

Spain. Progress report on cetacean research, April 2009 to March 2010, with statistical data for the *calendar year* 2009

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This report summarises information obtained from:

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Alnitak Marine Research Center	Alnitak	anacanadas@alnitak.info
Asociación de Naturalistas del Sureste	ANSE	jlmurcia@asociacionanse.org
AZTI-Tecnalia Foundation	AZTI-Tecnalia	aiuriarte@azti.es
Consejería de Medio Ambiente. Junta de Andalucía	CMA	eduardo.fernandez.tabales@juntadeandalucia.es
Conselleria de Medi Ambient. Govern de Les Illes Balears	CAIB	jaoliver@dgcapea.caib.es
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Instituto Español de Oceanografía	IEO	s.lens@vi.ieo.es ; m.b.santos@vi.ieo.es
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Servicio de Biodiversidad, Generalidad Valenciana	GVA	jimenez_juaper@gva.es
Instituto Cavanilles. Universidad de Valencia	UV	toni.raga@uv.es
University of Las Palmas de Gran Canaria, Unit of Histology and Veterinary Pathology of the Veterinary School	ULPGC	afernandez@dmor.ulpgc.es

1. SPECIES AND STOCKS STUDIED

IWC common name	IWC recommended scientific name	Area/stock(s)	Items referred to
Short-beaked common dolphin	<i>Delphinus delphis</i>	Canary Islands, Spanish Mediterranean, Bay of Biscay, Southern Spain, Northern Spain	2.1.1, 2.1.2, 3.1.1, 4.3, 5, 6.2.1, 7.3.2, 9
Striped dolphin	<i>Stenella coeruleoalba</i>	Canary Islands, Spanish Mediterranean, Bay of Biscay, Southern Spain, Northern Spain	2.1.1, 2.1.2, 4.3, 5, 7.3.2, 8, 9
Atlantic spotted dolphin	<i>Stenella frontalis</i>	Canary Islands	4.3, 5
Harbour porpoise	<i>Phocoena phocoena</i>	Bay of Biscay, Southern Spain	4.3, 8, 9
Rough-toothed dolphin	<i>Steno bredanensis</i>	Canary Islands	4.3
Bottlenose dolphin	<i>Tursiops truncatus</i>	Canary Islands, Spanish Mediterranean, Bay of Biscay, Southern Spain, Northern Spain	2.1.1, 2.1.2, 2.2, 3.1.1, 3.1.3, 4.3, 5, 6.2.1, 7.3.1, 7.3.2, 8, 9

Risso's dolphin	<i>Grampus griseus</i>	Canary Islands, Spanish Mediterranean, Bay of Biscay, Southern Spain	2.1.1, 2.1.2, 3.1.1, 4.3, 5, 6.2.1, 8
Long-finned pilot whale	<i>Globicephala melas</i>	Spanish Mediterranean, Bay of Biscay, Southern Spain, Northern Spain	2.1.1, 2.1.2, 2.2, 3.1.1, 9
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	Canary Islands	4.3, 5, 9
Beaked whale	<i>Ziphius sp.</i>	Bay of Biscay	2.1.2
Cuvier's beaked whale	<i>Ziphius cavirostris</i>	Canary Islands, Spanish Mediterranean, Bay of Biscay, Southern Spain, Northern Spain	2.1.1, 2.1.2, 3.1.1, 3.1.3, 4.3, 5, 8, 9
Blainville's beaked whale	<i>Mesoplodon densirostris</i>	Canary Islands	2.1; 2.1.3.1.1; 3.1.3.3.2
Killer whale	<i>Orcinus orca</i>	Strait of Gibraltar	2.1.1
Pigmy Sperm Whale	<i>Kogia breviceps</i>	Strait of Gibraltar	4.3, 8
Sperm whale	<i>Physeter macrocephalus</i>	Canary Islands, Spanish Mediterranean, Bay of Biscay, Southern Spain, Northern Spain	2.1.1, 2.1.2, 3.1.1, 3.1.3, 4.3, 5, 6.2.1, 6.3.1, 6.3.2, 8, 9
Humpback whale	<i>Megaptera novaeangliae</i>	Northern Spain	9
Minke whale	<i>Balaenoptera acutorostrata</i>	Canary Islands, Southern Spain	4.3, 8
Fin whale	<i>Balaenoptera physalus</i>	Spanish Mediterranean, Bay of Biscay, Southern Spain	2.1.1, 2.1.2, 4.3, 6.3.1, 8
Unidentified roqual	<i>Balaenopteridae</i>	Canary Islands	8

