

Mexico. Progress report on cetacean research, January 2008 to March 2009, with statistical data for the calendar year 2008.

COMPILED BY PALOMA LADRÓN DE GUEVARA P.* , LORENZO ROJAS-BRACHO* AND JORGE URBÁN-RAMÍREZ**

*Instituto Nacional de Ecología C/o CICESE; Km.107 Carretera Tijuana-Ensenada, Ensenada, B.C. 22860.

** Universidad Autónoma de Baja California Sur. Carret. Al sur km 5.5. Apdo. Post. 19-B, Col. Mezquitito. La Paz, B.C.S. C.P. 23080, México.

This report summarises information obtained from:

Name of agency/institute	Abbreviation (use in rest of report)	Contact e-mail address
Instituto Nacional de Ecología	INE	Lorenzo Rojas-Bracho, e-mail: lrojas@cicese.mx
Laboratorio de Mamíferos Marinos Centro de Ecología y Pesquerías Universidad Veracruzana	LabMMar	Eduardo Morteo, e-mail: emorteo@gmail.com
Centro de Investigación en Alimentación y Desarrollo, Unidad Guaymas	CIAD-Guaymas	Juan Pablo Gallo-Reynoso, e-mail: jpgallo@ciad.mx
Instituto Tecnológico de Bahía de Banderas	ITBB	Roberto Moncada, e-mail: Itmar6_mammal@yahoo.com.mx
Facultad de Ciencias, Universidad Nacional Autónoma de México	UNAM	Carmen Bazúa-Durán, e-mail: bazua@servidor.unam.mx
Universidad Veracruzana, Laboratorio de Mamíferos Marinos	UV, LAMM	Arturo Serrano, e-mail: arserrano@uv.mx arturoserrano@prodigy.net.mx
Programa de Investigación de Mamíferos Marinos, Universidad Autónoma de Baja California Sur	PRIMMA-UABCs	Jorge Urbán R., e-mail: jurban@uanbcs.mx Alejandro Gómez-Gallardo, e-mail: eagg@uabc.mx
Cetacean Research Associates	CRA	Steve Swartz, e-mail: Kabloona15@comcast.net

1. SPECIES AND STOCKS STUDIED

A tabular format is most appropriate. Please indicate where in the report the species is mentioned and use IWC recommended names (see IWC, 2006, Annex L). For subsequent items, common names are preferred. e.g.:

IWC common name	IWC recommended scientific name	Area/stock(s)	Items referred to
Vaquita	<i>Phocoena sinus</i>	Upper Gulf of California/North Pacific	2.1.1; 2.2, 7.3.2
Humpback whale	<i>Megaptera novaeangliae</i>	Marias Islands, Banderas Bay, Nay, Gulf of California /North Pacific	2.1.1, 2.2, 3.1.1, 4.1; 6.3.2, 8
Blue whale	<i>Balaenoptera musculus</i>	Gulf of California (mid & south part) /North Pacific	2.1.1; 4.1
Fin whale	<i>Balaenoptera physalus</i>	Gulf of California/North Pacific	2.1.1., 2.1.2, 3.1.1, 4.1, 8
Bryde's whale	<i>Balaenoptera edeni</i>	Gulf of California/North Pacific	2.1, 4.1, 8
Gray whale	<i>Eschrichtius robustus</i>	San Ignacio Lagoon/Eastern Pacific	2.1.1; 2.2; 3.1.1; 8
Sperm whale	<i>Physeter macrocephalus</i>	Gulf of California/North Pacific	2.1.1; 2.1.2, 3.1.1, 4.1
Common bottlenose dolphin	<i>Tursiops truncatus</i>	Gulf of Mexico/North Atlantic and Gulf of California/North Pacific	2.1.1, 2.1.2, 2.2, 3.1, 3.1.1, 3.2, 4.1, 4.2, 4.3, 4.4, 7.3, 11.2

Spinner dolphin	<i>Stenella longirostris</i>	Banderas Bay/North Pacific, Veracruz/Gulf of Mexico	2.1.1, 2.1.2, 2.2, 4.3
Pantropical spotted dolphin	<i>Stenella attenuata</i>	Northern coast of Veracruz/Gulf of Mexico	2.1.1, 2.1.2, 2.2
Atlantic spotted dolphin	<i>Stenella frontalis</i>	Northern coast of Veracruz/Gulf of Mexico	2.1.1, 2.1.2, 2.2
Rough-toothed dolphin	<i>Steno bredanensis</i>	Northern coast of Veracruz/Gulf of Mexico	2.1.1, 2.1.2, 2.2
False killer whale	<i>Pseudorca crassidens</i>	Northern coast of Veracruz/Gulf of Mexico	2.1.1, 2.1.2, 2.2
Killer whale	<i>Orcinus orca</i>	Gulf of California (southern part) /North Pacific	8

2. SIGHTINGS DATA

2.1 Field work

2.1.1 Systematic

Give brief details of systematic surveys, when and where held and references to cruise reports if applicable. A summary table of sightings may be included (e.g. see below).

