

SPANISH CETACEAN SOCIETY



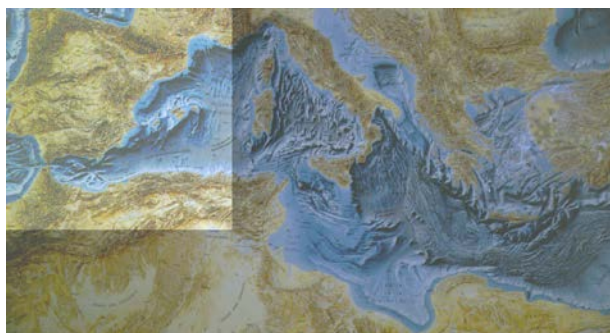
CONTRIBUTION TO THE SCS ACCOBAMS KIT

DRAFT TABLE OF CONTENT

Introduction ACCOBAMS presentation

List of riparian states

The Spanish government ratified the ACCOBAMS agreement in January of 1999



Mediterranean Seafloor © Hachette-Guides bleus-Paris

Introduction to the Spanish Cetacean Society

The Spanish Cetacean Society (SEC) was founded in April of 1999 during the XIII Annual Conference of the European Cetacean Society held in Valencia. Since the Mediterranean striped dolphin epizootic of 1990, the research effort on cetaceans had been steadily increasing in Spain and several cetacean research ngo's felt it necessary to create a body capable of making this growth constructive.

The SEC was therefore created with the two global goals of:

- promoting and co-ordinating the co-operation between people and institutions dedicated to research and conservation of marine mammals in Spain
- to reinforce the link between researchers and the relevant authorities in order to integrate research efforts in the framework of the regional, national and international biodiversity conservation strategies

The first step taken by the SEC was a project funded by the Spanish Ministry of the Environment for the standardisation of protocols and creation of a common data base for sightings and strandings. Possibly the most positive outcome of this project was not so much the final report itself but the creation of the main working tool of the SEC:

www.cetaceos.com

This web site is split in three sections. The first section concerns the internal functioning of the organisation. Here, members have direct access (with password) to the organisations accounts and meeting minutes. General Annual Meetings, elections and votes can be carried out through internet in order to economise on transport and time.

The Working Groups of SEC:

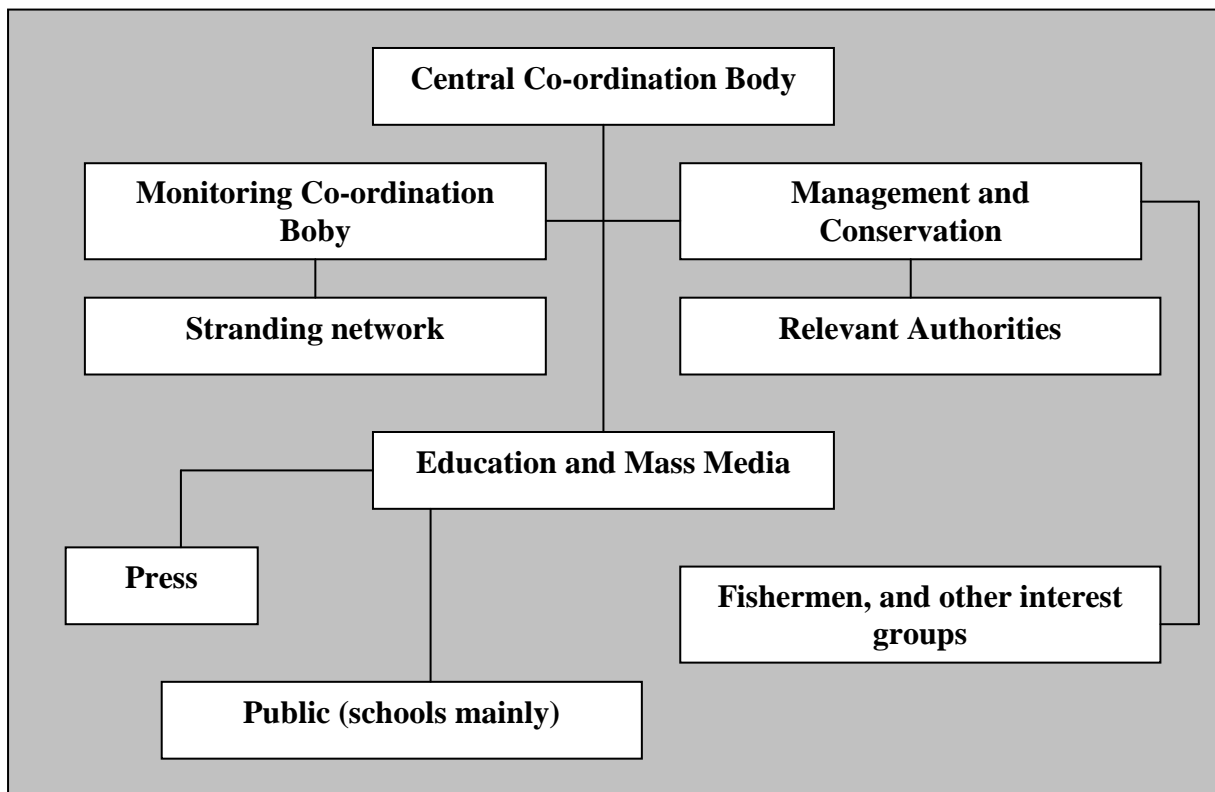
- Population studies of free ranging animals
- Stranding network
- Conservation and Education
- Bioacoustics
- Pathology

use the web-site as communications as their main tool also.

The other two sections of the web-site are thought for the general public and specially students and teachers (still mostly under construction) and for the mass media. The SEC tries to supply journalists with the main cetacean news adding differing opinions, images and sounds.

At present, keeping on top of the web site and other projects is pretty difficult due to lack of funds. Most of us have already too much work with our own projects so it takes a pretty big effort. We hope however that in the future we will be able to have one or two people working exclusively for the SEC.