2. SIGHTINGS DATA

2.1 Field work

2.1.1 Systematic

ULL:

Target species	Date	Area	No. of sightings	Contact person/institute and references
Sperm whale	September-December 2010	Canary Islands		Andrea Fais et al. (afais@ull.es.ULL). Unpublished report to the Canary Islands Government
Cuvier's beaked whale	Seasonal surveys through the year	Canary Islands		Natacha Aguilar et al. (naguilar@ull.es.ULL). Unpublished report to the Spanish Ministry of Environment and TRAGSEGA
Blainville's beaked whale	Seasonal surveys through the year	Canary Islands		Natacha Aguilar et al. (naguilar@ull.es.ULL). Unpublished report to the Spanish Ministry of Environment and TRAGSEGA
Bottlenose dolphin	Seasonal surveys through the year	Canary Islands		Marta Tobeña (ULL)

GVA: One day surveys are being carried out once a month in the coast of Alicante, gulf of Valencia and around Columbretes Island Marine Reserve (Castellón) to collect data on distribution, behaviour and photo-identification.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Common dolphin	01/04/09-31/03/10	Spanish Mediterranean	1	GVA
Striped dolphin	01/04/09-31/03/10	Spanish Mediterranean	38	GVA
Bottlenose dolphin	01/04/09-31/03/10	Spanish Mediterranean	2	GVA
Risso's dolphin	01/04/09-31/03/10	Spanish Mediterranean	1	GVA
Pilot whale	01/04/09-31/03/10	Spanish Mediterranean	2	GVA
Sperm whale	01/04/09-31/03/10	Spanish Mediterranean	1	GVA

Fin whale	01/04/09-31/03/10	Spanish Mediterranean	5	GVA
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ALNITAK: Ship-based surveys are being carried out since 1992 in the northern section of the Alborán Sea and the Gulf of Vera, to collect data on abundance, distribution, habitat preferences and photo-identification.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Short-beaked common dolphin	15-06 to 22-10 2009	Northern Alborán Sea	41	Ana Cañadas - ALNITAK
Short-beaked common dolphin	15-06 to 22-10 2009	Northern African coast	12	Ana Cañadas - ALNITAK
Striped dolphin	15-06 to 22-10 2009	Northern Alborán Sea	57	Ana Cañadas - ALNITAK
Striped dolphin	15-06 to 22-10 2009	Northern African coast	7	Ana Cañadas - ALNITAK
Bottlenose dolphin	15-06 to 22-10 2009	Northern Alborán Sea	39	Ana Cañadas - ALNITAK
Bottlenose dolphin	15-06 to 22-10 2009	Northern African coast	7	Ana Cañadas - ALNITAK
Risso's dolphin	15-06 to 22-10 2009	Northern Alborán Sea	9	Ana Cañadas - ALNITAK
Risso's dolphin	15-06 to 22-10 2009	Northern African coast	1	Ana Cañadas - ALNITAK
Long-finned pilot whale	15-06 to 22-10 2009	Northern Alborán Sea	30	Ana Cañadas - ALNITAK
Cuvier's beaked whale	15-06 to 22-10 2009	Northern Alborán Sea	8	Ana Cañadas - ALNITAK
Cuvier's beaked whale	15-06 to 22-10 2009	Northern African coast	1	Ana Cañadas - ALNITAK
Sperm whale	15-06 to 22-10 2009	Northern Alborán Sea	2	Ana Cañadas - ALNITAK
Minke whale	15-06 to 22-10 2009	Northern Alborán Sea	1	Ana Cañadas - ALNITAK
Fin whale	15-06 to 22-10 2009	Northern Alborán Sea	4	Ana Cañadas - ALNITAK

