



THE MESOAMERICAN REEF (MAR)

The MAR region encompasses the largest coral reef in the Atlantic Ocean and is part of the interconnected system of coastal habitats and currents that extends throughout the wider Caribbean. Its coastline stretches for 1,000 kilometers from the tip of the Yucatan Peninsula in Mexico to the Bay Islands in Honduras, passing through Belize and Guatemala. It is home to some of the world's most stunning beaches and vibrant waters, with an extraordinary array of over 500 known fish species. It harbors some of the largest remaining populations of manatees and sea turtles, possibly the largest known aggregation of whale sharks, and extensive mangrove, sea grass, and coral reef ecosystems.

The MAR region is culturally diverse, including Miskito, Garifuna, Caribbean Creole, K'ekchi, Mopan, Yucateco Maya, and Mestizo peoples. One to two million people live on its coasts and islands, and their livelihoods depend on the health of the reef. We must find a way to manage ecosystems in the region to ensure that they continue to provide important environmental services and support sustainable human development.

FACTS

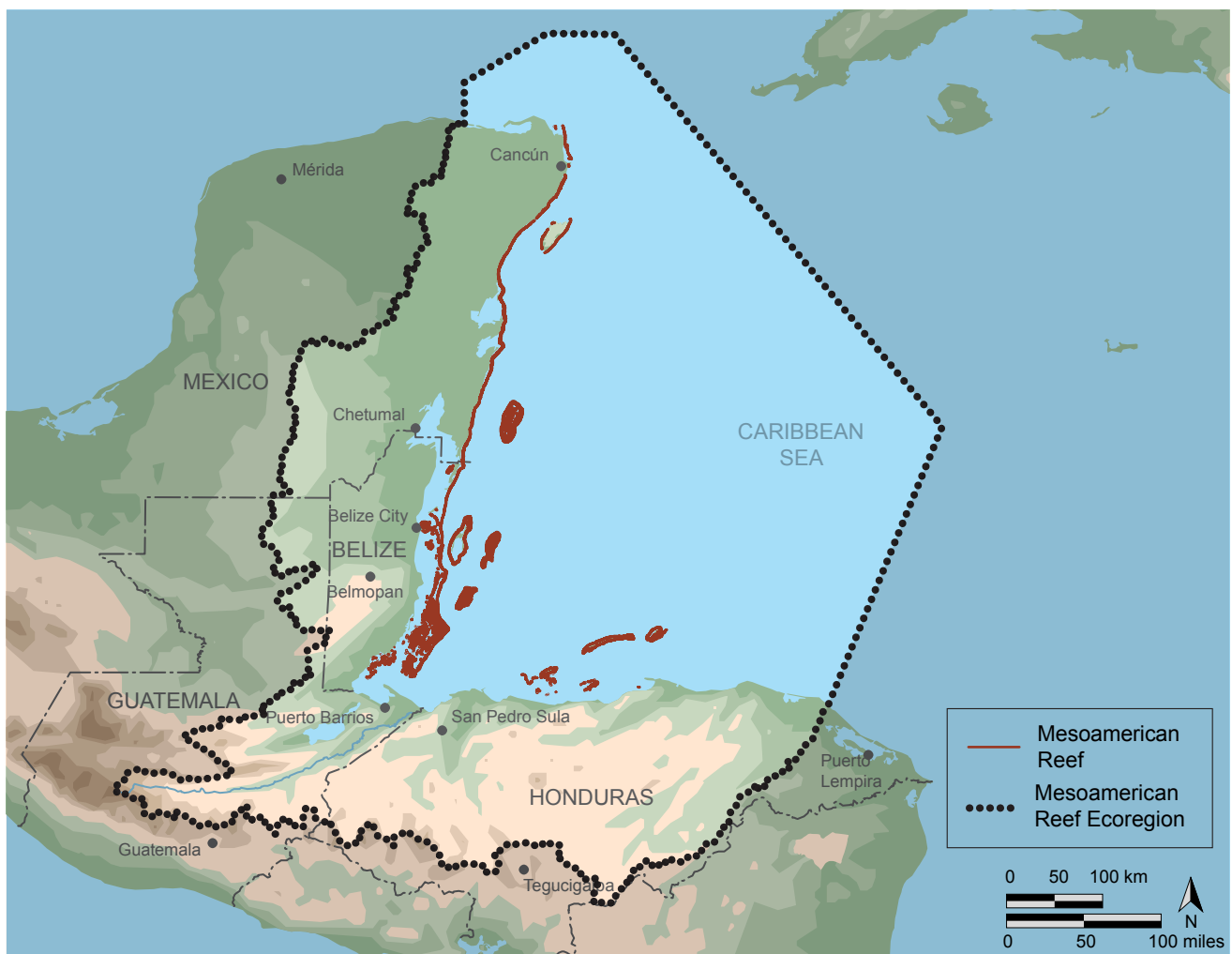
- Largest barrier reef in the Atlantic Ocean.
- Premiere tourist destination with an estimated 15 million visitors per year.
- Strategically important for the coastal communities and national economies around the reef.
- Provides food security for local inhabitants.
- Acts as a natural barrier against beach erosion, storms and impending Global Climate Change.
- Along the shores, mangroves are nurseries for fish and shellfish, provide habitat for shorebirds and protect coastal areas from the damage associated with hurricanes and strong storms.
- The MAR provides a unique opportunity for innovative international and interinstitutional coordination for conservation and sustainable development.

