

**SPAIN PROGRESS REPORT ON CETACEAN RESEARCH, MAY 2004 TO APRIL 2005,  
WITH STATISTICAL DATA FOR THE CALENDAR YEAR 2004**

Compiled by S. Lens<sup>1</sup>, J. Pantoja<sup>2</sup>, J.A. Vázquez<sup>3</sup> and E. Urquiola<sup>3</sup>

<sup>1</sup> Spanish Institute of Oceanography, Ministry of Education and Science  
Apdo. 1552. E-36200-Vigo

<sup>2</sup> Directorate-General for Biodiversity, Ministry of Environment  
Gran Vía de San Francisco, 4. E-28005-Madrid

<sup>3</sup> Spanish Cetacean Society  
Nalon, 16. E-28240-Hoyo de Manzanares (Madrid)

This report summarises information obtained from:

- ALNITAK (Marine Environment Research and Education Centre).
- AMBAR (Society for the Study and Conservation of Marine Fauna).
- EIBE (Euskal Izurde eta Balezaleen Elkarte- Asociación Vasca de Amigos de Delfines y Ballenas)
- CEMMA (Coordinadora para o Estudio dos Mamíferos Mariños).
- CEPESMA (Coordinadora para el Estudio y Protección de Especies Marinas).
- CIRCE (Conservation, Information and Research on Cetaceans).
- CRAM (Fundació per a la Conservació i la Recuperació d' Animals Marins).
- CREMA (Aula del Mar de Málaga).
- EIBE (Euskal Izurde eta Balezaleen Elkarte).
- GOBCAN (Dirección General de Medio Natural, Viceconsejería de Medio Ambiente, Gobierno de Canarias).
- GRAMPUS (Colectivo para el Estudio y Conservación del Medio Marino).
- GRUMM (Group of Study and Conservation of Marine Mammals, University of Barcelona).
- IEO (Instituto Español de Oceanografía).
- PROMAR (Programa de Recuperación de Fauna Marina de Almería).
- RUANO, A. (Asturias)
- SEC (Sociedad Española de Cetáceos).
- SECAC (Sociedad para el Estudio de Cetáceos en el Archipiélago Canario).
- TC (Tenerife Conservación).
- ULL (University of La Laguna , Tenerife. Department of Animal Biology of the Faculty of Biology. Department of Acoustic and Vibrations of the Faculty of Physics.).
- ULPGC (University of Las Palmas de Gran Canaria, Department of Anatomic Pathology of the Faculty of Veterinary).
- UV (University of Valencia, Department of Animal Biology & Cavanilles Institute of Biodiversity).

### 1. Species and stocks studied

Common name	Scientific name	Area/stock(s)	Items referred to
Minke whale	<i>Balaenoptera acutorostrata</i>	North Spain, Canary Islands	2.1.1, 4.3, 6.2, 6.3, 7.1, 7.2, 8
Sei whale	<i>Balaenoptera borealis</i>	North Spain, Canary Islands	2.1.1
Bryde's whale	<i>Balaenoptera edeni</i>	Canary Islands	2.1.1, 6.3
Fin whale	<i>Balaenoptera physalus</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 3.1.3, 4.1, 4.3, 4.4, 6.2, 6.3, 7.1, 7.2, 8
Common dolphin	<i>Delphinus delphis</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 4.1, 4.2, 4.3, 4.4, 6.2, 7.1, 7.2, 8, 9
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	Canary Islands, North Spain	2.1.1, 2.2, 3.1.1, 3.1.2, 3.1.3, 4, 7.1, 7.2
Long-finned pilot whale	<i>Globicephala melas</i>	Spanish Mediterranean, North Spain	2.1.1, 2.1.2, 2.2, 3.1.1, 4.1, 4.2, 4.3, 4.4, 6.2, 7.1, 7.2, 8
Risso's dolphin	<i>Grampus griseus</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 4.1, 4.3, 6.2, 7.1, 7.2, 8
Northern bottlenose whale	<i>Hyperoodon ampullatus</i>	Spanish Mediterranean, North Spain	2.1.1
Pygmy sperm whale	<i>Kogia breviceps</i>	Canary Islands	2.1.1., 4.2, 4.3, 5, 6.6, 7.1, 7.2
Dwarf sperm whale	<i>Kogia simus</i>	Canary Islands	4.2, 7.1, 7.2
Humpback whale	<i>Megaptera novaeangliae</i>	Spanish Mediterranean, Canary Islands	2.1.1, 2.1.2., 6.3
Sowerby's beaked whale	<i>Mesoplodon bidens</i>	North Spain	2.1.1, 3.1.1
Blainville's beaked whale	<i>Mesoplodon densirostris</i>	Canary Islands	2.1, 2.2., 3.1.1., 3.1.3., 3.2, 4.3, 5, 6.3, 7.1
Gervais' beaked whale	<i>Mesoplodon europaeus</i>	Canary Islands	2.1, 4.3, 5, 6.3, 7.1
Orca	<i>Orcinus orca</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 4.3, 6.2, 6.3, 7.2
Harbour porpoise	<i>Phocoena phocoena</i>	Spanish Mediterranean, North Spain	2.1.1, 2.2, 4.3, 6.2, 7.1, 7.2, 8

Sperm whale	<i>Physeter macrocephalus</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 4.1, 4.3, 4.4, 5, 6.2, 6.3, 7.1, 8
False killer whale	<i>Pseudorca crassidens</i>	Canary Islands	2.1.1, 7.2
Striped dolphin	<i>Stenella coeruleoalba</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 4.1, 4.3, 4.4, 5, 6.2, 7.1, 7.2, 8
Spotted dolphin	<i>Stenella frontalis</i>	Canary Islands	2.1.1, 2.1.2, 3.1.1, 4.3
Rough-toothed dolphin	<i>Steno bredanensis</i>	Canary Islands	2.1.1, 2.1.2
Bottlenose dolphin	<i>Tursiops truncatus</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 4.1, 4.2, 4.3, 4.4, 6.2, 7.1, 7.2, 8, 9
Cuvier's beaked whale	<i>Ziphius cavirostris</i>	Spanish Mediterranean, North Spain, Canary Islands	2.1.1, 2.1.2, 2.2, 3.1.1, 4.3, 6.2, 6.3, 7.1, 8

## 2. Sightings data

### 2.1 Field work

#### 2.1.1 SYSTEMATIC

##### SPANISH MEDITERRANEAN

**ALNITAK:** dedicated shipboard surveys are being carried out since 1992 in the Alboran Sea region and contiguous waters of south-eastern Spain. Data on acoustics, behaviour and photo-identification are also collected. Target species are *Tursiops truncatus*, *Delphinus delphis*, *Stenella coeruleoalba*, *Globicephala melas*, *Grampus griseus*, *Physeter macrocephalus*, *Balaenoptera physalus* and beaked whales. Data on sea turtles, marine birds, fishing activities, maritime traffic, debris pollution and meteorological and oceanographic variables are also collected in order to complement the analysis of cetacean distribution and habitat preference modelling. Model-based abundance estimates are being carried out also for several species. Opportunistic sightings were done as well in 1990 and 1991.

**SMRU / ALNITAK:** dedicated shipboard surveys have been carried out in July-August 2004 in a project targeting sperm whales around the Balearic Islands. A total of 1088 miles were sailed on effort.

**UV:** Shipboard surveys are being carried out since 2003 in the coast of Alicante and around Columbretes island Marine Reserve (Castellón) to collect data on distribution, behaviour and photo-identification of *Tursiops truncatus*, *Stenella coeruleoalba* and *Grampus griseus*.

