

BRAZIL. PROGRESS REPORT ON CETACEAN RESEARCH, MARCH 2003 TO FEBRUARY 2004, WITH STATISTICAL DATA FOR THE CALENDAR YEAR 2003 OR SEASON 2003/2004

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1. Species and stocks studied

Common name	Scientific name	Area/stock(s)	Items referred to
Common minke whale	<i>Balaenoptera acutorostrata</i>	Rio Grande do Sul	4.3; 8
Antarctic minke whale	<i>Balaenoptera bonaerensis</i>	Ceará; South Atlantic	4.3; 8; 11.1
Minke whale	<i>Balaenoptera</i> sp.	Santa Catarina	4.3; 8
	<i>Balaenoptera</i> sp.	Rio Grande do Sul	4.3; 8
Bryde's whale	<i>Balaenoptera edeni</i>	Rio de Janeiro; São Paulo; Rio Grande do Sul	2.1.1; 2.1.2; 4.3; 6.2; 8
Rorqual	<i>Balaenopteridae</i>	Alagoas; São Paulo	4.3; 6.2; 8
Arnoux's beaked whale	<i>Berardius arnuxii</i>	Rio Grande do Sul	4.3; 8
Common dolphin	<i>Delphinus</i> sp.	Rio de Janeiro; Rio Grande do Sul	4.3; 5; 8
Southern right whale	<i>Eubalaena australis</i>	Abrolhos Bank (Bahia); Rio de Janeiro; São Paulo; Santa Catarina; Rio Grande do Sul	2.1.1; 2.1.2; 3.1.1; 3.2; 4.3; 6.2; 8; 9; 10; 11.2
Pygmy killer whale	<i>Feresa attenuata</i>	Bahia	4.3; 8
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	Ceará; Rio Grande do Norte; Bahia	2.1.2; 4.3; 8; 11.2
Long-finned pilot whale	<i>Globicephala melas</i>	Rio Grande do Sul	4.3; 8
Risso's dolphin	<i>Grampus griseus</i>	Rio de Janeiro	4.3; 5; 8
Amazon river dolphin	<i>Inia geoffrensis</i>	Central Amazon	2.1; 3.1.1; 3.1.2; 4.1; 4.2; 6.2; 7.1; 10; 11.1
Pygmy sperm whale	<i>Kogia breviceps</i>	Rio Grande do Norte; Bahia	4.3; 8
Dwarf sperm whale	<i>Kogia sima</i>	Rio Grande do Norte	4.3; 8
Humpback whale	<i>Megaptera novaeangliae</i>	Fernando de Noronha; Alagoas; Bahia; Abrolhos Bank (Bahia); Espírito Santo; Rio de Janeiro; Antarctic Ocean (A and B, Areas I and II)	2.1.1; 2.1.2; 3.1.1; 3.1.3; 4.1; 4.3; 4.4; 5; 8; 9; 10; 11.1; 11.2.
Killer whale	<i>Orcinus orca</i>	Bahia; Rio de Janeiro; Rio Grande do Sul	2.1.2; 3.1.1; 4.3; 5; 8; 11.1
Melon-headed whale	<i>Peponocephala electra</i>	Ceará; Bahia	4.3; 8; 11.2
Common porpoise	<i>Phocoena phocoena</i>	Rio Grande do Sul	4.3; 8
Sperm whale	<i>Physeter macrocephalus</i>	Ceara; Rio Grande do Norte; Alagoas; Bahia; São Paulo	2.1.2; 4.3; 8
Franciscana	<i>Pontoporia blainvillei</i>	Espírito Santo; Rio de Janeiro; São Paulo; Santa Catarina; Rio Grande do Sul	2.1.1; 2.1.2; 2.2; 4.2; 4.3; 4.4; 5; 7.1; 8; 9; 10; 11.1; 11.2.