THE CHALLENGE

As in many regions of the world, the MAR is constantly threatened by coastal development, habitat loss, unregulated tourism, overfishing, and pesticides from large-scale agroindustry draining into the sea, among others. Climate change exacerbates the effects of other threats and diminishes the resilience and capacity of ecosystems to sustain biological processes.

FACTS

- Marine Protected Areas (MPA) encompass 57% of the territorial seas of the four countries within the MAR region.
- Over 70 marine conservation and research organizations are actively collaborating through networks including the Healthy Reefs Initiative and the Mesoamerican Reef Restoration Network, with a quantified improvement in reef health achieved over the last decade.
- The Belize Barrier Reef Reserve Network + Sian Ka'an and Banco Chinchorro Biosphere Reserves in Mexico are **World Heritage Sites**.
- Five simultaneous connectivity exercises in the MAR (**ECOMES**) have been developed to study the recruitment of fish larvae in 12 protected areas.
- **Lion Fish**: A Regional Strategy for the **Control of Lionfish in the MAR**, was developed in 2014.





MESOAMERICAN REEF FUND

OUR MISSION

To enable innovative, transnational solutions to critical Mesoamerica reef issues by providing meaningful, long-term financial support and trustworthy reef management advice so that future generations can enjoy and benefit from a thriving reef system.



OUR CONTRIBUTION TO CONSERVATION

In 2004, environmental funds in Mexico, Belize, Guatemala and Honduras came together to establish the Mesoamerican Reef Fund (MAR Fund) an institutional coalition and financial mechanism created to plan, fund, and promote strategic solutions for the entire MAR ecoregion. MAR Fund's programmatic activities are driven by the establishment and strengthening of a network of priority coastal and marine areas—the backbone of the reef system—and support to initiatives that maintain the integrity of the region's ecosystems and the communities that depend on them. MAR Fund currently focuses on a network of 14 priority MPAs distributed across the four MAR countries. In 2016, 14 additional areas were prioritized, for a total of 28. Through its programs and the grant support it provides, MAR Fund promotes adaptation to climate change, conservation and sustainable use of natural resources, and permanence of connectivity functions and ecosystem services.