CMA: Systematic aerial surveys are being carried out since 2005 twice a year in the Gulf of Vera, the Northern Alboran Sea, Strait of Gibraltar and the Gulf of Cadiz. Besides this, regular ship-based surveys are also being carried out since 2007 in these areas. Data on abundance and distribution are collected.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Common dolphin	01/04-18/11/2009	Gulf of Vera and Northern Alboran Sea	29	CMA
Striped dolphin	11/03-25/11/2009	Gulf of Vera, Northern Alboran Sea, Strait of Gibraltar and Gulf of Cadiz	53	CMA
Unidentified small dolphins (common & striped in aerial surveys)	22/04-30/10/2009	Gulf of Vera, Northern Alboran Sea, Strait of Gibraltar and Gulf of Cadiz	48	CMA
Bottlenose dolphin	11/03-18/11/2009	Gulf of Vera, Northern Alboran Sea, Strait of Gibraltar and Gulf of Cadiz	51	CMA
Long-finned pilot whales	21/04-25/11/2009	Gulf of Vera, Northern Alboran Sea, Strait of Gibraltar and Gulf of Cadiz	19	CMA
Risso's dolphin	06/05-30/10/2009	Gulf of Vera and Northern Alboran Sea	6	CMA
Killer whale	16/05/2009	Strait of Gibraltar	1	CMA
Cuvier's beaked whale	19/05-20/10/2009	Northern Alboran Sea	4	CMA
Unidentified beaked whale (possibly Cuvier's beaked whale)	05/05/2009	Northern Alboran Sea	1	CMA
Fin whale	02/12/09	Northern Alboran Sea	1	CMA

ANSE:

Target species	Date	Area	No. of sightings	Contact person/institute and references
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Bottlenose dolphin	19/01/09	Coast of Region de Murcia	1	J. L. Murcia (ANSE)
Bottlenose dolphin	18/02/09	Coast of Region de Murcia	1	J. L. Murcia (ANSE)
Bottlenose dolphin	10/07/09	Coast of Region de Murcia	1	J. L. Murcia (ANSE)
Risso's dolphin	10/07/09	Coast of Region de Murcia	1	J. L. Murcia (ANSE)
Bottlenose dolphin	10-28/12/09	Coast of Region de Murcia	3	J. L. Murcia (ANSE)

IEO: As part of the marine mammal and seabird observer program the IEO carries out onboard their acoustic surveys to estimate pelagic fish abundance, 3 observers are placed on the spring and autumn acoustic surveys. In 2009, 2 surveys took place, one in spring covering the Galician and Cantabrian Sea shelf waters and one in autumn covering the shelf and slope waters of the Bay of Biscay. The methodology is the same than the one applied by CRMM in the French acoustic cruise and on the same R/V (contact: M. Begoña Santos: m.b.santos@vi.ieo.es).

2.1.2 Opportunistic, platforms of opportunity

GVA: Opportunistic sightings from tourism ships, fishing ships, maritime authorities and coastal observations made by rangers of Coastal Natural Parks are collected by GVA.

Primary species	Area	Data type/method	Collected by	Platform	Location of archive (if applicable)	Contact person/institute and refs
Bottlenose dolphin	Serra Gelada, San Antonio and Tabarca Natural Reserves	sightings	Rangers	Coast/Boat	GVA	Parc Natural Serra Gelada/ Reserva Natural San Antonio/ Reserva Natural Tabarca
Striped dolphin	Serra Gelada and Columbretes Natural Reserves	sightings	Rangers	From Coast/Boat	GVA	Parc Natural Serra Gelada/ Reserva Natural Illes Columbretes
Globicephala melas	Serra Gelada Natural Reserve	sightings	Rangers	From Coast/Boat	GVA	Parc Natural Serra Gelada
Fin whale	Columbretes and San Antonio Natural Reserves	sightings	Rangers	From Coast/Boat	GVA	Reserva Natural Illes Columbretes Reserva Natural San Antonio
All present	Bay of Biscay	sightings	Crew, staff	Oceanographic survey	AZTI-Tecnalia Foundation	A.Uriarte (AZTI-Tecnalia)
All present	Bay of Biscay	sightings	Crew	Sport fishing	AZTI-Tecnalia Foundation	A.Uriarte (AZTI-Tecnalia)
All present	Bay of Biscay	sightings	Captain	Fishers	AZTI-Tecnalia Foundation	A.Uriarte (AZTI-Tecnalia)

