

## The EU LIFE + MIGRATE Project

The EU Life + Project MIGRATE was conceptualised to try to investigate the status of the population of the loggerhead turtle (*Caretta caretta*) and the bottlenose dolphin (*Tursiops truncatus*) in Maltese waters. The project also aims to address existing information gaps by obtaining data about these two species, their migratory routes, feeding grounds and aggregation areas, if they are present, so as to permit the evaluation of their conservation status and contribute towards the identification of areas essential to their life and reproduction. These sites, if found to be present, will be proposed as potential Sites of Community Importance (pSCIs) for eventual inclusion in the European Union Natura 2000 network.

The project was officially launched on the 12<sup>th</sup> February 2013 (please refer to figure 1) and much progress has been made over the past year.

Relevant biotic and abiotic data was gathered from information submitted by various organisations and volunteers who notified MEPA with cetacean and turtle sightings, as well as from anecdotal and historic data. From the provided data maps are being created and modelled to try and identify potential hotspots. Such hot spots will also be further confirmed or otherwise during the scientific boat based surveys carried out by Kai Marine Services, an associated beneficiary of the project, entrusted with the research aspect of the project.



**Figure 1:** The official project launch on the 12<sup>th</sup> February 2013, with the former Minister and former Director of Environment, Project Manager and BOV representative (as co-financier of the project) addressing the media and the stakeholders

These boat based surveys are one of the main actions of the project. Over a 2 year period a 6 month period will be carried out at sea. The first survey was carried out between August and November of last year on board a catamaran. A definite scientific methodology was used to survey the entire territorial waters, up to the fisheries management zone (FMZ- 25 nautical miles) of the Maltese Islands. A total of 2220 nautical miles were covered over a series line transect grids, using both visual and acoustic surveying techniques to ensure the maximum number of 'sightings' possible. For the recognition and differentiation of the individual dolphins, photos identification was used, looking at the animals' dorsal fin, shape and colour. Scratches and scars on their body are unique like fingerprints, making identification of the individuals easier. Logging the different animals allows the calculation of their abundance and group structure studies to be undertaken both for home range and migration. A total of 87 cetacean (dolphins, whales and porpoises) sightings were recorded. Preliminary analysis of the data shows that locally the most common species are the bottlenose dolphin, the striped dolphin (see Figure 2) and the common dolphin. The group size of cetacean encounters was generally small with between 1 to 10 individuals per sighting and it was rare to observe pods of more than 30 individuals. Other cetacean species spotted were the risso dolphin and the sperm whale. The loggerhead turtle had a total of 112 recorded sightings. Six turtles were rescued from longline gear. These were found to be either entangled or with part of the line also ingested. Two of the turtles were freed on site after the they were untangled and looked fit to swim, however, the remaining four were more seriously injured so were taken to shore for veterinarian assistance (see Figure 3) through the help of MEPA and the local eNGO, Nature Trust.



**Figure 2:** Striped dolphins encountered during the summer 2013 survey



**Figure 3:** One of the turtles taken to shore for further Veterinarian assistance

Once the final surveys for this year and data analysis is completed, high resolution maps will be created providing coordinates, a boundary and mapped habitats of important areas (if proven to be present) for the loggerhead turtle and bottlenose dolphin. The mapped sites will then be proposed for inclusion within the Nature 2000 network.

To raise awareness for the project numerous promotional activities are being carried out: Creating the project branding was one of the first actions carried out; the logo was created with two instantly recognizable images of the animals being surveyed and the wording "A Wave of Hope for Marine Life" directly linking these species to the main focus of this project. The logo (see Figure 4) is used on all promotional material from roll up banners used at events to the project website.



**Figure 4:** The project logo

The website (<http://www.lifeprojectmigrate.com>) contains regular updates on the project and a quarterly newsletter is also sent free of charge to any person signing up to the mailing list. To date four newsletters have been issued in 2013 and we are finalising the fifth one for 2014, which will be issued soon.

Posters promoting this project were designed and strategically placed in each and every branch of Bank of Valletta, our supporting partner (co-financier) during the month of April 2013. This increased public exposure for the project with the aim of introducing more volunteers to the project.

Numerous training sessions have been carried out to educate and inform various members of the public involved in sea-based activities. Training was also done for Armed Forces of Malta (AFM) officials involved in maritime issues (please refer to Figure 5). The latter training was organized together with the operations and training branch and hosted at the Maritime Squadron's lecture room facilities. The training sessions gave in-depth information on species identification (cetaceans and turtles), allowing sighting data collected from the public to be more accurate and reliable. There are more training sessions planned this year to various categories of sea-users. One of the sessions for the public and volunteers was also held within the BOV premises.



**Figure 5:** Training for Armed Forces of Malta (AFM) officials held at the AFM, Headquarters & Administration Block of Maritime Squadron MQR, Hay Wharf, Floriana.

With the help of BOV, it was possible to further promote this project through the BOV Valletta Boat show 2013, a show held in September 2013, aimed at attracting prospective and existing boat enthusiasts. At the boat show in an appropriate gazebo for promoters, we presented the project through a looped video also showing the work carried out at sea. The same was also done through the research boat (please refer to figure 6) which was also present on a pontoon during this event where guests were invited onboard to see the work and the equipment used for this research. Flyers were also disseminated to the public to increase awareness of the project and sign up anyone interested in volunteering.



**Figure 6-** The boat used by KAI marine during the research carried out in summer 2013

Additionally, a blog of the survey developed by KAI Marine provided daily updates of the research activities: [www.kaimarineservices.com/lifemigratesurveys](http://www.kaimarineservices.com/lifemigratesurveys).

Volunteers are an essential part of this project, with regular information on sightings from land or at sea being received continuously, increasing the range of data available. There is also the opportunity for volunteers to take part in the boat based surveys during the summer months, they will help record and identify species that are observed. To engage volunteers for the project, adverts were published in local newspapers between August and September 2013. With the purpose of signing up more volunteers this same process will be carried out this year between April and May.

In 2013 the Authority registered 84 volunteers who wished to take part in these surveys, with many of them providing data on cetacean and turtle sightings.