**CIRCE:** dedicated shipboard surveys are being carried out since 2000 in the Strait of Gibraltar and Gulf of Cadiz, as well as the south coast of Portugal. Data on acoustics, behaviour and photo-identification, and skin samples for genetic, pollutant and diet analysis are also collected. Target species are *Tursiops truncatus*, *Delphinus delphis*, *Stenella coeruleoalba*, *Globicephala melas*, *Orcinus orca*, *Physeter macrocephalus*, *Phocoena phocoena* and *Balaenoptera physalus*. Data on sea turtles, marine birds, fishing activities, maritime traffic, debris pollution and meteorological and oceanographic variables are also collected in order to complement the analysis of cetacean distribution and habitat preference modelling. Opportunistic sightings were done as well between 1997 and 2000.

**GRUMM:** Studies focused on the biology and ecology of marine mammals, with particular emphasis on: i) surveys on distribution and population estimates using aerial surveys and photo identification; ii) interactions with fisheries; iii) population biology, particularly studying reproductive parameters, growth and lifespan; and iv) nutritive condition, particularly through lipid analysis.

##### NORTHERN SPAIN AND BAY OF BISCAY

**AMBAR:** Since 2000 AMBAR is collaborating with the BDRP (Biscay Dolphin Research Program), in a monitoring survey program in the Bay of Biscay and English Channel, with the ferry "Pride of Bilbao". In 2004, 280 sightings have been collected: *Tursiops truncatus* 18, *Delphinus delphis* 93, *Stenella coeruleoalba* 18, unidentified dolphin 26, *Grampus griseus* 1, *Phocoena phocoena* 12, *Delphinus* + *Stenella* 3, *Globicephala melas* 14, *Ziphius cavirostris* 4, unidentified *ziphius* 3, *Balaenoptera physalus* 60, *Balaenoptera acutorostrata* 3, *Balaenoptera borealis* 2, unidentified *balaenoptera* 17, *Physeter macrocephalus* 6

Land based sightings project (2004): a total of 105 hours of observation in 2 different points along the Basque Country coast during which 7 sightings of 2 different species were recorded bottlenose (3) and common dolphins(4).

Shipboard sightings. In 2004 seven dedicated surveys, distributed along the year, were carried out by AMBAR in the southern part of Bay of Biscay. During the 28 days of the study period, a total of 1575 nm were sailed in the study area. A total of 90 sightings of 11 different species were recorded in the area; 70 sightings corresponding to small cetaceans (*Tursiops truncatus* 12, *Delphinus delphis* 30, *Stenella coeruleoalba* 11, unidentified dolphin 10, *Grampus griseus* 2, *Lagerorhynchus acutus* 1), 17 corresponding to mid-size cetaceans (*Globicephala melas* 9, *Globicephala macrorhynchus* 1, *Ziphius cavirostris* 3, *Mesoplodon bidens* 1, unidentified *ziphius* 3) and 3 corresponding to big size cetaceans (*Balaenoptera physalus* 2, *Physeter macrocephalus* 1).

**CEMMA:** Observations from the coast. 513.51 hours of observation in 865 observation points were carried out with a result of 58.99 hours of sightings and 161 sightings records, with a mean sighting rate of one sighting every 3.1 hours of observation. Observations at sea. A total of 17 specific trips in different ships were carried out during 1361.1 km travelled, carrying out a prospecting of 1937 km<sup>2</sup> (about 30% of the Galician continental shelf). 110.8 hours of observation were carried out effort, being 16.3 hours of sighting (14.7%) and a total of 60 sightings. The estimated number of animals seen is 728, with 3.5 sightings/trip and a rate of encounter of 0,044 sightings/km and a relative density of 0,53 cetaceans/km. Complementarily 114 opportunistic sightings have been gathered from coast and at sea. The total number of sightings is 477, corresponding to the following species: *Globicephala melas* (2,1%), *Phocoena phocoena* (4,1%), *Grampus griseus* (1,4%), large cetaceans (0,6%), *Delphinus delphis* (18,2%), *Tursiops truncatus* (65,2), *non identified delphinids* (7,1%). Most of them were coastal herds of *Tursiops truncatus*.

**EIBE:** Shipboard surveys are conducted since 2003 in the adjacent waters of the Basque Country. Data on behaviour and photo-identification are also collected. Target species are *Tursiops truncatus*, *Delphinus delphis*, *Stenella coeruleoalba*, *Globicephala melas*, *Balaenoptera borealis*, *Balaenoptera acutorostrata*, *Pseudorca crassidens*, *Phocoena phocoena*, *Orcinus orca*, *Physeter macrocephalus*, *Balaenoptera physalus*, *Ziphius cavirostris*, *Hiperoodon ampullatus* and *Mesoplodon sp.*. Data on marine birds, fishing activities, maritime traffic, debris pollution and meteorological and oceanographic variables are also collected in order to complement the analysis of cetacean distribution and habitat use modelling. Opportunistic sightings were done as well in 2003.

Shipboard surveys are conducted since 2004 in the waters of Grand Sole. Data on behaviour and photo-identification are also collected. Target species are, *Delphinus delphis*, *Balaenoptera physalus*, *Ziphius cavirostris*. Data on marine birds, fishing activities, maritime traffic, debris pollution and meteorological and oceanographic variables are also collected in order to complement the analysis of cetacean distribution and habitat use modelling. Opportunistic sightings were done as well since 2003.

**RUANO A. (ASTURIAS):** Shipboard surveys are conducted since 2004 in central and occidental Asturias waters (Cantabrian Sea). A total of 2283,49 Km. were shipped covering 3.600 Km<sup>2</sup>. During the study period a total of 69 sightings of 6 different species were recorded; 52 sightings corresponding to small cetaceans (*Tursiops truncatus* 15, *Delphinus delphis* 36, *Stenella coeruleoalba* 1), 6 to mid-size cetaceans (*Globicephala melas* 6) and 8 to large whales (*Balaenoptera physalus* 3, *Balaenoptera acutorostrata* 5). Data on marine birds, are also collected in order to complement the analysis of cetacean distribution. Opportunistic sightings were compiled since 1991.

#### CANARY ISLANDS

**SECAC:** Different surveys along the coast of the Canary Archipelago have been regularly carried out since 1999, with long term studies mainly focusing in the Western Islands of the Canary Islands (Life-Nature project, 1999-2001, and a Project for the Regional Government 2002-2003): Gran Canaria (study on *Grampus griseus*, on going project), Fuerteventura and Lanzarote (study for the Regional Government focused on beaked whales, since 2003), and La Gomera (since 2004, LIFE project LIFE03NAT/E/000062). A dedicated sailing boat and rubber dinghy have been used to carry out studies mainly on the following species: *Tursiops truncatus*, *Mesoplodon densirostris*, *Mesoplodon europaeus*, *Ziphius cavirostris*, *Globicephala macrorhynchus*, *Grampus griseus*, *Steno bredanensis*, *Stenella frontalis*, *Physeter macrocephalus*, *Balaenoptera physalus*, *Balaenoptera edeni*. Data on distribution, photo-identification, behaviour and biopsy samples for genetic analysis have been collected, together with data on sea turtles, marine birds, fishing activities, maritime traffic, and meteorological and oceanographic variables in order to complement the analysis of cetacean distribution and habitat use.