2.2 Analyses/development of techniques

Target species	Date	Area	Methods/effort	Parameters/ factors measured	Contact person/institute; refs
perm whale	20/8/06	Canary Islands	Line transect survey. (Visual and acoustic)	Distribution; sighting frequency. Population abundance	Andrea Fais et al. 2010 (afais@ull.es , ULL) Report to the Canary Islands Government

Cuvier's beaked whale		Canary Islands	Line transect survey. (Visual and acoustic)	Distribution; sighting frequency	Andrea Fais et al. 2010 (afais@ull.es , ULL) Report to the Canary Islands Government
Blainville's beaked whale		Canary Islands	Line transect survey. (Visual and acoustic)	Distribution; sighting frequency	Andrea Fais et al. 2010 (afais@ull.es , ULL) Report to the Canary Islands Government
Bottlenose dolphin		Canary Islands	Land-based sightings	Temporal relative distribution	María Tobeña ULL
Bottlenose dolphin	09/01/09	Coast of Region de Murcia	Line transect survey	Photo ID	L. Murcia (ANSE)
Bottlenose dolphin	08/02/09	Coast of Region de Murcia	Line transect survey	Photo ID	L. Murcia (ANSE)
Bottlenose dolphin	01/07/09	Coast of Region de Murcia	Line transect survey	Photo ID	L. Murcia (ANSE)
Risso's dolphin	01/07/09	Coast of Region de Murcia	Line transect survey	Photo ID	L. Murcia (ANSE)
Bottlenose dolphin	01-28/12/09	Coast of Region de Murcia	Line transect survey	Photo ID	L. Murcia (ANSE)

IEO: Diet analysis are being carrying out through the examination of stomach contents of all marine mammal species stranded and by-caught in Galicia (contact: G.J. Pierce: g.j.pierce@abdn.ac.uk, M. Begoña Santos: m.b.santos@vi.ieo.es). In addition, dietary information is also gathered from the analysis of the stable isotopes of muscle and skin samples of bottlenose dolphins stranded and by-caught in Galicia and their main prey (contact: Ruth Fernández: ruthfernandez@uvigo.es) and long-finned pilot whales (contact: Silvia Monteiro: silvia.sm.monteiro@gmail.com). Genetic studies have also been carried out on samples collected from stranded bottlenose dolphins (Ruth Fernández: ruthfernandez@uvigo.es).

Analyses are also being carried out on the life history and interactions with fisheries of other small cetaceans along the Galician coast (contact: Fiona Read: fionaread@iim.csic.es and Sabine Goetz: sabine.goetz@vi.ieo.es).

3. MARKING DATA

3.1 Field work

3.1.1 Natural marking data

Species	Feature	Area/stock	No. photo-id'd	Catalogue (Y/N)	Catalogue total	Contact person/institute; refs
Cuvier's beaked whale	Body marks	Canary Islands		Y		www.cetabase.info Natacha Aguilar et al. (naguilar@ull.es , ULL) Unpubl. report to the Spanish Ministry of Environment and TRAGSEGA
Blainville's beaked whale	Body marks	Canary Islands		Y		www.cetabase.info Natacha Aguilar et al. (naguilar@ull.es , ULL) Unpubl. report to the Spanish Ministry of Environment and TRAGSEGA
Sperm whale	Fluke	Canary Islands		Y		Andrea Fais et al. (afais@ull.es , ULL) Report to the Canary Islands Government
Bottlenose dolphin	Fin	Canary Islands		Y		In prep
Common dolphin	dorsal fin	Alboran Sea	+2500 picts. (2009)	N	(in process)	Ana Cañadas / ALNITAK
Long-finned pilot whale	dorsal fin	Alboran Sea	+8000 picts. (2009)	Y	(in process)	Ana Cañadas / ALNITAK
Bottlenose dolphin	dorsal fin	Alboran Sea	+4000 picts. (2009)	Y	(in process)	Ana Cañadas / ALNITAK
Risso's dolphin	dorsal fin	Alborán Sea	+100 picts. (2009)	Y	(in process)	Ana Cañadas / ALNITAK

