



MIGRAMAR ACTIVITY REPORT



MIGRAMAR

Content

.

4

Introduction

6

Projects

12

Alliances

16

Visibility

19

Research and Publications



Introduction

This document summarizes the main activities and accomplishments of the MigraMar network from September 2018 through May 2019.

About

GOVERNANCE

MigraMar has a well established Board of Directors comprised of James Ketchum (President), Alex Hearn (Vice President), Todd Steiner (Secretary), George Shillinger (Treasurer) and Kerstin Forsberg.

MEMBERSHIP

MigraMar has 20 members; currently there are two organizational members: CREMA and Upwell.

COMMUNICATION

News of MigraMar members publicizing their work is achieved through tags, links, hash tags, mentions and publications shared from the home pages of the members either Facebook or web. On average there are 15 monthly publications in networks reinforcing the work of the members and also the achievements they have had, in addition to publications with content of value to the work of MigraMar. In Facebook we reached 8,000 followers with 7,918 likes, which represents 297 new followers, giving us an average increase of 87 unpaid monthly likes. (Previously we had an increase of 30 unpaid likes per month). The daily reach of the publications oscillates between 6986 and 7100 and there is a general reach of the page over the last monthly period of 17,702 people. On Instagram, MigraMar reached 145 new followers with a final total of 1,060. Average daily reach of 660 accounts, 75 likes average on publications.

Projects

MIGRABASE

The MigraBase is finished. All metadata is logged in. We are currently entering data of tags in the receivers. Tiger sharks in Galapagos are finalized, we have several tests for mapping and other tools. We still have to work out the feature in the platform for sharing with other researchers. In the next following weeks we will finalize uploading all data of Galapagos and Cocos, then we will solicit that all network researchers do the same. As mentioned before, during our annual assembly it was agreed by MigraMar that MigraBase will continue to serve as repository of actual information but as of 2019 we will work with the global database of OTN.



MEXICAN PACIFIC



MigraMar's Mexican Pacific Project aims to create a series of conservation agreements along three potential swimways (MigraVias). These will connect the Gulf de California to Revillagigedo (México), Revillagigedo to Clipperton (México – France), and Revillagigedo – Rocas Alijos – Guadalupe – Channel Islands (México – EE. UU.)

A first workshop was held in Mexico City to present MigraVias of the Mexican Pacific project to recently elected Mexican authorities, French authorities (One of the MigraVias includes French waters), Mexican NGOs working of marine protected areas and staff linked to Mexican fisheries ministry.



The concept of MigraVias was well received and we obtained good feedback, participants are interested in advancing the concept with other stakeholders. James Ketchum and Cesar Peña-Herrera, members of MigraMar presented our current MigraVias project in Galapagos-Coco. New Mexican administration asked for MigraMar to design an innovative conservation initiative that could include incentives, change in fishing gear, timing, etc.

From January to April, we organized two international workshops in Mexico (La Paz, B.C.S and Ensenada, B.C) The objectives of these workshops was to engage stakeholder (scientific, non-governmental, academia, productive sector and government) on contributing to the MigraVias project, and to gather the most complete information about the migratory species that use the Mexican MigraVias.

As part of the basic research carried out by MigraMar contracted scientists, the garnered information so far suggests that high levels of connectivity are present.

Our data mining process has completed the following milestones:

- Compilation of peer-reviewed publications on the species already identified as users of the possible swimways is being undertaken. Topics include migratory routes, movements, genetic and isotopic connectivity, fisheries, and life history.
- Re-compilation of oceanographic information of the areas proposed as swimways is being undertaken.
- Preliminary analysis of information necessary to generate the technical justification is currently being undertaken.
- Species currently identified as users of these MigraVias are the following: Megaptera novaeangliae, Mobula birostris, Sphyrna lewini, Carcharhinus galapagensis, Carcharhinus falciformis, Galeocerdo cuvier, and Rhincodon typus. It is important to note that most of these species are vulnerable and currently under threat in different countries, and facing threats when migrating.



Government, academia and NGOs - La Paz workshop



Participants of the Ensenada workshop

Coco-Galapagos

MigraVia

Project

COCO-GALAPAGOS MIGRAVIA

In 2018 MigraMar produced relevant scientific documents to support governments and decision makers to advance in the creation of this bi-national swimway, a biological justification that lays down the science behind the concept of a marine corridor. An economic analysis was also produced to identify the most relevant economic actors and the monetary value of the activities they carry out as well potential economic impacts.

