

1120 **Posidonia* beds (*Posidonion oceanicae*)

Management of Natura 2000 habitats. Summary



Posidonia oceanica meadow edge, with biogenic sands and mysida crustaceans. Photo: C.M. Duarte.

P. oceanica is an endemic species to the Mediterranean Sea that forms dense and extensive green meadows whose leaves can attain 1 meter in height. These underwater meadows provide important ecological functions and services and harbour a highly diverse community, with some species of economic interest.

P. oceanica meadows are identified as a priority habitat type for conservation under the Habitats Directive (Dir 92/43/CEE). They require transparent, nutrient-poor waters and sediments devoid of labile organic matter. Over the last decades, following increased coastal urbanisation and industrialisation, many *Posidonia* meadows have disappeared or have been altered. It is estimated that 46% of the underwater meadows in the Mediterranean have experienced some reduction in range, density and/or coverage, and 20% have severely regressed since the 1970s.

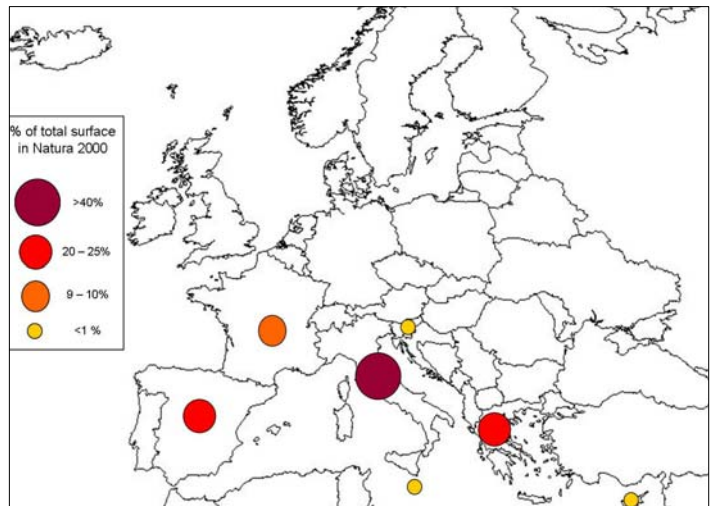
Current main threats to the habitat are related to: water and sediment enrichment (eutrophication), the disruption of the sedimentation/erosion balance along the coast and direct destruction by human modifications of the coastline, degradation by boat trawling and anchoring, salinity increase in the vicinity of water desalination facilities and the proliferation of invasive algal species.

Conservation management is mainly focused on protective measures through the installation of artificial reefs and seagrass-friendly moorings for boats, in order to reduce the erosive pressure of otter-trawling and free anchoring in shallow meadows. The control of invasive species (*Caulerpa taxifolia*, *C. racemosa*) has also been performed recurrently in some *P. oceanica* beds.

There is a need to further develop regulations for activities that have a negative impact on the *Posidonia* beds and other coastal ecosystems (e.g. pollutants level limits and allowed minimum distances of impact sources to meadows) and to implement it through the setting of a vigilance system. Such system could be coordinated with the seagrass monitoring networks already in place.

Seagrass monitoring is a fundamental tool for measuring the status and trends of meadows and is also essential to assess the effectiveness of any protective or recovery initiatives. The number of monitoring programmes on *P. oceanica* meadows has increased in recent years.

The slow growth of *P. oceanica* beds makes difficult recovery, which can take centuries, once the cause of habitat perturbation is eliminated. Recovery measures, like remediation of seagrass sediments enriched with organic matter, or transplanting of *P. oceanica*, are in experimental stage and need further development.



Percentage distribution of the total surface of *Posidonia* beds in Natura 2000

The complete text of the document is available at: http://ec.europa.eu/environment/nature/natura2000/management/best_practice_en.htm

Management of Natura 2000 habitats is a project launched by the European Commission in January 2007 aimed at defining best practices for management of habitat types included in Annex I of the Habitat Directive (92/43/EEC) that need active recurring management. Twenty six habitat types that are representative of different bio-geographical regions have been considered.