Target species	Date	Area	No. of sightings	Contact person/institute and references
Vaquita	Jun, Aug, Oct, and Nov/08	Upper Gulf of California	130 sightings and 39 acoustics encounters	L. Rojas-Bracho, INE
Humpback whale	1-19/03/08 and 20/02/09-19/-03/09	Marias Islands, Mexican Pacific	187 (2008) 159 (2009)	L. Rojas-Bracho, INE
Common bottlenose dolphin	Apr 08 –Mar 09	Alvarado, Veracruz	29	E. Morteo, LabMMar
Fin whale	5-25/02/05	Gulf of California	Many	J.P. Gallo, CIAD
Humpback whale	01/01/09-30/03/09	Banderas Bay	28	R. Moncada, ITBB
Common bottlenose dolphin	01/04/08-30/03/09	Banderas Bay	19	R. Moncada, ITBB
Common bottlenose dolphin	01-05/04/08	Terminos Lagoon, Campeche	23	C. Bazúa-Durán, UNAM
Common bottlenose dolphin	13-17/11/08	Terminos Lagoon, Campeche	26	C. Bazúa-Durán, UNAM
Common bottlenose dolphin	Jan-Dec 2008	Northern coast of Veracruz	60	A. Serrano, UV, LAMM
Pantropical spotted dolphin	Feb-May 2008	Northern coast of Veracruz	4	A. Serrano, UV, LAMM
Atlantic spotted dolphin	Feb 2008	Northern coast of Veracruz	1	A. Serrano, UV, LAMM
Spinner dolphin	June-July 2008	Northern coast of Veracruz	2	A. Serrano, UV, LAMM
Rough-toothed dolphin	Feb-May 2008	Northern coast of Veracruz	3	A. Serrano, UV, LAMM
False killer whale	March 2008	Northern coast of Veracruz	1	A. Serrano, UV, LAMM
Bryde's whale	Jan-Mar and Aug-Nov 2008 Jan-Mar 2009	Gulf of California (mid & south part)	39 (2008) 14 (2009)	J. Urbán R., PRIMMA-UABCS A. Gómez-Gallardo, PRIMMA-UABCS
Fin whale	Jan-Mar and Aug-Nov 2008	Gulf of California (mid & south part)	44 (2008) 5 (2009)	J. Urbán R., PRIMMA-UABCS A. Gómez-Gallardo, PRIMMA-UABCS

	Jan-Mar 2009			
Humpback whale	Feb-Apr 2008	Gulf of California (mid & south part)	121 (2008) 153 (2009)	J. Urbán R., PRIMMA-UABCS A. Gómez-Gallardo, PRIMMA-UABCS
	Feb-Mar 2009	Revillagigedo Archipelago	87 (2008)	
	Mar 2008			
Blue whale	Jan-Apr 2008	Gulf of California (mid & south part)	69 (2008) 27 (2009)	J. Urbán R., PRIMMA-UABCS A. Gómez-Gallardo, PRIMMA-UABCS
	Jan-Mar 2009			
Gray whale	01/25/08 - 04/03/08	San Ignacio Lagoon	1926 (2008)	J. Urbán R., PRIMMA-UABCS A. Gómez-Gallardo, PRIMMA-UABCS Steve Swartz (CRA)
	01/29/09 - 03/30/09		1609 (2009)	
Sperm whale	Jan-Feb, Apr, Aug and Sep 2008	Gulf of California (mid & south part)	21 (2008)	J. Urbán R., PRIMMA-UABCS A. Gómez-Gallardo, PRIMMA-UABCS
	Jan-Mar 2009		5 (2009)	

2.1.2 Opportunistic, platforms of opportunity

In 2004, the Committee **agreed** that details on the data collected by whalewatching vessels and other opportunistic platforms should be included (IWC, 2005b). Opportunistic platforms are those primarily engaged in non-research activities, such as whalewatching boats, cruise ships, ferries and Coast Guard vessels. Give brief details of work carried out, with references where appropriate. Please give the primary responsibility of the person collecting the data (e.g. vessel crew, naturalist or dedicated observer). Identify one or more types of data collected (separate by species, area and organisation). Types of data may include: sightings (e.g. count, time and location), survey effort, environmental data, photo-ID, animal behaviour or other (please specify). Use an asterisk to identify types of data contributed to a separate archive (such as a regional photo-ID catalogue), and provide the location of that archive in last column. Please make separate entries for each species, area and/or institution.