**TC:** Sightings surveys were carried out in Tenerife and La Palma with records of 9 species. From June 2004 to October 2004, a survey was carried out around the Eastern Islands (Tenerife and La Palma mostly), with the cooperation of the Regional Government and the Ministry of Defence, within the framework of a Project for the Regional Government. During 31 days of field work (906,1 nm), the spatio-temporal distribution, relative frequency and minimum estimate of population size have been studied, with a total of 146 sightings. Some methods used were photo-identification and transect line. Data on sightings were made on board R/V "MONACHUS".

### **2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY**

#### BAY OF BISCAY - BASQUE COUNTRY COAST

Data on opportunistic sightings made by skippers of collaborating vessels, fishing ships, maritime authorities, and coastal observations by volunteers and organisations are being collected by AMBAR. The data set compiled in this area in 2004 comprises about 108 sightings. Fin whale (*Balaenoptera physalus*) 3, (*Balaenoptera sp.*) 8, striped dolphin (*Stenella coeruleoalba*) 3, common dolphin (*Delphinus delphis*) 58, long-finned pilot whale (*Globicephala*

*melas*) 8, bottlenose dolphin (*Tursiops truncatus*) 23, orca (*Orcinus orca*) 1, Cuvier's beaked whale (*Ziphius cavirostris*) 1, sperm whale (*Physeter macrocephalus*) 1.

**EIBE:** During summer, Basque Country fishing boats for red tuna (*Thunnus thynnus*) sailed around the Bay of Biscay and Grand Sole. An opportunistic research program started in 2003 to implicate fisherman's in conservation and to obtain additional information about cetacean species in these waters. Six boats between 30 and 35 meters long and 10 meters high were used as sighting platforms. In 5 of those boats, the fishermen were trained to collect information on cetacean sightings. 268 opportunistic sightings were obtained belonging to 7 species. Fin whale (*Balaenoptera physalus*) 54, (*Balaenoptera* sp.) 52, striped dolphin (*Stenella coeruleoalba*) 38, common dolphin (*Delphinus delphis*) 34, long-finned pilot whale (*Globicephala melas*) 30, bottlenose dolphin (*Tursiops truncatus*) 11, orca (*Orcinus orca*) 18, minke whale (*Balaenoptera acutorostrata*) 6.

#### GALICIA (NW SPAIN)

**CEMMA:** Data on opportunistic sightings made by skippers of collaborating vessels and coastal observations by volunteers of CEMMA were also recorded, with a total of 138 records.

**IEO:** Opportunistic cetacean observations were carried out weekly during transects for red tides monitoring along the Galician rias (NW Spain).

#### ALBORAN SEA AND STRAIT OF GIBRALTAR

Data on opportunistic sightings made by skippers of collaborating vessels, fishing ships, maritime authorities, whale-watching boats and coastal observations by volunteers and organisations are being collected by ALNITAK, CIRCE and SEC. The data set of opportunistic sightings compiled in this area includes more than 4000 sightings.

#### CATALUÑA (NORTH WEST MEDITERRANEAN)

Data on opportunistic sightings made by coastal police, volunteer skippers of collaborating vessels, fishing ships and maritime authorities are being collected by Fundació CRAM. The data set of opportunistic sightings compiled in this area comprises 73 sightings.

#### LA GOMERA (CANARY ISLANDS)

Data on opportunistic sightings made by skippers of fishing ships, and whale-watching boats have being collected by SECAC since the end of 2004.

### 2.2 Analyses/development of techniques

**ALNITAK:** Model-based abundance estimates for bottlenose dolphins were obtained in the Alboran Sea. Further analysis to obtain abundance and habitat preference is being carried out for common and striped dolphins, using the method of spatial analysis. Photo-identification is also used as a means of tracking groups and individuals, both spatially and temporally, of the most common species. Data on oceanographic variables, skin samples for genetics and acoustic recordings are also collected.

**AMBAR:** This group has focused the research during this year 2004 on the 3 species of cetaceans: *Tursiops truncatus*, *Globicephala melas* and *Ziphius cavirostris*. The data have been analysed in order to obtain relative abundance and spatial models of distribution in relation to abiotic and biotic factors. AMBAR is using the photo-identification techniques and mark-recapture methods for estimate abundance of bottlenose dolphin, pilot whale and Cuvier's beaked whale.

**CEMMA:** The results of the annual sightings are analysed to estimate relative densities, distribution and population size.

**CIRCE:** Photo-identification is used to estimate the abundance and social structure of killer whales, bottlenose dolphins, common dolphins, sperm whales and long-finned pilot whales, as well as a means to track groups and individuals, both spatially and temporally, of the most common species. Data on oceanographic variables, skin samples for genetics and acoustic recordings are also collected.

**EIBE:** This group is applying photo-identification and mark-recapture models to analyse the social structure. Habitat use and spatial-temporal analysis regarding distribution of the animals are also being used.

**UV:** Shipboard surveys to collect data on diving behaviour are being made in order to correct the absolute abundance estimations of previous years. On the other hand, photo-identification technique is also conducted for bottlenose dolphin, Risso's dolphin and common dolphin, in order to track groups and individuals spatially. Data on opportunistic sightings made by tourism ships, fishing ships, maritime authorities and coastal observations by rangers of the principal islands are also collected.

**RUANO A. (ASTURIAS):** A two stages project is being carried out. The first Project level developed during 2004, has been designed and implemented through a research campaign in the Central and West area of Asturias Region., using a motor sailing vessel on a set of transects. Studies have been applied in the continental shelf, within a distance of 12 nm, enlarged to the Avilés Canyon. A collection of reference sources on strandings and occasional sightings along the coast since 1985 were also made. In the second Project level (during 2005), samples will be collected in the East area of Asturias Region. The same methodology will be used, covering the continental shelf, within a distance of 12 nm, and also to the Lastres and Ribadesella Canyons. The total area covered in the Project would be estimated in 2500 km<sup>2</sup>.

**ULL:** is analysing the seasonal and spatial distribution of sightings of the different species of the family Ziphiidae off El Hierro island in relation to depth and slope.

**TC:** Some methods used were photo-identification technique, especially for bottlenose dolphin, pilot whale and Blainville's beaked whale and transect line. A photo-identification catalogue for Blainville's beaked whale was elaborate using records taken from 1995 to 2004. Habitat use and spatial-temporal analysis regarding distribution of the animals and movements have also been carried out.

**GRUMM:** In the summer of 2002, within the framework of the LIFE 2000/NAT/E/7303 project, aimed to promote seventeen SCIs (Sites of Community Importance) in the Balearic Islands, a survey to assess population abundance and identity, conservation problems, and local movements of bottlenose dolphins (*Tursiops truncatus*) was initiated. The goal of these studies is producing an action plan for the conservation of the species in the waters of the Balearic Islands.