Bottlenose dolphin	Dorsal fin (left)	Coast of Murcia	18	Y	118	J. L. Murcia (ANSE)
Bottlenose dolphin	Dorsal fin (right)	Coast of Murcia	24	Y	139	J. L. Murcia (ANSE)

3.1.2. Artificial marking data

None

3.1.3 Telemetry data

Species	Tag type	No. successfully deployed	Maximum time transmitting	Contact person/institute; refs
Blainville's beaked whale	Suction-cup attached DTAG	12 tags from 2003 to 2009	1 day, summing 102 hours of acoustic and movement data	Natacha Aguilar, Patricia Arranz ULL, several refs in web page http://webpages.ull.es/users/cetaceos/publi.html
Short finned pilot whales	Suction-cup attached DTAG			Natacha Aguilar, Jacobo Marrero, ULL. Refs in web page http://webpages.ull.es/users/cetaceos/publi.html

3.2 Analyses/development of techniques

Species	Tag type	Methods/effort	Parameters/ factors measured	Contact person/institute; refs
Blainville's beaked whale	Suction-cup attached DTAG	Acoustic and 3D movement data Echoes from the seabed and organisms in the water column	Social sounds Foraging ecology	Natacha Aguilar, Patricia Arranz/ULL several refs in web page: http://webpages.ull.es/users/cetaceos/publi.html
Short finned pilot whales	Suction-cup attached DTAG	Acoustic and 3D movement data	Social sounds Foraging ecology	Natacha Aguilar, Jacobo Marrero/ULL Refs in web page: http://webpages.ull.es/users/cetaceos/publi.html

4. TISSUE/BIOLOGICAL SAMPLES COLLECTED

4.1 Biopsy samples (summary only)

None

4.2 Samples from directed catches (commercial, aboriginal and scientific permits) or bycatches

None

4.3 Samples from stranded animals

Species	Area/stock	type(s)*	No. collected	Archived (Y/N)	No. analysed	Contact person/institute
Common dolphin	Canary Islands	Compl.necrops /skin, blubber, muscle, liver, kidney, skeleton	1+1	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Common dolphin	Southern Spain	Complete necropsy	13	Y	13	eduardo.fernandez.tabales@jutan.deandalucia.es /CMA
Striped dolphin	Canary Islands	Compl.necrops /skin, blubber, muscle, kidney, liver, skeleton	9+1	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Striped dolphin	Spanish Mediterranean	Complete necropsy/ Skin	8+1	Y	7	Toni.raga@uv.es
Striped dolphin	Southern Spain	Complete necropsy	29	Y	29	eduardo.fernandez.tabales@jutan.deandalucia.es /CMA

