

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

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1. Species and stocks studied

Common name	Scientific name	Area/stock(s)	Items referred to
Atlantic spotted dolphin	<i>Stenella frontalis</i>	RJ, CE, PR	2.1.2, 4.3, 5, 8, 9
Bryde's whale	<i>Balaenoptera edeni</i>	SC	8
Clymene dolphin	<i>Stenella clymene</i>	CE, BA	4.3, 5, 7.3.2, 8
Common bottlenose dolphin	<i>Tursiops truncatus</i>	RJ, ES, SC, BA, RS, PR	2.1.1, 2.1.2, 2.2, 3.1, 3.1.1, 4.3, 4.4, 5, 7.3, 8, 9
Common dolphin	<i>Delphinus sp.</i>	RJ	5
Cuvier's Beaked whale	<i>Ziphius cavirostris</i>	CE, ES, BA	4, 4.3, 5, 8
Dwarf minke whale	<i>Balaenoptera acutorostrata</i>	BA, ES	2.1.2
Dwarf sperm whale	<i>Kogia sima</i>	RJ, CE, BA	4, 4.3, 5, 8
False Killer Whale	<i>Pseudorca crassidens</i>	RS	4.3, 8
Franciscana	<i>Pontoporia blainvillei</i>	RJ, ES, SC, RS, PR	2.1.1, 3.1.1, 2.2, 4.3, 4.4, 5, 8, 9, 11.1
Fraser dolphin	<i>Lagenodelphis hosei</i>	RJ	5
Fraser's Dolphin	<i>Lagenodelphis hosei</i>	CE	4.3, 5, 8
Guiana dolphin	<i>Sotalia guianensis</i>	RJ, ES, PR, SC, CE, SE, BA, SP	2.1.1, 2.1.2; 2.2, 3.1.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5, 7.3, 7.3.2, 8, 9, 10, 11.1, 11.2
Humpback whale	<i>Megaptera novaeangliae</i>	RJ, SE and Antarctic Ocean (AI, AII), BSA, CE, ES	2.1.1, 2.1.2, 3.1.1, 3.1.3, 4.1, 4.3, 5, 8
Killer Whale	<i>Orcinus orca</i>	PR	2.2.2
Long-finned Pilot whale	<i>Globicephala melas</i>	BA	4.3, 8
Pantropical spotted dolphin	<i>Stenella attenuata</i>	RJ, ES	4.3, 5, 8
Pygmy Sperm Whale	<i>Kogia breviceps</i>	CE, BA	4.3, 5, 8
Risso's Dolphin	<i>Grampus griseus</i>	CE	4, 4.3, 5, 8
Rough-toothed dolphin	<i>Steno bredanensis</i>	RJ, ES, BA, RS, PR	2.1.2, 3.1.1, 4.1, 4.3, 5, 8
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	CE	4.3, 5, 8
Southern right whale	<i>Eubalaena australis</i>	BA, ES, RS, SC, PR	2.1.1, 2.1.2, 2.2.2, 3.1.1, 3.2, 9, 10
Sperm Whale	<i>Physeter macrocephalus</i>	BA, ES, CE, RN, RS, BA	4.3, 5, 8
Spinner dolphin	<i>Stenella longirostris</i>	BA, ES, RN	2.1.2, 4.3, 4.4, 8, 9
Striped Dolphin	<i>Stenella coeruleoalba</i>	RS	4.3, 8
Baleen whale	<i>Balaenoptera sp.</i>	RS, PR	4.3, 8
Delphinidae	<i>Stenella sp.</i>	RS	4.3, 8
Physeteridae	<i>Kogia sp.</i>	RS	4.3, 8

Legend for states in the table above and elsewhere in the text: AM – Amazonas, AP – Amapá, BA – Bahia, CE – Ceará, ES – Espírito Santo, FN – Fernando de Noronha Archipelago (Pernambuco State), PA – Pará, PR – Paraná, SC – Santa Catarina, SP – São Paulo, RJ – Rio de Janeiro, RN – Rio Grande do Norte, ASPSP – Archipelago de São Pedro e São Paulo (off RN State), RS – Rio Grande do Sul.

2. SIGHTINGS DATA

2.1 Field work

2.1.1 Systematic

Target species	Date	Area	No. of sightings	Contact person/institute and references
Guiana dolphin	2009-2010	RJ	N	MAQUA
Bottlenose dolphin	01-12/2009	Itajaí River estuary, SC	continuous	André S. Barreto/ CTTMar-UNIVALI
Guiana dolphin and Franciscana	5-25/01/09, 5-27/08/09, 7-27/01/10	Lagamar Estuary, SP and PR	132/16 groups, respectively	Marcos Santos/Projeto ATLATIS-UNESP
Franciscana	2009	Baía da Babitonga, SC	Various unreported	Marta J. Cremer, UNIVILLE
Guiana dolphin	2009	Baía da Babitonga, SC	Various unreported	Marta J. Cremer, UNIVILLE

Common bottlenose dolphin	2009	Praia da Tesoura, Laguna, SC	Various unreported	Marta J. Cremer, UNIVILLE
Guiana dolphin	Sep 2009 to Feb 2010	Mucuripe Embayment, CE	15	Ana Carolina Meirelles, AQUASIS
Guiana dolphin	22/03/2009	São Cristóvão Beach, RN Guamaré, RN	1	Flávio J. Lima Silva (PCCB-UERN) Flávio J. Lima Silva (PCCB-UERN)

PCCB-UERN is monitoring the behavior (foraging strategy, aerial activities, locomotion, permanency, group size and composition) of Guiana dolphin from an observation point on a cliff in São Cristóvão Beach (Areia Branca) and the others cetacean species from boats at Guamaré region in Rio Grande do Norte State (Northeastern Brazil). Ecology studies of Guiana dolphin is being conducted in São Cristóvão from beach (FIRMINO, 2004; DANTAS *et al.* 2009).

Target species	Date	Area	No. of sightings	Contact person/institute and references
Guiana dolphin	All year	Abrolhos Bank	52 groups (169 dolphins)	Leonardo Wedekin/ IBJ

IBJ – Guiana dolphin – During an effort of more than 300 hours with 16.1 hours of direct observation, and 48 one-day surveys, *Sotalia guianensis* were monitored by boat cruises in 2009/2010, when 36 groups of dolphins were sighted, including calves. This research project, which began in 2002, aims to study the population dynamics (through photo-identification technique), ecology and behavior of the species in the southern coast of the Bahia State, northeastern Brazil.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Humpback whale	Jul to Nov	Abrolhos Bank (BSA)	189 (465 whales)	Milton Marcondes/ IBJ
Humpback whale	Jul to Oct	Northern coast of Bahia (BSA)	119 (275 whales)	Clarêncio Baracho/IBJ

IBJ – Humpback Whale – Population dynamics, ecology and behavior through different techniques (photoidentification, biopsy sampling, bioacoustics) of humpback whales have been carried out from on board surveys in Bahia and Espírito Santo States, northeastern Brazil, from 12°20'S to 20°18'S, including the Abrolhos Bank. In Abrolhos Bank from July to November, 465 humpback whales, including 72 calves, were detected during 1, 811 nautical miles of boat surveys (295 hours of effort). In northern coast of Bahia 275 humpback whales were sighted, including 19 calves during 608,1 nautical miles of boat surveys (239,5 hours of effort).

Target species	Date	Area	No. of sightings	Contact person/institute and references
Bottlenose dolphin	Year around	Southern Brazil	> 150 sightings (9 dolphins photo-identified)	A. Giacomo and P. H. Ott/GEMARS

GEMARS – Land-based photoidentification surveys during 103 days of effort were conducted to determine the abundance of bottlenose dolphin in the Tramandaí river (29°58'S; 50°07'W), southern Brazil.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Southern right whale	July - Nov 2009 (Aerial)	Central SC to North RS	137 whales including 58 calves (aerial)* (* including double counting)	Karina R. Groch, PBF-Brasil

PBF-Brasil – Southern right whales have been surveyed from helicopter in a coastline of 400km, from Santa Catarina Island (central coast of SC) to the northern coast of RS (Groch, 2005). From three aerial surveys conducted between July and November (one per month in July, September and November), 137 individuals were sighted, including 58 mother/calf pairs (including double counting) (K.R. Groch, *unpublished*).

Target species	Date	Area	No. of sightings	Contact person/institute and references
Guiana dolphin	2009	Ilhéus	Resident population	Yvonnick Le Pendu GPMAl-UESC
Guiana dolphin	2009	Canavieiras	Resident population	Yvonnick Le Pendu GPMAl-UESC

GPMAl-UESC – Behaviour, photo-identification, etnobiology and interactions of Guiana dolphins with boats were sampled on a daily basis from several observation points of the urban coast of Ilhéus, Bahia.