The structure of SEC



THE STRANDING NETWORK IN THE SPANISH ACCOBAMS RANGE

From northwest to southeast:

CRAM

Marine species recovery centre of Catalonia

Marineland - Mallorca

Marine species recovery centre of Balearic islands

INSTITUTO CAVANILLES - UNIVERSITY OF VALENCIA

(Mediterranean stranding data base)

Marine species recovery centre of Valencia

University of Alicante

Mundo Mar

Marine species recovery centre of Alicante

CREA - Murcia

Marine species recovery centre of Murcia

ANSE - Cartagena

Marine species recovery centre of Murcia

Equinac - EA-Almería

Marine species recovery centre of Almería

CREMA - Aula del Mar de Malaga

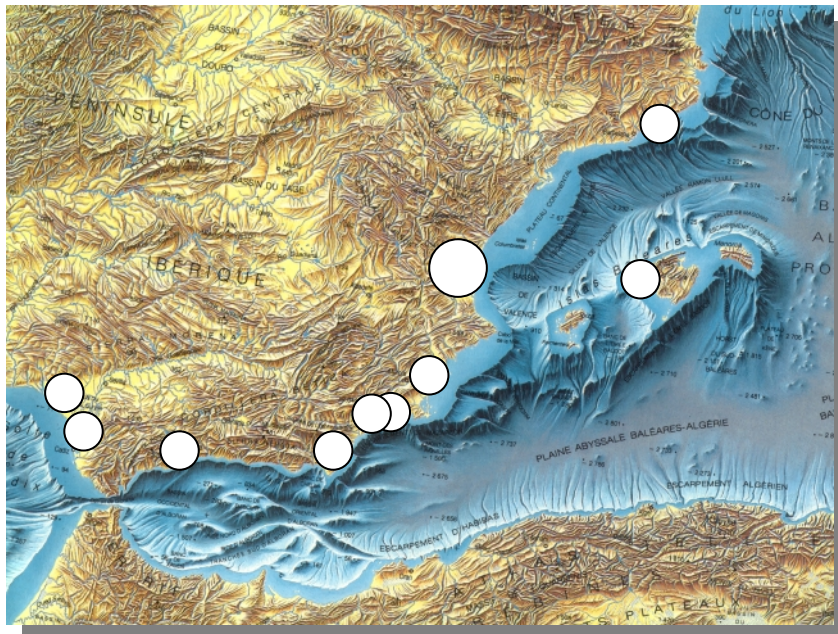
Marine species recovery centre of Andalusia

Estación Biológica de Doñana

Stranding network of the Coto Doñana National Park

Grampus

Marine species recovery centre of Huelva



CETACEAN RESEARCH AT SEA IN THE SPANISH ACCOBAMS RANGE

From northeast to southwest:

University of Barcelona (Balearic Islands)

Research on bottlenose dolphin (population - bycatch - molecular analysis various species (genetics, toxicology, feeding))

Cetacean monitoring in Catalanian waters

University of Valencia

Cetacean population monitoring in Valencia and Murcia

Parasitology, molecular analysis of various species (genetics, toxicology, feeding).

University of Murcia

Cetacean population monitoring, oceanography in Murcia

ANSE Cartagena

Cetacean population monitoring in Murcia

Alnitak - Cetacean Research Unit of the Universidad Autónoma de Madrid

Cetacean population monitoring in Murcia and Andalucía, molecular analysis of various species (genetics, feeding)

Esparte

Cetacean population monitoring in Murcia and Andalucía, molecular analysis of various species (genetics, feeding)

CIRCÉ

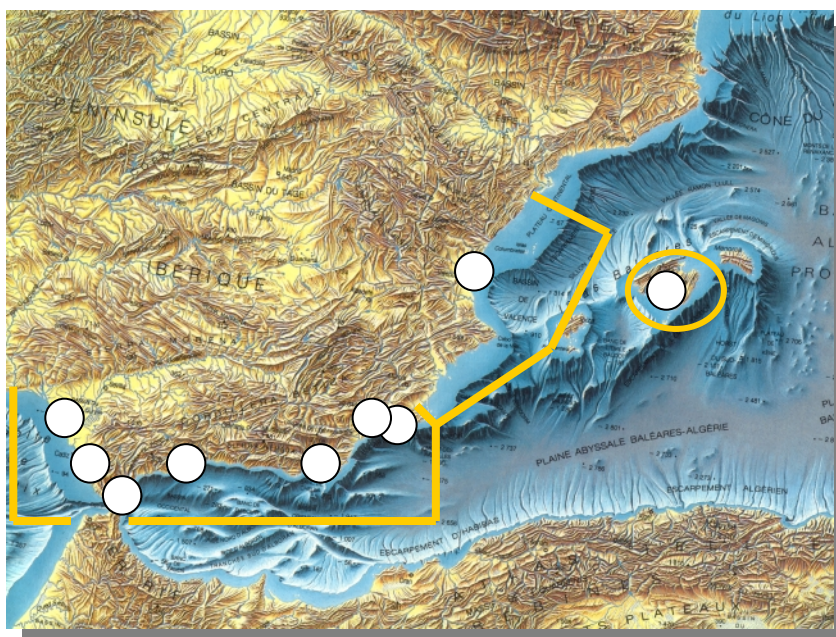
Cetacean population monitoring in Murcia and Andalucía, molecular analysis of various species (genetics, feeding)

Fundación Bitacora

Cetacean population monitoring in Andalucía

Balaena - SOC

Cetacean population monitoring in Andalucía



Part I Theoretical part

What kind of information would you like to be included? Is it necessary to include generalities like cetacean origin, evolution, etc.? What are the important points on cetacean in a practical view?

I believe it would be interesting to include a brief summary of these generalities linking them to the Mediterranean and Black Sea basins and to the conservation of cetaceans.

