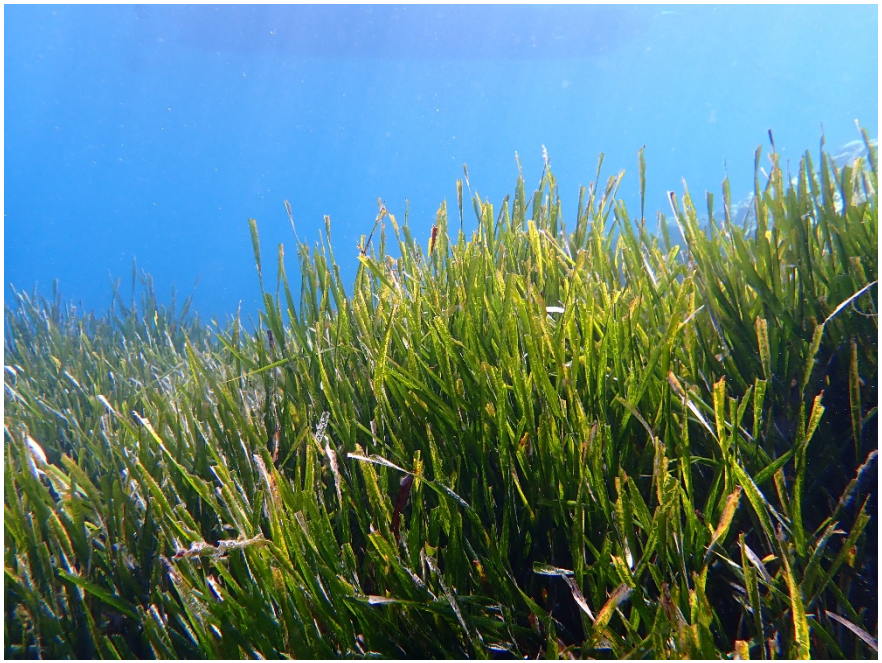
Posidonia Seagrass Conservation

30–40% loss in just 50 years, and 56% decrease over a century

Restoring Posidonia is essential because these underwater meadows provide crucial ecosystem services, vital both for marine life and humans, by mitigating the effects of climate change through their ability to capture carbon and produce oxygen. Their CO2 capture and storage are 17 times more efficient than a tropical forest, and oxygen production per hectare is 5 times higher. They also protect against coastal erosion and serve as vital ecosystems that provide shelter and habitat for many marine species.

Diving federations affiliated with CMAS are generally not the leaders of seagrass conservation programmes but could play key roles. Through their networks of divers, they act as channels for awareness, training, observation, and citizen science.



By Frédéric Ducarme - Wikipedia

The initiative is based on the Spanish project Acción Posidonia and the French app DONIA (prevention of anchor damage). CMAS has called on Mediterranean federations to launch national initiatives within a common framework: knowledge sharing, citizen science training, ecological restoration.

Contact in Spain: Alejandro de Vera (FEDAS) heads the Scientific Committee; the operational manager is Guillermo Álvarez.

Related external initiative: CONNECT POSIDONIE (Race for Water Foundation with GIS Posidonie, France) https://heyzine.com/flip-book/48286d9cae.html

The diving organisations most clearly involved are:

1. CMAS, at the international level;

2. FEDAS, in Spain and in associated restoration projects;

3. FFESSM, in France, through environmental training, clubs, observations, and partnerships;

4. The national CMAS federations of Mediterranean countries, with varying involvement depending on the projects.

The main programmes are:

1. The Mediterranean Action Plan of the Barcelona Convention

Coordinated by UNEP/Mediterranean Action Plan, it provides the common framework for cooperation among the 22 contracting Parties — coastal countries and the European Union. Posidonia is taken into account in marine biodiversity policies, specially protected areas, and ecological monitoring programmes. (unep.org)

2. Action Plan for the Conservation of Marine Vegetation

Implemented with the support of SPA/RAC, this regional plan makes Posidonia seagrass a priority. It specifically includes:

• coordination between Mediterranean countries;

• improvement of mapping and monitoring methods;

• preparation of technical recommendations;

• strengthening the skills of marine protected area managers;

• conservation of Posidonia meadows and banks. (spa-rac.org)

3. The "Mediterranean Posidonia Network"

Created in 2020 at the initiative of the French Biodiversity Office, this network brings together actors from **11 Mediterranean countries**: administrations, scientists, protected area managers, marine professionals, and environmental organisations. Its goal is to harmonise practices, share data, and prepare a common strategy for protecting Posidonia. (ofb.gouv.fr)