Target species	Date	Area	No. of sightings	Contact person/institute and references
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Guiana dolphin	2009	Estuarine Complex of Paranaguá Bay, PR	Not reported	Camila Domit, LEC/CEM/UFPR
Franciscana	2009	Estuarine Complex of Paranaguá Bay, PR	Not reported	Camila Domit, LEC/CEM/UFPR
Common bottlenose dolphin	2009	Guaratuba Bay, PR	Not reported	Camila Domit, LEC/CEM/UFPR

Target species	Date	Area	No. of sightings	Contact person/institute and references
Guiana dolphin	Mar/09 to Jan/10	Estuary of Paraguaçu river, BA	148	Maria do Socorro Reis/ Instituto Mamíferos Aquáticos

IMA has conducted regular systematic land-base sightings and also, monthly 12 day cruise in the estuary of Paraguaçu river (Todos os Santos Bay), BA, Northeastern coast, to study behavioural ecology of *Sotalia guianensis* and photo-identification. IMA has also been monitoring Guiana dolphins on Barra do Paraguaçu as compensatory measure because of the installation of a gas duct. IMA is conducting research on bioacoustic Guiana dolphins in the estuary of Paraguaçu river (Todos os Santos Bay) to register possible behavior alterations from antropic noises (generated from boats or fishing with explosive), and natural noises (generated by biota or natural events).

2.1.2 Opportunistic, platforms of opportunity

Primary species	Area	Data type/method	Collected by	Platform	Contact person/institute and refs
Rough-toothed dolphin	RJ	sightings	Team	Research boat	Lailson-Brito / Azevedo - UERJ
Bottlenose dolphin	RJ	sightings	Team	Research boat	Lailson-Brito / Azevedo - UERJ
Killer Whale	RJ	sightings	Team	Research boat	Lailson-Brito / Azevedo - UERJ
All cetaceans	SC – SWA	Sightings	crew	fishing vessels; research vessels (non-dedicated)	André S. Barreto/ CTTMar-UNIVALI
Guiana dolphin	CE – SWA	Sightings	crew	Land based	Ana Carolina Meirelles, AQUASIS
Southern right whale	Abrolhos Bank	sightings	Researchers of IBJ	Humpback whale survey	Milton Marcondes, IBJ
Guiana dolphin	Abrolhos Bank	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Milton Marcondes, IBJ
Rough-Toothed dolphins	Abrolhos Bank	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Milton Marcondes, IBJ
Common bottlenose dolphin	Abrolhos Bank	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Milton Marcondes, IBJ

IBJ – During 2009 humpback whale survey in Abrolhos Bank (Bahia and Espírito Santo States) 2 groups of southern right whale, 15 groups of Guiana dolphin, 03 group of rough-Toothed dolphins, 2 groups of common bottlenose dolphin and 7 groups of non-identified cetaceans were registered.

Guiana dolphin	BA	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Clarêncio Baracho, IBJ
Common bottlenose dolphin	BA	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Clarêncio Baracho, IBJ
Rough-toothed dolphin	BA	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Clarêncio Baracho, IBJ
Dwarf minke whale	BA	Photo-id; sightings	Researchers of IBJ	Humpback whale survey	Clarêncio Baracho, IBJ

IBJ – During 2009 humpback whale survey in northern coast of Bahia 07 groups of Guiana dolphin, 01 group of common bottlenose dolphin, 02 groups of rough-toothed dolphin, and 02 groups of dwarf minke whale were

recorded.

Humpback whale	BA	Photo-id	Researchers of IBJ	whalewatching vessel	Sergio Cipolotti, IBJ
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IBJ – Opportunistic sightings and photo-identification of humpback whales have been made from whale watching boats in the Northern coast of Bahia State. During 143 cruises, 439 humpback whales were sighted with 56 photo-identifications.

Southern right whale	RS and SC	Photo-ID*sightings	Researcher GEMARS	supply vessels	F. Sucunza and P.H. Ott/GEMARS
Common bottlenose dolphin	RS	Year around/sightings	Researcher GEMARS	supply vessels	F. Sucunza, D. Danilewicz and P.H. Ott/GEMARS

GEMARS – Opportunistic sightings of cetaceans have been made from supply vessels, in coastal waters of Tramandaí (29°58'S; 50°07'W), southern Brazil. During 23 cruises, eight bottlenose dolphin and seven southern right whales sighted. Two southern right whales were photo-identified.

Species	Area	Data type/method	Collected by	Platform	Contact person/institute; refs
Atlantic spotted dolphin	PR and SC	Sightings	Researchers of LEC/CEM	Fishery vessels and ships of the Brazilian navy	Camila Domit, LEC/CEM/UFPR
Common bottlenose dolphin	PR	Sightings	Researchers of LEC/CEM	Fishery vessels and ships of the Brazilian navy	Camila Domit, LEC/CEM/UFPR
Killer whale	PR	Sightings	Crew/tourist	Recreational vessels	Camila Domit, LEC/CEM/UFPR
Southern right whale	PR	Sightings	Crew/tourist	Fishery vessels	Camila Domit, LEC/CEM/UFPR

LEC-CEM-UFPR – Opportunistic sightings have been made by researchers cruises conducted by Brazilian navy. Also, some sightings were obtained from observers assigned to fishery vessels (by-catch program) and by tourists that visit that area along the year. The area covered by these sightings spans from 25° to 26°S and from 47° to 48°W.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Guiana dolphin	03/06	Itapoã beach, Vila Velha, ES	1	Lupercio Barbosa / Instituto ORCA
Rough-Toothed dolphin	05/08 to 07/10	Santa Mônica bay, Guarapari, ES	30	Lupercio Barbosa / Instituto ORCA

Instituto ORCA – The species reported were sighted by people that doesn't provided data, at all reported cases, when got knowledge about sightings. The Instituto ORCA went to the place to collect data of sighting. In 08 May 2009 were sighted nearly 40 Guiana dolphin interacting with fishing boats at Itapoã beach, Vila Velha (20°20'87''S e 40°17'04''W), during 2 hours. On 08 May 2009 were sighted a specimen of Rough-Toothed dolphin around Santa Monica Bay, Guarapari (20°37'43''S – 40°27'13''W), that happens frequently according to the locals. Were made 120h of sporadic observations of this animal between May and July 2009.

2.2 Analyses/development of techniques

Target species	Date	Area	Methods/effort	Parameters/ factors measured	Contact person/institute; refs
All cetaceans	01 – 12/2009	Brazilian coast and adjacent waters	Researchers, onboard observers, publications	SIMMAM* (Research boat, Seismic Vessels, Publications, Platforms of Opportunity)	André S. Barreto/ CTTMar-UNIVALI and Paulo A.C. Flores/CMA-ICMBio
Franciscana	2009	Baía da Babitonga, SC	Scan and circuit sampling, Bioacoustics	Distribution, acoustic repertoire	Marta J. Cremer/UNIVILLE
Guiana dolphin	2009	Baía da Babitonga, SC	Scan and circuit sampling, Bioacoustics	Distribution, acoustic repertoire, sound pollution	Marta J. Cremer/UNIVILLE

Common bottlenose dolphin	2009	Praia da Tesoura, Laguna, SC	Bioacoustics, environmental parameters measurements	Acoustics repertoire, environmental parameters effects on behavior	Marta J. Cremer/UNIVILLE
Common bottlenose dolphin	Year around	Tramandaí estuary, RS	Photo-identification/103 days of effort	Population size and residence pattern	A. Giacomo and P. H. Ott/GEMARS
Guiana dolphin	Jan-Dec 2009	Ilhéus, BA	Direct observations/12h per week Photo-ID/8 hours per week	Behaviour, use of area, group composition	Yvonnick Le Pendu/GPMAI-UESC
Guiana dolphin	Jan-Dec 2009	Canavieiras, BA	Direct observations/12h per week Photo-ID/9 hours per week	Behaviour, use of area, group composition	Yvonnick Le Pendu/GPMAI-UESC
Guiana dolphin	01/09 'til 10/10	Estuary of Paraguaçu river, BA	Line transect survey	Distribution; sighting frequency, site fidelity	Maria do Socorro Reis/ Instituto Mamíferos Aquáticos

* SIMMAM (Portuguese for *System for Marine Mammal Monitoring*), under the Brazilian Stranding Network of Aquatic Mammals (REMAB) coordinated by CMA-ICMBio, is a GIS platform developed to store cetacean data and overlap or compare these data with other GIS platforms. SIMMAM is being used to aggregate sighting and stranding data from different sources and different research groups along the Brazilian coast. Data from published sources is available to the public at <http://siaiacad09.univali.br/simmam/> and further analysis is allowed to associated institutions with REMAB while full access of all data is allowed to CMA/ICMBio for conservation and management purposes. Contacts: Andre S. Barreto (CTTMar-UNIVALI), Paulo A.C. Flores (CMA/ICMBio), Fábía de O. Luna (CMA/ICMBio).