During this period January – April, MigraMar produced two substantial scientific documents that further on the research of this area: A base line analysis and a monitoring system for the MigraVia.

This report presents the concept of MigraVía Coco-Galápagos as a response to the need to protect ecosystem integrity for open waters and reefs that connect regional MPAs. The report describes the MigraVía

as the next logical step to strengthen state conservation efforts by Ecuador and Costa Rica and respond directly to various public and private initiatives in the region.

The report study synthesizes the technical information and evaluates the feasibility of creating an area for the biological and ecological conservation of migratory species in this region.

These reports allow us to define where does this biological corridor stand at the present time regarding its conservation status, it defines a series of physical, biological and anthropogenic indicators. The monitoring system defines the type and frequency of scientific research, data gathering that is required in order to evaluate if the conservation measures taken are yielding better results of the defined indicators.

Hammerhead nurseries

NEW NURSERY SITE IDENTIFIED IN SANTA CRUZ GALÁPAGOS
(IMAGE FROM DRONE)

This 3-year project aims to implement conservation strategies in key nursery sites for hammerhead sharks in four countries of the Eastern Pacific. This first year, the project's goal is to identify at least three nursery sites in Ecuador, both in Galapagos and in the mainland, define and share a standardized monitoring methodology with other Eastern Pacific countries and start conservation strategies with local fishermen in Ecuador through an outreach and environmental education campaign that highlights direct benefits to communities associated with nursery ground conservation.

From January to April, information was collected in eighteen fishing communities in the provinces of Manabí and Esmeraldas,

in continental Ecuador, carrying out directed surveys and searching for information in fishing sites.

Information was collected from 142 fishermen from eighteen fishing coves in the northern, central-north and southern areas of the province of Manabí. In the Galapagos Islands, a new aggregation site was identified as a probable breeding site for hammerhead sharks, where approximately 20 individuals were counted, including neonates and juveniles, five of which were marked with internal and external devices for subsequent follow-up and monitoring.



Alliances

PARTNERSHIPS AND ALLIANCES IS
A BIG STRENGTH OF MIGRAMAR

MigraMar joined the alliance of 57 signatory parties from academia, non-profit sector, retailers, fisheries and governmental agencies in a bid to stop shark finning from being “tolerated” within Marine Stewardship Council (MSC) certified fisheries. The letter expressed concern with the Conformity Assessment Bodies (CABs) for having failed in implementing the MSC standard linked to shark finning.

MigraMar actively participates in CMAR Science group. The group has finalized and shared amongst participants a protocol for the monitoring of pelagic species in MPA that allows the evaluation of abundance, spatial/temporary distribution and changes in sizes of specimens along time. Three techniques are proposed: Baited Remote Underwater Video Systems or BRUVS, visual census and a citizen participation program.

The information gathered is intended to strengthen management and conservation efforts of pelagic species.

MigraMar presented the MigraVia project during the past meeting of CMAR technical committee. Cesar Peñaherrera, our science coordinator, recently hired, presented via teleconference to all CMAR members the concept of the MigraVia, and the scientific research that has been done so far. We will be meeting with the new pro-tempore secretary of CMAR as soon as he/she is appointed in order to maintain our relationship with this important governmental body.

OCEAN TRACKING NETWORK

MigraMar works closely with OTN (Ocean Tracking Network). All past tracking data is kept on the MigraBase (which will be updated in the following months assuring all members have their past information in the system). OTN will financially support some our projects including trans boundary movements of smooth hammerhead shark in Peru and Ecuador, Tiger shark habitat identification and establishment of protected nurseries for hammerhead sharks in Colombia.



YACHT AID GLOBAL

MigraMar has also established an alliance with Yacht Aid Global that supports with vessels, staff and equipment to conduct research expeditions. We are planning on three different expeditions for this 2019. During May 5 through 10 an expedition financially covered by YAG took place in the Gulf of California that will yield important data and information to advance the Mexican MigraVias project.