### 3. Marking data

#### 3.1 Field work

##### 3.1.1 NATURAL MARKING DATA

Species	Feature	Area/stock	Calendar year/season/ no. photographed	Catalogued (Y/N)	Catalogue total	Contact person/insitute
Unidentified cetacean		Bay of Biscay	2004 /summer	Y	5	Juanma Salazar/EIBE
		Asturias north Spain	2004 summer/29			Arturo Ruano
Unidentified orqual	dorsal fin	Canary Islands		N		Vidal Martin/SECAC
Minke whale	dorsal fin	Asturias north Spain	2004 summer/7			Arturo Ruano
Fin whale	Dorsal fin/body	Balearic Islands	Spring-Summer 2002-2004	N		Joan Gonzalvo / GRUMM
Common dolphin	dorsal fin	Alboran Sea	+2000 pictures (2004)	N		Ana Cañadas / ALNITAK
		Valencia Region	2004-2005/ all seasons	N		Juan Antonio Raga / UV
		Strait of Gibraltar	2000 pictures (2004)			Renaud de Stephanis / CIRCE
		South-east Bay of Biscay	2003-2005 /all season	N	120	Juanma Salazar/EIBE
		Galicia	2004	Y	10	Alfredo López / CEMMA
Short-finned pilot whale	dorsal fin	Canary Islands	Sep 99- Feb 05/ +3.500 photos	Y/N	213	Vidal Martin / SECAC
		Southern Bay Biscay	2004 / all seasons	N		J.A. Vázquez / AMBAR
		Canary Islands	2004/summer/34	Y	140	M.Carrillo / TC
Long-finned pilot whale	dorsal fin	Alboran Sea	+800 pictures (2004)	N		Ana Cañadas / ALNITAK
		Galicia	2004	Y	10	Alfredo López / CEMMA
		South-east Bay of Biscay	2003-2005 /all season	Y	70+	Juanma Salazar/EIBE
		Asturias North Spain	2004/summer/142			
		Southern Bay Biscay	2004 / all seasons	Y	46	J.A. Vázquez / AMBAR

		Strait of Gibraltar	5000 (2004)	Y	155+	Philippe Verborgh / CIRCE
		Canary Islands	Since end 2004/120	N		Vidal Martín / SECAC
		Balearic Islands	Spring-Summer 2002-2004	N		Joan Gonzalvo / GRUMM
Northern bottlenose whale	Dorsal fin	South-east Bay of Biscay	2003-2004 /all season	N	2	Juanma Salazar/EIBE
Blainville's beaked whale	dorsal fin/body	Canary Islands	1995-2004/all seasons/110	Y	38	M. Carrillo / TC
		Canary Islands	2004/autumn/62 photos	N		Vidal Martín/SECAC
Killer whale	Dorsal fin/Saddle patch	Strait of Gibraltar	2000 (2004)	Y	29	Renaud de Stephanis / CIRCE
Sperm whale	flukes	Strait of Gibraltar	10 (2004)	Y	22	Renaud de Stephanis / CIRCE
Striped dolphin	Dorsal fin	South-east Bay of Biscay	2003-2004 /all season	N	30+	Juanma Salazar/EIBE
Bottlenose dolphin	dorsal fin	Valencia Region	2004/ winter	N		Juan Antonio Raga / UV
		Alboran Sea	991 pictures (2004) 502 pictures enero 05	N		Ana Cañadas / ALNITAK
		Southern Bay Biscay	2004 / all seasons	Y	76	J.A. Vázquez / AMBAR
		South-east Bay of Biscay	2003-2005 /all season	Y	102	Enara Marcos/EIBE
		Strait of Gibraltar	3000 (2004)	Y	120	Renaud de Stephanis / CIRCE
		Galicia	2004	Y	30	Alfredo López / CEMMA
			Since Ago 2004 / 968 photos	N		Vidal Martín / SECAC
		Canary Islands	2004/summer/12	Y	125	M.Carrillo / TC
		Southern Bay Biscay	2004 / all seasons	Y	2	J.A. Vázquez / AMBAR
		Balearic Islands	Spring-Summer 2002-2004	Y	250+	Joan Gonzalvo / GRUMM
Cuvier's beaked whale	Dorsal fin/body	South-east Bay of Biscay	2003-2004 /all season	N	7	Juanma Salazar/EIBE
Risso's dolphin	Dorsal fin/body	Balearic Islands	Spring-Summer 2002-2004	N		Joan Gonzalvo / GRUMM

### 3.1.2. ARTIFICIAL MARKING DATA

#### 4. Tissue/biological samples collected

##### 4.1 Biopsy samples (+skin swabbing + slaughtered skin)

Species	Area/stock	Calendar year/season no. collected	Archived (Y/N)	No. analysed	Total holdings	Contact person/institute
Common dolphin	Spanish Mediterranean	12 (skin swabbing)	Y			Ana Cañadas / Alnitak
Bottlenose dolphin	Spanish Mediterranean	28 biopsies	Y	10		Susana García / SEC
	Balearic Islands	Summer 2004 / 1	Y			Alex Aguilar / GRUMM
	Canary Islands	2004 / 11 biopsies	Y	11		Silvia Hildebrandt / SECAC-ULPGC
Short-finned pilot whale	Canary Islands	2004 / 20 biopsies	Y	20		Silvia Hildebrandt / SECAC-ULPGC
	Canary Islands	2005 / 7 biopsies	Y	7		Silvia Hildebrandt / SECAC-ULPGC
Risso's dolphin	Canary Islands	2004 / 1 biopsy	Y	0		Silvia Hildebrandt / SECAC-ULPGC
Blainville's beaked whale	Canary Islands	2004 / 1 biopsy	Y	1		Silvia Hildebrandt / SECAC-ULPGC
Atlantic spotted dolphin	Canary Islands	2004 / 7 biopsies	Y	5		Silvia Hildebrandt / SECAC-ULPGC
	Canary Islands	2005 / 1 biopsy	Y	0		Silvia Hildebrandt / SECAC-ULPGC
Rough-toothed dolphin	Canary Islands	2004 / 4 biopsies	Y	0		Silvia Hildebrandt / SECAC-ULPGC

*Previous years*

Species	Area/stock	Calendar year/ season no. collected	Archived (Y/N)	No. analysed	Total holdings	Contact person/institute
Fin whale	Med	2001-2002				
Bryde's whale	Canary Islands	1999/ 8	Y	8		Silvia Hildebrandt / SECAC- ULPGC
Common dolphin	South Spain	2001-2002				
	Basque Country (N Spain)	2002				
	Canary Islands	1999 -2003 / 43	Y	20		Silvia Hildebrandt / SECAC- ULPGC
Risso's dolphin	Canary Islands	1999-2000 / 5	Y	0		Silvia Hildebrandt / SECAC- ULPGC
Short-finned pilot whale	Canary Islands	1999-2000 / 29	Y	29		Silvia Hildebrandt / SECAC- ULPGC
Long-finned pilot whale	Basque Country (N Spain)	2002				
Sperm whale	South Spain	2000-2002				
	South Spain	2001-2002				
	Canary Islands	2000 / 2	Y	2		Silvia Hildebrandt / SECAC- ULPGC
Striped dolphin	South Spain	2001-2002				
	Basque Country (N Spain)	2002				
	Canary Islands	1999 -2000 / 23	Y	0		Silvia Hildebrandt / SECAC- ULPGC
Bottlenose dolphin	Basque Country (N Spain)	2002				
	Canary Islands	1999 -2003 / 48	Y	38		Silvia Hildebrandt / SECAC- ULPGC
Gervais' beaked whale	Canary Islands	1999 / 1	Y	1		Silvia Hildebrandt / SECAC- ULPGC
False killer whale	Canary Islands	1999 / 3	Y	0		Silvia Hildebrandt / SECAC- ULPGC
Atlantic spotted dolphin	Canary Islands	1999 - 2003/ 188	Y	26		Silvia Hildebrandt / SECAC- ULPGC
Rough-toothed dolphin	Canary Islands	1999 -2000 / 9	Y	0		Silvia Hildebrandt / SECAC- ULPGC