Tucuxi	<i>Sotalia fluviatilis</i>	Central Amazon, Piauí; Ceará; Rio Grande do Norte; Paraíba; Pernambuco; Alagoas; Sergipe; Bahia; Espírito Santo; Rio de Janeiro; São Paulo; Paraná; Santa Catarina	2.1.1; 2.1.2; 2.2; 3.1.1; 3.2; 4.1; 4.2; 4.3; 4.4; 5; 7.1; 8; 9; 10; 11.1; 11.2
	<i>Stenella sp</i>	Ceará; Bahia; Santa Catarina	4.3; 8
Pantropical spotted dolphin	<i>Stenella attenuata</i>	Fernando de Noronha	2.1.2
Clymene dolphin	<i>Stenella clymene</i>	Ceará; Bahia; worldwide	4.3; 7.1; 8; 9; 11.1
Striped dolphin	<i>Stenella coeruleoalba</i>	São Paulo; Rio Grande do Sul	4.3; 7.1; 8;
Atlantic spotted dolphin	<i>Stenella frontalis</i>	Rio de Janeiro; São Paulo	2.1.2; 4.3; 5; 8
Spinner dolphin	<i>Stenella longirostris</i>	Ceará; Rio Grande do Norte; Pernambuco; Fernando de Noronha; Rio de Janeiro	2.1.1; 2.1.2; 3.1.1; 4.3; 8; 9
Rough-toothed dolphin	<i>Steno bredanensis</i>	Rio Grande do Norte; Pernambuco; Rio de Janeiro; São Paulo	2.1.2; 4.2; 4.3; 4.4; 7.1; 8
Bottlenose dolphin	<i>Tursiops truncatus</i>	São Pedro e São Paulo Archipelago; Pernambuco; Bahia; Rio de Janeiro; São Paulo; Santa Catarina; Rio Grande do Sul	2.1.1; 2.1.2; 2.2; 3.1.1; 3.2; 4.1; 4.3; 5; 7.1; 8; 9; 10; 11.1; 11.2
Cuvier's beaked whale	<i>Ziphius cavirostris</i>	Sergipe; Bahia	4.3; 8
Beaked whale	<i>Ziphiidae</i>	Alagoas	4.3; 8

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

Amazon river dolphin

Project 1 – Surveys for Amazon river dolphin were always carried out along the same track and at the same time of day from a sighting platform of 4.8 m aluminium boat with a 15 HP outboard engine twice a month and with four trained people: two observers, a recorder and a driver. One observer looked forward, using binoculars as much as possible to detect dolphins far ahead, and another to the rear. The driver and the recorder assisted as observers. The objective of these surveys is the 'minimum count'. Average boat speed was 11 km.h⁻¹. The boat was only stopped if this was necessary to determine the size of a dolphin group and if there was no risk of allowing dolphins to overtake the craft and be double-counted. During all period of this report, marked botos (mentioned in previous reports) were monitored visually in a daily basis. A total of ± 210 botos from a total of 334 marked individuals were seen at least once in the area during the period of this report. (Contact person: Vera M.F. da Silva, INPA).

Tucuxi

Project 1 – Tucuxi was also studied as a target species of the project described for Amazon river dolphin. During all period of this report, marked tucuxis (mentioned in previous reports) were monitored visually in a daily basis. Three marked individuals were seen at least once in the area during that period. (Contact person: Vera M.F. da Silva, INPA).

Project 2 – Photo-identification and behavior studies of marine tucuxi from land base sightings and vessels were done in Rio Grande do Norte, northeastern Brazil, in the following localities: Pipa beach (Tibau do Sul), Guarafas Lagoon (Tibau do Sul) and Tabatinga beach (Nísia Floresta). Group sizes varied from 1 to 14 animals (mean = 4) in Tabatinga beach (Gondim, 2004); from 2 to 8 (mean = 3.6) in Pipa beach, and from 2 to 5 animals (mean = 3.42) in Guarafas Lagoon (Oliveira, 2004). (Contact person: Priscila Medeiros, PPC-RN).

