



Below is further information related to the marine biodiversity exercise.

Can you explain why *Posidonia oceanica* is important for coastal areas? It is also important for other reasons. Can you give examples?

Posidonia oceanica is a seagrass providing several ecosystem services in coastal ecosystems. Its occurrence determines the provisioning of sheltered areas to several marine organisms acting as a nursery for example for juveniles of several fish and benthic species (amphipods crustaceans, gastropods mollusks, tunicates, echinoderms, polychaetas). Additionally, through their roots this seagrass contributes to erosion prevention and acting as a living lung beneath the surface contributes to oxygen production and can be considered a good bioindicator for water quality assessment.

What can be done to protect *Posidonia oceanica*?

Posidonia oceanica is an endemic species of the Mediterranean Sea and its protection is assured from different legislation in force in the field of marine conservation, acting both at the European Union level (such as the Habitat Directive) and at national level due to the designation of Marine Protected Areas sometimes rightly designed, at least originally, to safeguard this kind of habitat. Protection can be achieved in some ways also through behavioral changes of our daily habits whilst exploring the sea beneath the surface and exploring the coastal areas. For instance, for boaters, this includes avoiding anchoring directly on the seagrass meadows and using the buoys where available. Besides direct human-driven impacts there are also many threats affecting the health status of *Posidonia* meadows: altered sedimentary flow often due to unsustainable coastal development, changes due to river run-off, reduction in water quality and transparency, presence of excessive amount of chemical contaminants and nutrients upload, anchoring, trawling and unsustainable fisheries, coastal aquaculture, explosives, laying cables and pipes, dumping, competition with alien species, overgrazing, regression phenomena due to synergies between different causes. At intergovernmental level, there are different policy tools acting to preserve the seagrass-related habitats: the RAMOGE agreement signed in 1976 and the Annexes to the SPA/BD Protocol aimed at protection of endangered and threatened species, with the consequent action plans adopted in the wider framework of the Barcelona Convention.