Mediterranean population

- Life habits :
- reproduction
 - alimentation
 - daily /monthly/seasonally movement
 - migrations
 - other

Vital environment

Social organisation

Anatomic and physiologic organisation

Echolocation and communication

Part II Mediterranean and Black Sea Species

Identification form with

- distribution map
- status

We can really only give you distribution maps of the more commonly observed species (**in bold and black**). If you require maps of the Spanish region I could send them in February. For each species covered by the Agreement:

<u>PHOCÆNIDAE</u>	<i>Phocæna phocæna</i>
<u>DELPHINIDAE</u>	<i>Steno bredanensis</i> <i>Grampus griseus</i> <i>Tursiops truncatus</i> <i>Stenella cæruleoalba</i> <i>Delphinus delphis</i> <i>Pseudorca crassidens</i> <i>Orcinus orca</i> <i>Globicephala melas</i>
<u>ZIPHIIDAE</u>	<i>Mesoplodon densirostris</i> <i>Ziphius cavirostris</i>
<u>PHYSETERIDAE</u>	<i>Physeter macrocephalus</i>
<u>KOGIIDAE</u>	<i>Kogia simus</i>
<u>BALAENIDAE</u>	<i>Eubalaena glacialis</i>
<u>BALAENOPTERIDAE</u>	<i>Balaenoptera acutorostrata</i> <i>Balaenoptera borealis</i> <i>Balaenoptera physalus</i> <i>Megaptera novaeangliae</i>

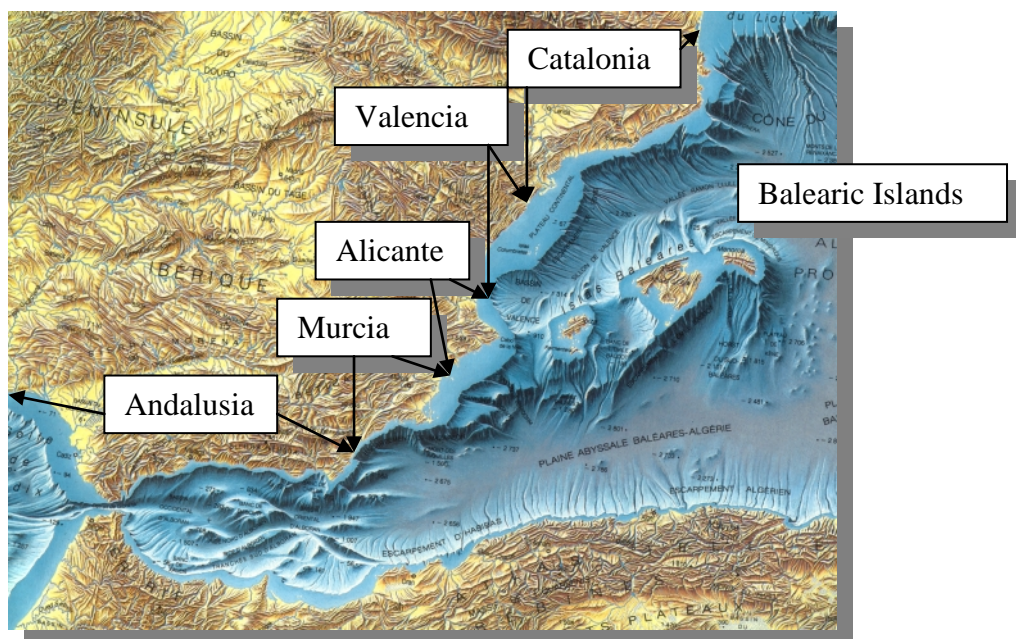
Observation effort or research campaign in progress or already done

Cetacean research in Spain has been very limited until the 1980's. At the beginning of the XXth Century Cabrera has several publications which are often referred to. The research on SOC-Balaena is carrying out an analysis of historic documents (fishing gear log books) that could also have very valuable information on certain species as *Orcinus orca*.

Professor J.A. Valverde (co-founder of WWF international and Coto Doñana National Park) has since the 1950's published several articles mainly on strandings of different species around the coast of Andalusia. There is also some very interesting information in the capture records of the Getares whaling station in front of Gibraltar during 50's.

More recently, around the 1980's, A. Aguilar (University of Barcelona) and J.A. Raga (University of Valencia) started working on cetacean populations around Spain (Galician whaling industry, 1990 Striped dolphin epizootic, etc.).

The 1990 epizootic originated an important interest in cetacean research and conservation in Spain. Greenpeace carried out various studies together with the University of Barcelona and the ngo Alnitak (now Cetacean research Unit of the University of Madrid) initiated a population monitoring programme in the eastern Alboran sea focussing mainly on the bottlenose and common dolphin.



Spanish Autonomous Regions in the ACCOBAMS range

Research programmes at present:

The main research programmes at present in the Spanish ACCOBAMS range are (by species):

Tursiops truncatus

Distribution:

The main population nuclei are around the Balearic islands and the Alboran Sea, but there are groups also in other regions as Cadiz, Huelva, Valencia and Murcia. The species is found mainly on the continental shelf and its edge but also in deep waters in the Alboran region.

Population studies at sea by the Univ. of Barcelona, Univ. Valencia, Alnitak, Esparte, Circé.

Population genetics by Univ. of Barcelona
Stable isotopes by Univ. of Barcelona, Alnitak
Bycatch and fishery interaction studies by Univ. of Barcelona, Alnitak, Circé.

Delphinus delphis

Distribution:

This species is very seldom observed north of Cabo de Palos in Murcia. In contrast, as we move into the Alboran basin the encounter rate and group size increases, making it the most common cetacean in the region. In the alboran sea the species appears to prefer the coastal waters where it feeds mainly on small pelagic fish. However it is also observed frequently in deep waters.

