

# CABO DE PALOS-ISLAS HORMIGAS

MARINE RESERVE  
MURCIA - SPAIN

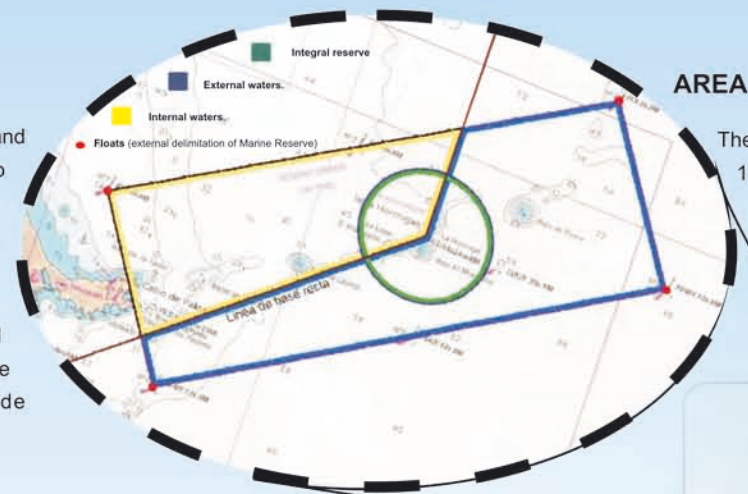
SECRETARÍA GENERAL DEL MAR ~ SGM

## AIMS

The mission of the Marine Reserve is to protect and enhance fisheries to maintain sustainable fisheries, enabling artisanal fishermen in the area to preserve their traditional way of life.

## CREATION

In 1995, the Spanish Ministry of Environment and Rural and Marine Affairs (MARM - Ministerio de Medio Ambiente y Medio Rural y Marino) and the Department of Agriculture, Livestock and Fisheries (Consejería de Agricultura, Ganadería y Pesca) of the Region of Murcia created a Marine Reserve under the Ministerial Order of 22<sup>nd</sup> June 1995 and Decree 15/1995 of 31<sup>st</sup> March, based on studies conducted by the Comunidad Autónoma de la Región de Murcia and the Spanish Institute of Oceanography (IEO - Instituto Español de Oceanografía).



## AREA

The Marine Reserve has a surface of 1,898 ha and contains an integral reserve around Isla Hormiga, El Bajo del Mosquito and the isles of El Hormigón and La Losa.

## GENERAL FEATURES

The temperature and salinity characteristics of the waters of the Reserve and its surroundings are not unlike those of the continental shelf between Cabo de La Nao and Cabo de Gata, being heavily affected by the seasons and Atlantic waters flowing from El Estrecho.

In summer, the average temperature (25°C) and salinity (36.9%) of the first 20 meters are, in open water, the highest in the Peninsula coast.

The area of Cabo de Palos is considered a biogeographical frontier of the Mediterranean which, along with Cabo de Gata, segregates the sea of Alborán, of greater Atlantic influence, from the rest of the Mediterranean.

The *Posidonia oceanica* beds constitute a characteristic landscape on the sea beds of the east Iberian coast. Some of the Spanish coast's most extensive and best-conserved formations of this plant can be found to the north and south of the Reserve.

They are home to a great wealth of species (biodiversity), particularly molluscs, several new listings of which have been made for the area.

This enormous biodiversity is due to the great variety of environments which exist, as a result of the relief of the bottoms and incoming bodies of water from distant places.

Several species of commercial interest are common in the Marine Reserve, particularly grouper (*Epinephelus guaza*), the European seabass (*Dicentrarchus labrax*), common dentex (*Dentex dentex*) and gillhead seabream (*Sparus aurata*). Pelagic species abound too, such as the greater amberjack (*Seriola dumerilii*) and scombroidea fish such as the Atlantic bonito (*Sarda sarda*) and the bullet tuna (*Auxis rochei*).

Neptune-grass  
*Posidonia oceanica*



European seabass  
*Dicentrarchus labrax*



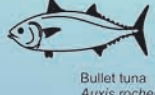
Gillhead seabream  
*Sparus aurata*



Grouper  
*Epinephelus guaza*



White gorgonian  
*Eunicella singularis*



Bullet tuna  
*Auxis rochei*



White seabream  
*Diplodus sargus*



Comber  
*Serranus cabrilla*



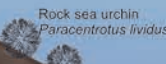
Greater amberjack  
*Seriola dumerilii*



Brown meagre  
*Sciaena umbra*



Common dentex  
*Dentex dentex*



Rock sea urchin  
*Paracentrotus lividus*



Red scorpionfish  
*Scorpaena scrofa*



Atlantic bonito  
*Sarda sarda*



European conger  
*Conger conger*



Moray  
*Muraena helena*



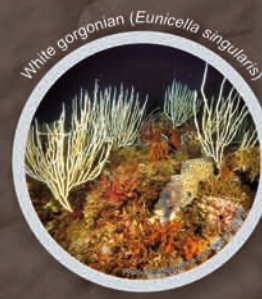
Common spiny lobster  
*Palinurus elephas*



Common octopus  
*Octopus vulgaris*



Grouper (*Epinephelus guaza*)



White gorgonian (*Eunicella singularis*)



Professional fisheries in the Reserve



Submarine patrimony



*Posidonia oceanica*



Professional fisheries Trammel net



Lighthouse at Cabo de Palos

## REGULATED ACTIVITIES\*

	Professional Fisheries Deep water	Professional Fisheries Shallow water	Professional Fisheries Trammel net	Fishing from shore	Scuba diving	Underwater photography	Collection of sea life	Commercial fishing
Integral reserve	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited	Allowed
External waters	Allowed	Allowed	Allowed	Prohibited	Allowed	Allowed	Prohibited	Allowed
Internal waters	Allowed	Allowed	Allowed	Allowed	Allowed	Allowed	Prohibited	Allowed

Ministerial Order of 22<sup>nd</sup> June 1995 (BOE no. 161 of 7<sup>th</sup> July 1995) and Decree 15/1995 of 31<sup>st</sup> March (BORM no. 92 of 21<sup>st</sup> April 1995).  
Ministerial Order of 29<sup>th</sup> April 1999 (BOE no. 119 of 19<sup>th</sup> May 1999). Ministerial Order of 7<sup>th</sup> April 2000 (BORM no. 92 of 19<sup>th</sup> April 2000).  
Ministerial Order of 6<sup>th</sup> June 2001 (BOE no. 146 of 19<sup>th</sup> June 2001).  
Ministerial Order of 19<sup>th</sup> July 2001 from Consejería de Agricultura, Agua y Medio Ambiente (BORM no. 174 of 28<sup>th</sup> July 2001)

## RESOURCES

Surveillance:  
Patrol boats ("Las Galeras", "Sebastes" and "Las Iletas" vessels)  
Rangers, binoculars, GPS video camera, night vision devices, diving equipment...  
ROV, Visitor's center

Information:  
Brochures, posters, DVD videos, ...

## CHALLENGES

- Increasing fishermen awareness on the importance of Marine Reserves.
- Increasing stakeholders education
- Keeping poachers out of the Marine Reserve.
- balancing good scuba diving and artisanal fisheries.
- Reducing the threats and impacts of human-induced effects.
- Ensuring better flow of data and information to the managers.
- Tackling the threat of invasive non-native species.
- Ensuring cultural and marine heritage.

## RESULTS

- Recovery of exploited stocks and fishery enhancement.
- Protection of the marine biodiversity.
- Marine laboratories for scientific follow up and research.
- Public awareness of the need and benefit of Marine Reserves.
- Good diving practice compatible with resource protection.

This figure is for representational purposes only.