

TOWARDS TRANSBOUNDARY MONITORING AND CONSERVATION OF MOBILE SPECIES WITHIN THE MEDPAN NETWORK

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Abstract

During their migrations, mobile species experience varying levels of protection and face many threats as they travel through multiple countries' jurisdictions and across ocean basins. Some populations are declining rapidly and an efficient network of MPAs could contribute to their long term conservation by facilitating the implementation of management and conservation measures in key habitats of their life cycle.

Keywords: *MPAs, Management, Turtles, Mediterranean Sea*

The Mediterranean Sea is recognised as one of the world's 25 top biodiversity hotspots. Although it represents only 0.7 % of the global ocean surface, it comprises 4 to 18 % of the world known marine species, depending on the taxonomic group considered [1]. The Mediterranean Sea marine life, however, undergoes multiple soaring pressures, mostly due to human activities, such as professional and recreational fishing, maritime traffic, water pollution, coastal development, introduction of non-indigenous species, and offshore oil and gas prospecting and exploitation. In this context, Marine Protected Areas (MPAs) are key tools to mitigate human impacts in coastal environment and promoting sustainable activities to conserve Biodiversity [2]. Mobile and migratory species depend on critical habitats throughout their seasonal movements, including breeding and foraging sites as well as the pathways between them. Loggerhead sea turtles, for example, can be found nesting on a beach in Greece, but forage along the coast of Tunisia, France or Sardinia [3]. These migratory movements, as well as those of a variety of other sea turtles, marine mammals, seabirds and fish, geographically link locations and stressors in distant ecosystems.

Network of MPA managers can thus play a key role for the conservation of mobile species by facilitating the implementation of harmonised protocols and conservation measures at the geographical scale relevant to the ecology of these species. Since 2017 the network of Marine Protected Areas managers in the Mediterranean (MedPAN) is developing and supporting activities, bringing together MPA managers and involving NGOs and researchers working on mobile species (marine turtles in particular), to implement an integrated management strategy for these species. This network, that counts to date 8 founding members, 60 members and 48 partners from 19 Mediterranean countries, is responsible for the management of more than 110 marine protected areas (national parks, marine parks and reserves, Natura 2000 marine sites, regional parks, and many more designations) across the Mediterranean, representing more than 63% of the total of Mediterranean MPAs effectively managed [4, see Figure 1].

Within MedPAN, a Cooperation Framework for monitoring marine turtles, which includes a Data Sharing Charter and a monitoring guide dedicated to answer MPA management needs is currently being developed. This work is coordinated by the Mediterranean MPAs Marine Turtle Working Group (MPATWG), within the MedPAN network. Indeed, Marine Protected Areas (MPAs) managers can adopt measures that help decrease pressures on nesting beaches and sometimes in waters around and by collaborating, they can be increasingly effective at curbing pressures and impacts in mating, migrating, foraging and wintering areas. In addition, MedPAN is organising several workshops in order to identify a path forward incorporating marine mammals in existing and future MPAs' management plan that will contribute to their long-term conservation.

References

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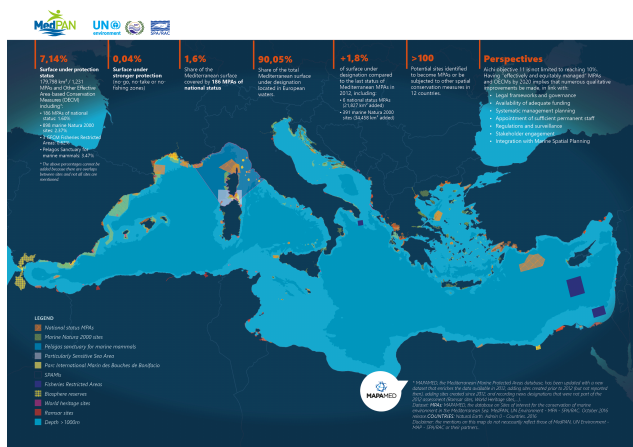


Fig. 1. Key figures of the 2016 Mediterranean MPA status