*4.2 Samples from directed catches or bycatches*

Species	Area/stock	Calendar year/ season total	Archived (Y/N)	Tissue type(s)*	Contact person/institute
Common dolphin	Galicia	1	Y	Skin, muscle blubber,	Santiago Lens/IEO

*4.3 Samples from stranded animals*

Species	Area/stock	Calendar year/ season total	Archived (Y/N)	Tissue type(s)*	Contact person/institute
Minke whale	Galicia (N Spain)	2	Y	Complete necropsy	Alfredo López / CEMMA
	Basque Country (N Spain)	1	N	Skin (1)	P. Cermeño / AMBAR
Fin whale	Galicia (N Spain)	1	Y	Complete necropsy	Alfredo López / CEMMA
	Almería (S Spain)	2	Y	Complete necropsy	PROMAR
	Valencia (E Spain)	2	Y	Pictures,	Juan Antonio Raga/ UV
	Canary Islands	3	Y	Skin, blubber and muscle	Antonio Fernández/ULPGC
Common dolphin	Almería (S Spain)	16	Y	Complete necropsy	PROMAR
	Andalucía (S Spain)		Y	Complete necropsy	JoséLuis Mons Checa / CREMA
	Galicia (N Spain)	140	Y	Complete necropsy	Alfredo López / CEMMA
	Asturias (N Spain)	22	Y	Complete necropsy	Luis Laría / CEPESMA

	Basque Country (N Spain)	4	Y (4)	Complete necropsy	P. Cermeño / AMBAR
	Canary Islands	1	Y	Skeleton, skin	Manuel Carrillo / TC
	Canary Islands	2	Y	Complete necropsy	Antonio Fernández/ULPGC
	Cataluña (NE Spain)	1	Y	Complete necropsy and samples	Manel Gazo / CRAM
Long-finned pilot whale	Galicia (N Spain)	16	Y	Complete necropsy	Alfredo López / CEMMA
	Basque Country (N Spain)	2	Y (1)	Complete necropsy (1)	P. Cermeño / AMBAR
	Asturias (N Spain)	4	Y	Complete necropsy	Luis Laría / CEPESMA
	Almería (S Spain)	2	Y	Complete necropsy	PROMAR
Short-finned pilot whale	Canary Islands	3	Y (2)	Complete necropsy	Antonio Fernández/ULPGC
Risso's dolphin	Galicia (N Spain)	4	Y	Complete necropsy	Alfredo López / CEMMA
	Almería (S Spain)	1	Y	Complete necropsy	PROMAR
	Canary Islands	Spring 2004	Y	Stomach, bones, skin	Manuel Carrillo / TC
	Canary Islands	3	Y	Complete necropsy	Antonio Fernández/ULPGC
	Andalucía (S Spain)		Y	Complete necropsy	JoséLuis Mons Checa / CREMA
	Valencia (E Spain)	1	Y	Complete necropsy	Juan Antonio Raga/ UV
Pygmy sperm whale	Galicia (N Spain)	1	Y	Complete necropsy	Alfredo López / CEMMA
	Canary Islands	Summer 2004	Y	Skin, skull	Manuel Carrillo / TC
	Basque Country (N Spain)	1	N	None	P. Cermeño / AMBAR
Blainville's beaked whale	Canary Islands	Spring 2004	Y	Stomach, skin, skeleton	Manuel Carrillo / TC
	Canary Islands	2	Y (1)	Complete necropsy	Antonio Fernández/ULPGC
True's beaked whale	Canary Islands	1	Y	Complete necropsy	Antonio Fernández/ULPGC
Gervais' beaked whale	Canary Islands	Summer 2004	Y	Stomach, skin, skull	Manuel Carrillo / TC
Harbour porpoise	Galicia (N Spain)	17	Y	Complete necropsy	Alfredo López / CEMMA
	Asturias (N Spain)	2	Y	Complete necropsy	Luis Laría / CEPESMA
	Basque Country (N Spain)	2	Y	Complete necropsy	P. Cermeño / AMBAR
Sperm whale	Canary Islands	Summer-Autumn 2004 / 2	Y	Skee, stomach, teeth, bones	Manuel Carrillo / TC
	Canary Islands	4	N	None	Antonio Fernández/ULPGC
	Almería (S Spain)	1	Y	Complete necropsy	PROMAR
Striped dolphin	Galicia (N Spain)	15	Y	Complete necropsy	Alfredo López / CEMMA
	Asturias (N Spain)	5	Y	Complete necropsy	Luis Laría / CEPESMA
	Basque Country (N Spain)	4	Y (2)	Complete necropsy	P. Cermeño / AMBAR
	Valencia (E Spain)	10	Y	Complete necropsy	Juan Antonio Raga/ UV
	Andalucía (S Spain)		Y	Complete necropsy	JoséLuis Mons Checa / CREMA
	Almería (S Spain)	20	Y	Complete necropsy	PROMAR
	Canary Islands	Spring-Summer 2004 / 4	Y	Stomach, skin, bones, skull	Manuel Carrillo / TC
	Canary Islands	16	Y (11)	Complete necropsy	Antonio Fernández/ULPGC
	Cataluña (NE Spain)	5	Y	Various tissues in formalin	Manel Gazo / CRAM
	Cataluña (NE Spain)	6	Y	Frozen blubber	Manel Gazo / CRAM
	Cataluña (NE Spain)	1	Y	Frozen plasma	Manel Gazo / CRAM
Cataluña (NE Spain)	1	Y	Frozen cerebrospinal fluid	Manel Gazo / CRAM	
Atlantic spotted dolphin	Canary Islands	Spring-Summer 2004 / 4	Y	Skeen, skull, bones, stomach	Manuel Carrillo / TC



	Canary Islands	12	Y (11)	Complete necropsy	Antonio Fernández/ULPGC
Spinner dolphin	Canary Islands	3	Y	Complete necropsy	Antonio Fernández/ULPGC
White-sided dolphin	Galicia (N Spain)	1	Y	Complete necropsy	Alfredo López / CEMMA
	Basque Country (N Spain)	1	Y	Complete necropsy	P. Cermeño / AMBAR
Bottlenose dolphin	Almería (S Spain)	1	Y	Complete necropsy	PROMAR
	Galicia (N Spain)	22	Y	Complete necropsy	Alfredo López / CEMMA
	Asturias (N Spain)	6	Y	Complete necropsy	Luis Laría / CEPESMA
	Basque Country (N Spain)	4	Y (2)	Skin (2)	P. Cermeño / AMBAR
	Valencia (E Spain)	3	Y	Pictures and measurements	Juan Antonio Raga/ UV
	Canary Islands	Spring 2004	Y	Skin, skeleton	Manuel Carrillo / TC
	Canary Islands	3	Y (2)	Complete necropsy	Antonio Fernández/ULPGC
	Cataluña (NE Spain)	1	Y	Complete necropsy and samples	Manel Gazo / CRAM
Unidentified dolphin	Galicia (N Spain)	43	Y		Alfredo López / CEMMA
	Valencia (E Spain)	27			Juan Antonio Raga/ UV
	Almería (S Spain)	20	Y	Complete necropsy	PROMAR
	Basque Country (N Spain)	11	N	None	P. Cermeño / AMBAR
	Asturias (N Spain)	2	Y		Luis Laría / CEPESMA
Cuvier's beaked whale	Basque Country (N Spain)	2	Y	Stomach, teeth, gonads, skin	Pablo Cermeño / AMBAR
	Asturias (N Spain)	2	Y		Luis Laría / CEPESMA
	Galicia (N Spain)	2	Y	Complete necropsy	Alfredo López / CEMMA
	Canary Islands	Spring-Winter 2004 / 2	Y	Stomach, skin	Manuel Carrillo / TC
	Canary Islands	9	Y (5)	Complete necropsy	Antonio Fernández/ULPGC
Fraser's dolphin	Canary Islands	2	Y (1)	Complete necropsy	Antonio Fernández/ULPGC
Rough-toothed dolphin	Canary Islands	3	Y	Complete necropsy	Antonio Fernández/ULPGC

#### 4.4 Analyses/development of techniques

**ALNITAK / SEC:** Biopsy samples from bottlenose dolphins have been collected in 2004 in order to perform stable isotopes and genetic analysis. This study is being carried out in collaboration with the Autonomous University of Madrid.