**A MoU was signed
with PACIFICO during the annual assembly
of Forever Costa Rica.**

The MoU was signed between Rosario Alvarez (ED MigraMar) and Silvia Charpentier (President of the Board Forever Costa Rica). The MoU was designed with the support of an external consultant (Paquita Bath) and crafted with input from MigraMar Board members (Todd Steiner, James Ketchum and Alex Hearn) and the Executive Director. PACIFICO Board chair (Zdenka Pisculich) and Coordinator (Carlos Chacón).

Visibility

UICN

MigraMar participated in the plenary session of UICN commission of species conservation during the UICN Forum in Mexico City.

The MigraVias project was presented to more than 100 UICN members.

<http://www.foromexicanouicn.org/>

THE ECONOMIST FILM

Together with PACIFICO and The Economist Films, Migramar participated in an expedition to produce a documentary highlighting the importance of marine protected corridors, connecting MPAs (MigraVias); and the effect of climate change on MPAs.

Three members of The Economist are currently joining Todd Steiner, leader of the expedition that is currently taking place.

Results of the expedition will be shared with the network and we expect that this piece by The Economist will bring an enormous exposure to our network.

EARTH X

MigraMar participated in the environmental expo EarthX in Mexico City with a stand and a conference regarding marine conservation. The stand received more than 200 visits.

The conference where MigraMar highlighted the MigraVias project in the Mexican Pacific was attended by at least 100 conservationist who received the initiative with enthusiasm.

<https://www.earthxmexico.org/>

WORLD OCEAN SUMMIT

Organized by The Economist Group in Au Dhabi, UAE. The World Ocean Summit received more than 900 representatives of government, business, academia and civil society from over 60 countries assembled to discuss a variety of topics including blue economy, blue bonds, green gas emissions from the shipping industry, aquaculture and its development in Africa and Asia and the polarizing topic of deep sea mining.

Last session included commitments from various institutions, governments and corporations advocating for a strong carbon and polymer tax.

<https://www.woi.economist.com/world-ocean-summit/>

During the first evening of the summit a documentary film featuring MigraMar's work was presented to all participants. <https://www.youtube.com/user/EconomistMagazine/videos>. Important connections with potential allies and/ donor were made during the course of the summit, like with The University of Western Australia, the European Investment Bank, Sustainable Ocean Alliance, deep-sea conservation coalition, and others.

MEMBERS

Several of our members have been recognized by a variety of institutions during this period of January through April.



I L E N A Z A N E L L A

Ilena Zanella was recognized with the Whitley Award for her work with hammerhead shark.



R A N D A L L A R A U Z

Randall Arauz from CREMA and MigraMar member earned recognition as one of the 2019 Sea Heroes, an international award by Seiko.



K E R S T I N F O R S B E R G

Was recognized as one of the 50 worlds leaders by Fortune, for her dedicated work in environmental education to local communities on the conservation of giant mantas.



LATIN AMERICAN CONGRESS OF SHARKS, RAYS AND CHIMERAS

Frida Lara, Elpis Joan, Randall Arauz and James Ketchum, participated in the Latin American Congress at Merida Mexico, presenting MigraMar to students of various nationalities.



SANDRA BESSUDO

Presented on the Monaco Blue Initiative, the importance of the Island of Malpelo and the need of additional protection with a *MigraVia* connecting it to Coiba.



TIERRA BEAT

MigraMar was a featured guest for Mexico City's celebration of earth day. The director, Rosario Alvarez, presented the work of the network in a session shared with Heinrich-Böll Foundation.



BIODIVERSIDAD EN HD

Cesar Peñaherrera and Alex Hearn presented results of our project SHARK COUNT in an event in Ecuador.

Research and Publications

UC DAVIS

Work from MigraMar members was featured in the UC Davis magazine. This research contributed to the expansion of the Revillagigedo marine protected area of Mexico.

PLOS ONE

MigraMar published a scientific paper in PLOS ONE on the movement of scalloped hammerhead sharks at Coco's island, Costa Rica. The research suggests that the Galapagos and Malpelo populations may use Cocos as a navigational waypoint or stopover during seasonal migrations to the coastal Central and South America.

UPWELL

George Shillinger, member of MigraMar in conjunction with researchers from Upwell and UMCES completed a research on a dynamic model for monitoring leatherback turtles, in the hope of reducing the by catch of this ecologically important species.

GOBI

George Shillinger published an article with GOBI magazine about the work of MigraMar and how we inform conservation decisions in the Eastern Pacific.