Primary species	Area	Data type/method	Collected by	Platform	Location of archive (if applicable)	Contact person/institute and refs
Common bottlenose dolphin	Veracruz, Veracruz	Federal surveillance and inspection	Crew	Monitoring vessel	Parque Nacional Sistema Arrecifal Veracruzano	E. Morteo, LabMMar
Fin whale	San Carlos – Guaymas, Gulf of California	Photo-ID; sightings	Crew	Research skiff	CIAD-Guaymas	JP. Gallo, CIAD-Guaymas
Sperm whale	Guaymas basin, Gulf of California	Photo-ID; sightings	Crew	Research vessel	CIAD-Guaymas	JP. Gallo, CIAD-Guaymas
Common bottlenose dolphin	Bahía de las Guásimas, Gulf of California	Photo-ID, sightings	Crew	Fishing skiff	CIAD-Guaymas	JP. Gallo, CIAD-Guaymas
Common bottlenose dolphin	Gulf of Mexico	Photo-ID; sightings	Marine Mammal Observer	Seismic vessel	LAMM, UV	A. Serrano, UV, LAMM
Pantropical spotted dolphin	Gulf of Mexico	Photo-ID; sightings	Marine Mammal Observer	Seismic vessel	LAMM, UV	A. Serrano, UV, LAMM
Atlantic spotted dolphin	Gulf of Mexico	Photo-ID; sightings	Marine Mammal Observer	Seismic vessel	LAMM, UV	A. Serrano, UV, LAMM
Spinner dolphin	Gulf of Mexico	Photo-ID; sightings	Marine Mammal Observer	Seismic vessel	LAMM, UV	A. Serrano, UV, LAMM

Rough-toothed dolphin	Gulf of Mexico	Photo-ID; sightings	Marine Mammal Observer	Seismic vessel	LAMM, UV	A. Serrano, UV, LAMM
False killer whale	Gulf of Mexico	Photo-ID; sightings	Marine Mammal Observer	Seismic vessel	LAMM, UV	A. Serrano, UV, LAMM

2.2 Analyses/development of techniques

Give brief details of any analyses of data carried out, with references where appropriate. A summary table of sightings and associated effort may be included (see below).

Target species	Date	Area	Methods/effort	Parameters/ factors measured	Contact person/institute; refs
Vaquita	Jun, Aug, Oct, and Nov/08	Upper Gulf of California	Passive acoustic detection along transect lines and in fixed stations, using boats or buoys as platforms to deploy equipment. Visual surveys (distance sampling). Oceanographic sampling (salinity, temperature, depth and turbidity)	Distribution, abundance, movements, population trend, acoustic detectors testing, sound speed and oceanographic profiles.	L. Rojas-Bracho, INE
Humpback whale	1-19/03/08 and 20/02/09-19/03/09	Marias Islands, Mexican Pacific	Theodolite tracking on shore-based stations. Photo-identification during boat surveys	Distribution, movements, breathing rates, relative abundance (No. animals/effort hour)	L. Rojas-Bracho, INE
Common bottlenose dolphin	March 2002	Nautla, Veracruz	Line transect survey	Interactions between dolphin – coastal artisanal fisheries	E. Morteo, LabMMar
Common bottlenose dolphin	March 2002	Alvarado, Veracruz	Line transect survey	Interactions between dolphin – coastal artisanal fisheries	E. Morteo, LabMMar
Common bottlenose dolphin	May 06 – Apr 08	Alvarado, Veracruz	Line transect survey	Interactions between dolphin – coastal artisanal fisheries	E. Morteo, LabMMar
Humpback whale	01/01/09-30/03/09	Banderas Bay	Line transect survey	Distribution; sighting frequency, Photo identification	R. Moncada, ITBB
Common bottlenose dolphin	01/04/08-30/03/09	Banderas Bay	Line transect survey	Distribution; sighting frequency, Photo identification	R. Moncada, ITBB
Common bottlenose dolphin	01-05/04/08	Terminos Lagoon, Campeche	Line transect survey	Distribution; Photo-ID; environmental data; acoustic recordings; biopsy sampling	C. Bazúa-Durán, UNAM
Common bottlenose dolphin	13-17/11/08	Terminos Lagoon, Campeche	Line transect survey	Distribution; Photo-ID; environmental data; acoustic recordings; biopsy sampling	C. Bazúa-Durán, UNAM
Common bottlenose dolphin	Jan 2008-Dec 2008	Northern coast of Veracruz	Line transect survey	Distribution; sighting frequency; Abundance estimate	A. Serrano, UV, LAMM
Pantropical spotted dolphin	Feb-May 2008	Northern coast of Veracruz	Line transect survey	Distribution; sighting frequency; Abundance estimate	A. Serrano, UV, LAMM
Atlantic spotted dolphin	Feb 2008	Northern coast of Veracruz	Line transect survey	Distribution; sighting frequency; Abundance estimate	A. Serrano, UV, LAMM
Spinner dolphin	June-July 2008	Northern coast of Veracruz	Line transect survey	Distribution; sighting frequency; Abundance estimate	A. Serrano, UV, LAMM

