

Report of the CIESM Round Table on

CETACEAN DISTRIBUTION: DATA COLLECTION AND USE

The round table took place from 9 to 10.30. It was moderated by Giuseppe **Notarbartolo di Sciara** (Tethys, Milan). Panelists included (in the order): Pierre **Beaubrun** (EPHE Montpellier), Maurizio **Wurtz** (Genoa Univ.), Konstantinos **Stergiou** (Thessaloniki Univ.).

Aims of this informal round table included: (a) to stimulate the continuation and strengthening of the current CIESM effort of collecting and organising into a database cetacean sighting data from the Mediterranean and Black Seas, (b) to improve collection coverage to be extended as homogeneously as possible both geographically and seasonally, and (c) to generate information tools to take full advantage of the data, through the application of modern data analysis and diffusion techniques and mechanisms.

Giuseppe Notarbartolo di Sciara opened with a brief description of the round table and comments on its aims, introduced the panelists, and recalled the importance of gaining a clearer understanding of cetacean distribution in the Mediterranean and Black Seas not only to promote science, but also to enhance our ability to protect marine mammals, particularly within the framework of ACCOBAMS (<http://www.accobams.org>).

Pierre Beaubrun illustrated the state of the CIESM cetacean sightings database, and described both past and ongoing efforts. Past achievements included the collection of data, started in 1984, through ad hoc CIESM sighting forms in seven languages, which resulted in a database of 15,000 cetacean sightings from a variety of sources, dating back to 1972; the validation of the data; the compilation of the 1972-1992 information into a Preliminary Atlas published in 1995; and the preparation of a careful code of deontology that protects data ownership while allowing and encouraging the sharing of the data (details on these methods are described in full in the Atlas). Since the CIESM Marine Mammals Working Group meeting of January 1996, the ongoing effort has been articulated into two main lines of action: (1) the continuation of the data collection, and (2) the inclusion of effort-corrected data into three new subsets of the database: “normal platforms” (moving at speeds comprised between four and ten knots), ferries, and sightings in straits. Several teams from the Mediterranean and Black Seas have contributed to this new database during the past eight years, so that distribution maps based on an Index of Relative Abundance are being generated. However, coverage is still very heterogeneous, particularly as far as seasons are concerned.

Maurizio Wurtz discussed ways in which the future collection of data may be improved, so that sightings of cetaceans performed either during dedicated cruises (such as those that are being planned at the moment within the context of ACCOBAMS), or from platforms of opportunity (e.g., from research vessels dedicated to other types of research, from whale watching vessels, from ferries, from military ships) can accrue the database in particular as far as seasons other than summer and localities other than the northwestern Mediterranean are concerned.

Kostas Stergiou described the approach adopted by Kristin Kashner, University of British Columbia, who as part of the Sea Around Us Project (<http://www.seaaroundus.org>) is investigating, on the global scale, the potential impact that fisheries may have on marine mammal populations using spatial modeling approaches. Of particular interest for the Mediterranean case was the adoption of the “*relative suitability of the environment*” index (RES index), to support the construction of distribution maps by linking sighting point data to a selection of environmental parameters connected to each data.

During the brief discussion which ensued after the presentations, the following major points were raised:

- It was suggested that the sighting database be made to include monk seal sightings, thereby naming the database “CIESM marine mammal database” rather than “CIESM cetacean database”. Such a decision was seen as particularly appropriate given that (a) monk seals continue to be part of the Mediterranean marine fauna, and their distribution is apparently changing; and (b) the CIESM Marine Mammal Task Force should include monk seal investigations among its objectives. The need to refrain from pinpointing to specific caves containing important monk seal habitat was agreed upon.
- It was recalled that the existence of such a substantial marine mammal sighting database was seen as an important asset for Mediterranean science, and that preliminary contacts with colleagues currently engaged in web-based marine zoological archives (e.g., Census of Marine Life Obis SeaMap) had elicited considerable interest.
- Attention of the meeting was drawn to the MFSTEP (Mediterranean Forecasting System: Toward Environmental Predictions) web pages <http://www.bo.ingv.it/mfstep>, soon to have the resolution of 1/16th of a degree, which provide environmental data (such as temperature, salinity, and current fields) useful for the construction of the RES index (see above).

The meeting concluded that the effort is still very valuable, and even more so now than in the past due to the recent methodological and communication developments. However, it was recognised that embarking on such an effort, to promote the wider collection of data, restructure the current database, apply modern algorithms to the data to generate distribution maps, and finally, enable the widespread use of data through web-based tools, is a demanding enterprise which must be done professionally. It was therefore suggested that a short proposal be drafted by concerned persons and institutions, with an approximate budget and timeframe, to be circulated within CIESM to verify if opportunities exist for launching and funding such an enterprise.

Giuseppe Notarbartolo di Sciarra
Tethys, Milano, Italy
Moderator