Population studies are currently being carried out by several research teams (ANSE, Alnitak, Esparte, Circé) in Andalusia. These studies include population genetics, photoidentification, habitat use, social behaviour, and bioacoustic analysis.

Globicephala melas

Distribution:

A common species in deep waters (over 500m) in most regions, being more common towards the south and specially abundant in the Alboran sea.

Population studies are currently being carried out by several research teams (ANSE, Alnitak, Esparte, Circé) in Andalusia and Murcia. These studies include population genetics, photoidentification, habitat use, social behaviour, and bioacoustic analysis.

Physeter macrocephalus

Distribution:

Deep waters, specially around the depth of 1000 m.

Although not much research has been carried out in the region, the few surveys and data of strandings highlights the region around the Balearic Islands and Columbrete islands as specially important for this species. In the Alboran sea and region of Gibraltar the species is also frequently observed.

At present studies carried out by Circé and Alnitak in Andalusia, concentrate on population genetics, photo-id and bioacoustics.

Balaenoptera physalus

Distribution:

Once hunted in the Strait of Gibraltar, this species had become pretty scarce in most regions except for in the Gulf of Lyons and around the Columbretes islands. In recent years movements of the species through Alboran and Gibraltar have increased.

Studies concentrate on these movement pattern in the region of Andalusia (Circé, Alnitak, Esparte).

Stenella coeruleoalba

The most abundant cetaceans except for in the Alboran sea. It is commonly found in waters off the shelf in all regions.

Population studies are being carried out in Andalucia and Murcia by (Alnitak, ANSE, Esparte, Circé, Bitacora) and in other regions by the universities of Barcelona and Valencia within the context of the "Mediterranean Project".

The University of Valencia is studying other aspects of this species (parasitology, genetics, feeding, etc.).

Orcinus orca

This species is observed mainly around the strait of Gibraltar where it feeds on tuna fish, often "stealing" fish from fishermen. Occasionally small groups are observed further inside the Mediterranean.

Circé is focussing on this species and possible interactions with fisheries in Andalusia.

Grampus griseus

Photoidentification of Risso's dolphin groups is being carried out by the Greenpeace ship "Zorba", Alnitak, Esparte, ANSE, Bitacora, Circé.

Phocoena phocoena

This species is at present only observed on the Atlantic coast of Andalucía (ACCOBAMS range).

Esparte, Circé and Alnitak are trying to study the distribution and dynamics of this species in the region.

Other species

Other species are also found in Spanish waters but are not the main target of any research programmes. This doesn't mean that they are necessarily very scarce. In the case of *Ziphius cavirostris* sightings are not very frequent mainly due to the shy attitude of the species.

Balaenoptera acutorostrata is occasionally observed in the Alboran sea.

The other species on the list can all be considered rare in Spanish waters.

Part III Cetacean in the wild

The Spanish Cetacean Society has a "Working Group" of **population studies at sea** since 1999 when a series of common research protocols were established for cetacean observation studies at sea. The making of these protocols clearly highlighted the difficulty or impossibility of a complete standardisation of research effort. However, the discussion within the working group which is still going on, has been very positive in promoting and co-ordinating the co-operation among research teams.

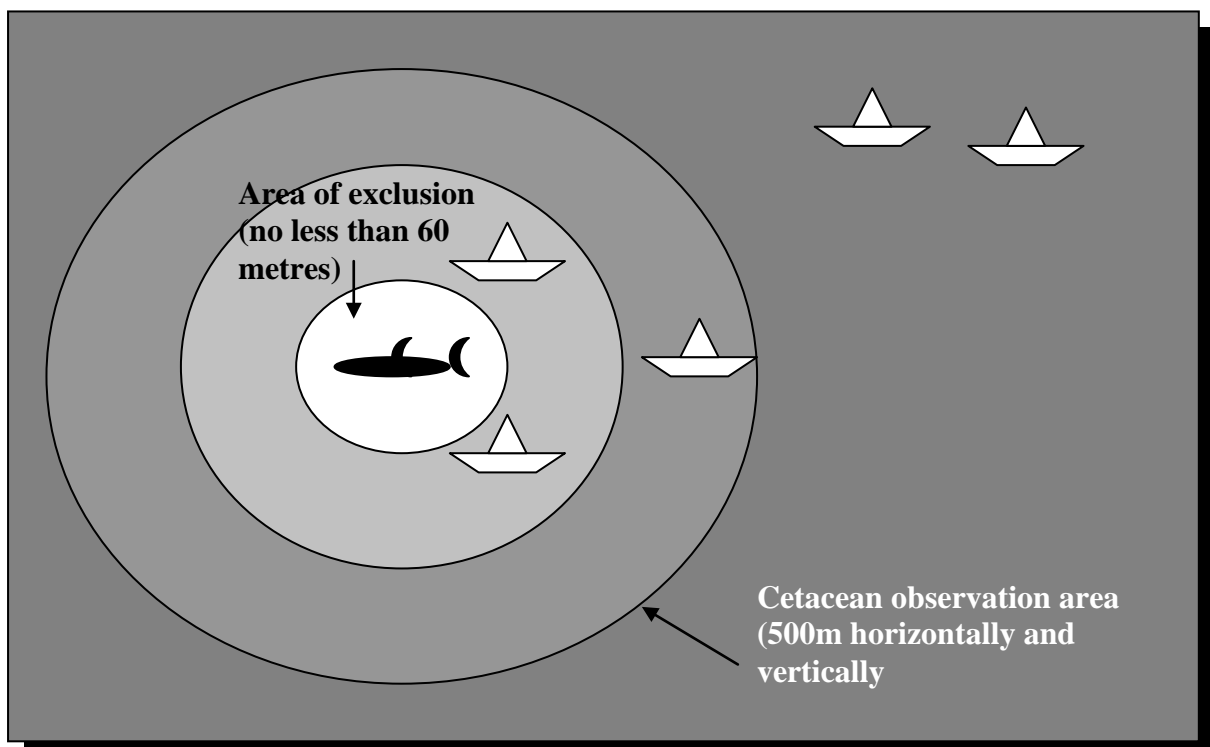
Approach protocol

The Spanish Cetacean Society has been actively involved, since its foundation in 1999, in the "making" of a national decree for whale-watching which will regulate all human activities that require an approach to cetaceans. We are expecting this law to be passed during 2002.