Rough-toothed dolphin	Feb-May 2008	Northern coast of Veracruz	Line transect survey	Distribution; sighting frequency; Abundance estimate	A. Serrano, UV, LAMM
False killer whale	March 2008	Northern coast of Veracruz	Line transect survey	Distribution; sighting frequency; Abundance estimate	A. Serrano, UV, LAMM
Gray whale	01/25/08-04/03/08 and 01/29/09-03/30/09	San Ignacio Lagoon	Countings on transect survey	Abundance, Distribution, Group composition	J. Urbán R., PRIMMA-UABCS A Gómez Gallardo, PRIMMA-UABCS Steve Swartz, CRA

3. MARKING DATA

3.1 Field work

3.1.1 Natural marking data

Provide this in the form of a table, e.g.

Species	Feature	Area/stock	No. photo-id'd	Catalogue (Y/N)	Catalogue total	Contact person/institute; refs
Humpback whale	Fluke	Marias Islands, Mexican Pacific	40 (2008) Over 72 (2009)	Y In process	Over 112 Over 112	L. Rojas-Bracho, INE
Humpback whale	Female-calf Dorsal fin	Marias Islands, Mexican Pacific	3 (2008) 5 (2009)	Y Y	8 8	L. Rojas-Bracho, INE
Common bottlenose dolphin	Dorsal fin	Alvarado, Veracruz	184	Y	332	E. Morteo, LabMMar
Fin whale	Dorsal fin	Guaymas area, Gulf of California	100	Y	160	JP. Gallo, CIAD-Guaymas
Sperm whale	Fluke	Guaymas basin, Gulf of California	75	N	75	JP. Gallo, CIAD-Guaymas
Common bottlenose dolphin	Dorsal fin	Bahía de las Guásimas, Gulf of California	125	Y	270	JP. Gallo, CIAD-Guaymas
Humpback whale	Fluke	Banderas Bay	Not analysed yet	Y		R. Moncada, ITBB
Humpback whale	Dorsal fin Mothers whit	Banderas Bay	Not analysed yet	Y		R. Moncada, ITBB
Common bottlenose dolphin	Dorsal fin	Banderas Bay	Not analysed yet	Y		R. Moncada, ITBB
Common bottlenose dolphin	Dorsal fin	Veracruz/ Gulf of Mexico	345	Y	585	A. Serrano, UV, LAMM
Humpback whale	Fluke	N. Pacific / Mexico	63 (2008), 50 (2009)	Y	1500	J. Urbán R., PRIMMA-UABCS
Humpback whale	Dorsal fin	N. Pacific / Mexico	38 (2008)	Y	185	J. Urbán R., PRIMMA-UABCS
Gray whale	visible whale's backs	Wintering breeding ground San Ignacio Lagoon/Eastern Pacific	73 (2008), 1213 (2009)	Y In process	2500 2500	J. Urbán R., PRIMMA-UABCS A Gómez Gallardo, PRIMMA-UABCS Steve Swartz (CRA)

It would be useful to include the numbers by features recorded for some species e.g. humpback whales, where more than one is commonly used (e.g. flukes, literal/dorsal fin). This would enable the Secretariat to maintain a directory for information purposes.

3.1.2. Artificial marking data

This would include such things as Discovery marks (especially recovery information) or external artificial tags.

3.1.3 Telemetry data

Include both satellite and radio-tags. A table is an appropriate way to summarise the data, e.g.:

Species	Tag type	No. successfully deployed	Maximum time transmitting	Contact person/institute; refs

3.2 Analyses/development of techniques

Give brief details of any analyses of marking data carried out (e.g. times/distances to resightings, biological parameters, etc.) with references where appropriate.

LabMMar

We identified 9 dolphins travelling 300 km back and forth between Nautla and Alvarado (Veracruz) in an average of 6.3 weeks.