MAR Fund is based in Guatemala and has a dedicated staff of 14 people. Thirteen years since its founding, the Fund has established strategic alliances with key conservation stakeholders and is considered among the most important coordinators of conservation efforts in the MAR region. MAR Fund has successfully mobilized financial resources for the region, including \$21.8 million of project funding and the establishment of a \$26 million endowment. In 2016 MAR Fund secured a \$10 million endowment challenge grant from Oak Foundation to provide long-term financial sustainability for marine resource management and conservation initiatives in Belize—and has committed to raise \$15 million in endowment matching funds.

PROJECT “CONSERVATION OF MARINE RESOURCES IN CENTRAL AMERICA”

MAR Fund provides strategic, technical and financial support for planning, managing, and optimizing the hard work managers, partners, and communities involved in the region’s conservation efforts. Key MAR Fund programs include:

- Re-granting in the Mesoamerican Reef. This is a \$2 million, 4-year program to re-grant to seven longstanding Oak Foundation partners working on different strategic aspects of marine resources management in the region.
- Community Fisheries Program. Promotes community participation and co-management of local fisheries and supports the design, establishment, and operation of fish replenishment (aka no-take) zones—a total of 15 to date, contributing to the unofficial goal of fully protecting 20% of the region’s territorial waters.
- Small Grants Program. Through this channel, MAR Fund supports the conservation, effective management, and sustainable use of MPAs. This program has funded 72 projects developed by over 63 organizations in the region, including local communities, government organizations, NGOs, and academic institutions. Over \$2,026,200 have been approved and 1.4 times that amount has been leveraged.
- Reef Rescue Initiative (RRI). The RRI was established to increase the resilience of and to restore damaged and degraded reefs. An important undertaking made possible through a €7million endowment grant awarded by the German Cooperation through KfW and developed in cooperation with the Central American Commission on Environment and Development (CCAD).

MAR Fund has supported and participated in establishing strategic regional alliances, such as the Connectivity Network and the Reef Restoration Network. It is a partner of the innovative Healthy Reefs Initiative, and the MAR Leadership Program.

Co-financed by KfW, these **10 million €** initiative supports **9 coastal and marine protected areas** from the initial network of **14 sites**.



1. Protection and conservation of the coastal and marine ecosystems.



2. Better management practices and sustainable use of the coastal and marine resources.



3. Small grants, communication and effective exchanges for the adoption of new practices. It provides funding through small grants, to the 14 priority protected areas.

In 2016, in collaboration with the Mexican Fund for the Conservation of Nature (FMCN), HRI and MAR-L, MAR Fund proposed a blue economy approach for the MAR, where effective protection and sustainable use of the region’s “blue” resources are the pillars for its future development. To that end, MAR Fund, the Caribbean Biodiversity Fund and the Pacifico Platform, all members of the Caribbean – Pacific Alliance for Marine Conservation Finance, have launched the Blue Challenge in three marine regions: the Mesoamerican Reef, the Caribbean Sea and the Eastern Tropical Pacific, respectively, to demonstrate the sustainable blue economy concept.

Our mid-term goals include coordinating and supporting alliances around climate change mitigation and adaptation, increasing and diversifying funding sources for the region. Our next capital campaign goal is \$50 million to integrate scientific knowledge, sound leadership, human capital and conservation finance at a regional scale.



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Reef Fund



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MESOAMERICAN REEF FUND

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FONDO MEXICANO
PARA LA CONSERVACIÓN
DE LA NATURALEZA, A.C.
INSTITUCIÓN PRIVADA

MESOAMERICAN REEF LEADERSHIP PROGRAM

ABOUT THE PROGRAM

Building a new generation of conservation leaders in the MAR region is the essence of the Mesoamerican Reef Leadership Program (MAR Leadership). Founded eight years ago by the Mexican Fund for the Conservation of Nature with the support of the Summit Foundation, the program seeks to scale-up environmental and socioeconomic impacts in the MAR by strategically strengthening local capacities and the leadership skills of individuals to design and launch effective, high-impact conservation projects. It also provides a platform to promote knowledge exchange and the deployment of a network of conservation practitioners with a regenerative mindset and framework.