GEMARS – The population of bottlenose dolphins from the Tramandaí estuary (29°58'S; 50°07'W), southern Brazil, was estimated in nine individuals. The dolphins showed a high degree of residency with three animals being re-sighted over an 18 years period.

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/institute
Rough-toothed dolphin	Dorsal fin	Rio de Janeiro	50	Y	50	Lailson-Brito / Azevedo – UERJ
Guiana dolphin	Dorsal fin	Guanabara Bay	32	Y	69	Lailson-Brito / Azevedo – UERJ
Common bottlenose dolphin	Dorsal fin	Itajai River estuary	1	Y	14	André S. Barreto/ CTTMar-UNIVALI
Humpback whale	Fluke	Abrolhos Bank (BA)	2009 / n = 194	N	> 2.861 (2008-09 under analysis)	Mariana Neves, IBJ
Humpback whale	Fluke	NE of BA	2009 / n = 61	Y	841	Clarêncio Baracho, IBJ
Guiana dolphin	Dorsal	BA	2009 / n = 55	Y	135	Leonardo L. Wedekin, IBJ
Guiana dolphin	Dorsal Fin	Lagamar estuary (SP and PR)	19	Y	199 (SP), 182 (PR)	Marcos Santos
Franciscana	Dorsal fin	Lagamar estuary (PR)	3	Y	8	Marcos Santos

Guiana dolphin	Dorsal fin	Baía da Babitonga, SC.	0	Y	55	Marta J. Cremer, UNIVILLE
Common bottlenose dolphin	Dorsal fin	Laguna, SC, BR.	27	Y	27	Marta J. Cremer, UNIVILLE
Bottlenose dolphin	Dorsal fin	Tramandaí estuary, RS	9	Y	17	A. Giacomo and P. H. Ott/GEMARS
Southern right whale	Head callosities	RS	2	Y	5	F. Sucunza and P.H. Ott/GEMARS
Southern right whale	Head callosities and dorsal marks	SC and RS	~40	N	455** (up to 2006 and under analysis from	Karina R. Groch/PBF-Brasil
Guiana dolphin	Dorsal fin	Port of Ilhéus, BA	Ongoing analyses	Y	40	Yvonnick Le Pendu/GPMAI-UESC
Guiana dolphin	Dorsal fin	Canavieiras estuary, BA	Ongoing analyses	N	Ongoing analyses	Yvonnick Le Pendu/GPMAI-UESC
Guiana dolphin	Dorsal fin	Estuarine Complex of Paranaguá. PR	18	Y	18	Camila Domit, LEC/CEM/UFPR
Franciscana	Dorsal fin	Estuarine Complex of Paranaguá. PR	02	N	0	Camila Domit, LEC/CEM/UFPR

3.1.2. Artificial marking data

3.1.3 Telemetry data

Species	Tag type	No. successfully deployed	Maximum time transmitting	Contact person/institute; refs
Humpback whale	Satellite	14	139	A. Zerbini and A. Andriolo (IA)

3.2 Analyses/development of techniques

PBF-Brasil – Southern right whale: distribution, coastal movements, within season residency and site fidelity (Groch, 2005), biological parameters (ongoing analysis on population estimates; Groch et al. 2005); behavior of right whales in Central-Southern Santa Catarina State (Groch and Correa, ongoing analysis).

GPMAI-UESC – The photo-identification of naturally marked individuals is in progress in order to describe the social and demographic structure of the population of Ilhéus and Canavieiras-BA.

LEC-CEM-UFPR – Site fidelity, patterns of habitat use, reproductive rates and seasonality are being estimated using photo-id of naturally marked Guiana dolphin in the Estuarine Complex of Paranaguá Bay, southern Brazil.

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
Guiana dolphin	RJ	20	Y	20		Lailson-Brito / Azevedo - UERJ
Humpback whale	Abrolhos Bank	2009 / 91	Y	91	587	Márcia Engel/ IBJ
Humpback whale	Northeast of Bahia	2009/ 2	Y	2	45	Márcia Engel/ IBJ
Southern right whale	Abrolhos Bank	2009/ 1	Y	1	1	Márcia Engel/ IBJ
Guiana dolphin	Lagamar (SP/PR)	6	Y	0	6 recent ones	Marcos Santos

4.2 Samples from bycatches

Species	Area/stock	Tissue type(s)*	No. collected	Archived (Y/N)	No. analysed	Contact person/institute
Guiana dolphin	RJ	Kidney, liver, lung, muscle, stomach, intestine, heart, blubber	5	Y	5	Lailson-Brito / Azevedo – UERJ
Guiana dolphin	CE	Muscle, liver, blubber, stomach contents, skeleton	3	Y	3	Ana Carolina Meirelles/Aquasis
Guiana dolphin	PR – SWA	Skin, blubber, muscle, teeth, liver, gonads	2	Y	2	Camila Domit – LEC/CEM/UFPR

4.3 Samples from stranded animals

Species	Area/stock	Calendar year/season total	Archived (Y/N)	Tissue type(s)*		Contact person/institute
<i>Guiana dolphin</i>	RJ	10	Y	<i>Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin.</i>		Lailson-Brito / Azevedo - UERJ
<i>Rough-toothed dolphin</i>	RJ	1	Y	<i>Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin.</i>		Lailson-Brito / Azevedo - UERJ
<i>Humpback whale</i>	RJ	1	N	<i>blubber, skin.</i>		
Humpback whale	Bahia and Espirito Santo States (BSA)	Skin, blubber, lung, intestine, stomach, heart, liver, blood, kidney, bones	22	Y	2	Milton Marcondes/IBJ
Guiana dolphin	Bahia and Espirito Santo	Skin, blubber, liver; kidney and bones	6	Y	0	Milton Marcondes/IBJ
Dwarf Minke whale	Bahia State	bones	2	Y	0	Milton Marcondes / IBJ
Sperm whale	Bahia State	Skin; stomach	1	N	0	Milton Marcondes/IBJ
Melon-headed whale	Bahia State	bones; skin; bubbler; ovaries; stomach	1	Y	0	Milton Marcondes / IBJ
Franciscana	Litoral norte de Santa Catarina	bones; skin; bubbler; ovaries; stomach	4	Y	0	Marta J. Cremer, UNIVILLE
Guyana dolphin	Litoral norte de Santa Catarina	bones; skin; bubbler; ovaries; stomach	1	Y	0	Marta J. Cremer, UNIVILLE
Bottlenose dolphin	Litoral norte de Santa Catarina	bones; skin; bubbler; ovaries; stomach	1	Y	0	Marta J. Cremer, UNIVILLE
Guiana dolphin	CE	Stomach contents	7	Y	0	Ana Carolina Meirelles/Aquasis
Guiana dolphin	CE	Muscle	14	Y	7	Ana Carolina Meirelles/Aquasis
Guiana dolphin	CE	Skeleton	14	Y	0	Ana Carolina Meirelles/Aquasis

Guiana dolphin	CE	Heart, lung, liver, testicles	1	Y	0	Ana Carolina Meirelles/Aquasis
Sperm Whale	CE	Muscle, blubber	3	Y	0	Ana Carolina Meirelles/Aquasis
Sperm Whale	CE	Liver, kidney	1	Y	0	Ana Carolina Meirelles/Aquasis
Short-finned Pilot Whale	CE	Skin, muscle, skeleton, pancreas, heart, lung, stomach, intestine, liver, bladder, spleen, kidney, testicles	1	Y	1	Ana Carolina Meirelles/Aquasis
Rissos's Dolphin	CE	Skin	1	Y	0	Ana Carolina Meirelles/Aquasis
Humpback Whale	CE	Muscle, skin, stomach, intestine, spleen, kidney, ovary, uterus, blubber	1	Y	1	Ana Carolina Meirelles/Aquasis
Dwarf Sperm Whale	CE			Y	1	Ana Carolina Meirelles/Aquasis
Pygmy Sperm Whale	CE	Muscle, skeleton, spleen, heart, lung, testicles, kidney, blubber	1	Y	1	Ana Carolina Meirelles/Aquasis
Fraser's Dolphin	CE	Muscle, skin, skeleton	1	Y	1	Ana Carolina Meirelles/Aquasis
Atlantic Spotted Dolphin	CE	Skin		Y	1	Ana Carolina Meirelles/Aquasis
Clymene Dolphin	CE	Muscle, skeleton, heart, lung, intestine, pancreas, liver, spleen, kidney, bladder, ovaries, uterus,				Ana Carolina Meirelles/Aquasis
Cuvier's Beaked whale	CE	Skeleton		Y	1	Ana Carolina Meirelles/Aquasis
Sperm whale	RN	Tooth ,bones	1	Y		Flávio J. Lima Silva PCCB-UERN
Guiana dolphin	RN	Skeleton, bones, muscle, blubber, stomach, teeth,	11	Y		Flávio J. Lima Silva PCCB-UERN
Spinner dolphin	RN	Skeleton, bones, muscle, blubber, teeth, ovaries, stomach	1	Y		Flávio J. Lima Silva PCCB-UERN
Franciscana	Southern Brazil	Skull, teeth, stomach, gonads, liver, kidney, blubber, muscle	61	Y	> 100	P.H. Ott and I.B. Moreno GEMARS
Baleen whale	Southern Brazil	Skull, baleen	2	Y	-	P.H. Ott and I.B. Moreno GEMARS