4. TISSUE/BIOLOGICAL SAMPLES COLLECTED

4.1 Biopsy samples (summary only)

Species	Area/stock	Calendar year/ season - no. collected	Archived (Y/N)	No. analysed	Total holdings	Contact person/institute
Common bottlenose dolphin	Gulf of California	4	Y	4	4	JP. Gallo, CIAD-Guaymas
Common bottlenose dolphin	Terminos Lagoon, Campeche	3	Y	18	18	C. Bazúa-Durán, UNAM
Bryde's whale	Gulf of California/ Mexico	8 (2008)	Y	0	8	J. Urbán R., PRIMMA-UABCS
Fin whale	Gulf of California/ Mexico	29 (2008)	Y	0	29	J. Urbán R., PRIMMA-UABCS
Humpback whale	Gulf of California/ Mexico	12 (2008)	Y	0	12	J. Urbán R., PRIMMA-UABCS
Blue whale	North Pacific/Mexico	58 (2008)	Y	0	58	J. Urbán R., PRIMMA-UABCS
Sperm whale	Gulf of California/ Mexico	22 (2008)	Y	0	22	J. Urbán R., PRIMMA-UABCS

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

Species	Area/stock	Tissue type(s)*	No. collected	Archived (Y/N)	No. analysed	Contact person/institute
Common bottlenose dolphin	Alvarado (Veracruz)	Dorsal fin/ flukes/caudal lobes	1/2/2	Y	1	E. Morteo, LabMMar

*e.g. liver, skin, blubber ovaries, etc.

4.3 Samples from stranded animals

Species	Area/stock	Tissue type(s)*	No. collected	Archived (Y/N)	No. analysed	Contact person/institute

Spinner dolphin	Banderas Bay	Skin	1	Y	0	R. Moncada, ITBB
Common bottlenose dolphin	Banderas Bay	Skin, tooth	3-3	Y	0	R. Moncada, ITBB

*e.g. liver, skin, blubber etc.

4.4 Analyses/development of techniques

Give brief details of any analyses of data carried out, with references where appropriate.

LabMMar

Skin, blubber and muscle from specimen described in section 4.2 are being used in MHC-II, and µsat analyses, along with samples from the Caribbean and Cuba

5. POLLUTION STUDIES

Information on available samples should be given in Section 4 although any clarification can be given here. The main purpose of this section is to give brief details of work in progress or completed analyses, with references where appropriate.

6. STATISTICS FOR LARGE CETACEANS

6.1 Corrections to earlier years' statistics for large whales

This is the correct place to include any corrections to statistics presented in earlier years. It is also be appropriate to include references to studies that utilise time series of data here.

6.2 Direct catches of large whales (commercial, aboriginal and scientific permits) for the calendar year 20XX or the season 20XX/XX

Please summarise the information here in the form of a table. However, it must be noted that this summary is not considered to fulfil the obligation to supply data to the Commission as specified in the Schedule.

Species	Type of catch	Area/stock	Males	Females	Total landed	Struck and lost

6.3 Anthropogenic mortality of large whales for the calendar year 2008 or the season 2009/03

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

The inclusion of this data was agreed by the Committee in 2004 (IWC, 2005a). If available, please use Latitude and Longitude for location or else specify as much detail as possible. Please indicate type of vessel, e.g. 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). Example given.

Whale species	Sex	No.	Date	Location	Vessel type	Speed	Fate	How observed	Contact person/ institute and refs

6.3.2 Fishery bycatch of large whales

The inclusion of this data was agreed by the Committee in 2004 (IWC, 2005a). If available, please use Latitude and Longitude for location. Indicate 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.). The Committee also agreed that types of fishing gear involved in bycatch should be documented (IWC, 2005a). **Please use the internationally recognised standard gear description codes from FAO (given in Appendix 1)**, although more detail can be supplied if known. More detailed information and illustrations of the different types of fishing gear can be found

on the FAO/FIGIS website¹. Please also include any instances of entanglement in shark exclusion nets, which are another important source of bycatch. Please indicate 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	Fate	Targeted fish species	Gear	How observed?	Source or contact
Humpback whale	F	1	23/01/09	20° 43'N; 105°29'W	R	<i>Fishing line</i>		M	
Comments: Entangled in gear, cut off and sank.									

7. STATISTICS FOR SMALL CETACEANS

It was first agreed to include this information in a Commission resolution in 1976 (IWC, 1977, p.31)). Furthermore, in 2005 (IWC, 2006, Annex J) it was agreed that these data should be brought into line with those reported for large cetaceans. **Therefore, this Section should be completed using the same guidelines as given in Section 6 above, Statistics for large cetaceans.**

7.1 Corrections to earlier years' statistics for small cetaceans

This would be a place to include any corrections to statistics presented in earlier years. It may also be appropriate to include references to studies that utilise time series of data here.

