

## **Project Update: August 2016**

The sixth field season of our project took place in July 2016 at Holbox Island.

### *Fishers' surveys and interviews*

We have collected 130 field surveys at Holbox Island with information of traditional fishers' knowledge related to historical and current small-fisheries, species caught, changes in fishing technology, and fishers' perception of the future of fisheries.

### *Documentation of past and current fishing sites at Holbox and Chiquila*

We have collected over 100 fishing sites that have current and past importance for small-scale fisheries (ssf). Currently we are processing the data with GIS tools and we are defining the criteria for the classification of these sites based on the type of ecological habitat.

Preliminary data of this analysis was presented at *The 4th International Marine Conservation Congress, Making Marine Science Matter*, from 30th July – 3rd August 2016 in St. John's, Newfoundland, Canada. The principal investigator of this project, Nadia Rubio received a full travel grant to assist to this conference from the Too Big to Ignore (TBTI) Initiative, a global partnership for ssf. Our project was also invited to participate at the TBTI global workshop on: *"Stewardship in small-scale fisheries: Practices and lessons from around the world"*. We established collaboration with this initiative and some of our results will be part of a global research to understand stewardship actions in SSF around the world. Figures 1 and 2 show some preliminary results presented in our talk at the conference.

### *Scientific Outreach*

We were invited to participate in a community event at Casa de la Cultura de Isla Holbox on July 8<sup>th</sup> 2016. This was a large event for the Island, kids and adults performed traditional dances, and over 250 people visited. Here I talked and exhibited to the community a diversity of pictures related to the fishers of Holbox that have helped us in documenting the history of the Island (Figs. 3-8).

We will have another community event on September 24<sup>th</sup> 2016. This is the first festival dedicated to bird watching at Holbox Island and Chiquila. This activity is gaining strength as an alternative touristic activity. The Yum Balam Natural Protected Area organised this event. I will give a talk related to the historical importance of coastal ecosystem services provided by near shore habitats of the region. Other scientists will be talking about the ecology of birds and the importance of archaeological sites in the region as future tourism alternatives. This event will be an interesting venue where we will continue to disseminate our results to the community.

### *Development of webpage related to the history of fishing at Holbox Island*

We have started to build up the webpage, which will disseminate historical and sociocultural aspects of Holbox fisheries. For this webpage we will be using a diversity of pictures that were taken throughout our fieldtrips at Holbox. The webpage will also have texts from contributing scientists that will narrate the history and sociocultural aspects of Holbox. We are also in

collaboration with local photographer's native from Holbox and Chiquilá, which will be sharing their pictures in the webpage. The aforementioned collaboration aims to enhance local collaboration for the conservation of the island's nature and culture. The webpage is in a very early stage of construction, but we have the hosting and the domain (holbofish.org; Fig. 9) of the page working.

The webpage will have an open access map where people will be able to see our spatial data related to the historical and current fishing sites and the fishery species associated to these sites. The open access map is a section of the webpage that will take a little more time since we will make these results public once we submit the first scientific publication.

*Scientific paper in process*

We intend to submit a first manuscript of our work by December 2016 to the special issue of Frontiers in Marine Science, which will publish papers that participated in the 4th International Marine Conservation Congress.

