response in the four MAR countries

AR Fund coordinated with The Nature Conservancy (TNC) to develop and implement emergency response actions for reefs in the four countries of the region. The Early Warning and Post-Storm Rapid Response Protocol, developed by TNC for Quintana Roo, Mexico, was the basis for this work, and which MAR Fund adopted to be replicated in the other countries in the MAR.

The protocol includes the profile of emergency brigades and the actions required to ensure a rapid response for reefs, should they become damaged from the impact of hurricanes.

In 2019, MAR Fund put together more than 10 technical and strategic meetings held in Belize, Guatemala, and Honduras for the dissemination of the protocol and to jointly define the needs and opportunities of countries to develop and strengthen response capabilities when emergencies occur.

Moreover, opportunities and the commitment of the countries to adopt this tool were also discussed. Over 50 people have taken part in this process, all representing governmental agencies, municipalities, local NGOs, co-managers of protected areas, researchers, fishermen associations, and the private sector.

The most significant achievements include the negotiation of formal agreements with governments in each country and the forming of coordination committees to implement emergency brigades and training activities in 2020.

Photo by MAR Fund

You can read the complete protocol here: http://bit.ly/38rmMsg

After five consecutive years of work carried out in Mexico, Belize, Guatemala, and Honduras, the second phase of the Project Conservation of Marine Resources in Central America—supported by the German Cooperation through KfW and co-funded by target protected areas—, concluded between June and July 2019.

Target protected areas of this phase were the Manatee Sanctuary State Reserve, in Mexico; the Corozal Bay Wildlife Sanctuary, and the South Water Caye Marine Reserve, in Belize; the Rio Sarstun Multiple Use Area, in Guatemala, and the Turtle Harbour/Rock Harbour Special Marine Protected Zone, in Utila, Honduras.

Mexico

In Laguna Guerrero, Mexico, the president of the honorary Municipal Council of the Municipality of Othon P. Blanco, Mr. Otoniel Segovia Martínez, gave the welcome speech.



Partners and community representatives attended the project's closing event.

Photo by Ana Beatriz Rivas/MAR Fund

Representatives of Sarteneja Alliance for Conservation and Development (SACD), from Belize; Mexican Fund for the Conservation of Nature A.C. (FMCN in Spanish); Pronatura Península de Yucatán A.C. (PPY), Office of Environmental Protection of the State of Quintana Roo (PPA in Spanish), National Commission of Natural Protected Areas (CONANP in Spanish), El Colegio de la Frontera Sur-Unidad Chetumal (ECOSUR), Technological Institute of Chetumal (ITCH in Spanish), authorities of the ejidos in community surveillance and conservation of the protected area, representa-

tives of the local journals, and community members.

In the event, Ana Beatriz Rivas, MAR Fund's project officer presented the key aspects and achievements obtained during the project's implementation. Afterward, a representative of each of the four community projects shared the experience related to their work.

José Juan Dominguez delivered the acknowledgement address and official closing. He is the Director of Natural Protected Areas of the Institute of Biodiversity and Natural Protected Areas of the State of Quintana Roo (IBANQROO in Spanish), implementer of the project in the Manatee Sanctuary State Reserve.

Belize

The project's closure for the South Water Caye Marine Reserve took place in Belize City. Attendants included representatives of the Belize Fisheries Department (project implementer), Ministry of Natural Resources, World Wildlife Fund (WWF), Belize Forest Department, Belize Marine Conservation and Climate Adaptation Project (MCCAP), Wildtracks, Blue Ventures, and the Garifuna WABAFU Fishermen Association.



Ph.D. Teresa Álvarez from ECOSUR.

Photo by MAR Fund

The closing event in Corozal Bay Wildlife Sanctuary, Belize, was held on July 12, 2019. Attendants included representatives of the Belize Fisheries Department, Belize Marine Conservation and Climate Adaptation Project (MCCAP), Audubon Society (BAS), Association of Protected Areas Management Organizations (APAMO), Wildtracks, Blue Ventures, Pesca Tours, Corozal Bay Advisory

Committee, Institute of Biodiversity and Natural Protected Areas of the State of Quintana Roo



(IBANQROO in Spanish), El Colegio de la Frontera Sur (ECOSUR), as well as representatives of the stakeholder communities. A representative of the Sarteneja Alliance for Conservation and Development (SACD), implementor of the project, presented the achieved results and lessons learned. We are excited to see how the project supported and strengthened the SACD's work in the area.

Guatemala

In Guatemala, the project promoted activities in the Rio Sarstun Multiple Use Area (AUMRS, for its initials in Spanish), located in the municipality of Livingston, department of Izabal. You can read more here: http://bit.ly/37fEOh5



Ximena Flamenco, MAR Fund project officer, presented results of the work led by her, in Livingston, Izabal, Guatemala.

Photo by MAR Fund

Honduras

In Honduras, Phase II was focused on Utila island. The closing event took place at the office of the Bay Islands Conservation Association (BICA-Utila), co-manager of the area. Please visit: http://bit.ly/2RC1KQV



Edoardo Antúnez from Bica-Utila, in Honduras, opened the project's closing ceremony.

Photo by MAR Fund

Emotional closing events of the Project Conservation of Marine Resources in Central America, Phase II



From left to right: Joseline Sacché, Luis Enrique Farfán, Melissa Mazariegos, Nick Whittingham, and Claudio González.

Photo by Lucy Calderón/MAR Fund

MAR Fund contributes to promoting the 4Rs approach (Refuse, Reuse, Recycle, and Recover) AR Fund provided support to the First Summit of Youth Leadership for the 4Rs to empower the Guatemalan youth in six of the 17 Sustainable Development Goals (SDGs), promoted by the United Nations. The event was held in August 2019, in Guatemala City. Semillas del Océano led the activity which had funding from the British Embassy in Guatemala and MAR Fund.

As part of this initiative, groups of youths were awarded with funding from what is known as "Mini-grants: the 4Rs," for projects with environmental impact.

To learn more about the summit mentioned above, please visit the following links:

- a. http://bit.ly/30GolaN
- b. http://bit.ly/2v6mQiB
- c. http://bit.ly/37h4PMU

Raising awareness on the current state of the MAR is vital so that more people in the four countries encompassing this region learn about its importance in daily livelihoods.

To that end, MAR Fund provided a small financial contribution to the Mesoamerican Reef Reporting Project, which Earth Journalism Network (EJN) of Internews launched in 2019. For more information, please visit: http://bit.ly/2v32MO7

With MAR Fund's grant, two Guatemalan journalists complemented the funding granted by EJN to be able to publish the articles about the MAR.

The links to the journalistic articles prepared with the support of MAR Fund are the following:

a. http://bit.ly/38prdntb. http://bit.ly/2GnYLXf



Coral reefs in Guatemala.

Photo by Ana Giró/HRI

MAR Fund contributes to the production of media coverage on the MAR