7.2 Direct catches of small cetaceans for the calendar year 2008 or the season 2009/03

Species	Type of catch	Area/stock	Males	Females	Total landed	Struck and lost

7.3 Anthropogenic mortality of small cetaceans for the calendar year 2008 or the season 2009/03

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
Common bottlenose dolphin	U	7	March 2002	Alvarado (Veracruz)	Probably panga	U	Alive	Photograph	E. Morteo, LabMMar
Common bottlenose dolphin	U	13	March 2002	Nautla (Veracruz)	Probably panga	U	Alive	Photograph	E. Morteo, LabMMar
Injuries were identified and classified from photo-ID material (see references (11.2)).									

7.3.2 Fishery bycatch of small cetaceans

Species	Sex	No.	Date	Location	Fate	Targeted fish species	Gear	How observed?	Source or contact
Vaquita	U	1	September 2008	San Felipe, B.C., Mexico	Death	Probable sierra or mackerel, just before shrimp season	Gillnet as judged by body marks	Stranded in beach with a big aperture in belly	Lorenzo Rojas, INE
Common bottlenose dolphin	U	14	March 2002	Alvarado (Veracruz)	Alive	U	Probably GNS	Photo-ID	E. Morteo, LabMMar

¹ http://www.fao.org/figis/servlet/static?dom=root&xml=tech/gears_search.xml

Common bottlenose dolphin	U	16	March 2002	Nautla (Veracruz)	Alive	U	Probably GNS	Photo-ID	E. Morteo, LabMMar
Common bottlenose dolphin	U	9	11/11/08	Alvarado, Veracruz	D	U	GNS	Reported by fishermen	E. Morteo, LabMMar
Comments: E. Morteo, LabMMar for March 2002, Injuries were identified and classified from photo-Id material (see references (11.2). All dolphins observed in 2008 were entangled in gear and stabbed to death (over 50 strikes each). Samples were recovered from one specimen (see 4.2) and dorsal fin did not match any photo-Id dolphin.									

8. STRANDINGS

Give a paragraph detailing the nature of the strandings reporting process (e.g. completely opportunistic, one or more networks, coastline covered, seasonal coverage). Then complete the following summary table with information where people can go for more details.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Fin whales	2	2	JP. Gallo, CIAD-Guaymas	jgallo@ciad.mx
Bryde's whale	1	1	JP. Gallo, CIAD-Guayma)	jgallo@ciad.mx
Bryde's whale	1	U	Jorge Urbán R. (PRIMMA-UABCS) Alejandro Gómez-G. (PRIMMA-UABCS) Úrsula González Peral (PRIMMA-UABCS)	jurban@uanbcs.mx eagg@uabcs.mx ugonz@uabcs.mx
Humpback whale	2	U	Jorge Urbán R. (PRIMMA-UABCS) Alejandro Gómez-G. (PRIMMA-UABCS) Úrsula González Peral (PRIMMA-UABCS)	jurban@uanbcs.mx eagg@uabcs.mx ugonz@uabcs.mx
Killer whale	1	U	Jorge Urbán R. (PRIMMA-UABCS) Alejandro Gómez-G. (PRIMMA-UABCS) Úrsula González Peral (PRIMMA-UABCS)	jurban@uanbcs.mx eagg@uabcs.mx ugonz@uabcs.mx
Gray whale	2 calves y 1 yearly	3	J. Urbán R (PRIMMA-UABCS) A Gómez Gallardo (PRIMMA-UABCS) Steve Swartz (CRA)	jurban@uabcs.mx eagg@uabcs.mx Kabloona15@comcast.net

9. OTHER STUDIES AND ANALYSES

This is the appropriate place to briefly summarise other aspects of cetacean research relevant to the Scientific Committee, including results of analyses and development of techniques not covered in earlier sections. Give references where appropriate.

Attention is drawn to the issues of priority Committee interest, including: management of whaling and Comprehensive Assessment of whale stocks - e.g. current stock size, recent population trends, carrying capacity, productivity and stock identity; effects of environmental change; scientific aspects of sanctuaries; and whalewatching.

UV, LAMM

We are carrying out a study on the effects of noise on *Tursiops truncatus*.

10. LITERATURE CITED

Include all references cited in the text here. Please follow the official IWC style guide for references (<http://www.iwcoffice.org/publications/styleguide.htm>).

11. PUBLICATIONS

Please follow the official IWC style guide for references (<http://www.iwcoffice.org/publications/styleguide.htm>).