Bottlenose Dolphin	Southern Brazil	Skull, teeth, stomach, muscle	2	Y	> 50	P.H. Ott and I.B. Moreno GEMARS
Rough-Toothed Dolphin	Southern Brazil	Skull, teeth, skeleton, stomach, gonads, blubber, muscle	2	Y	> 10	P.H. Ott and I.B. Moreno GEMARS
<i>Kogia</i> sp.	Southern Brazil	Skull, teeth, skeleton, stomach, intestine, gonads, blubber, muscle	1	Y	-	P.H. Ott and I.B. Moreno GEMARS
Striped Dolphin	Southern Brazil	Skull, teeth, skeleton, stomach, muscle	1	Y	-	P.H. Ott and I.B. Moreno GEMARS
Sperm Whale	Southern Brazil	Teeth, muscle	1	Y	-	P.H. Ott and I.B. Moreno GEMARS
False Killer Whale	Southern Brazil	Skull, teeth, skeleton, stomach, muscle	1	Y	-	P.H. Ott and I.B. Moreno GEMARS
<i>Stenella</i> sp.	Southern Brazil	Skull, teeth, skeleton, muscle	1	Y	-	P.H. Ott and I.B. Moreno GEMARS
Franciscana	PR	Skin, blubber, muscle, teeth, liver, kidney, stomach, skull	1	Y		Camila Domit, LEC/CEM/UFPR
Guiana dolphin	PR	Skin, blubber, muscle, teeth, liver, gonads, kidney, stomach, skull	27	Y		Camila Domit, LEC/CEM/UFPR
Rough-toothed dolphin	PR	Teeth, skull	1	Y		Camila Domit, LEC/CEM/UFPR
Atlantic spotted dolphin	PR	Skin, blubber, muscle, teeth, liver, gonads, kidney stomach, skull	3	Y		Camila Domit, LEC/CEM/UFPR
Common bottlenose dolphin	PR	Skin, blubber, muscle, teeth, liver, gonads, kidney, stomach, skull	2	Y		Camila Domit, LEC/CEM/UFPR
Mysticeti	PR	Skin, blubber, muscle	1	Y		Camila Domit, LEC/CEM/UFPR
Humpback whale	ES	Blubber, muscle	1	Y	0	Lupercio Barbosa / Instituto ORCA
Guiana dolphin	ES	Skin, blubber, lung, intestine, pancreas, stomach, heart, liver, kidney, bones, muscle, gastric juice	16	Y	0	Lupercio Barbosa / Instituto ORCA

Franciscana	ES	Skin, blubber, lung, intestine, pancreas, stomach, heart, liver, kidney, bones, muscle,	2	Y	0	Lupercio Barbosa / Instituto ORCA
Bottlenose dolphin	ES	Skin, blubber, lung, intestine, pancreas, stomach, heart, liver, kidney, bones, muscle, gastric juice	1	Y	0	Lupercio Barbosa / Instituto ORCA
Rough-Toothed dolphin	ES	Skin, blubber, lung, intestine, pancreas, stomach, heart, liver, kidney, bones, muscle	2	Y	0	Lupercio Barbosa / Instituto ORCA
Pantropical spotted dolphin	ES	Skin, blubber, lung, intestine, pancreas, stomach, heart, liver, kidney, bones, muscle	1	Y	0	Lupercio Barbosa / Instituto ORCA
Cuvier's beaked whale	ES	Skin, Blubber, muscle	1	N	0	Lupercio Barbosa / Instituto ORCA
<i>Physeter macrocephalus</i>	S. Atlantic	teeth	1	Y	0	Luciano R. Alardo Souto / IMA
<i>Kogia breviceps</i>	S. Atlantic	skeleton, muscle, skin, bubbler	1	Y	1	Luciano R. Alardo Souto / IMA
<i>Kogia sima</i>	S. Atlantic	skeleton, muscle, skin, bubbler	1	Y	1	Luciano R. Alardo Souto / IMA
<i>Ziphius cavirostris</i>	S. Atlantic	skeleton, parasites, stomach contents, skin, fetus, muscle	1	Y	1	Luciano R. Alardo Souto / IMA
<i>Tursiops truncatus</i>	S. Atlantic	skeleton, stomach contents, skin, muscle	1	Y	1	Luciano R. Alardo Souto / IMA
<i>Steno bredanensis</i>	S. Atlantic	skeleton, parasites, eyes, dull, thymus, pancreas, thyroid, tongue, esophagus, stomach contents, kidney, testis,	2	Y	2	Luciano R. Alardo Souto / IMA
<i>Stenella clymene</i>	S. Atlantic	skeleton, muscle, skin, bubbler, stomach contents, oropharynx, esophagus, pancreas, liver, kidney, ovary, uterine horn, adrenal glands, heart, lungs, trachea, eyes, parasites	6	Y	6	Luciano R. Alardo Souto / IMA
<i>Sotalia guianensis</i>	S. Atlantic	skeleton, muscle, skin, bubbler, parasites, lungs, pancreas, ovary	15	Y	11	Luciano R. Alardo Souto / IMA

4.4 Analyses/development of techniques

MAQUA – UERJ is developing tests of precision and accuracy of analytical methods for organochlorine determinations in blubber samples of cetaceans.

PCCB/UERN is attempting to determine the cause of death of stranded individuals, including analyses of the interaction with fishing (FRAGOSO *et al.*, 2009a; FRAGOSO *et al.*, 2009b; ATTADEMO *et al.*, 2005; OLIVEIRA *et al.*, 2007). Stomach contents and skeletal morphology has been investigated as well (SILVA *et al.*, 2010, FRAGOSO *et al.*, 2009). (Contact: Flávio J. Lima Silva – PCCB/UERN).

LEC/CEM/UFPR – Age and growth, pollution and feeding analyses are being carried out by LEC/CEM/UFPR. Analysis to determine the cause of stranding has been studied, including monitoring events of bycatch and the interaction between cetaceans and the artisanal fisheries.

5. POLLUTION STUDIES

MAQUA – UERJ performed trace metals and organochlorines determinations in cetacean tissues of the Brazilian and Antarctic waters. Species: *Megaptera novaeangliae*, *Sotalia guianensis*, *Kogia sima*, *Pontoporia blainvillei*, *Steno bredanensis*, *Tursiops truncatus*, *Delphinus sp.*, *Stenella frontalis*, *Stenella attenuata* and *Lagenodelphis hosei*. We also performed new flame retardants determinations in *Pontoporia blainvillei* and *Sotalia guianensis*. We also conducted noise pollution studies with Guiana dolphins.

AQUASIS collaborates with tissues samples to MAQUA-UERJ for heavy metals and organochlorine analyses.

LEC/CEM/UFPR collaborates with tissue samples of *S. guianensis*, *P. blainvillei*, *S. frontalis*, and *T. truncatus* to the work conducted by MAQUA/UERJ.

IMA is carrying out analysis of contaminants (organochlorine and heavy metal) of marine mammals tissues from BA state.

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 2007

6.3 Anthropogenic mortality of large whales for the calendar year 2007

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

Whale species	Sex	No.	Date	Location	Vessel type	Speed	Fate	How observed	Contact person/ institute and refs
Humpback whale	F	1	11/9/09	19,00625 S / 039,73150 W	O	U	D	Necropsy of stranded carcass*	Milton Marcondes / IBJ
* calf									

6.3.2 Fishery bycatch of large whales

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

Species	Type of catch	Area/stock	males	Female	Total landed	Struck and lost
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7.3 Anthropogenic mortality of small cetaceans for the calendar year 2009

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

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)	FAO statistical area (if known)	FAO area	Fate	Targeted species	Gear	How observed?	Source or contact
Guiana dolphin	2 F; 1 U	3	---		May 2009; January and February 2010	Bahia and Espirito Santo States	?		D	?	GN	A *	Milton Marcondes / IBJ

* Necropsy of stranded carcass

Species	Sex	No.	Date	Location	Fate	Targeted fish species	Gear	How observed?	Source or contact
Guiana dolphin	F	1	June 2009	04°33'S, 37°40'S	D	-	GN	M	Ana Carolina Meirelles/Aquasis
Guiana dolphin	-	1	June 2009	03°15'S, 39°12'W	D	-	GN	M	Ana Carolina Meirelles/Aquasis
Guiana dolphin	M	1	October 2009	03°41'S, 38°35'W	D	-	GN	M	Ana Carolina Meirelles/Aquasis
Guiana dolphin	-	1	October 2009	02°55'S, 39°49'W	D*	-	GN	M	Ana Carolina Meirelles/Aquasis
Guiana dolphin	-	1	December 2009	04°31'S, 37°41'W	D**	-	GN	M	Ana Carolina Meirelles/Aquasis

Comments: Entangled in gear, cut off and sank.

