

An ACCOBAMS threat-based management approach: identification of relevant Cetacean Critical Habitats in the Mediterranean and the Black Seas

The Mediterranean and the Black Seas are recognized as areas with exceptional marine biodiversity. Nevertheless, the dense human population and intensive human activities make this biodiversity, and more particularly marine mammals, more susceptible to threats.

Conservation of cetaceans has been recognized as a priority both at national and international levels. The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Area (ACCOBAMS) is specifically devoted to cetacean conservation at the regional level. Under this intergovernmental Agreement, Countries commit themselves to preserve all cetaceans and their habitats within the Agreement area. In this context, the Parties and the Scientific Committee of ACCOBAMS have been engaged, since several years, in identifying Cetacean Critical Habitats (CCHs).

Recently, a newer effort, based on the identification of Important Marine Mammal Areas (IMMAs), defined as '*discrete portions of habitat, important for one or more marine mammal species, that have the potential to be delineated and managed for conservation*' was launched in the Mediterranean Sea by the IUCN MMPATF, ACCOBAMS and the Tethys Research Institute.

In the context of cetacean conservation and management in the ACCOBAMS area, it is important to incorporate the concept of actual and/or potential human activities and threats at the population level to address the actual 'critical' aspect. This concept is appropriate to identify sites containing CCH, in need of protection due to the occurrence of significant interactions between cetaceans and human activities, where:

- **Conflicts between cetaceans and fishing activities** have been reported (mainly **depredation** when cetaceans are stealing preys in the fishing gear);
- Significant or frequent **bycatch** of cetaceans is reported;
- Intensive **whale watching** or other marine tourism activities occur (**harassment**);
- **Navigation** presents a potential threat to cetaceans (in terms of **ship strike**);
- **Military exercises** are known to routinely occur;
- **Seismic activities** are known to occur.

Twenty two CCH were adopted in 2010 by ACCOBAMS Parties: 18 in the Mediterranean Sea and 4 in the Black Sea. An initiative aiming at spatially mapping direct threats to cetaceans in the ACCOBAMS area is currently ongoing. This work will allow the identification of new relevant CCH in the ACCOBAMS area, which, once aligned with areas of importance for cetaceans, will facilitate the implementation of sustainable conservation actions at the regional level such as:

- creation of new specific MPAs,
- extension of existing neighboring MPAs,
- implementation of other conservation tools through the following:
 - if areas containing cetacean critical habitats are connected in a coherent regional network, it might be useful to create appropriate management tools such as corridors;
 - if cetacean species are present only seasonally, specific seasonal measures could be implemented;
 - considering the species present and the type of anthropogenic activities implemented in some CCH, specific management tools could be implemented such as IMO recommendations, Particularly Sensitive Sea Areas (PSSA) in areas with an important maritime traffic; Fisheries Restrictive Areas in areas with important interaction with fisheries.