By Mark Burgess - Wikipedia

4. The SEMPA Project — 2023-2027

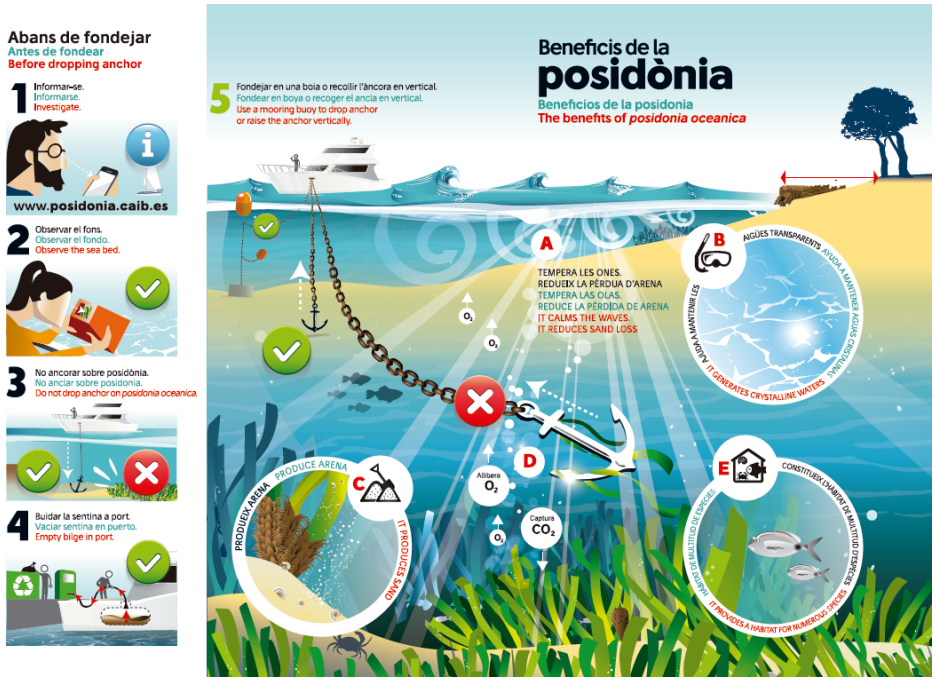
Funded by the European Union and coordinated under UNEP/MAP, the SEMPA project covers Algeria, Egypt, Israel, Lebanon, Libya, Morocco, and Tunisia in particular. It supports the management of marine protected areas, ecological monitoring, climate change adaptation, and local stakeholder participation. (unep.org)

The most advanced countries have national programmes for monitoring and regulating anchoring, while the southern and eastern Mediterranean countries mainly benefit from regional programmes for capacity building and managing protected areas. The current trend is towards increased coordination between countries thanks to SPA/RAC, UNEP/MAP, SEMPA, and the Mediterranean Posidonia Network.

Country	Main conservation measures
France	Marine protected areas, anchoring regulations, mooring zones with lightweight equipment (ZMEL), mapping, scientific monitoring, the DONIA app and the national network **Alliance Posidonia**. (ofb.gouv.fr)
Spain	Protection of seagrass meadows within the Natura 2000 network, marine protected areas and regional monitoring programmes, notably **POSIMED** in several coastal regions. The Balearic Islands also have measures for the surveillance and control of anchoring. (miteco.gob.es)
Italy	Protection through national parks, marine protected areas and Natura 2000 sites; programmes for mapping, monitoring of seagrass meadows and anchoring restrictions in sensitive areas. These actions also form part of the European obligations concerning habitat type 1120*. (op.europa.eu)
Croatia	Mapping of marine habitats, ecological monitoring and integration of Posidonia into the management of marine protected areas. Croatia also participates in the Mediterranean Posidonia Network. (wedocs.unep.org)
Greece and Cyprus	Protection mainly provided by marine protected areas, Natura 2000 sites and anchoring management measures, with efforts varying from region to region.
Malta	Monitoring and conservation of seagrass meadows, notably within the framework of the Mediterranean action plans and marine protected areas. (wedocs.unep.org)

Country	Main conservation measures
Tunisia	Programmes for mapping and monitoring seagrass meadows, management of protected areas and cooperation with SPA/RAC and the SEMPA project. Knowledge of seagrass coverage there is considered relatively advanced compared with several countries in the southern and eastern Mediterranean. (wedocs.unep.org)
Algeria, Morocco, Egypt, Israel, Lebanon and Libya	Strengthening of marine protected areas, habitat monitoring, improved governance and development of national capacities, notably through the SEMPA project and the Mediterranean Action Plan. (unep.org)

The measures generally used are as follows.



Govern de les Baleares

<u>National programmes mainly rely on five types of actions:</u>

1. Ban or regulate anchoring on seagrass beds.

2. Install eco-friendly mooring buoys to prevent anchors from uprooting the rhizomes.

3. Create or strengthen marine protected areas.

4. Map and monitor the condition of seagrass beds, their density, fragmentation, and mortality.

5. Raise awareness among boaters, fishers, divers, and communities. Active restoration — transplanting or replanting fragments — also exists, but it remains more delicate and is generally considered complementary: the priority is still to avoid destroying existing seagrass beds, because Posidonia grows slowly and its natural regeneration can take several decades. The Mediterranean network has also developed specific guidelines for active, assisted, or restorative restoration. (<u>ofb.gouv.fr</u>).