Species	Sex	No.	Date	Location	Fate	Targeted fish species	Gear	How observed?	Source or contact
<i>Sotalia guianensis</i>	F	1	18/10/2009	Southern Brazil (coast area)	Dead	Sharks	GND	Landed of boat	Camila Domit, LEC/UFPR

Comments:

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)	FAO statistical area (if known)	FAO area	Fate	Targeted species	Gear	How observed?	Source or contact
Guiana dolphin	11 M, 1 F and 1 U	13	-		Between march and December 2009	ES			D	?		Net marks in the carcass	Lupercio Barbosa/ Instituto ORCA
Bottlenose dolphin	1 M	1			10/16/2009	ES			D	?		Net marks in the carcass	Lupercio Barbosa/ Instituto ORCA
Franciscana	2 M	2			Between October 2009 and January 2010	ES			D	?		Net marks in the Carcass	Lupercio Barbosa/ Instituto ORCA

<i>Sotalia guianensis</i>		1			05/8/2009	Lauro de Freitas, BA			Dead		GN		Luciano R. Alardo Souto / IMA
<i>Stenella clymene</i>		1			19/5/2009	Camaçari, BA (12.7799S, 38.1828W)			Dead		GN		Luciano R. Alardo Souto / IMA

Comments: Entangled in gear, cut off and sank.

8. STRANDINGS

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
<i>Sotalia guianensis</i>	15	0	José Lailson Brito Jr; Alexandre Azevedo and Paulo Renato Dorneles	lailson@uerj.br
<i>Megaptera novaeangliae</i>	1	0		azevedo.alex@uerj.br
<i>Steno bredanensis</i>	1	0		dornelespr@gmail.com

CTTMar-UNIVALI is a member of the Brazilian South Marine Mammal Stranding Network (REMASul) and answers to stranding in the central-north coast of Santa Catarina. However, due to logistical reasons, most strandings are dealt by the Museu Oceanográfico do Vale do Itajaí (Itajaí Valley Oceanographic Museum). Strandings attended by CTTMar-UNIVALI are opportunistic, when called by the local authorities.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Humpback whale	22	20	Milton Marcondes/ IBJ	milton.marcondes@baleiajubarte.org.br
Guiana dolphin	6	6	Milton Marcondes/ IBJ	milton.marcondes@baleiajubarte.org.br
Sperm whale	1	1	Milton Marcondes/ IBJ	milton.marcondes@baleiajubarte.org.br
Dwarf Minke whale	2	2	Milton Marcondes/ IBJ	milton.marcondes@baleiajubarte.org.br
Melon-headed whale	1	1	Milton Marcondes/ IBJ	milton.marcondes@baleiajubarte.org.br

IBJ is a member of the Brazilian Northeastern Aquatic Mammals Stranding Network. The Marine Mammal Stranding Response Program monitors strandings along the Abrolhos Bank and Northeastern Bahia state since 2002. The veterinary staff perform necropsies whenever is possible in order to investigate the cause of death. Eventually the veterinary staff is required by the Brazilian Environmental Agency (ICMBio) to respond to live strandings of large whales along the Brazilian coast.

Species	No. strandings	No. post mortems	Contact person/institute	Contact email address(es)
Franciscana	4	4	Marta J. Cremer, UNIVILLE	marta.cremer@univille.net
Guiana dolphin	1	1	Marta J. Cremer, UNIVILLE	marta.cremer@univille.net
Common bottlenose dolphin	1	1	Marta J. Cremer, UNIVILLE	marta.cremer@univille.net

UNIVILLE is a member of the Brazilian South Marine Mammal Stranding Network (REMASul) and answers to stranding in the north coast of Santa Catarina on an opportunistic basis.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Sperm whale	3		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Humpback whale	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Guiana dolphin	19		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br

Rissos's Dolphin	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Cuvier's Beaked whale	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Atlantic Spotted dolphin	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Clymene dolphin	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Fraser's Dolphin	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Short-finned Pilot Whale	1			
Pygmy Sperm Whale	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br
Dwarf sperm whale	1		Ana Carolina Meirelles/ Aquasis	cameirelles@yahoo.com.br

AQUASIS is a member of the Brazilian Northeastern Aquatic Mammals Stranding Network. Stranding records were obtained through opportunistic surveys and reports from fishermen, government officials and tourists, most of them as part of the collaboration network established during previous surveys. Some carcasses were also found during awareness campaigns.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Sperm whale	1		Flávio J. Lima Silva	flaviogolfinho@yahoo.com.br
Guiana dolphin	4	7	Flávio J. Lima Silva	flaviogolfinho@yahoo.com.br
Spinner dolphin	1		Flávio J. Lima Silva	flaviogolfinho@yahoo.com.br

PCCB/UERN is a member of the Brazilian Northeastern Aquatic Mammals Stranding Network (REMANE). It conducts systematic surveys along 50km of RN coastline between Tibau (4°50'24.92"S, 37°14'27.15"W) and Caiçara do Norte (5°4'1.15"S, 36° 4'36.41"W) in the south. Data collection of samples follows the Aquatic Mammals Stranding Protocol of REMANE (IBAMA, 2005).

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Franciscana	61	61	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
<i>Balaenoptera</i> sp.	2	2	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
Bottlenose dolphin	2	2	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
Rough-Toothed Dolphin	2	2	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
Striped Dolphin	1	1	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
Sperm Whale	1	1	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
False Killer Whale	1	1	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
<i>Stenella</i> sp.	1	1	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com
<i>Kogia</i> sp.	1	1	P.H. Ott and I.B. Moreno GEMARS	gemars@gemas.org.br paulo.henrique.ott@gmail.com iggy.moreno@gmail.com

GEMARS is a member of the Brazilian South Marine Mammal Stranding Network (REMASul). Systematic beach surveys to recovery marine mammals carcasses have been conducted in the northern Rio Grande do Sul state, southern Brazil, since 1991. The study area comprises about 270km of sand beaches, between Torres (29° S, 49°43'W) and Tavares (31°15'S, 50°54'W).

Species	No.	No. post	Contact person(s)/ Institute(s)	Contact email address(es)
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	strandings	mortems		
Bryde's whale	1 (dead adult)	-	Karina R.Groch, PBF – Brasil	krgroch@terra.com.br ; karina@baleiafranca.org.br

PBF-Brasil is a member of the Brazilian South Marine Mammal Stranding Network (REMASul). No systematic survey is conducted and rather strandings are reported by local authorities and coast users.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
<i>Pontoporia blainvillei</i>	1	1	LEC/CEM/UFPR e IPeC	camila.lec@ufpr.br
<i>Sotalia guianensis</i>	26	26	LEC/CEM/UFPR e IPeC	camila.lec@ufpr.br
<i>Steno bredanensis</i>	1	1	LEC/CEM/UFPR e IPeC	camila.lec@ufpr.br
<i>Stenella frontalis</i>	3	3	LEC/CEM/UFPR e IPeC	camila.lec@ufpr.br
Common bottlenose dolphin	2	2	LEC/CEM/UFPR e IPeC	camila.lec@ufpr.br
<i>Mysticeti</i>	1	1	LEC/CEM/UFPR e IPeC	camila.lec@ufpr.br

LEC/CEM/UFPR is a member of the Brazilian South Marine Mammal Stranding Network (REMASul). Systematic beach and island weekly surveys are conducted along coast of Paraná State (approximately 40km on the beach areas and 50 km on the islands), southern Brazil, aiming to record and collect samples from stranded marine mammals.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
Humpback whale	1	1	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br
Guiana dolphin	16	16	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br
La Plata dolphin	2	2	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br
Bottlenose dolphin	1	1	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br
Rough-Toothed dolphin	2	0	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br
Pantropical spotted dolphin	1	1	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br
Cuvier's beaked whale	1	0	Lupercio Barbosa / Instituto ORCA	instituto@orca.org.br

Instituto ORCA – On 21 april 2009, an injured Rough-toothed dolphin stranded in Santa Monica beach, Guarapari (20°37'70''S – 40°26'78''W), which was treated by Instituto ORCA during 24 days, came to death by unknown causes, being detected only a soft inflammatory process in brain histological slides. In 05/07/2009 stranded at Areia Preta beach, Anchieta (no data provided), another specimen less nourished of the same species, that came to death after 2 days, were found in its stomach plastic bags, obstructing the digestive ways. On 08 April 2009, a Cuvier's beaked whale that stranded in Itaparica beach, Vila Velha/Espirito Santo State (20°22'570''S – 40°18'292W), died minutes before being helped by Instituto ORCA.