The law is based on experience from the Canary Islands and other whale-watching "hot-spots". The angle and distance of the approach by vessels to cetaceans is regulated as is the number of vessels allowed at given distance ranges.

As the law has not yet been passed, we can unfortunately not give you any more details. However, we can here present the "Code of Conduct" which is an annex to this law.

CODE OF CONDUCT - APPROACH TO CETACEANS



Zonation:

EXCLUSION AREA

No vessels are allowed in this area (only in case of emergency). In some cases the limit may be over 60 metres.

CETACEAN OBSERVATION AREA

From the limit of the exclusion area to 500 metres from the cetaceans. This includes also an equal distance vertically in the case of helicopters or planes.

This "cetacean observation area" is in turn subdivided in two sub-areas:

1. A restricted area between the limit of the exclusion area (60 m) and the "protection area". Only a limited number of ships is allowed in this area and for a limited amount of time.
2. A protection area from the external limit of the "restricted area" to the 500 m limit of the "cetacean observation area".

The limits of these two sub-areas will be established in each case according to the guidelines of research on the species and the site.

Conduct in each of these areas

- ✓ No manoeuvring in this area except for during emergencies.
- ✓ In case of emergency in the exclusion zone, the ship must be stopped and always with the propeller still.

In the restricted area

- ✓ Only two vessels at the time and only for 15 to 30 minutes. After this this period they must leave the area free for other vessels.
- ✓ Vessels must not enter the restricted area if cetaceans are foraging or socialising (resting for spermwhales) or showing evasiveness.
- ✓ Vessels must not enter the restricted area if there are calves or solitary mothers with calves.

In the protection area

- ✓ Only one vessel at a time is allowed to be in the protection area while waiting for one of the vessels to leave the restricted area. Vessels must keep radio contact at all times to co-ordinate their movements.

Conduct in the Cetacean observation Area

- It is forbidden to approach cetaceans with motored aircraft more than 500 metres.
- Vessels must never impede the free travelling of cetaceans.

- Vessels must never intercept the course of the cetaceans, pass through the group or pass in front of them.
- Vessels must not separate or disperse a group of cetaceans.
- Vessels must never approach calves or get in between mothers and calves.
- Vessels must avoid any physical contact with cetaceans.
- No swimming or diving in proximity of cetaceans.
- No physical contact with cetaceans.
- No feeding or throwing food or solid or liquid garbage to cetaceans,.
- Switch off echosounders in vicinity of cetaceans.
- Abandon the area immediately if any signs of disturbance to cetaceans are observed: alterations in behaviour, changes in course and speed, successive breachings, blowing of bubbles, short dives, evasive behaviour, course changes under-water, etc.
- Avoid making sounds that may disturb the animals. No emission of sounds to attract the animals or scare them is allowed.
- Inform the relevant authorities if an animal is injured, giving the exact position. If possible stay in the vicinity until the authorities arrive. The same is valid also if a dead carcass is observed. In this case if possible tow it to the nearest port.
- Within the Cetacean Observation Area vessels should manoeuvre at a constant speed of less than 4 knots and never faster than the slowest animal of the cetacean group.
- ✓ Once the sighting is concluded the vessel will maintain its speed until it is out of this area.
- ✓ Approach to cetaceans should be slow, converging towards them in the same direction as them and never from in front or behind in an angle of less than 30°.
- ✓ During the sighting course should be parallel to that of the cetaceans without any abrupt changes in speed or course.
- ✓ Vessels approaching cetaceans simultaneously should be in contact in order to avoid any disturbance to the animals.
- ✓ If the animals approach the vessel in less than 60 metres, the engine must be stopped or set in neutral at minimum revs.
- ✓ Never start the engine or put in gear until the animals are at least 60 metres away from the ship.
- ✓ If the animals approaching are small dolphins the ship may keep navigating but at a constant speed and course.
- ✓ Never direct the vessel directly towards the cetaceans and never change courses to incite them to bowride.
- ✓ Before stopping the engine and after starting it, it is important to wait a few minutes (at least one minute) before putting it in gear. All speed changes must be done slowly.
- ✓ Never put the engine in reverse (except for in case of emergency).
- ✓ Never navigate erratically, always maintain a constant course and speed.
- ✓ Do not navigate in circles around a cetacean or group.

Observation protocol

Unfortunately we do not have a translation in English or French of the SEC Protocols. However, these protocols have been based greatly on methodologies commonly used by most research teams in the European Cetacean Society.

I will therefore just include the original version of the SEC protocols and list the research teams in Spain working with the different types of observation you have listed.

- from a fixed point

The only research teams that use fixed observation platforms are:

Balaena/SOC in Barbate (Gulf of Cadiz)

Oportunistic observations of cetaceans (mainly orcas) off the coast of Barbate. Orcas sporadically approach the "Almadraba" (tunny maze net) set off this port, in order to feed on tunas.

CEMMA in Galicia (outside the ACCOBAMS range)

- linear transect

Line transects studies have been carried out in recent years by the University of Barcelona and the University of Valencia (shipboard and aerial).

A series of line transect studies are also planned in the Alboran Sea and Gulf of Cadiz by the Cetacean Research team of the University of Madrid, Alnitak and the CIRCE

- regular commercial line

There are a few groups using commercial lines outside the ACCOBAMS range (AMBAR - Bay of Biscay). In the Strait of Gibraltar several studies have been carried out in the past, one by Hasmi in 1986 and another by Erwan in 1999. There are several plans to make use of other commercial lines.

