# plemmirio

Legal status Foundation year Marine Protected Area

2004

Foundation text

Ministerial Decree n° 32

Management body

Consortium between the Province of Siracusa and the City of Siracusa

Superficy

2500 ha

Management category (IUCN, 1994) IV-V



Plemmirio has been a SPAMI since 2008 thanks to the exceptionnal wealth of natural resources: 25 priority habitats and 42 species listed in Annex II and a high interest in education for everyone.

### Territory

The Plemmirio MPA is off the Maddalena Peninsula, a few kilometres south of the city of Siracusa; it stretches from Punta Castelluccio to Golfetto della Fanusa.



### Physic features

The Maddalena Peninsula is for the most part a calcarenitic platform featuring major sequences of faults and fissures aligned, and lesser faults. The coastline is formed by cliffs, subject to forms of local erosion, where calcarenitic rockslides are frequent.

In terms of sedimentation, the sea beds are mostly hard rock with occasional patches of coarse sediment.

Starting from the coastline, underwater morphology chiefly features a hard substrate outlined by a series of terraces alternating with submerged inlets and presenting loose sediments composed mostly of coarse sand and debris.

## Specificities and importance

The intertidal zone (0-15m) and its coves and caves, contain a photophyllic and a sciophilous association, considered high priority habitats. The mid-tide zone (15-30 m) is characterized by Cystoseira species and Flabellio-Peyssonnelieturn squamariae. Between depths of 30 to 50 metres, on the detritic bottom, the biocoenosis of the coastal detritic strip spreads across the whole area and contiguous to the mid-tide zone Algae, with the coralligenous biocoenosis and beyond -40 metres, is bound above by the Posidonia meadowand below by the coastal detritic bottom.

At Punta Tavernara, between depths of 36 and 45 metres, there is a sciophilous population, colonized in a higher layer by a population of *Phyllariopsis brevipes* due to very strong currents. On loose substrates, we find the meadow of *Posidonia oceanica*, sometimes discontinuous, and alternates with the biocoenosis of the mid-tide zone Algae.

The sea bottom is rich in benthic fauna, in numerous species of fish and in meadows of Posidonia oceanica often with Pinna nobilis. Higher up and nearer the coast, there is a strong presence of colonial corals.

Capo Murro di Porco is an ideal place from which to observe some of the large pelagic fish, as well as marine mammals.

The benthic fringe just before the marine area is teeming with Mediterranean biodiversity, thanks to a variety of naturally-occurring factors. They have all helped the development of numerous species.





#### Threats and pressures

The area is particular popular with divers and fishermen.

As many as 150 divers a day enjoy the area in high season. The presence of a strong flow of diver-tourists constitutes a potential nuisance for the species. At the present time, the area seems to be keeping the external human pressure under control. The major threat is represented by the high number of craft used for diving.





## **Management**

No management plan has established so far. Indications and buoys are efficient and wellorganized.

The Plemmirio marine area is divided as follow:

- Zone A full reserve for scientific research and guided underwater tours
- Zone B general reserve where some activities are allowed
- Zone C partial reserve not really restrictived

Surveillance of the MPA is carried out by Siracusa Harbour Police, as well as by the security forces of the local bodies responsible for managing the area.

A staff is compunded by 5 full-time members and 5 short-term contract.

There is a scientific partnership with the University and since 2005 there is a project which provided for the monitoring of the natural conditions and the effects of underwater activities in zone A.

A number of programmes have been developed specifically for differently-able people, and partnership agreements have been drawn up with scuba diving clubs, environmental associations, local fishermen and tour operators and hospitality providers.

Professional training courses have been sponsored by the Ministry for Equal Opportunities, the Ministry of Labour and Social Policy and by the regional department for family matters.

The Plemmirio MPA has striven to achieve total access for differently-able persons. Educational itineraries have been devised, seven access points, have been identified and the role of escort to accompany differently-able persons while at sea has been created.

The most original project, is the creation of two underwater itineraries designed for blind people, and making use of Braille to provide informative materials on this very special underwater visit, in absolute safety, in a spirit of education and information.