Project 3 – Studies on behavioural ecology and photo-identification are being conducted in Todos os Santos Bay, Bahia, north-eastern Brazil, from land base sightings and monthly cruises. (Contact person: Maria do Socorro Reis, MAMA)

Project 4 – Studies on behavioural ecology and bioacustics have been conducted in Bahia, northeastern Brazil, from Nova Viçosa (17°54'S; 039°21'W) to Caraíva (16°55'S; 039°08'W). Systematic studies have been also conducted in Abrolhos Archipelago, the most offshore area of the species' distribution. (Contact person: Luiza P. Godoy, Milton C. Marcondes & Marcos Rossi-Santos, IBJ)

Project 5 – Photo-identification, bioacoustic and behaviour studies have been conducted in Guanabara Bay, Rio de Janeiro, southeastern Brazil. (Contact person: José Lailson Brito, UERJ)

Project 6 – Photo-identification studies of marine tucuxi, from land and boat, have been conducted at Cananéia estuary (25°00'S, 047°58'W), São Paulo, southeastern Brasil, and Guaraqueçaba and Pinheiros Bays, Paraná, southern Brazil. (Contact person: Marcos Cesar de O. Santos, Projeto Atlantis)

Project 7 – Photo and video-identification, behaviour, age identification, reproductive biology, feeding ecology, population density and systematic studies of marine tucuxi have been conducted on a regular basis from a land and boat based sightings in the estuary complex of Iguape – Paranaguá and Ubatuba (São Paulo, southern Brazil) and in Guaraqueçaba, Paranaguá Bay and Guaratuba Bay (Paraná, southern Brazil). (Contact Persons: Emygdio L..A Monteiro Filho & Gislaine Filla, IPeC)

Project 8 - Linear transects for population estimates have been conducted in Babitonga Bay, Santa Catarina, southern Brazil. (Contact person: Marta Cremer, UNIVILLE)

Project 9 - Marine tucuxi is studied through boat surveys in an area of ~250km² (Baía Norte, Santa Catarina, southern Brazil) year round (Flores, 2003). The area is divided into 18 zones using topographic references easily identifiable from the boat to plot sightings locations also aided by a GPS (Flores, 2003, Flores *et al* 2003). Studies include photoidentification, biopsy sampling and behavioural reactions to boat approaches. (Contact person: Paulo Flores, IWC-Brazil)

Franciscana

Project 1 – Linear transects for population estimates have been conducted in Babitonga Bay, Santa Catarina, southern Brazil. (Contact person: Marta Cremer, UNIVILLE)

Project 2 – Aerial surveys for franciscana' population estimates were conducted off Rio Grande do Sul, southern Brazil. (Contact persons: Daniel Danilewicz & Ignacio Moreno, GEMARS/CECLIMAR)

Bottlenose dolphin

Project 1 – Photo-identification and behavior studies of offshore populations of bottlenose dolphins have been conducted on São Pedro e São Paulo Archipelago (00°56'N; 029°22'W), northeastern Brazil. (Contact person: Paulo Ott, GEMARS/CECLIMAR)

Project 2 – Photo-identification, behavioral ecology and bioacustics of coastal bottlenose dolphins have been conducted in Tramandaí (29°58'S; 050°07'W), Rio Grande do Sul, southern Brazil. Studies on interactions of the species with artisanal fishery have also been carried out. (Contact person: Lilian Sander & Thales de Freitas, UFRGS)

Spinner dolphin

Project 1 – Photo-identification, behavioral ecology and bioacoustics studies as well as the abundance estimate of spinner dolphin have been conducted off Fernando de Noronha Archipelago (3°52'S; 032°28'W). Methods included observation from land, boat cruises and diving. (Contact person: José Martins, Centro Golfinho Rotador)

Humpback whale

Project 1 – Photo-identification, behavioural ecology and biopsy sampling of humpback whales have been carried out from onboard surveys in Bahia, northeastern Brazil, from 12°20'S to 19°30'S, including the Abrolhos Bank region. In the latter, land based studies on behaviour and interactions between humpbacks and whalewatching boats were conducted. Aerial surveys were also carried out between the northern limit of Bahia (12°10'S) and the southern limit of Espírito Santo (20°42'S), and the data was collected following the methodology of linear transects (Burnham et al., 1980; Hiby and Hammond, 1989; Buckland et al., 1993). In Abrolhos Bank 736 humpback whales, including 108 calves, were detected during 2,119 n.miles of boat surveys (424 hours of effort) and 1,539 whales, including 264 calves, were detected from shore-based site, during 125 one-hour scans. In northern Bahia a total of 323 whales, including 18 calves, were sighted during 1,458 n.miles (243 hours of effort) of boat surveys. In southern Bahia 244 whales were sighted, including six calves, during 8 days of aerial survey. (Contact persons: Luiza P. Godoy & Milton C. Marcondes, IBJ)