**AMBAR:** Stomach contents have been preserved in order to analyze diets from the different species: Common dolphins (4), Bottlenose dolphins (2), Striped dolphins (2), Harbour porpoise (2). Diet analysis includes identification of fish and cephalopod remains, count and measurement of “hard parts” (fish otoliths and cephalopod mandibles), and estimation of original prey size using published regressions. Teeth will be analyzed to estimate the age, using standard techniques. Skin samples have been collected for Bottlenose dolphin (2), Harbour porpoise (2), Pilot whale (1), Minke whale (1), Atlantic white-side dolphin (1) and Common dolphin (4) to future genetic analysis. Standard procedures (histology) for identifying possible pathology have been applied to organ samples. Also pollution samples were taken, striped dolphin (2), harbour porpoise (2), pilot whale (1) and common dolphin (4).

**CEMMA:** Stomach contents for several species have been analysed. Diet analysis includes identification of fish and cephalopod remains, count and measurement of “hard parts” (fish otoliths and cephalopod mandibles), and estimation of original prey size using published regressions. Teeth and gonads will be analysed to estimate the age and reproductive status using standard techniques. Samples of parasites were collected in order to study their interactions. Other samples are taken and conserved in biological bank of samples for later studies.

**CIRCE / SEC:** Biopsy samples from bottlenose dolphins have been collected in 2004 in order to perform stable isotopes and genetic analysis. This study is being carried out in collaboration with the Autonomous University of Madrid.

**CREMA:** Samples and information from animals stranded in Andalusia (south Spain) were collected. This centre collaborates with other research centres, taking samples of common, striped and bottlenose dolphins in the southern Spanish coast.

**UV:** Data on parasites and causes of death have been collected for several species. Teeth and gonads were also collected to estimate the age and reproductive status using standard techniques. Stomach contents have been analysed for diet studies. Other samples are taken and conserved in biological bank of samples for later studies.

**SECAC:** Genetic analysis have been carried out from biopsy samples of different cetacean species. The samples from *Tursiops truncatus*, *Globicephala macrorhynchus*, *Physeter macrocephalus*, and *Stenella frontalis*, have been used also for comparison with cetacean populations from Archipelago of Azores and Madeira (project called MACETUS, Interreg project, 2003-2005). This study has been carried out in collaboration with the University of Las Palmas de Gran Canaria and the Canarian Government. Stomach contents have been collected from stranded animals.

**CRAM:** From all carcasses from which a complete necropsy was carried out, tissue samples were collected in order to perform histology analyses. Teeth will be analyzed to estimate the age, using standard techniques. Gastrointestinal contents were collected in order to obtain and study parasites. Skin samples have been collected for all the stranded animals in order to conduct future genetic analysis.

**ULPGC:** The Unit of Histology and Pathology, Institute for Animal Health, School of Veterinary carry out a systematic study to determine the pathology and the possible cause/s of strand and death of the beached cetaceans in the Canary Islands. Histopathological, immunohistochemical, microbiological, parasitological and toxicological studies are performed. Special emphasis is made on anthropogenic causes of lesions found in stranded animals (collisions, fishing interaction, military naval exercises and anthropogenic contaminants.).

## 5. Pollution studies

**AMBAR:** Pollution samples were taken in 2 striped dolphin, 2 harbour porpoise, 1 pilot whale and 4 common dolphins during this year. Samples of skin, bubbler, kidneys and liver are frozen.

**CEMMA:** Pollution studies are carried out to determine contaminant levels.

**TC:** Studies in cetacean stranded during 2004 gave data of plastics presence in 5 stomachs of five different species: *Mesoplodon densirostris*, *Mesoplodon europaeus*, *Physeter macrocephalus*, *Kogia breviceps* and *Stenella coeruleoalba*.

**ULPGC:** To perform analysis of PCBs, organochlorines and heavy metals samples of blubber, muscle, lung, liver, kidney and brain of every stranded animal are taken.

**GRUMM:** Studies on pollution monitoring and effects, particularly focusing on organochlorine compounds, were conducted on: i), *Tursiops truncatus* and *Delphinus delphis* from Mediterranean and North Atlantic waters; ii) *Tursiops truncatus* from Sarasota (in collaboration with the Chicago Zoological Society and Alterra-Marine and Coastal Zone Research); iii) *Phocoena phocoena* from the Bay of Fundy (in collaboration with Duke University and Alterra-Marine and Coastal Zone Research). Special attention has been paid to the validation of the use of retinoids as biomarkers of pollutant exposure in odontocetes. Some of these studies were carried out under the umbrella of the IWC Pollution 2000+ project.

## 6. Statistics for large cetaceans

### 6.1 Direct catches (commercial, aboriginal and scientific permits) for the calendar year 2004

Not applicable

### 6.2 Non-natural mortality for the calendar year 2004

Species	Area/stock	Males	Females	Total	Cause	Methodology
Sperm whale	Canary Islands			2*	Collisions with ships	

\*unknown sex

### 6.2.1 STRANDINGS OR DEAD WHALES ENCOUNTERED AT SEA

Whale species	Sex	Location	Cause of death	Det.	Source or contact institution, contact name and telephone and/or e-mail
Fin whale	M	Valencia (E Spain)	U	U	Juan Antonio Raga/ UV
Fin whale	M	Valencia (E Spain)	U	U	Juan Antonio Raga/ UV
Fin whale	F	Galician	U	U	Alfredo López / CEMMA
Fin whale	U	Canary Islands	U	U	Antonio Fernández/ULPGC
Fin whale	F	Canary Islands	U	U	Antonio Fernández/ULPGC
Fin whale	F	Canary Islands	Collision	Cut visual observation	Antonio Fernández/ULPGC
Sperm whale	F	Canary Islands	Collision	Cut visual observation	Antonio Fernández/ULPGC
Sperm whale	M	Canary Islands	U	U	Antonio Fernández/ULPGC
Sperm whale	M	Canary Islands	U	U	Antonio Fernández/ULPGC
Sperm whale	M	Canary Islands	U	U	Antonio Fernández/ULPGC
Blue whale	M	Barcelona (NE Spain)	Ship strike	V (A)	Manel Gazo / CRAM
Blue whale	U	Tarragona (NE Spain)	U	U	Manel Gazo / CRAM
Comments:					
A. Deep cut in front of dorsal flipper.					

### North Spain.

Several whales were observed floating dead far from the coast but the reasons of these events were not studied.

### Canary Islands.

**ULPGC, TC, SECAC:** Four dead and advanced decomposed strandings cause by possible collisions of a juvenile female of fin whale (*Balaenoptera physalus*), an adult female of sperm whale (*Physeter macrocephalus*) and two adults of Cuvier's beaked whale (*Ziphius cavirostris*) (one male and the other unidentified), most probably due to collisions with High Speed Ferry.