Atlantic spotted dolphin	Canary Islands	Compl.necrops /Skin, blubber, muscle, kidney, liver, skeleton	1+1	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Harbour porpoise	Southern Spain	Complete necropsy	1	Y	1	eduardo.fernandez.tabales@jutan.deandalucia.es /CMA
Bottlenose dolphin	Canary Islands	Compl.necrops /Skin, blubber, muscle, kidney, liver, skeleton	1+2	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Rough-toothed dolphin	Canary Islands	Complete necropsy	1	Y		Antonio Fernández/ULPGC
Risso's dolphin	Canary Islands	Complete necropsy	1	Y		Antonio Fernández/ULPGC
Risso's dolphin	Southern Spain	Complete necropsy	1	Y	1	eduardo.fernandez.tabales@jutan.deandalucia.es /CMA
Short-finned pilot whale	Canary Islands	Compl.necrops /Skin, blubber, muscle, kidney, liver, skeleton/ teeth	5+2	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Long-finned pilot whale	Southern Spain	Complete necropsy	2	Y	2	eduardo.fernandez.tabales@jutan.deandalucia.es /CMA
Cuvier's beaked whale	Canary Islands	Partial necropsy/ Skin, skeleton	1+ 2	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Pygmy sperm whale	Southern Spain	Complete necropsy	1	Y	1	eduardo.fernandez.tabales@jutan.deandalucia.es /CMA
Sperm whale	Canary Islands	Partial necrops /Skin, bubbler, muscle, kidney, liver, skeleton	4+3	Y		Antonio Fernández/ULPGC M. Carrillo/ TENECON
Sperm whale	Spanish Mediterranean	Skin, teeth	1	Y	0	Toni.raga@uv.es
Minke whale	Canary Islands	Complete necropsy	2	Y		Antonio Fernández/ULPGC
Fin whale	Spanish Mediterranean	Skin, baleen plates	1	Y	0	Toni.raga@uv.es

4.4 Analyses/development of techniques

TENECON: Samples from cetaceans stranded in western Canary Islands are taken to determine the cause of death (in collaboration with ULPGC) and feeding (in collaboration with the Aberdeen University). Other samples are preserved in a tissue bank.

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

CMA: Necropsies have been performed with histopathological and bacteriological analyses, following agreed necropsy proceedings (ECS, 1991). Immunohistochemical and PCR tests have been also used to identify morbillivirus in lymph nodes, lungs, and CNS.

5. POLLUTION STUDIES

TENECON: Samples from cetaceans stranded in western Canary Islands are being analysed in collaboration with the University of La Laguna (Marine Sciences Department and Toxicology Department). Eight samples have being processed so far.

ULPGC: Samples of blubber, muscle, lung, liver, kidney and brain are taken of every stranded animal available, in order to perform analysis of PCBs, organochlorines and heavy metals.

6. STATISTICS FOR LARGE CETACEANS

6.1 Corrections to earlier years' statistics for large whales

6.2 Direct catches of large whales (commercial, aboriginal and scientific permits) for the calendar year 2009 or the season 2009/10

Not applicable

6.3 Anthropogenic mortality of large whales for the calendar year 2009 or the season 2009/10

6.3.1 Observed or reported ship strikes of large whales (including non-fatal events)

Type of vessel: High-speed Ferry (HSF), Large Cargo (LC), Military (M), Fishing Vessel (FV), Passenger Carrying Excursion (PC), Other (O). Fate: Indicate if the whale swam away (X), appeared seriously injured (I), killed (D).

Whale species	Sex	No.	Date	Location (UTM)	Vessel type	Speed	Fate	How observed	Contact person/ institute and refs
Sperm whale	F	1	/2009	354458 E 3108672 N	O	U	D	Stranded. Necropsy	Manuel Carrillo/ Canarias Conservación
Sperm whale	M	1	03/2009	362416 E 3124799 N	O	U	D	Stranded. Necropsy	Manuel Carrillo/ Canarias Conservación
Fin whale	M	1		Valencia	LC	U	D	Stranded	Toni.raga@uv.es

6.3.2 Fishery bycatch of large whales

Fate of whale: (R = released alive, D = discarded dead or seriously injured, K = kept for sale or specimen), targeted fish species (e.g. tuna, herring, etc.). How observed?: M = records collected as part of a planned cetacean monitoring programme, F = records collected by onboard fishery monitoring scheme, V = records collected by fishermen through vessel logbooks, A = anecdotal reports from any reliable source, with a further distinction of DA if the latter were documented (e.g. photos, rescue teams etc.).

Whale species	Sex	No.	Date	Location (UTM)	Fate	Targeted fish species	Gear	How observed?	Source or contact
Sperm whale	F	1	/09	369998 E 3161750 N	D			Stranded Necropsy	M.Carrillo/ TENECON
Comments: Nylon in the stomach.									