Species	No. strandings	No. post mortems	Contact person(s)/ Institute(s)	Contact email address(es)
<i>Physeter macrocephalus</i>	2	2	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Kogia breviceps</i>	1	1	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Kogia sima</i>	1	1	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Ziphius cavirostris</i>	1	1	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Tursiops truncatus</i>	2	2	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Steno bredanensis</i>	7	7	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Stenella clymene</i>	11	11	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org
<i>Sotalia guianensis</i>	23	23	Luciano R. Alardo Souto / IMA	luciano.alardo@mamiferosaquaticos.org

IMA is a member of the Brazilian Northeastern Aquatic Mammals Stranding Network (REMANE). It has been

conducting systematic monitoring of beaches, mainly in locations around the north coast (Salvador to Sergipe State's board), Todos os Santos Bay, Camamu Bay, Bahia southeast from Barra Grande to Olivença, all located in Bahia State.

9. OTHER STUDIES AND ANALYSES

IBJ – Bioacoustic studies were conducted to recording humpback whales songs and anthropogenic noises (whale-watching and artisanal fishing boats; ship traffic; oil platform operation) in BA, ES and SE states. About 20 hours of recording from 30 different humpback whale groups were made. Contact person/institute: Marcos Rossi-Santos/IBJ.

PBF-Brasil – Southern right whale: whale/boat interaction during whalewatching operations (Groch and Correa, ongoing analysis).

GPMAI-UDESC – In order to study conflicts between anthropic and cetaceans' activities, boats and *Sotalia guianensis* movements are monitored in the port of Ilhéus using theodolite. An ethnobiological study of local fishermen knowledge and interactions with Guiana dolphin is conducted in Canavieiras.

LEC/CEM/UFPR – Studies on the effect of noise by recreational boats, ships and activities of ports on the population of *Sotalia guianensis* in Paraná State, southern Brazil, and on the effect of artisanal fisheries (By-Catch) on the cetaceans of PR are being conducted.

IMA – Further studies conducted include 1) Muscle-skeletal morphology of pectoral fins of cetaceans Delphinidae stranded off BA, 2) Fetal biometrics and early bone calcification in fetus of Guiana dolphin stranded off BA, 3) Heart anatomy of Cetaceans odontoceti stranded off Bahia state, Brazil, and 4) Ethnoecological profile on Guiana dolphin of Baía de Todos os Santos/Bahia.

10. LITERATURE CITED

- Groch, K.R. 2005. *Biologia Populacional e Ecologia Comportamental da Baleia Franca Austral, Eubalaena australis* (Desmoulins, 1822), CETACEA, MYSTICETI, no litoral sul do Brasil. PhD. Thesis, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil. 159pp. [In Portuguese and English] Available from krgroch@terra.com.br
- Groch, K. R., Palazzo JR., J. T., Flores, P. A. C., Adler, F. R. and Fabia, M. E. 2005a. Recent rapid increases in the Brazilian right whale population. *Latin American Journal of Aquatic Mammals*, (4)1: p.41-47.

11. PUBLICATIONS

11.1 Published or 'In Press' papers only

- Azevedo, A.F., Flach, L., Bisi, T. L., Andrade, L.G., Dorneles, P.R., Lailson-Brito, J. Jr. (2010). Whistles emitted by Atlantic spotted dolphins (*Stenella frontalis*) in southeastern Brazil. *The Journal of the Acoustical Society of America*.
- Azevedo, A.F., Flach, L., Bisi, T. L., Van Sluys, M., Dorneles, P.R., Lailson-Brito, J. Jr. (2009). Comportamento do boto-cinza (*Sotalia guianensis*) (Cetacea, Delphinidae): problemas de amostragem, termos e definicoes. *Oecologia Brasiliensis* 13: 192-200.
- Azevedo, A.F., Lailson-Brito, J.Jr., Dorneles, P.R., Van Sluys, M., Cunha, H.A., Fragoso, A.B.L. (2009). Human-induced injuries to marine tucuxis (*Sotalia guianensis*) (Cetacea: Delphinidae) in Brazil. *JMBA2 – Biodiversity Records* 2: electronic page 22.
- Cremer, M. J.; Barreto, A. S.; Hardt, F. A. S.; Tonello JR, A.; Mounayer, R. (2009) Cetacean occurrence near an offshore oil platform in southern Brazil. *Biotemas* 22: 247-251.
- Cypriano-Souza, A. L.; Fernandez, G. P. Lima-Rosa, C. A., Engel, M. H. and Bonatto, S. L. 2009. Microsatellite Genetic Characterization of the Humpback Whale (*Megaptera novaeangliae*) Breeding Ground off Brazil (Breeding Stock A). *Journal of Heredity*, Disponível online.
- Danilewicz, D.; Secchi, E.R.; Ott, P.H.; Moreno, I.B.; Bassoi, M. and Borges M.M. 2009. Habitat use patterns of franciscana dolphins (*Pontoporia blainvillei*) off southern Brazil in relation to water depth. *Journal of the Marine Biological Association of the United Kingdom*: 89(5): 943-949.
- Danilewicz, D.; Tavares, M.; Moreno, I.B.; Ott, P.H. and Trigo, C.C. 2009. Evidence of feeding by the humpback whale (*Megaptera novaeangliae*) in mid-latitude waters of the western South Atlantic. *Journal of the Marine Biological Association of the United Kingdom* 2 (Published on-line – Reference Number 6348)
- Dorneles, P. R., Lailson-Brito, J. Jr., Durtu, A. C., Weijs, L., Azevedo, A. F., Torres, J. P. M., Malm, O., Neels, H., Blust, R., Das, K. (2010). Anthropogenic and naturally-produced organobrominated compounds in marine mammals from Brazil. *Environment International* 36: 60-67.
- Engel, M. H. and Martin, A. R. 2009. Feeding grounds of the western South Atlantic humpback whale population. *Marine Mammal Science*, 25: (4) 964-969.
- Heinzelmann, L.; Tavares, M.; Ott, P.H.; Moreno, I.M.B. and Chies, J.A.B. 2009. MHC class II expression in skin biopsies from the franciscana dolphin *Pontoporia blainvillei* and the southern right whale *Eubalaena australis*. *Journal of the Marine Biological Association of the United Kingdom*, pages 1-5.
- Lailson-Brito, J., Dorneles, P.R., Azevedo-Silva, C.E., Azevedo, A.F., Vidal, L.G., Zanelatto, R.C., Lozinski, C.P.C., Azeredo, A., Fragoso, A.B.L., Cunha, H.A. (2009). High organochlorine accumulation in blubber of Guiana dolphin, *Sotalia guianensis*, from Brazilian coast and its use to establish geographical differences among populations. *Environmental Pollution* (1987).