11.1 Published or ‘In Press’ papers only

Please list all published or ‘in press’ papers. **It will be appreciated if you can send a pdf or reprint to the Secretariat for the library.**

Alter, S.E. S. Flores-Ramirez, S. Nigenda, J. Urban- Ramirez, L. Rojas-Bracho, and S.R. Palumbi. 2009. Mitochondrial and nuclear genetic variation across calving lagoons in Eastern North Pacific Gray Whales (*Eschrichtius robustus*). *Journal of Heredity*:100(1):34–46

Barlow, J., L. Rojas-Bracho, C. Muñoz Piña, and S. Mesnick. (in press). Conservation of the vaquita in the northern Gulf of California, Mexico. Chapter 15 in: R. Q. Grafton, R. Hilborn, D. Squires, M. Tait, and M. Williams (eds.) *Handbook of Marine Fisheries Conservation and Management*. Oxford University Press.

Galindo, J., Serrano, A., Vázquez-Castán, L., González-Gándara, C. and López-Ortega, M. 2009. Cetacean diversity, distribution, and abundance in Northern Veracruz, Mexico. *Aquat. Mamm.* **30**(1): 12-18.

Gallo-Reynoso, JP, J Égido-Villarreal and EM Coria-Galindo. (in press). Sperm whale distribution and diving behaviour in relation to presence of jumbo squid in Guaymas Basin, Mexico. *Biology Record, Association of Marine Biology*.

Gallo-Reynoso, JP, J Égido-Villarreal and B Alessio. (in press). Varamiento de calderones (*Globicephala macrorhynchus* Gray, 1846) en Punta Xpet-ha, Yucatán, México. In: F Cervantes-Reza (ed.). Book to commemorate 60 Years of the Colección Mastozoológica del Instituto de Biología, UNAM. Universidad Nacional Autónoma de México.

Heckel, G., P. Ladrón de Guevara P. y L. Rojas-Bracho. 2008. Ballenas y delfines. Pp. 563-602 In: G. Danemam y E. Ezcurra (eds.). *Bahía de los Ángeles: Recursos Naturales y Comunidad. Línea Base 2007*. PRONATURA Noroeste, A.C., SEMARNAT, INE, and San Diego Natural History Museum. México, D.F. 741 pp. [In Spanish].

Ladrón de Guevara P., P., Lavanegos, B. and Heckel, G. 2008. Fin whales (*Balaenoptera physalus*) foraging on daytime surface swarms of the euphausiid *Nyctiphanes simplex* in Ballenas Channel, Gulf of California, Mexico. *J. Mammal.* **89**(3): 559-566.

Lagerquist, B.A., Mate, B.R., Ortega-Ortiz, J., Winsor, M., Urbán-Ramírez, J. 2008. Migratory movements and surfacing rates of humpback whales (*Megaptera novaeangliae*) satellite tagged at Socorro Island, Mexico. *Mar. Mamm. Sci.* **24**(4): 815–830.

Rodríguez Pérez M y, E Escobar-Briones, JP Gallo-Reynoso, P Morales Puente and E Cienfuegos Alvarado. (in press). Proporciones isotópicas estables en *Phocoena sinus*. Composición elemental e isotópica estable de $\delta^{13}\text{C}$ y $\delta^{15}\text{N}$ en *Phocoena sinus*. Elemental and $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ stable isotopic composition in *Phocoena sinus*. In: F. Cervantes-Reza (ed.). Book to commemorate 60 Years of the Colección Mastozoológica del Instituto de Biología, UNAM. Universidad Nacional Autónoma de México.

Rojas-Bracho, L. and Jaramillo-Legorreta, A.M. 2009. Vaquita *Phocoena sinus*. Pp. 1192-1196 In: Perrin, W.F., Würsig, B. & Thewissen, J.G.M. (eds.) *Encyclopedia of Marine Mammals*. 2nd Edition. Academic Press. New York, U.S.A. 1352 pp. + 739 illus.

11.2 Unpublished literature

Please include information as to where the documents may be obtained **and if possible, pdf versions or reprints for the library.**

Gallo-Reynoso, JP, J Égido-Villarreal and EM Coria-Galindo. 2006. Sustentabilidad de las pesquerías y conservación de cachalotes, *Physeter macrocephalus*, en la zona de Guaymas. Reporte final Convenio KF65 CIAD. World Wildlife Fund – México, program Gulf of California. Centro de Investigación en Alimentación y Desarrollo, A.C., Unidad Guaymas. Unpublished Internal Document. 54 pp. [In Spanish].

García-Vital, M. y E. Morteo. 2008. Classification of dorsal fin scarring patterns in bottlenose dolphins (*Tursiops truncatus*) photo-identified along the coastal waters of Veracruz, Mexico. Page. 75. Abstracts XXXI International Reunion for the study of Marine Mammals, SOMEMMA. May 18-21st, Ensenada, Baja California, Mexico.

Guevara Aguirre, D. 2008. Distribución y abundancia de toninas (*Tursiops truncatus*) en la Laguna de Términos, Campeche. Bachelor Thesis, Benemérita Universidad Autónoma de Puebla. 82 pp. [In Spanish].