- photo-identification

Several research teams in Spain use photo-identification. Most of them are at present integrated in the EUROPHLUKES programme, which in its initial phase will precisely be developing a standardisation at a European level. These research teams inside the ACCOBAMS range are: Alnitak (Co-ordinator for SW Europe, ANSE, ESPARTE and CIRCE).

- acoustics

Bioacoustics is used by Alnitak (Alboran Sea), ESPARTE (Alboran Sea) and CIRCE (Gibraltar and Gulf of Cadiz). The SEC has a bioacoustics working group co-ordinated by Michel André (Canary Islands).

- other

As mentioned, several aerial surveys (line-transect) have been carried out in recent years as part of a programme of the Spanish Ministry of the Environment for the identification of areas of special interest for the conservation of cetaceans in Spanish waters of the Mediterranean and contiguous Atlantic (ACCOBAMS range). These studies have been carried out by the cetacean research teams of the University of Valencia (Dr. J.A. Raga) and the University of Barcelona (Dr. A. Aguilar).

Samples collect protocol : - skin

Skin samples are collected by skin swabbing by Alnitak, Esparte and Circe in the south of Spain for molecular analysis of mitochondrial DNA and microsatellites. The target species are *Delphinus delphis*, *Tursiops truncatus*, *Globicephala melanea*, *Physeter macrocephalus* and *Balaenoptera physalus*. The samples are usually stored in DMSO saline solution and frozen. Of some species, bone is also used.

- faeces

Although some samples have been collected, nobody (that I know of) is working with faeces samples at present.

- other

Biopsies are being taking by the team of A. Aguilar (University of Barcelona) primarily for studies on toxicology. This research team has recently obtained a Pew fellowship for the creation of a sample bank. Alnitak and Circé are also working with blubber samples for stable isotope analysis.

The University of Valencia works on parasitology of various species.

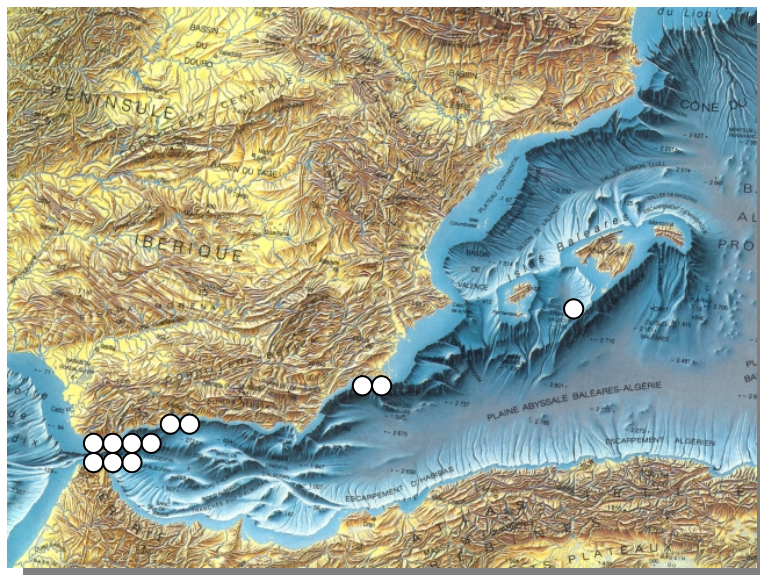
Observation sheet: which data is absolutely required (date, hour, position, specie, number of individuals, other)

The standard SEC sighting sheet is as follows:

The basic data for the SEC data-base on sightings is as follows:

Whale-watching: - chart

SEC has recently presented a report to the Spanish Ministry for the Environment on the issue of whale-watching. This activity has in recent years been growing exponentially along the southern coast of Spain. In the region with greatest potential for this industry, the Strait of Gibraltar, fortunately most of the whale-watching companies are trying to adopt a proper conduct with respect to the animals, but there are already some clear examples along the andalusian coast that show the urgent need for an adequate regulation.



On this map we have summarised the results of the report on whale watching for the ACCOBAMS range

Part IV Beached cetacean

As for the cetacean sightings at sea, the SEC protocol is until now only available in Spanish (see annexes)

Identification criteria

Samples protocol:

- minimum sample
- how to do them
- how to conserve them
- other

Necessary authorization and how to get them

It is necessary to have an authorisation to collect and transport cetaceans or samples. The relevant authorities for this are the nature conservation agencies of the regional governments (autonomías) and the Dirección General de Conservación de la Naturaleza of the Spanish Ministry of the Environment.

For CITES authorisations the SOIVRE department of the customs office is also responsible.

Beaching network: - who to inform

In Spain, each region has its responsible contact centre (see map of stranding network above). Most of the findings are transmitted by the public to the police (Guardia Civil), but other institutions are also contacted (Red Cross, Protección Civil, Policía Local, Policía Nacional, local administration, etc).

These institutions are usually in contact with the regional stranding network. If not, they will normally contact the Nature Conservation Service of the Guardia Civil (SEPRONA) who will inform the regional stranding network.

- how to create a beaching network

Stranding networks are fundamental. Ideally the entire Mediterranean coast would be permanently monitored from strandings. Apart from the interest of knowing what species and how many are stranding, this is a valuable source of scientific material which should be made good use of.

Co-ordination is the main challenge of an efficient network. The authorities and the public need to know who is in charge of the network.

Co-operation is also vital. Samples can be collected for oneself, but if samples are collected for all and properly distributed to the regional, national and international research teams, science and conservation will benefit.

Diseases and parasites

The University of Valencia is specialised in parasitology studies. Toxicology is analysed by the universities of Valencia and Barcelona. Most groups and specially the stranding networks cooperate with the research of these universities by collecting samples.