- Meirelles, A.C.O., Monteiro-Neto, C., Martins, A.M., Costa, A.F., Barros, H.M.D.R., Alves, M.D.O. Cetacean Strandings on the coast of Ceará, Northeastern Brazil (1992-2005). 2009. *Journal of the Marine Biological Association of the United Kingdom*, 89(5): 1083-1090.
- Meirelles, A.C.O., Ribeiro, A.C., Silva, C.P.N., Soares-Filho, A.A. in press. Records of Guiana Dolphin, *Sotalia guianensis*, in the State of Ceará, Northeastern Brazil. *Latin American Journal of Aquatic Mammals*
- Melo, C. L. C., Santos, R. A., Bassoi, M., Araujo, A. C., Lailson-Brito, J. Jr., Dorneles, P. R., Azevedo, A. F. 2010 (in press). Feeding habits of delphinids (Mammalia: Cetacea) from Rio de Janeiro State, Brazil. *Journal of the Marine Biological Association of the United Kingdom*.
- Moreno, I.B.; Danilewicz, D.; Tavares, M.; Ott, P.H. and Machado, R. 2009. Descrição da pesca costeira de média escala no litoral norte do Rio Grande do Sul: comunidades pesqueiras de Imbé/Tramandaí e Passo de Torres/Torres. *Boletim do Instituto de Pesca*, 35:129-140.
- Moreno, I. B., Ott, P.H., Tavares, M., Oliveira, L.R., Danilewicz, D., Siciliano, S. and Bonatto, S. L. 2009. Os cetáceos com ênfase no golfinho-nariz-de-garrafa, *Tursiops truncatus* (Montagu, 1821). pp. 286-293 In: Danielle de Lima Viana *et al.* (Orgs.). O Arquipélago de São Pedro e São Paulo: 10 anos de Estação. Brasília, DF: SECIRM. 348pp.
- Oliveira, L.R., Ott, P.H., Flores, P.A.C., Siciliano, S., Almeida, R.S. and Bonato, S.L. 2009. First molecular estimate of sex ratio in Southern right whale calves, *Eubalaena australis*, for Brazilian waters. *Journal of the Marine Biological Association of the United Kingdom*, v:1003-1007.
- Ott, P.H., Tavares, M., Oliveira, R.L., Moreno, I.B., Danilewicz, D., Martins, M.B., Machado, R. and Wickert, J. C. 2009. Mamíferos marinhos do litoral gaúcho. pp. 236-257. In Würdig, N. L. e Freitas, S. M. F. (Orgs.) *Ecosistemas e biodiversidade do litoral norte do RS*. Nova Prova Editora, Porto Alegre. 287 pp.
- Ott, P.H., Tavares, M., Moreno, I.B., Oliveira, L.R. and Danilewicz, D. in press Os cetáceos do Arquipélago de São Pedro e São Paulo, Brasil Capítulo 11. In: Mohr, L.V.; Wagner, J.C.; Costa, P.M. & Válka, R.J. (Orgs.). *Ilhas Oceânicas Brasileiras: da Pesquisa ao Manejo*. Volume II. Brasília: Ministério do Meio Ambiente.
- Rosas, F. C. W. and Barreto, A. S. 2008. Reprodução e Crescimento, p. 51-66 In: Monteiro-Filho, E. L. A.; Monteiro, K. D. K. A.. (Org.). *Biologia, Ecologia e Conservação do Boto-Cinza*. 1 ed. São Paulo: Páginas & Letras.
- Rossi-Santos, M. R. and Flores, P. A. C. 2009a. Commensalism between Guiana dolphins *Sotalia guianensis* and sea birds in the North Bay of Santa Catarina, southern Brazil. *The Open Marine Biology Journal*, 3: 77-82.
- Rossi-Santos, M. R. and Flores, P. A. C. 2009b. Feeding strategies of the Guiana dolphin *Sotalia guianensis*. *The Open Marine Biology Journal*, 3: 70-76.
- Rossi-Santos, M. R., Neto, E. S. and Baracho, C. G. 2009. Interspecific cetacean interactions during the breeding season of humpback whale (*Megaptera novaeangliae*) on the north coast of Bahia State, Brazil. *Journal of the Marine Biological Association of the United Kingdom*, 89: (5) 961-966.
- Santos, M.C. de O., Oshima, J.E.F. and Da Silva, E. 2009. Sightings of franciscana dolphins (*Pontoporia blainvillei*): the discovery of a population in the Paranaguá Estuarine Complex. *Brazilian Journal of Oceanography*, 57(1): 57-63.
- Santos, M.C. de O. and Da Silva, E. 2009. Records of a male killer whale (*Orcinus orca*) in southeastern Brazil. *Brazilian Journal of Oceanography*, 57(1): 65-68.
- Santos, M.C. de O., Oshima, J.E.F., Pacífico, E. dos S. and Da Silva, E. 2010. Group size and composition of Guiana dolphins (*Sotalia guianensis*) in the Paranaguá Estuarine Complex, Brazil. *Brazilian Journal of Biology*, 70(1): 111-120.
- Santos, M.C. de O., Oshima, J.E.F., Pacífico, E. dos S. and da Silva, E. 2010. Feeding associations between Guiana dolphins, *Sotalia guianensis*, and seabirds in the Lagamar estuary, Brazil. *Brazilian Journal of Biology*, 70(1): 9-17.
- Santos, M. C. de O. and Gadig, O. B. F. 2010. Evidence of a failed predation attempt of a bull shark (*Carcharhinus leucas*) on a Guiana dolphin (*Sotalia guianensis*). *Arquivos de Ciências do Mar*, 42(2): 93-98.
- Santos, M.C. de O., Siciliano, S., Vicente, A.F. de C., Alvarenga, F.S., Zampirolli, E., de Souza, S.P. and Maranhão, A. In press. Cetacean records along São Paulo state coast, Brazil. *Brazilian Journal of Oceanography*.
- Santos, M. C. de O. In press. Guiana dolphins (*Sotalia guianensis*) displaying beach hunting behavior in the Cananéia estuary, Brazil: social context and conservation issues. *Brazilian Journal of Oceanography*.
- Santos, M.C. de O. and Ditt, E.H. In Press. Incidental capture of a spinner dolphin, *Stenella longirostris* (Gray, 1828), in a gillnet set for sharks off the Brazilian southeast coast. *The Latin American Journal of Aquatic Mammals*, 7(1).
- Santos, M.C. de O., Oshima, J.E. de F., Pacífico, E. dos S. and da Silva, E. In press. Guiana dolphins (*Sotalia guianensis*) in the Paranaguá Estuarine Complex: insights on the use of area based on photo-identification. *Zoologia*.
- Santos, U. A., Alavarez, M., Schilling, A. C., Reuss-Strenzel, G. M. and Le Pendu, Y. (in press). Spatial distribution and activities of the estuarine dolphin *Sotalia guianensis* (van Bénédén, 1864) (Cetacea, Delphinidae) in Pontal Bay, Ilhéus, Bahia, Brazil. *Biota Neotropica*. ISSN 1676-0603.
- Souto, L. R. A. 2009. Sincronometria de cachalote-pigmeu, *Kogia breviceps* (Odontoceti, Kogiidae), no litoral da Bahia, Nordeste do Brasil. *Sitientibus. Série Ciências Biológicas*, 9(2/3): 129-132.
- Sousa-Lima, R.S. and Clark, C.W. 2009. Whale sound recording technology as a tool for assessing the effects of boat noise in a Brazilian marine park. *Park Science* 26(1): 59-63.
- Sousa-Lima, R. S. and Groch, K. R. in press. Correlation between body length and fluke width in humpback whales, *Megaptera novaeangliae*. *Marine Mammal Science*. In press.
- Tavares, M., Moreno, I. B., Siciliano, S., Rodríguez, D., Santos, M.C. de O., Lailson-Brito, J. and Fabián, M. 2010. Biogeography of common dolphins (genus *Delphinus*) in the South-western Atlantic Ocean. *Mammal Review*, 40(1): 40-64.
- Van Bresselem, M., Santos, M. C. de O. and Oshima, J.E.F. 2009. Skin diseases in Guiana dolphins (*Sotalia guianensis*) from the Paranaguá estuary, Brazil: A possible indicator of a compromised marine environment. *Marine Environmental Research*, 67(1): 63-68.

- Van Bresselem, M. F., Raga, J. A., Di Guardo, G., Jepson, P. D., Duignan, P., Siebert, U., Barrett, T., Santos, M.C. de O., Moreno, I. B., Siciliano, S., Aguilar, A. and Waerebeek, K. V. 2009. Emerging infectious diseases in cetaceans worldwide and the possible role of environmental stressors. *Diseases of Aquatic Organisms* 86(2): 143-157.
- Van Parijs, S.M., Chris W. Clark, C.W., Sousa-Lima, R.S., Parks, S.E., Rankin, S., Risch, D., and Van Opzeeland, I.C. 2009. Management and research applications of real-time and archival passive acoustic sensors over varying temporal and spatial scales. *Marine Ecology Progress Series* 395: 21–36.
- Wedekin, L. L., Neves, M. C., Marcondes, M. C. C., Baracho, C. B., Rossi-Santos, M. R., Engel, M. H. and Simoes-Lopes, P. C. In press. Site fidelity and movements of the humpback whales (*Megaptera novaeangliae*) on the Brazilian breeding ground, southwestern Atlantic. *Marine Mammal Science*. In press.