MAR Leadership fills an important gap by focusing on people from Mexico, Belize, Guatemala and Honduras who demonstrate leadership potential and by providing them with training, mentoring and networking opportunities that may otherwise be inaccessible to them.

FACTS

- 18 multinational synergies arise from relationships developed in the program.
- 91% of MAR Fellows are currently working in conservation.
- 36 fellows have advanced to positions of greater influence and responsibility.
- 27 fellows are working in MPAs.
- 10 fellows are advocates in important public policy processes in their countries.

WHERE OUR FELLOWS COME FROM

71
Fellows



Guatemala (20.83%) Honduras (20.83%)
Mexico (34.72%) Belize (23.61%)



Academia (2.78%) Government (29.17%)
Private Sector (9.72%) Independent (12.50%)
NGO (45.83%)

Gender Representation



M (48.57%) F (51.43%)

2010 - 2018 HIGHLIGHTS

50

Projects Implemented
in the region



18

Cross-project
collaborations

36

Fellows have advanced to
positions of greater influence
and responsibility



26

Workshops
held



MAR LEADERSHIP
Mesoamerican Reef Leadership Program

HOW WE WORK

Every year, Fellows with diverse backgrounds are selected from the four MAR countries to participate in the program. They include local tourism entrepreneurs, government employees, community leaders, architects, biologists, lawyers, communications experts, and others whose professional endeavors are directly connected to the coastal and marine environment of the region. Fellowships are 12 months long and consist of in-person workshops; individually tailored training programs; peer-to-peer learning and collaboration; mentoring; technical assistance; and networking opportunities. The program provides training on project design, fundraising, strategic communications, public speaking, policy advocacy, negotiation and conflict resolution, and personal development.

Each cohort focuses on a theme linked to the conservation needs of the reef: 2010, coastal development and tourism; 2011, sustainable fisheries and the establishment of marine protected areas; 2012, the establishment of a network of multifunctional marine reserves; 2014, integrated solid waste management; 2015, mangrove valuation and conservation; and in 2016, the Blue Economy as a model for sustainable development.

MAR-L's theory of change is that by strengthening the leadership skills of local leaders and providing them with professional mentoring and strong networking capacities, they will transform their ideas and skills into strategic actions that have measurable impacts towards the development of an environmentally-responsible economic model and effective conservation initiatives in the region.

OUR 6-STEP PROCESS



@MARLeadership



@MARLeadership

MAR LEADERSHIP PROGRAM

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HEALTHY REEFS



OVERVIEW

The Healthy Reefs Initiative (HRI) is a globally unique international collaborative program of coral reef-focused research, management and conservation organizations dedicated to safeguarding the Mesoamerican Reef. Our vision is to improve our scientific understanding of the functioning of the MAR, and enhance its health through science-based adaptive management actions. HRI has engaged 72 key marine conservation, government, private sector, and academia organizations; coordinating the latest scientific input into management efforts, thereby improving the collective success of all of these important conservation programs. Through our proven and effective use of the media, we are creating a more informed, powerful and dynamic stakeholder base for reef conservation in the MAR.

HRI tracks the health of the MAR ecosystem to improve its condition, evaluate the effectiveness of its management and draw the connection between reef health and human well being. Over the last ten years, the Initiative's biennial **"Report Cards"** have graded the health of the Mesoamerican Reef based on survey data collected from over 300 sites. The novel **Eco-Audit** program then evaluates government and NGO efforts to increase the health of the reef by following the Initiative's data-based recommendations. These tools

help leaders and managers make informed decisions impacting the reef, ensuring its long-term integrity while continuing to support the activities that sustain the millions of livelihoods and valuable economies of our four nations.