Project 2 – Ship surveys for biopsy and photo-identification of humpback whales, as well as for cetacean distribution and abundance have been conducted in the Antarctic Peninsula (B and C, I and II). Abundance and distribution of cetaceans are been investigated in relation to biotic and abiotic parameters off the Antarctic Peninsula (Contact person: Luciano Dalla Rosa, MOFURG)

Southern right whales

Project 1 – Southern right whales were surveyed from helicopter from August to November (one survey per month), in the coastline of 400km from Santa Catarina Island to the northern coast of Rio Grande do Sul, southern Brazil, and from 14 land-based sites off Santa Catarina, covering about 100km of coastline. The studies include photo-identification, behaviour, distribution, abundance and interactions between right whales and whalewatching boats. During the aerial surveys 89 sightings (197 individuals, of which 54 were calves) were registered, including double counting. From the land-based observations 819 whales, of which 302 were calves, and including double counting, were sighted. A total of 113 different individuals were counted in the same day in September during the aerial survey. (Contact persons: Paulo C. Flores, Karina R. Groch & José Truda Palazzo, IWC-Brazil)

Bryde's whales

Project 1 – Bryde's whales were surveyed off Laje de Santos State Marine Park (24°19'S; 046°10'W), São Paulo, southeastern Brazil, during sighting cruises. During two boat surveys covering a total of 380 n.miles, eight Bryde's whales were observed at Laje de Santos during summer and one whale was observed off Ilhabela State Park (23°46'S; 045°21'W). Sightings occurred at a distance of 1 to 28 miles from the coast, but more frequent between 20 to 28 miles offshore. (Contact person: Mabel Augustowski, CEMAR)

2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

Project 1 - Visual surveys and long-term observations of 238 individually recognisable animals were used to investigate the size and structure of a boto (*Inia geoffrensis*) community in the central Amazon. On a day-to-day basis some 260 ± 50 botos were estimated to occur in this system or on adjacent rivers within 10 km, and about half this number were 'permanent residents'. Seasonal variation in water levels had influence on the distribution between habitats but not on the overall number of dolphins. It is estimated that about 270 botos are *significant users* of the lake system and an unknown number of others visit it for periods of hours up to one week or two weeks at most. There is a strong evidence of extensive individual movement along rivers of many tens to hundreds of km, but no seasonal migration as such on this scale. These results indicate that the boto population of the central Amazon, at least, is structured and that the structure is partly or wholly based on floodplain lake systems, though with extensive animal movement between systems. It is estimated that 13,000 botos occur in the 11,240 km² Mamirauá Sustainable Development Reserve, which covers an estimated 11-18% of

várzea habitat in Brazil.(Martin, A. R. & da Silva, V. M. F. 2004). (Contact person: Vera M.F. da Silva, INPA)

Project 2 – Sightings of marine tucuxi were recorded from land observation sites at Fortaleza, Ceará. (Contact person: Cristine Negrão, AQUASIS)

Project 3 – Sightings of sperm whale, short-finned pilot whale and spinner dolphin were recorded during a cruise from São Pedro e São Paulo Archipelago to Fernando de Noronha Archipelago. (Contact person: Paulo Ott & Glauco Caon, GEMARS/CECLIMAR)

Project 4 – Sightings of sperm whales were recorded during a cruise from São Pedro e São Paulo Archipelago to Fernando de Noronha Archipelago (Ananias *et al.*, 2003). (Contact person: Priscila Medeiros, PPC-RN)

Project 5 – Sightings of pantropical spotted dolphin have been recorded through land-based sites, boat surveys and diving in Fernando de Noronha Archipelago (3°52’S; 032°28’W). Humpback whales have also been sighted through land observation and boat surveys in Fernando de Noronha Archipelago (see 2.1.1, Spinner dolphin – Project 1) (Contact person: José Martins, Centro Golfinho Rotador)