7. STATISTICS FOR SMALL CETACEANS

7.1 Corrections to earlier years' statistics for small cetaceans

7.2 Direct catches of small cetaceans for the calendar year 2009 or the season 2009/10

Not applicable

7.3 Anthropogenic mortality of small cetaceans for the calendar year 2009 or the season 2009/10

7.3.1 Observed or reported ship strikes of small cetaceans (including non fatal events)

Species	Sex	No.	Date	Location	Vessel type	Speed	Fate	How observed	Contact person/ institute and refs
Bottlenose dolphin	U	1	/09	Benidorm (Alicante)	U	U	D	stranded	Toni.raga@uv.es

7.3.2 Fishery bycatch of small cetaceans

Species	Ratio of male to female (if known)	No.	No. extrapolated to fleet total (point estimate)	Range, CI or CV	Date of bycatch	Location (description or lat/long) (UTM)	FAO statistical area (if known)	FAO area	Fate	Targeted species	Gear	How observed?	Source or contact
Atlantic spotted dolphin	F	1			10/01/09	332314 E 3101148 N			D	U	U	Cut injuries. Necropsy	M.Carrillo/TENECON
Bottlenose dolphin	M	1			23/10/09	331216 E 3103493 N			D	U	U	Hematoma in melon. Necropsy	M.Carrillo/TENECON
Common dolphin	U	1	Unknown		13/03/2009	Almería (Southeastern Spain)	37			U	U	M	CMA
Common dolphin	U	1	Unknown		06/12/2009	Málaga (Alboran Sea)	37			U	U	M	CMA
Striped dolphin	U	1	Unknown		02/02/2009	Málaga (Alboran Sea)	37			U	U	M	CMA
Striped dolphin	U	1	Unknown		18/02/2009	Málaga (Alboran Sea)	37			U	U	M	CMA
Striped dolphin	U	1	Unknown		05/05/2009	Málaga (Alboran Sea)	37			U	U	M	CMA
Striped dolphin	U	1	Unknown		16/02/2009	Níjar (Gulf of Vera)	37			U	U	M	CMA
Striped dolphin	U	1	Unknown		18/03/2009	Algeciras (Strait of Gibraltar)	37			U	U	M	CMA

8. STRANDINGS

Several stranding networks and organizations collect information on strandings along the Spanish coasts: Basque Country (Northern Spain): AMBAR; Asturias (Northern Spain): CEPESMA; Galicia (Northern Spain): CEMMA; Andalucía (Southern Spain): Coordinated by CMA. A complete stranding network for cetaceans and sea turtles is carried out along the year. Data on location and biometry are registered, and necropsies are performed in well-preserved specimens. The network is integrated by rangers of Andalusian Natural Parks, technicians and volunteers, Cataluña (Mediterranean): CRAMM; Valencia (Mediterranean): UV; Balearic Islands (Mediterranean): CERCAM and Fundación Marineland; Melilla (Northern Africa): GRAMM; Canary Islands: SECAC, TENECON, ULPGC.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Striped dolphin	10	9	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Spotted dolphin	2	1	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Common dolphin	2	1	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Rough-toothed dolphin	1	1	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Bottlenose dolphin	2	1	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Risso's dolphin	2	1	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Short-finned pilot whale	5	5	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Sperm whale	4	4	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Minke whale	2	2	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Balaenopteridae	1	1	Antonio Fernández/ULPGC	afernandez@dmor.ulpgc.es
Striped dolphin	36	9	Juan Jiménez/GVA	jimenez_juaper@gva.es
Bottlenose dolphin	2	0	Juan Jiménez/GVA	jimenez_juaper@gva.es
Sperm whale	3	0	Juan Jiménez/GVA	jimenez_juaper@gva.es
Fin whale	1	0	Juan Jiménez/GVA	jimenez_juaper@gva.es
Common dolphin	38	13	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Striped dolphin	76	29	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Bottlenose dolphin	11	0	CMA	eduardo.fernandez.tabales@jutandeandalucia.es