Causes of mortality in cetacean

Human risks related to the work with beached cetacean
Assurances and responsibilities

Part V Legislation

Text of international law
National legislations

- Spain has ratified ACCOBAMS, CITES, Barcelona Convention,..
- European Union's Habitats Directive
- All cetacean species are at present protected by national law.
- We have an National Endangered Species Act which includes several populations of cetaceans as endangered or vulnerable.
- The Canary Island have a law for the regulation of whalewatching activities since 1996 and it is expected that we'll have the national passed before the end of 2002.

Action plans

The Mediterranean Project (Dirección General de Conservación de la Naturaleza (DGCN) - Ministry of the Environment)

This 3 year programme, co-ordinated by Dr. J.A. Raga of the University of Valencia (Instituto Cavanilles) is the main current contribution of the Spanish Ministry of the Environment to the ACCOBAMS agreement, the Barcelona Convention and the EU's Habitat Directive. Its three main aims are:

1. the identification of populations / stocks
2. the establishment of their conservation status
3. the identification of important areas for their conservation

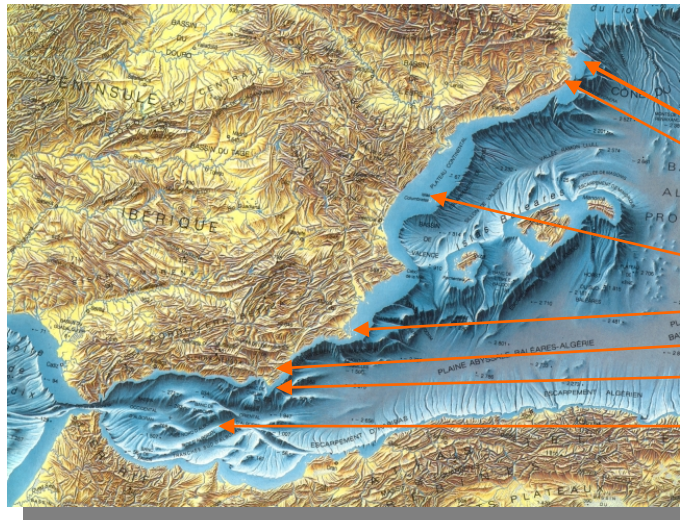
The DGCN has another project together with the University of Barcelona on the interaction between fisheries in the Balearic Islands and the bottlenose dolphin. Complementing this programme, a LIFE project on marine and coastal management in the Balearics includes several actions for the bottlenose dolphin.

Spanish research teams have an active participation in EUROPHLUKES, the European photo-identification system. The ngo Alnitak is the co-ordinator for SW Europe in this programme.

Part VI Protected area

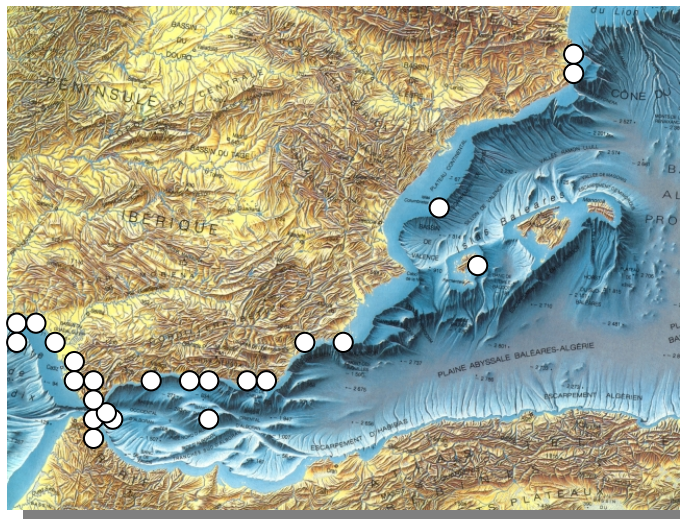
List and description of marine protected area in Mediterranean and Black Seas

Proposed SPAMI's



- Cabo Creus
- Islas Medes
- Islas Columbretes
- Mar Menor -o.c. Murcia
- Levante Almería
- Cabo de Gata
- Isla de Alboran

Proposed marine SAC's from NE to SW



- Cabo Creus
- Islas Medes
- Islas Columbretes
- Alcudia
- Formentera
- Mar Menor
- Murcia Litoral 2
- Levante Almeriense
- Cabo de Gata
- Arrecifes Roquetas
- Calahonda Castell de Ferro
- Isla de Alboran
- Punta de la Mona
- Marro - Cerro gordo
- Calahona Malaga
- Estepona
- Calamocarro
- Monte Macho
- Estrecho
- Barbate
- Trafalgar
- Cadiz (3)
- Doñana
- Huelva (3)

LIST OF MPA's

Name	Code	Type of MPA	interest for cetaceans
CATALONIA			
Cabo Creus			yes
Islas Medes			yes
Delta del Ebro			
BALEARIC ISLANDS			
Cabo Formentor			yes
Bahía de Alcudia			yes
Isla de Cabrera			yes
Freu de Formentera			yes
VALENCIA			
Albufera de Valencia			
Islas Columbretes			yes
Cabo S. Antonio			yes
Isla de Tabarca			yes
MURCIA			
Mar Menor			
Cabo de Palos Hormigas			yes
Cabo Tiñoso			yes
Aguas costeras de Murcia			yes
ANDALUCIA			
Islote de S. Andres	ES6110020		
Levante Almeriense			yes
Cabo de Gata-Nijar	ES0000046		yes
Arrecifes de Roquetas	ES6110019		yes
Punta Entinas			yes
Isla de Alboran	ES6110015		yes
Punta de la Mona	ES6140016		yes
Marro Cerro Gordo	ES6170002		yes
Salobreña	ES6140013		yes
Castell de Ferro	ES6140014		yes
Calahonda Malaga	ES6170030		yes
Estepona	ES6170036		yes
Calamocarro	ES6310001		
Monte Macho	ES6310002		
Zona del estrecho	ES6120012		yes
Barbate	ES6120008		yes
Trafalgar	ES6120017		yes
Cadiz	ES0000140		
Cadiz	ES6120009		
Cadiz	ES6120023		
Doñana	ES0000024		yes
Estuario Rio Tinto	ES6150029		
Estuario Rio Piedras	ES6150028		
Marismas del Odiel	ES0000025		

Part VII Training and education

List of possibilities of training (theoretical and practical) and education on ceatacean

Courses

Every year several courses and conferences are given by some of the main research teams in Spain. News on these is generally put up on the SEC web site.