Swartz S.L., J. Urbán R., A. Gómez-Gallardo U., S. González C., B. Troyo V. and M. Nájera C. 2008. La ballena gris en Laguna San Ignacio B.C.S. México, durante el invierno 2008. Informe a SEMARNAT Permiso SGPA/DGVS/00506/07. 36pp. [In Spanish].

Swartz S.L., J. Urbán R., A. Gómez-Gallardo U., S. González C., B. Troyo V. and M. Nájera C. 2008. Preliminary comparison of winter counts of gray whale in Laguna San Ignacio, B.C.S., Mexico from 1978 to 2008. *SC/60/BRG30*.

REFERENCES

- International Whaling Commission. 1977. Chairman's Report of the Twenty-Eighth Meeting. *Rep. int. Whal. Commn* 27:22-35.
- International Whaling Commission. 1989. Report of the Scientific Committee, Annex I. Report of the Working Group on Progress Reports. *Rep. int. Whal. Commn* 39:130.
- International Whaling Commission. 1997. Report of the Scientific Committee. *Rep. int. Whal. Commn* 47:59-257.
- International Whaling Commission. 2005a. Report of the Scientific Committee, Annex J. Report of the Sub-Committee on Estimation of Bycatch and other Human-Induced Mortality. *J. cetacean Res. Manage.(Suppl.)* 7:254-266.
- International Whaling Commission. 2005b. Report of the Scientific Committee, Annex M. Report of the Sub-Committee on Whalewatching. *J. cetacean res. Manage.(Suppl.)* 7:327-337.
- International Whaling Commission. 2006. Report of the Scientific Committee, Annex J. Report of the Sub-Committee on Estimation of Bycatch and other Human-Induced Mortality. *J. cetacean res. Manage.(Suppl.)* 8.
- International Whaling Commission. 2006. Report of the Scientific Committee, Annex L. Report of the Standing Sub-Committee on Small Cetaceans. *J. cetacean res. Manage.(Suppl.)* 8.

Appendix 1. FOA fishing descriptions and codes

FAO FISHING GEAR CATEGORIES:		FALLING GEAR	
SURROUNDING NETS		Cast nets	FCN
With purse lines	PS	Falling gear (not specified)	FG
One-boat operated purse seines	PS1		
Two-boat operated purse seines	PS2	GILLNETS AND ENTANGLING GEAR	
Without purse lines (lampara)	LA	Set gillnets (anchored)	GNS
SEINE NETS		Driftnets	GND
Beach seines	SB	Encircling gillnets	GNC
Boat seines	SV	Fixed gillnets (on stakes)	GNF
Danish seines	SDN	Trammel nets	GTR
Scottish seines	SSC	Combined gillnet-trammel nets	GTN
Pair seines	SPR	Gillnets and entangling gillnets (not specified)	GEN
Seine nets (not specified)	SX	Gillnets (not specified)	GN
TRAWLS			
Bottom trawls	TBB	TRAPS	
Beam trawl	OTB	Stationary uncovered pounds nets	FPN
Otter trawls (side or stern)	PTB	Pots	FPO
Pair trawls	TBN	Fyke nets	FYK
Nephrops trawls	TBS	Stow nets	FSN
Shrimp trawls (not specified)	TM	Barriers, fences, weirs, etc	FWR
Midwater trawls		Aerial traps	FAR
Otter trawls (side or stern)	OTM	Traps (not specified)	FIX
Pair trawls	PTM		
Shrimp trawls	TMS	HOOKS AND LINES	
Midwater trawls (not specified)	TM	Handlines and pole-lines (hand operated)	LHP
Otter twin trawls	OTT	Handlines and pole-lines (mechanised)	LHM
Otter trawls (not specified)	OT	Set longlines	LLS
Pair trawls (not specified)	PT	Drifting longlines	LLD
Other trawls (not specified)	TX	Longlines (not specified)	LL
DREDGES		Trolling lines	LTL
Boat dredges	DRB	Hooks and lines (not specified)	LX
Hand dredges	DRH		
LIFT NETS		GRAPPLING AND WOUNDING	
Portable lift nets	LPN	Harpoons	HAR
Boat-operated lift nets	LNB		
Shore operated stationary lift nets	LNS	HARVESTING MACHINES	
Lift nets (not specified)	LN	Pumps	HMP
		Mechanised dredges	HMD
		Harvesting machines (not specified)	HMX
		MISCELLANEOUS GEAR	MIS
		RECREATIONAL FISHING GEAR	RG
		GEAR NOT KNOWN OR NOT SPECIFIED	NK
		SHARK CONTROL NETS	NSC
		DERELICT FISHING GEAR	