ACCOMPLISHMENTS

In its first decade, the Initiative developed and deployed a comprehensive framework for evaluating and improving reef health – the first in the world. Its network of partners has grown to include all of the Marine Protected Area management agencies in the region. Currently, the Initiative is the only group that regularly convenes regional meetings of conservation managers to collaboratively generate evidence-based, consensus-driven reef management recommendations. Additionally, the Initiative accrues imperative longitudinal data that not only contributes to a greater understanding of reef health, but also of sustainable fisheries, climate change impacts, and marine science in general.



4 countries

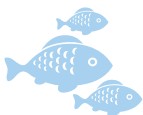
IN COLLABORATION TO
IMPROVE ECOSYSTEMS:
MEXICO, BELIZE,
GUATEMALA AND
HONDURAS

10 years

OF TEAMWORK, RESEARCH
AND COLLABORATION



854 FIELD SURVEYS
ASSESSED



57% of the territorial
sea protected in
designated MPAs

57%



Parrotfish fully protected in
Belize, Guatemala and the
Bay Islands, Honduras



Coral cover increased
from 10% to 18%



Commercial and
herbivorous fish biomass
increased



Reef Health:
Improved from 'poor' to
'fair' (2.3 to 2.8 out of 5)



OUR CORNERSTONE STRATEGIES

Healthy Waters – Clean, intact, healthy watersheds and coastal waters are needed to support vibrant coral reefs, fisheries, human health and local economies. HRI's Healthy Waters strategy focuses on innovative and catalytic activities that help improve sewage treatment and reduce contamination from land run-off.

Healthy Communities – Our human communities in the Mesoamerican Region depend on productive ecosystems for livelihoods, coastal protection and food security. The Healthy Communities strategy aims to improve our understanding of the linkages between human and ecological health.

Healthy Fisheries – Our Healthy Fisheries strategy includes activities supporting ecosystem-based fisheries management, including the region-wide protection of parrotfish, important fish spawning sites, and the promotion of fully-protected fisheries replenishment zones.

Healthy Futures – Our region's marine biodiversity and people's livelihoods are dependent on maintaining healthy coral reefs for the long term. This strategy is testing new innovative solutions to help restore and promote healthy coral reefs in a changing climate, including developing a regional Coral Bleaching Response Plan, testing new approaches to restore herbivory, involving *Diadema* urchins and the Caribbean King Crab, supporting partners with coral nurseries, and promoting reef resiliency.

OUR COLLABORATIVE APPROACH

The Healthy Reefs Initiative promotes a unity of vision across national borders for increasing reef health throughout the extensive system of the Mesoamerican Reef.

There are a number of unresolved issues that must be addressed to ensure the Mesoamerican Reef's long-term recovery. In our second decade, HRI will strengthen our data collection and analysis efforts to better understand concerns such as the decline of large-bodied fish, the impact of climate change and connections between reef and human health. Working more closely with Smithsonian scientists and educators, our Initiative aims to dramatically increase scientific collaboration regionally and globally.

Our efforts will continue to raise capacity and collaboration among marine conservation practitioners in the region, while also enhancing public awareness and political will through effective use of the media. This approach is filling an important informational gap and supporting implementation of effective marine conservation actions across the region.

HRI is going beyond innovative reporting on ecosystem health (biennial Report Cards) and management effectiveness (periodic Eco-Audits), by engaging with international researchers to advance and promote the latest science in connectivity, restoration and resiliency across the region through our network of partners. Through these actions we plan to continue increasing the health of the Mesoamerican Reef as we have done over the past decade, thereby sustaining and supporting our local communities and providing a Meso-amazing jewel for our global benefit.

OUR PRODUCTS



DATABASE WITH
256
USERS



TRAINING OF
181
FIELD BIOLOGISTS



72
PARTNERS



5
REPORT CARDS



3
ECO-AUDITS



14
MONITORING
TRAINING
WORKSHOPS



@HealthyReefs



@HealthyReefsForHealthyPeople



Healthyreefs

HEALTHY REEFS

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