

Project Update: September 2015

As the project started an information network of fisherman and fisher women was established from all coasts of Turkey (Black Sea, Sea of Marmara, Aegean Sea and Mediterranean Sea). The main sampling stations were identified with the help of researcher's personal contacts from the areas, Mediterranean Conservation Society, and by field work. The field work started in May, 2015 and during the trips the main aim of the project was explained and a flyer on general information of chondrichthyans (on their life cycle, how they reproduce, their importance in the ecosystem, their status and previously reported species diversity in the area of the fisherman- fisherwomen) were given to local fishermen-fisherwomen (Figure 1 and Figure 2).

Samples were also collected during the trips and till September, 2015 a total of 73 specimen from 13 different species (*Charcharhinus plumbeus*, *Isurus oxyrinchus*, *Sycliorhinus canicula*, *Mustelus mustelus*, *Squalus blainvillei*, *Torpedo marmorata*, *Gymnura altavela*, *Squatina squatina*, *Dasyatis pastinaca*, *Raja radula*, *Myliobatis aquilla*, *Pteromylaeus bovinus*, *Rhinobatos rhinobatos*) were collected (Figure 2), and from these species 5 species (*Mustelus mustelus*, *Sycliorhinus canicula*, *Torpedo marmorata*, *Dasyatis pastinaca*, *Raja radula*) were collected from more than one station from Aegean and Mediterranean coasts. Dissections were done on all the species where possible. During dissections morphological measurements, stomach contents were reported and gonad samples (if the sample was fresh and not frozen, for histological preparations) and tissue samples were collected from all. Some of the tissue samples were send by the fisherman-fisherwomen from Mediterranean stations.

The *Isurus oxyrinchus* specimen was caught for the first time in Foca according to the fishermen in the area. The specimen was 76.5 cm and 2.750 kg and was caught at the entrance of Gediz River at 4 m. A mature *Isurus oxyrinchus* give birth to 65-70 cm young and the sample we obtain being a 76.5 cm in length indicates that it was a new born. A poster was presented on the species in the "18. Su Ürünleri Sempozyumu" an annual symposium in Turkey on fish biology, fisheries and fisheries technologies (Figure 3).

Histological preparations (Figure 4) were conducted on 3 species (*Isurus oxyrinchus*, *Sycliorhinus canicula*, *Rhinobatos rhinobatos*, *Gymnura altavela*) where fresh samples were obtained during dissections. Slide photos of the gonad sample taken from *Isurus oxyrinchus* can be seen in Figure 5.



Figure 1. Photos taken during meetings with fisherman-fisherwomen at field trips in Ozdere, Kusadası and Foca. A: A fisherman cleaning his net and a *Raja radula* caught in the net. B-C: A fish market in Foca where they are selling two *Mustelus mustelus* displayed on the floor of the marketplace. D: A shark was dried and hang from the ceiling of the fish cooperation. E-F: The *Isurus oxyrinchus* caught in Foca and being displayed in a fish restaurants.

