Project Update: February 2016

This is the second report of the project "Characterization of Mobulid ray fishery in Northern Peru through field observation and DNA barcoding techniques", which is promoted by The Rufford Foundation as a "Small grant", and which is conducted by the NGO Amigos de la Naturaleza and the NGO ProDelphinus. The report covers the period from October 17th 2015 to February 12th 2016.

During the second phase of the project, we conducted two workshops with fishermen from Zorritos and San Jose (two per port) in order to increase awareness on mobulid species, their interaction with fisheries and the necessity of promoting their conservation with appropriate knowledge.

On December 31st , a new Peruvian regulation on the conservation of *Manta birostris* was applied. Through the norm, a ban on *M. birostris* fishery was established along National jurisdictional waters (RM N°441-2015-PRODUCE). In this sense, appropriate identification of mobulid species by fishermen, consumers and inspectors becomes even more necessary. Local people from San Jose and Zorritos expressed their awareness on this ban, and asked for more informative tools on morphological identification of mobulids. I was interviewed twice by a local radio to clarify doubts and give more information about the project. Additionally, we designed a pocket identification guide of Peruvian mobulids and distributed them on both ports and in nearby fishery villages (Fig. 4).

During the reported period, both onboard and land observation continued. Between October and February, we have registered 31 trips in San Jose and 19 trips in Zorritos. In San Jose, 1 observed trip registered catch of mobulids, while in Zorritos 13 trips registered catch of mobulids. Despite this difference in onboard studies, observations in landing sites registered considerable numbers of mobulids landed per port.

Regarding the genetic compound of the project, we continued sampling and collecting tissue of 5 mobulid species per port. The most abundant species in the catches was *Mobula japanica*, followed by *Mobula munkiana*, while the least abundant was *Manta birostris*. On December, we started with DNA extraction and amplification of part of the samples. However, we will wait until March to complete the process in order to cover more samples per species, considering that present day climatologic anomalies (i.e. ENSO) could bring higher numbers of rare species *(Manta birostris* and *Mobula tarapacana*).

Figure 1. Workshops in Zorritos.

Figure 2. Workshops in San Jose.

Figure 3. Sampling and lab work

Fig 4. Identification guide for mobulid species of Peru