



# SPANISH INVENTORIES OF MARINE HABITATS AND SPECIES

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### INTRODUCTION

The Spanish Inventories of Marine Habitats and Species are two of the components of Natural Heritage under Law 42/2007 of Natural Heritage and Biodiversity, which are expected to provide information to the Nature Data Bank.

### **OBJECTIVE**

- Harmonization of existing data, including web-based mapping tools to promote environmental education and awareness, as well as access to information about marine habitats and species with the aim to improve synergies, avoid duplication of data collection and ensure comparability of the information gathered on European Directives and International Conventions.
- Development of a management tool for the Spanish marine environment.

#### MATERIAL & METHODS

The Ministry of Agriculture and Fisheries, Food and Environment of Spain provided an institutionalized process for collecting existing and scattered data sets regarding marine biodiversity. Tragsatec developed the coordination of this work, executed with a huge scientific effort, and was the responsible of the harmonization of gathered data. The main challenge was to compile and analyze all the existing information to establish the basis of a Marine Planning and contribute to the correct determination of the Good Environmental Status (GES).

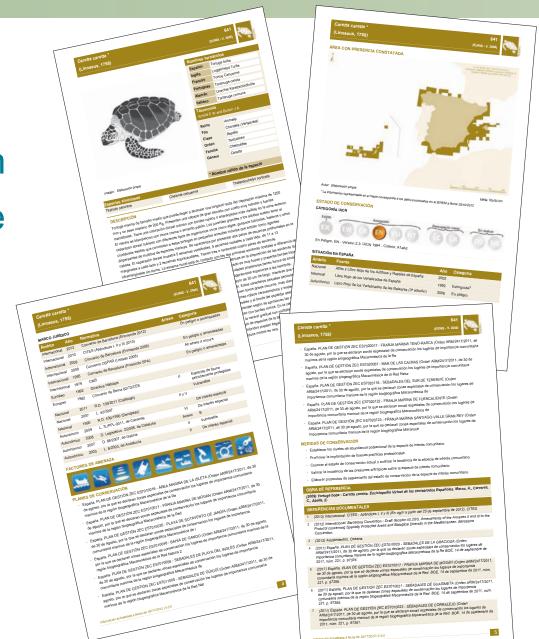




### **RESULTS & DISCUSSION**



DATABASE: containing available data on marine habitats and species (scientific name and synonyms, description, distribution, protection under legal instruments, threats, categorization and so on). This database is linked to all the studies that support it and includes the distribution maps for each specie or habitat at different scales.





#### REFERENCE LIST **SPANISH** MARINE SPECIES



150 SCIENTIFICS AND EXPERTS FROM DIFFERENT SPANISH RESEARCH INSTITUTIONS



With shows presence in the **5 SPANISH MARINE SUBDIVISIONS** ACCORDING TO THE MARINE STRATEGY

North Atlantic **South Atlantic** Levantine-Balearic Strait and Alboran Canary



### REFERENCE LIST OF SPANISH MARINE HABITATS

Done by more than 30 SCIENTIFICS and **experts** from different Spanish Research Institutions. It lists 886 MARINE HABITATS **TYPES** and shows their presence in the 3 biogeographic regions: Atlantic,

Mediterranean and Macaronesian.

The List of Spanish Marine Habitats tries to harmonize the description and collection of for habitat identification. It is hierarchical and

data across Spain through standarized criteria covers all types of marine habitat types from natural to artificial.

This list was completed and published in March 2013. It allows to be revised and updated with new habitats depending on the grade of knowledge.

Cross-walks between the List of Spanish Marine Habitats and other habitat classifications (e.g. EUNIS, OSPAR and Barcelona Conventions, Natura 2000 network) are also defined.





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#### **PUBLICATIONS**

of Spanish Marine Habitats.



Guía Interpretativa Inventario Español de Hábitats Marinos.2012. J.Templado, E. Ballesteros, I, Galparsoro, A. Borja, A. Serrano, L. Martín y A. Brito. It presents the different marine environments of Spain in a descriptive way, as well as the complexity and uniqueness of the different classifications to date and the List

Marine Species Fact Sheets, including all the relevant information and data on marine species in Spain

Marine Habitats Fact Sheets. including all the relevant information and data on marine habitats in Spain

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The List of Spanish Marine Species is a comprehensive Spanish system to facilitate the collection of Marine Species across Spain. It is a taxonomic classification according to the World Register for Marine Species (WoRMS). This includes introduced species, species whose determination is doubtful, species occasionally observed and species with no definite location. This list was completed in 2016 and published in March 2017. It allows to be revised and updated with new species depending on the grade of knowledge.

LISTA PATRÓN DE ESPECIES MARINAS PRESENTES EN ESPAÑA																
Id Lista Patron	Especie	Reino Filo	Clase	Orden	Familia	Género	Epíteto	Autor	Referencia	CodRef	D NOR	D SUD	D ESAL	D LEBA	D CAN	Observaciones
6002	Echinoderes worthingi	Animalia Kinorhyncha	Cyclorhagida	Cyclorhagida	Echinoderidae	Echinoderes	worthingi	Southern, 1914	WoRMS	416488	<u>-</u> Р	P	-	-	-	
6003	Meristoderes macracanthus	Animalia Kinorhyncha	Cyclorhagida	Cyclorhagida	Echinoderidae	Meristoderes	macracanthus	Herranz, Thoirmar, Benito, Sánchez & Pardos, 2012	WoRMS	731314				Р		
6004	Semnoderes armiger	Animalia Kinorhyncha	Cyclorhagida	Cyclorhagida	Semnoderidae	Semnoderes	armiger	Zelinka, 1928	WoRMS	101126	Р			Р		
6005	Rugiloricus manuelae	Animalia Loricifera		Nanaloricida	Pliciloricidae	Rugiloricus	manuelae	Pardos & Kristensen, 2013	LPEM	999945	Р					
6006	Rocellaria dubia	Animalia Mollusca	Bivalvia		Gastrochaenidae	Rocellaria	dubia	(Pennant, 1777)	WoRMS	505249	Р	Р	Р	Р	Р	
6007	Bryopa aperta	Animalia Mollusca	Bivalvia	Anomalodesmata	Clavagellidae	Bryopa	aperta	(G. B. Sowerby I, 1823)	WoRMS	573725			Р			
6008	Bryopa melitensis	Animalia Mollusca	Bivalvia	Anomalodesmata	Clavagellidae	Bryopa	melitensis	(Broderip, 1834)	WoRMS	573726					Р	
6009	Cardiomya cadiziana	Animalia Mollusca	Bivalvia	Anomalodesmata	Cuspidariidae	Cardiomya	cadiziana	Huber, 2010	WoRMS	505132	Р	Р				

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## CONCLUSIONS

The Spanish inventories of Marine Habitats and Species are now a valuable source of information on distribution, abundance, state of conservation and trends of Marine Habitats and Species in Spain.

This initiative is accessible via web with a friendly publication that aims to promote environmental education and knowledge.

#### However, there are still new challenges to face to!

#### **Updating the Reference List of Spanish Marine Habitats and Species**

Inclusion of new data on species and marine habitats from scientific projets, such as research on deep habitats and other less known, and review of existing ones, which will permit to develop additional management and protection measures.

#### **Visibility**

Promoting an Inventory via institutional webs, scientific publications, informative sheets, etc.