11.2 Unpublished literature

- Attademo Silva, F. J. L., Moura, Firmino, A. S. L., Gomes, P. T. 2005. Uso de cetáceos como isca no Rio Grande do Norte In: VII Congresso de Ecologia do Brasil, 2005, Caxambu. Anais VII Congresso de Ecologia do Brasil. São Paulo: Sociedade de Ecologia do Brasil.
- Costa, M. E. B., Silva, M. A., Le Pendu, Y. and Costa-Neto E. M. 2009. Etnobiologia e conservação do boto-cinza (*Sotalia guianensis*) (CETACEA, DELPHINIDAE) em uma comunidade pesqueira de Canavieiras, Bahia, Brasil. In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos, Salvador. Livro de Resumos Ações prioritárias para a conservação. Salvador: Souto L.R.A. e Reis M.S.S (Orgs).
- Carvalho, V. L.; Silva, C. P. N.; Campos, T.M. 2009. Reabilitação de cetáceos encalhados no litoral do Ceará. In: Anais do VI Encontro Nacional de Conservação e Pesquisa de Mamíferos Aquáticos, Salvador-BA, Brazil.
- Carvalho, V. L.; Silva, C. P. N.; Amâncio, A.C; Velozo, R.S.; Souza, R.R. 2009. Reabilitação de um filhote de golfinho-de-Risso (*Grampus griseus*) encalhado no Ceará. In: Anais do VI Encontro Nacional de Conservação e Pesquisa de Mamíferos Aquáticos, Salvador-BA, Brazil.
- Campos, T. M.; Meirelles, A. C. O. 2008. Impactos Antrópicos sobre o Boto-Cinza (*Sotalia guianensis*) (Cetacea: Delphinidae), na Enseada do Mucuripe, Fortaleza, Ceará, Brasil. III Congresso Brasileiro de Oceanografia, Fortaleza-CE, Brazil.
- Choi, K. F.; Campos, T. M.; Meirelles, A. C. O.; Amâncio, A. C. 2008. PRIMEIRO REGISTRO DE GOLFINHO LISTRADO (*Stenella coeruleoalba*) PARA O ESTADO DO CEARÁ, BRASIL. 2008. III Congresso Brasileiro de Oceanografia, Fortaleza-CE, Brazil.
- Choi, K. F.; Campos, T. M.; Meirelles, A. C.O.; Amâncio, A.C. 2008. Parto de um golfinho-listrado, *Stenella coeruleoalba* (CETACEA, DELPHINIDAE), durante reabilitação em cativeiro no estado do Ceará. Anais do V Encontro Nacional de Conservação e Pesquisa de Mamíferos Aquáticos, São Vicente-SP, Brazil.
- Choi, K. F.; Meirelles, A. C.O.; Campos, T. M. and Picanço M. C. L. 2009. RESGATE, MANEJO E SOLTURA DE UM GOLFINHO-PINTADO-DO-ATLÂNTICO, *Stenella frontalis*, ENCALHADO NA PRAIA DE GUAJIRU, TRAIRI – CEARÁ. In: Anais do VI Encontro Nacional de Conservação e Pesquisa de Mamíferos Aquáticos, Salvador-BA, Brazil.
- Dantas, C. C., Silva-Jr, L. L., Pedroza, E. M. S., Costa, T. E. B., Almeida, H. M., Oliveira, I. T. G., Fragoso, A. B. L., Firmino, A.S.L., Silva, Flávio J. L. 2009. Estudo Preliminar Etológico de Mamíferos Marinhos com Ocorrência na Praia de São Cristóvão, Areia Branca, RN In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordeste de Mamíferos Aquáticos, 2009, Salvador. Anais do VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordeste de Mamíferos Aquáticos.
- Dantas, C. C., Fragoso, A. B. L., Costa, T. E. B., Pedroza, E. M. S., Firmino, A.S.L., Silva, F. J. L. 2009. Encalhe de Golfinho-Cabeça-de-Melão, *Peponocephala electra*, na Região da Costa Branca, RN In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordeste de Mamíferos Aquáticos, 2009, Salvador. Anais do VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordeste de Mamíferos Aquáticos.
- Domit, C. 2010. Ecologia do boto-cinza, *Sotalia guianensis* (van Bénédén, 1864), no Complexo Estuarino de Paranaguá, Paraná, Brasil. PhD Dissertation. Universidade Federal do Paraná. 222pp.
- Fragoso, A. B. L., Nascimento, L. F., Firmino, A.S.L., Almeida, H. M., Gondim, M. A., Silva, D. M. R., Silva-Jr., L. L., Silva, Flávio J. L. 2009. The use of paleopathology techniques on the study of skeletal lesions caused by fishery interactions in Guiana dolphin (*Sotalia guianensis*) (Van Beneden, 1864) of Rio Grande do Norte Coast, Brazil In: 18th Biennial Conference on the Biology of Marine Mammals, 2009, Quebec. 18th Biennial Conference on the Biology of Marine Mammals.
- FRAGOSO, A. B. L., FIRMINO, A.S.L., NASCIMENTO, L. F., SILVA, Flávio J. L. 2009. Lesões Cranianas Causadas por Infestação Parasitária em Boto-Cinza, *Sotalia guianensis* (Van Beneden, 1864) do Rio Grande do Norte. In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordeste de Mamíferos Aquáticos, 2009, Salvador. Anais do VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordeste de Mamíferos Aquáticos.
- Gonçalves, M. I. C. 2009. A actividade e estrutura espacial dos grupos de boto-cinza, *Sotalia guianensis* (Van Bénédén, 1864), no porto de Ilhéus-Bahia. MSc Dissertation, Universidade do Porto, Portugal.
- GONÇALVES, M. A. and LE PENDU, Y. 2009. A organização e as atividades dos grupos de boto-cinza, *Sotalia guianensis* (van Bénédén, 1864), no Porto de Ilhéus Bahia. In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos (ENCOPEMAQ) & II Simpósio Nordeste de Mamíferos Aquáticos (SINEMA), 2009, Salvador. Livro de Resumos do VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos (ENCOPEMAQ) & II Simpósio Nordeste de Mamíferos Aquáticos (SINEMA), 2009. p. 66-66.
- Izidoro, F. B. 2009. Caracterização dos grupos e brincadeiras em boto-cinza (*Sotalia guianensis*) (Van Bénédén, 1864) no Porto de Ilhéus, Bahia. MSc Dissertation, Universidade Estadual de Santa Cruz, Brasil.
- Karam e Britto, M. 2009. Mamíferos Marinhos, a Atividade de Prospecção Sísmica e o Uso do Sistema de Monitoramento de Mamíferos Marinhos SIMMAM. Master Thesis. Master's in Ciência e Tecnologia Ambiental, Universidade do Vale do Itajaí, 118 pp.

- Le Pendu, Y. and Lima, A. M. 2009. Conhecimento etnoecológico de cetáceos pelos pescadores da baía do Pontal, Ilhéus. In: XV Seminário de Iniciação Científica e X Semana de Pesquisa e Pós-graduação, 2009, Ilhéus. Livro de resumos do XV Seminário de Iniciação Científica e X Semana de Pesquisa e Pós-graduação.
- Lima, A. M. and Le Pendu, Y. 2009. Etnoconhecimento dos cetáceos pelos pescadores de Ilhéus, Bahia. In: XI Simpósio de Biologia do Sul da Bahia, 2009, Ilhéus. Livro de resumos do XI Simpósio de Biologia do Sul da Bahia.
- Lima, A. M. and Le Pendu, Y. 2009. Etnoconhecimento e interações entre cetáceos e pescadores em Ilhéus, Bahia. In: VI encontro Nacional sobre conservação e pesquisa de mamíferos aquáticos, 2009, Salvador. Livro de Resumos Ações prioritárias para a conservação. Salvador : Souto L.R.A. e Reis M.S.S (Orgs).
- Meirelles, A.C.O., Choi, K.F., Campos, T.M., Amâncio, A.C. 2009. Primeiro registro de encalhe de um Golfinho de Risso (*Grampus griseus*) no estado do Ceará. In: Anais do VI Encontro Nacional de Conservação e Pesquisa de Mamíferos Aquáticos, Salvador-BA, Brazil.
- Morais, B. C. and Le Pendu, Y. 2009. Comportamento e distribuição espacial de *Sotalia guianensis* (van Bénédén, 1864) no Morro do Pernambuco, Ilhéus, Bahia. In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos, Salvador. Livro de Resumos Ações prioritárias para a conservação.
- Morais, B. C., Paula, Y. C. and Le Pendu, Y. 2009. Uso do hábitat pelo boto-cinza, *Sotalia guianensis* (Cetacea: Delphinidae), no Morro do Pernambuco, Ilhéus, Bahia, Brasil. In: XV Seminário de Iniciação Científica e X Semana de Pesquisa e Pós-graduação, 2009, Ilhéus. Livro de resumos do XV Seminário de Iniciação Científica e X Semana de Pesquisa e Pós-graduação.
- Nascimento, L. F., Medeiros, P. I. A. P., Gondim, M. A., Tosi, C. H., Silva, D. M. R., Fragoso, A. B. L., Silva, Flávio J. L. 2009. Ocorrência do Cachalote (*Physeter macrocephalus*, Linnaeus, 1758) no Rio Grande do Norte, Nordeste do Brasil. In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordestino de Mamíferos Aquáticos, 2009, Salvador. Anais do VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos e 2º Simpósio Nordestino de Mamíferos Aquáticos.
- Rosso-Londoño, M.C. 2010. Mortalidade de cetáceos no litoral do estado do Paraná e possíveis interações com a pesca artesanal. MSc Thesis. Universidade Federal do Paraná. 96pp.
- Silva-Jr., L. L., Costa, T. E. B., Dantas, C. C., Fragoso, A. B. L., Pedroza, E. M. S., Silva, Flávio J. L. 2009. Record of marine mammals strands in the west coastal region of the State of Rio Grande do Norte, northeast of Brazil In: 18th Biennial Conference on the Biology of Marine Mammals, 2009, Quebec, Canada. 18th Biennial Conference on the Biology of Marine Mammals.
- Tomas, S. and Le Pendu, Y. 2009. Ocorrência e composição de grupos de botos-cinza (*Sotalia guianensis*) (CETACEA: DELPHINIDAE) no Porto de Ilhéus, BA, Brasil. In: VI Encontro Nacional sobre Conservação e Pesquisa de Mamíferos Aquáticos, Salvador. Livro de Resumos Ações prioritárias para a conservação. Salvador: Souto L.R.A. e Reis M.S.S (Orgs).

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