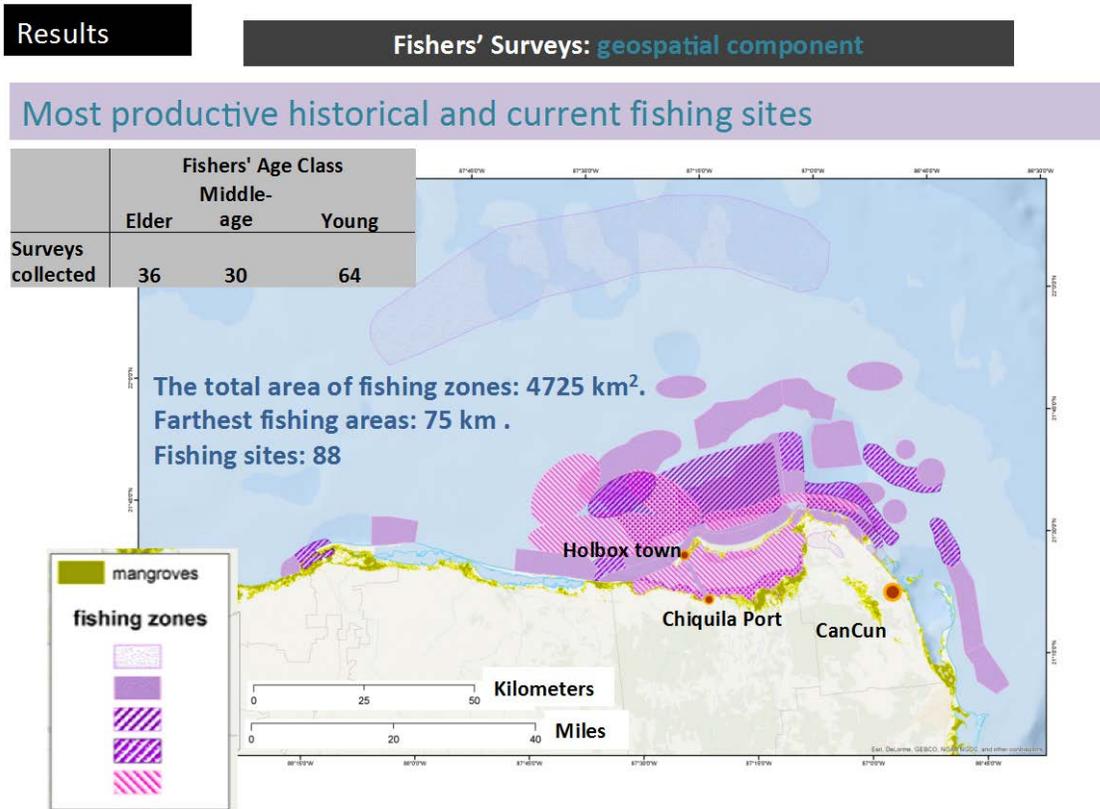


Fig. 1 Preliminary results of the fishing sites documented from our surveys.

Results

Fishers' Surveys: species component

Surveys collected: **Elders** n=36    **Middle-age fishers** n=30

Question: Species that used to be abundant when you initiated fishing and now are not.

Species groups	Count of different common names from surveys
Sharks	12
Immature Sharks	9
Snappers	14
Groupers	12
Pampanos and jacks	7
Small Fish un identified	7
Mojarras	5
Mulletts	4
Corvinas	3
Snooks	2
Grunts	1
Rays and Mantas	3
Sea Turtles	5
Crocodile	1
Edible sea snails	8
Crustaceans	5
Octopuss	3
Marine Mammals	2
Mussels	1
Soft Coral	1
105	

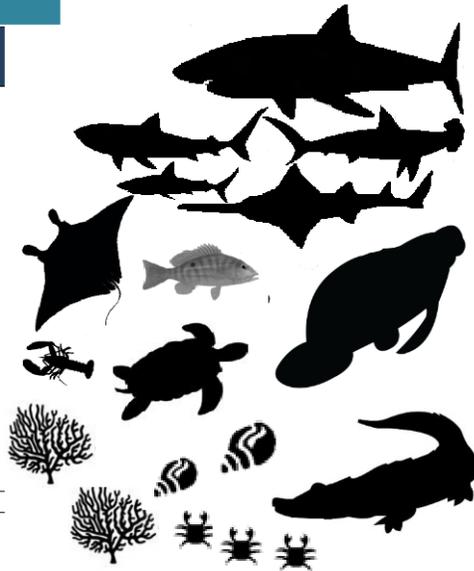


Fig. 2 Preliminary results of species groups that used to be abundant at Holbox Island.



Fig. 3 Kids watch the fishers' photo exhibit at the Casa de la Cultura of Holbox Island.



Fig. 4 People visiting the photo exhibit at Holbox Island.



Fig. 5 Holbox fisher Miguel Zapata and Nadia Rubio.



Fig. 6 People at Casa de la Cultura of Holbox Island.



Fig 7. Fisher Enrique Santana and his wife Concepcion.



Fig. 8 Girl from Holbox Island who visited the exhibit.

Outreach



Figure 9. Homepage of our future website where we will be disseminating our results to diverse audiences.