Every two years since 1996, Dr. J.A. Raga organises a course at the Universidad Internacional Menendez Pelayo in Valencia. These courses have generate a great interest in the past both nationally and internationally. All members of the European Society can receive notice of these courses through the Society's communications.

Volunteering programmes

Several research teams in Spain have been running "eco-volunteering" systems since 1992. Most of these research programmes are on ships, but there have also been some whale skeleton diggings, stranding network volunteering and other activities. The information on these is also on the web site of SEC.

The main volunteering programmes on ships are:

Proyecto CETUS - On board the Nauja carrying out research on dolphins in the Alboran Sea.

Circé - On board the Elsa carrying out research in the Strait of Gibraltar

Alnitak carries out part of its research programmes in the Alboran Sea with Earthwatch Institute volunteers.

Education programmes

Several SEC groups develop education programmes at several levels.

ANSE Cartagena works with the general public and school kids on land and on their research ship ELSE.

ALNITAK works mainly on the production of conferences and documentaries (e.g. BBC The Blue Planet).

EA-Almeria works with schools in Almeria, cleaning beaches and training stranding network volunteers.

Aula del Mar de Malaga, co-ordinator of the Andalusian stranding network has a maritime museum and produces an important volume of educational programmes for schools.

SOC-Balaena develops several educational programmes in the region of Barbate.

The Cetacean Museum of Doñana will probably be opened to the public this year. This is the dream come true of Professor J.A. Valverde, the father of naturalism in Spain and co-founder of the WWF International.

Training programmes

The same groups listed above also develop training programmes targeting mainly:

- fishermen and maritime authorities co-operating with SEC
- university students
- whale-watching operators
- volunteers of the stranding networks

Part VIII Address Book

List of research laboratories, institutions and associations concerned with cetacean, according to the following example:

I have sent a copy of this table around SEC. I hope therefore to be able to provide you with a complete and up-dated address book by mid February.

Until then, I submit a list of the co-ordinators at different levels:

Name of the institution Contact person(s) (Title) Postal address Postal address Postal address Telephone Fax E-mail Web site Key words (Eventually a short description of one or two lines)	Dirección General de Conservación de la Naturaleza Javier Pantoja Marine Programme manager C/. Gran Vía San Francisco, 6 E-28 MADRID Spain Tel. +34 91 Fax. +34 91 E-mail : Internet : Key words:
Name of the institution Contact person(s) (Title) Postal address Postal address Postal address Telephone Fax E-mail Web site Key words (Eventually a short description of one or two lines)	Spanish Cetacean Society Ricardo Sagarminaga President C/. Nalon, 16 E-28240 HOYO DE MANZANARES Madrid, Spain Tel. +34 918565429 Fax. +34 918565429 E-mail : sec@cetáceos.com Internet : www.cetáceos.com Key words: co-ordination of co-operation Application science to management and conservation

<p>Name of the institution Contact person(s) (Title) Postal address Postal address Postal address Telephone Fax E-mail Web site Key words (Eventually a short description of one or two lines)</p>	<p>SEC - Stranding + Pathology work group Josep María Alonso Co-ordinator C/. Nalon, 16 E-28240 HOYO DE MANZANARES Madrid, Spain Tel. +34 918565429 Fax. +34 918565429 E-mail : sec@cetáceos.com Internet : www.cetáceos.com Stranding network, cetacean recovery centres, pathology - co-ordination at a national level</p>
<p>Name of the institution Contact person(s) (Title) Postal address Postal address Postal address Telephone Fax E-mail Web site Key words (Eventually a short description of one or two lines)</p>	<p>SEC - Population monitoring work group Ana Cañadas Co-ordinator C/. Nalon, 16 E-28240 HOYO DE MANZANARES Madrid, Spain Tel. +34 918565429 Fax. +34 918565429 E-mail : sec@cetáceos.com Internet : www.cetáceos.com Population monitoring, photo-identification, surveys</p>
<p>Name of the institution Contact person(s) (Title) Postal address Postal address Postal address Telephone Fax E-mail Web site Key words (Eventually a short description of one or two lines)</p>	<p>SEC - Bioacoustic work group Michel André Co-ordinator C/. Nalon, 16 E-28240 HOYO DE MANZANARES Madrid, Spain Tel. +34 918565429 Fax. +34 918565429 E-mail : sec@cetáceos.com Internet : www.cetáceos.com Bioacoustics</p>
<p>Name of the institution Contact person(s) (Title) Postal address</p>	<p>SEC - Conservation and Education Lucía Hernandez Co-ordinator C/. Nalon, 16</p>

Postal address	E-28240 HOYO DE MANZANARES
Postal address	Madrid, Spain
Telephone	Tel. +34 918565429
Fax	Fax. +34 918565429
E-mail	E-mail : sec@cetaceos.com
Web site	Internet : www.cetaceos.com
Key words (Eventually a short description of one or two lines)	Management and conservation, Education and volunteering programmes, press, public relations, image and sound bank

For each chapter in each part, I would like to include a list of references (institutions or persons) to contact in case of need or question (hence the key words).

Part IX Corrections or modifications

Sheets to send back to the ACCOBAMS secretary to complete or modify the kit.

Bibliography

For each chapter in each part, I would like to include a bibliography in three parts:

- vulgarisation (generalities understandable to every one)
- literature a little bit sharper
- scientific articles