Harbour porpoise	7	1	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Long-finned pilot whale	7	2	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Risso's dolphin	5	1	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Sperm whale	1	0	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Cuvier Beaked whale	2	0	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Minke whale	1	0	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Pigmy sperm whale	1	1	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Not identified small cetaceans	28	0	CMA	eduardo.fernandez.tabales@jutandeandalucia.es
Striped dolphin	18		CAIB	jaoliver@dgcapea.caib.es
Bottlenose dolphin	5		CAIB	jaoliver@dgcapea.caib.es
Risso's dolphin	1		CAIB	jaoliver@dgcapea.caib.es
Cuvier beaked whale	1		CAIB	jaoliver@dgcapea.caib.es
Long-finned pilot whale	1		CAIB	jaoliver@dgcapea.caib.es
Sperm whale	1		CAIB	jaoliver@dgcapea.caib.es
Not identified small cetaceans	8		CAIB	jaoliver@dgcapea.caib.es

9. OTHER STUDIES AND ANALYSES

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. Opportunistic sightings were done as well in 1990 and 1991. 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 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 for bottlenose dolphins, long-finned pilot whales, Risso's dolphins, beaked whales, striped dolphins and common dolphins in the Alborán Sea and adjacent Gulf of Vera, using spatial modelling. Photo-identification is also used as a means of tracking groups and individuals, both spatially and temporally, of the most common species. Abundance estimates based on mark-recapture are being obtained at present for Risso's dolphins and long-finned pilot whales, and the catalogue is being prepared for common and bottlenose dolphins. Skin samples for genetics and acoustic recordings are also collected.

AZTI-Tecnalia: During 2009 observer's programs were carried out in the bottom trawl (OTB) fishery in ICES Divisions VI (154 hauls observed) and VIIIabd (357 hauls), and in the VHVO bottom pair trawlers (PTB) fishery in ICES Divisions VIIIabd (61 hauls). No incidental mortality of cetaceans was reported by the observers.

EIBE/BCG: In 2008 and 2009 EIBE carried out a study for the Basque Country Government to define sites of Community interest for cetaceans. During the study the first 20 miles of sea along the Basque Country coast were monitored 15 times. A total of 46 sightings were made. Eight species of cetaceans were detected with the following number of sightings: 15 groups of bottlenose dolphins, 9 groups of common dolphins, 6 groups of pilot whales, 3 groups of striped dolphins. Sightings of single animals of Cuvier's beaked whale, harbour porpoise and 10 sperm whales were also made. It is worth remarking the presence of a group of humpback whales detected for the first time along this area. The bottlenose dolphin was the only species present all year round with a relative maximum abundance in autumn. Common dolphins and pilot whales were the most frequent species in winter while in summer the most frequent were common and striped dolphins. Sperm whales were only sighted in spring.

IEO: Incidental catches of cetaceans were monitored in different Spanish fisheries. Observer's schemes were in operation in the trawl fishery (OTB) in the SW Atlantic (906 hauls observed), NAFO (582 hauls observed), Hatton bank (132 hauls), Reijkanes Ridge (92 hauls) and in the pair bottom trawl fishery (PTB) in Svalbard (107 hauls observed). No incidental catches of cetaceans were reported.

Observers collected information on incidental catches in a programme to monitor discards and incidental catches in several fisheries in ICES Areas VII, VIII and IX. A total of 1109 bottom trawl hauls (OTB), 55 pair trawl hauls (PTB) and 62 gillnet (GNS) sets were monitored. No incidental catches were reported.

The General Secretary for the Sea (Ministry of Environment and Rural and Marine Affairs) funded the IEO to carry out an observer program to monitor incidental catch of cetaceans in the gillnet fishery (GNS) in ICES Areas VII and VIIIab, to comply with Regulation (CE) n° 812/2004. In 2009 219 gillnet sets were monitored. A total of 22 common dolphins, 12 harbour porpoises and one dolphin of an unidentified species were reported as incidentally caught.

TENECON: Since 2004 osteological studies are being carried out in collaboration with the Institute of Animal Health, Faculty of Veterinary, University of Las Palmas de Gran Canaria. In 2009, the skeletons of one short-finned pilot whale and one Cuvier's beaked whale and the skull of one sperm whale were prepared and described.

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