## 6.2.2 OBSERVED OR REPORTED SHIP STRIKES

## 6.2.3 FISHERY BYCATCH

### 6.3 Earlier years' statistics

## 7. Statistics for small cetaceans

### 7.1 For the calendar year 2004

Species	Area/stock	Directed catch		Incidental mortality			Live-capture
		Reported	Est. total	Reported	Est. total	Source*	Reported
Common dolphin	Galicia (N Spain)			37		Gillnet (G)	
	South Spain			7	64	Fishing interaction	
	Cataluña (NE Spain)			1		Fishing interaction	

Striped dolphin	South Spain			5	58	Fishing interaction	
	Cataluña (NE Spain)			2		Fishing interaction	
Atlantic spotted dolphin	Canary Islands			2		Fishing interaction	
Bottlenose dolphin	Galicia (N Spain)			2		Gillnet (G)	
	South Spain			1	14	Fishing interaction	
Unidentified dolphin	South Spain			1	59	Fishing interaction	
Risso's dolphin	South Spain			1	1	Fishing interaction	
	Galicia (N Spain)			3		Gillnet (G)	
	Canary Islands			1		Fishing interaction	
Harbour porpoise	South Spain			1	6	Fishing interaction	
	Galicia (N Spain)			2		Gillnet (G)	
Cuvier's beaked whale	Canary Islands			2		Collision with ships	
Pygmy sperm whale	Canary Islands			1		Collision with ships	
Long-finned pilot whale	Galicia (N Spain)			1		Trawl	

## 7.2 Earlier years' statistics

This table summarises strandings diagnosed as by-catches (2003-2004).

Species	Area/stock	Diagnosed*	Source
<i>Delphinus delphis</i>	Galicia (N Spain)	37	CEMMA
<i>Tursiops truncatus</i>	Galicia (N Spain)	2	CEMMA
<i>Phocoena phocoena</i>	Galicia (N Spain)	2	
<i>Grampus griseus</i>	Galicia (N Spain)	3	CEMMA

\*Most of them are animals with marks of gears, cuts in the fins, etc. Other have marks of ropes.

## 8. Strandings

Several stranding networks and organizations collect information on strandings along the Spanish coasts: CRAMM in Cataluña (North-East Spain), CREMA in Andalucía (South Spain), GRAMPUS – SECEM and OCEANIDE in the Gulf of Cádiz (South Spain), PROMAR in the coasts of Almería (South Spain), GRAMM in the coast of Melilla (North Africa), UV in the coasts of Valencia (eastern Spain), CERCAM in the Balearic Islands (eastern Spain), AMBAR in the Basque Country (North Spain), CEPESMA in the coast of Asturias (North Spain), CEMMA and IEO in Galicia (North Spain), Fundación Marineland (FUN. MAR) in the Balearic Islands (eastern Spain) and SECAC, TC and ULPGC in the Canary Islands.

## 9. Other studies and analyses

### Iberian Peninsula and Balearic Islands

**ALNITAK:** Since July 2002, ALNITAK is participating in a European Commission funded Life project entitled "Conservation of cetaceans in Murcia and Andalucía" (LIFE02NAT/E/8610), which will run until July 2006. Within this project, ALNITAK co-ordinates the monitoring actions, including model-based abundance estimates for bottlenose dolphins and other cetaceans species, and the development of a long-term monitoring programme.

**SEC:** The Spanish Cetacean Society initiated a Life Nature project (LIFE02NAT/E/8610: "Conservation of Cetaceans and Turtles in Andalucía and Murcia") in 2002 (finishing in 2006). This project includes the development

of a monitoring plan for the species (harbour porpoise, bottlenose dolphin and loggerhead turtle), the development of management plans for the areas, and public awareness. The monitoring program is carried out in collaboration with ALNITAK, CIRCE and ANSE.

**AMBAR:** In order to respond to the necessity of viable solution for the interaction between fishing activities and the population of bottlenose dolphins, the **DGP (FISHERIES BAL)** began a project in October 2000. The study was structured in four parts: 1) continue control of artisanal fishing boats, 2) photo-identification of different schools of dolphins, 3) analysis of the strandings and 4) interviews to fishermen.

**CEMMA:** An ecological study of the resident bottlenose dolphin in the Galician coast between 2003-2005 is being carried out with funding from the Environmental Department of the Galician Government. An agreement with the Government allows to carry out works of attendance to strandings and fauna recovery. Routinely diet studies, age, reproduction and pathology are carried out. A biological bank of samples has started for genetics studies and pollutants. An acoustic survey of cetaceans is also developed by means of TPODs.

**CIRCE:** Since July 2002, CIRCE is participating in a European Commission funded Life project entitled "Conservation of cetaceans in Murcia and Andalucía" (LIFE02NAT/E/8610), which will run until July 2006. Since 2003, CIRCE is collaborating in the Environmental Impact assessment of different off shore wind farms in the Gulf of Cadiz

**CREMA:** Information and samples of stranded animals in the region of Andalucía (south Spain) are being collected. This centre collaborates with other research centres, taking samples of common, striped and bottlenose dolphins in the southern Spanish coast.

**GRAMPUS and SECHEM:** Stomachs of stranded cetaceans in the Gulf of Cadiz are being taken for food habits studies.

**GRUMM:** Studies on population genetics were carried on: i) Mediterranean and Atlantic populations of *Tursiops truncatus* (in collaboration with the University of Durham); ii) Mauritanian population of *Delphinus* spp. (in collaboration with the University of Durham); Mediterranean and Atlantic populations of *Balaenoptera physalus* (in collaboration with the University of California at Berkeley). Studies on isotopic signature were carried out on: I) Mediterranean and Atlantic populations of *Tursiops truncatus*, *Delphinus delphis* and *Stenella coeruleoalba*; North Atlantic population of *Physeter macrocephalus* (in collaboration with the Copenhagen Zoologisk Museum and Age Dynamics).

**IEO:** Incidental catches of cetaceans were monitored in different long distance Spanish fisheries. Observer's schemes were in operation in the trawl fishery in the SW Atlantic (989 hauls observed), NAFO (1,388 hauls observed), Svalbard (255 hauls observed) as well as in Hatton Bank (293 hauls) and Reikjanes ridge (66 hauls). The long line fishery for swordfish was also monitored in the Atlantic, Pacific and Indian Oceans (145, 88 and 90 sets respectively). A total of 564 hauls were observed in a programme to monitor discards and incidental catches in the trawl fishery in ICES Areas VI, VII and IX. Observers collected as well information on incidental catches and sightings of cetaceans in some experimental long line fisheries (1,519 sets).

### Canary Islands

**GOBCAN:** The Canaries have 10 SACs approved for bottlenose dolphins. Case has been opened for the designation of the 'Parque Natural Marino de las ballenas' (Natural Marine Park for whales). Case has been opened as well for the development of the Biodiversity law. There exists a law regulating the whale-watching activities since 1995, and a new law is being developed. Certificates of whale-watching touristic guide operator have been implemented. Since 1996, vigilance is carried out over the whale watching operations by the local authorities. In 2002-2003-2004, a socio-economic study of the whale-watching activities was done by the SEC- Sociedad Española de Cetáceos for the "Dirección General de Política Ambiental del Gobierno de Canarias".