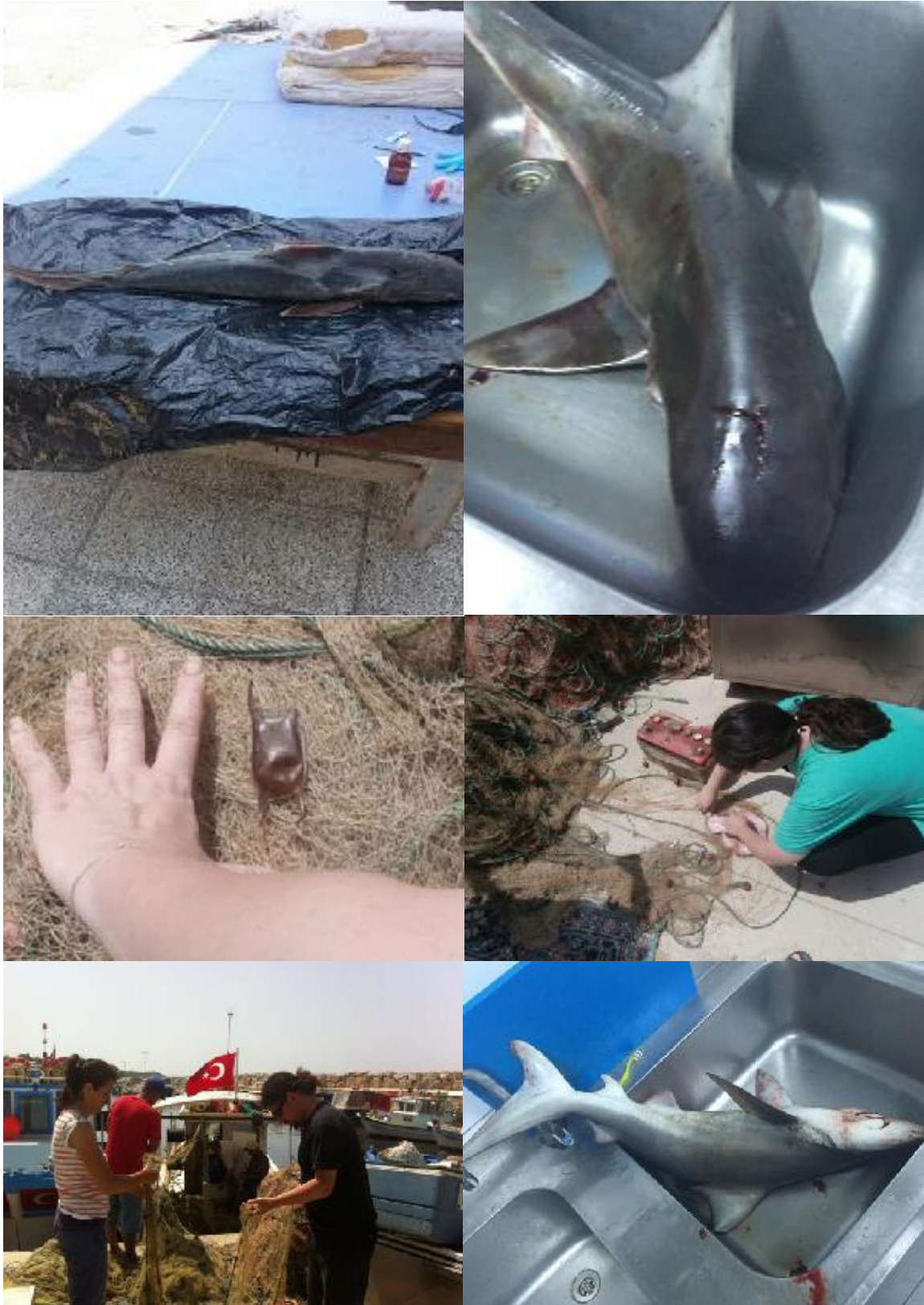


Figure 2. Photos taken during meetings with fisherman-fisherwomen at field trips and some send by fisherman. A: A photo of a *Mustelus mustelus* preserved frozen by a fisherman for the project, send by Vahit Alan from during his field trip to Karatas. B: Photos of a *Charharhinus plumbeus* send by a fisherman, was caught and sold to a restaurant. C: A ray eggcase caught in a net in Ozdere. D: Elizabeth G. T. Eronat helping a fisherman clean his net, a *Torpedo marmorata* caught in the net. E: Fethi Bengil helping a fisherman and his wife clean their net. F: Photos of a *Charharhinus plumbeus* send by a fisherman, was caught and sold to a restaurant.



Figure 3. The poster presented in 18. Su Ürünleri Sempozyumu on *Isurus oxyrinchus*.



Figure 4. A-B: Elizabeth G. T. Eronat and Fethi Bengil during histological block slicing. C-D-E-F: Histological slices of *Isurus oxyrinchus*.

The tissue samples collected during dissections were preserved in 96% alcohol and the samples collected during field trips or send by fisherman were preserved frozen. By using a sample DNA kit for 5 sample DNA extraction was conducted on samples of 5 species (Figure 5). From the extractions 3 species extraction was at the quality needed for barcoding (*Isurus oxyrinchus*, *Squatina squatina*, *Rhinobatos rhinobatos*). The extracted DNA samples are preserved and will be send to a company for PCR services.

The project will also going to be presented as a poster at "Annual Scientific Meeting of the European Elasmobranch Association" in 9-11 October, 2015. In the poster the general information and the progress of the project will be given represented.

Photos of some of the species obtained are given in Figure 6 and photos during the dissections of some species are given in Figure 7.



Figure 5. DNA extraction of 5 species with the sample kit.



Figure 6. From top to bottom: *Raja radula*, *Scyliorhinus canicula*, *Gymnura altavela*, *Myliobatis aquilla*, *Rhinobatos rhinobatos*, *Squatina squatina*, *Pteromylaeus bovinus* and *Isurus oxyrinchus*.



Figure 7. Photos taken during dissections in the laboratory and in the field.