**SECAC:** Since June 2004, SECAC is conducting a Life project entitled "*Tursiops truncatus* y *Caretta caretta* in La Gomera" (LIFE03NAT/E/000062), which will run until December 2006. SECAC has been conducting a Interreg III-B project, together with the Archipelagos of Madeira and Azores in order to study the population structure, distribution, movements, and habitat use of the sperm whale (*Physeter macrocephalus*), short-finned pilot whale (*Globicephala macrorhynchus*), bottlenose dolphin (*Tursiops truncatus*) and Atlantic spotted dolphin (*Stenella frontalis*). This project have been using techniques such as photo-identification biopsies and VHF/TDR's transmitters as main study methodology. Within the survey program named CETOC, SECAC has been conducted also studies on the possible endemic character of the oceanic form of Atlantic spotted dolphin in Canarias, on the populations of bottlenose dolphin and short-finned pilot whales in the SACs of Tenerife and Gran Canaria, of Risso's dolphin in the north of Gran Canaria, and on beaked whales along the coast of Lanzarote and Fuerteventura.

Moreover, on the 22th of April, in Puerto Calero harbour opened the Museo de Cetáceos de Canarias, the first museum of cetaceans of the Canary Islands. The entire project and its realization has been conducted and supervised by SECAC and Puerto Calero.

**ULPGC:** The Department of Anatomic Pathology has been carried out a systematic study with the following aims. To determine the pathology and the possible cause/s of the stranding and death of the stranded cetaceans in the Canary Islands. Around 30-40 necropsies are performed every year and the corresponding pathological, microbiological, parasitological and toxicological, etc. studies are also carried out. Special emphasis is focused on anthropogenic effects on the lesions found in stranded animals (collisions, fishing interaction, acoustic trauma, etc.).

**TC:** A member of Tenerife Conservación has started a thesis project about the Osteology of cetaceans in Canary Island, with the direction of the Institute of Sanity, Faculty of Veterinary, University of Las Palmas de Gran Canaria.

## 10. Literature cited

## 11. Publications

### 11.1 Published or 'In Press' papers only

In the version published in the report, 'In press' papers will not be included (they will of course be included as fully published papers in subsequent years). However, they are of value in the version presented to the meeting.

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## APPENDIX: ORGANISATIONS/INDIVIDUALS AND CONTACT DETAILS

ALNITAK Marine Environment Research and Education Centre. Nalón 16, La Berzosa, E-28240 Hoyo de Manzanares, Madrid, Spain.

*Ana Cañadas: alnitak.ana@cetaceos.com, (34) 676481284 – (34) 918565199*

AMBAR - Society for the study and conservation of marine fauna, C/ Blas de Otero, 18, 5 iz. 48014. Bilbao. Spain.

*José Antonio Vázquez: ggbvaboj@lg.ehu.es / ggbvaboj@hotmail.com. (34) 677081833*

*Pablo Cermeño: cermeno@euskalnet.es (34) 617626869*

ANSE - .Asociación de Naturalistas del Sureste. C/ Medieras, 6 - Entlo. izquierda (Palacio Almirante Escaño), 30201 Cartagena.

*Pedro García: cartagena@asociacionanse.org (34) 968 526817*

CREMA (Aula del Mar) Centro de Recuperación de Especies Marinas Amenazadas. Avda. Manuel Agustín Heredia, 35 29001 – Málaga, Spain.

*José Luis Mons: crema@auladelmar.info (34) 678609056*

EIBE - *Euskal Izurde eta Balezaleen Elkarte*- Asociación Vasca de Amigos de los Delfines y Ballenas. Baserritar etorbidea 6D-3ºizq.20280 Hondarribia.Gipuzkoa.Spain

*Enara Marcos: enara@eibeh.org (34) 630440827*

*Juanma Salazar: juanma@eibeh.org*

CRAM. Fundació per a la Conservació i la Recuperació d' Animals Marins. Camí Ral, 239. 08330 Premià de Mar (Barcelona).

*Manel Gazo; manel@cram.es (34) 93 752 45 81*

CEMMA - Coordinadora para o Estudio dos Mamíferos Mariños, P.O. Box 15. 36380 Gondomar (PONTEVEDRA). Spain

*Alfredo López: tursion@iim.csic.es (34)686989008*

CEPESMA - Coordinadora para el Estudio y Protección de Especies Marinas, Muelle 3, 33700 Luarca, Asturias, Spain

*Luis Laria: cepesma@cepesma.com*

CIRCE - Conservation, Information and Research on Cetaceans, Cabeza de Manzaneda 3, Algeciras, 11390, Cádiz, Spain.

GRAMPUS- Colectivo para el Estudio y Conservación del Medio Marino, C/ Sacrificio 22, 1º. 21750 El Rocío, Almonte, Huelva, Spain

*Sonia Alís: grampus@terra.es (34) 657 51 43 70*

GRUMM – Grupo de Estudio y Conservación de los mamíferos Marinos, Universidad de Barcelona. Departamento de Biología Animal (Vertebrados). Facultad de Biología. Universidad de Barcelona. 08071 Barcelona, Spain.

*Alex Aguilar: alexa@bio.ub.es. (34) 93 402 14 53*

IEO - Instituto Español de Oceanografía, Centro Oceanográfico de Vigo, Ministerio de educación y Ciencia. Apdo. 1552. 36200-Vigo, Spain

*Santiago Lens: santiago.lens@vi.ieo.es (34) 986 492111*

MIMAM – Dirección General para la Biodiversidad, Ministerio de Medio Ambiente. Gran Vía de San Francisco, 4. 28005-Madrid, Spain.

*Javier Pantoja: JPantoja@mma.es. (34) 91 596 46 11*

PROMAR- Programa de recuperación de Fauna Marina de Almería. C/Zacatín 37. Adra 04770 Almería, Spain

*Francisco Toledano: ecologistasalm@larural.es (34) 650 40 33 86*

SEC – Sociedad Española de Cetáceos, La Berzosa, E-28240 Hoyo de Manzanares, Madrid, Spain.

*sec@cetaceos.com (34) 628012037 – (34) 914460257*

SECAC - Sociedad para el Estudio de los Cetáceos en el Archipiélago Canario. c/ El Greco nº 17 - 2º J - 35500 Arrecife, Lanzarote, Canarias, Spain.

*Vidal Martín: cetocanarias@iespana.es (34) 626649984*

TC (Tenerife Conservación) . Calle Heraclio Sánchez Nº 23 F46. 38204 La Laguna, Santa Cruz de Tenerife, Canarias- Spain.

*Manuel Carrillo: monachus@mixmail.com (34) 699692494*

ULL (University of La Laguna), Tenerife. Department of Animal Biology of the Faculty of Biology. Department of Acoustic and Vibrations of the Faculty of Physics.

*Alberto Brito: abrito@ull.es*

ULPGC- Unidad de Histología, Anatomía Patológica e Inmunopatología. Instituto de Sanidad Animal y Seguridad Alimentaria.(IUSA). Facultad de Veterinaria - Universidad de Las Palmas de Gran Canaria. Trasmontaña, 35416 Arucas, Gran Canaria, España.

*Antonio Fernández: afernandez@dmor.ulpgc.es (34) 928451030*

UV (UNIVERSIDAD DE VALENCIA)- Marine Zoology Unit, Cavanilles Institute of Biodiversity and Evolutionary Biology, P.O. Box 22085, 46071 Valencia, Spain

*Juan Antonio Raga: toni.raga@uv.es (34) 963 544375*