Project 6 – Land based studies on behaviour and interactions between right whales and whalewatching boats have been carried out off Abrolhos Archipelago, northeastern Brazil during the humpback whale study (see 2.1.1, Humpback – Project 1) (Contact persons: Luiza P. Godoy & Milton C. Marcondes, IBJ)

Project 7 - Opportunistic observations of cetacean species have been made in southeastern Brazil from ships and land-based sites at Rio de Janeiro. The species sighted were *Eubalaena australis*, *Balaenoptera edeni*, *Megaptera novaeangliae*, *Orcinus orca*, *Stenella frontalis*, *Steno bredanensis*, *Stenella longirostris* e *Tursiops truncatus*. (Contact persons: José Lailson Brito Jr. & Alexandre de Freitas Azevedo, UERJ)

Project 8 – Opportunistic sightings of Bryde’s whales during dive tour operations were recorded in São Paulo, southeastern Brazil, close to Laje de Santos State Marine Park (24°19’S; 046°10’W) and Ilhabela State Park (23°46’S; 045°21’W). Opportunistic sightings of three whales were recorded during dive tour operations in summer and one whale in early spring. (Contact person: Mabel Augustowski, CEMAR)

Project 9 – Opportunist sightings and photo-identification of bottlenose dolphin have been made from boat surveys during the marine tucuxi study in Santa Catarina Island, southern Brazil (see 2.1.1, Tucuxi – Project 8). Occasional sightings of franciscanas have also been recorded. (Contact person: Paulo A.C. Flores, IWC-Brazil)

Project 10 – Opportunist sightings and photo-identification of bottlenose dolphin have been conducted in two estuaries along the Rio Grande do Sul state coast (Mampituba river and Tramandaí estuary). These efforts aim to contribute for the photo-id catalogue of the animals in the region as well as to the study of population size, residency, site fidelity and home range of these coastal populations. (Contact person: Paulo Ott & Ignacio Moreno, GEMARS/CECLIMAR)

Project 11 – Opportunistic observations of bottlenose dolphins, right whales and humpback whales were registered during weekly beach surveys for marine mammals at southern coast of Rio Grande do Sul. (Contact person: Mônica Muelbert, MOFURG)

2.2 Analyses/development of techniques

Information given in 2.1.1 and 2.1.2.

3. Marking data

3.1 Field work

3.1.1 NATURAL MARKING DATA

Species	Feature	Area/stock	Calendar year/ no. photographed	Catalogued (Y/N)	Catalogue total	Contact person/insititute
Bottlenose dolphin	Dorsal fin	Florianópolis, Santa Catarina	2003-04 / n = 20	Y	45	Paulo A.C. Flores, IWC-Brazil

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Bottlenose dolphin	Dorsal fin	North of Rio Grande do Sul, Southern Brazil	2003-04 / n = 8	Y	8	Lilian Hoffman, UFRGS
Bottlenose dolphin	Dorsal fin	North of Rio Grande do Sul, Southern Brazil	2003-04 / n = 3	N	-	Ignacio Moreno, GEMARS/CECLIMAR
Bottlenose dolphin	Flanks and dorsal fin	São Pedro e São Paulo Archipelago (Northeast Brazil)	Summer 2004/ n = 10	N	7	Paulo Ott, GEMARS/CECLIMAR
Humpback whale	Fluke	Abrolhos Bank, Bahia	2003 / n = 474	Y	2,100 (include data from 2003 season which are being analyzed)	Luiza Pacheco De Godoy, Instituto Baleia Jubarte
Humpback whale	Fluke	Northern Bahia	2003 / n = 119	Y	267	Suzana Más Rosa, Instituto Baleia Jubarte
Humpback whale	Fluke	Antarctic Sectors B and C (Areas I and II)	2003-04 / n = 15	On going analysis	382	Luciano Dalla Rosa, MOFURG
Orca	Dorsal	Rio de Janeiro	2003-03/n = 4	Y	5	José Lailson-Brito, UERJ
Southern right whale	Head callosities	Santa Catarina, Rio Grande do Sul	2003-04 / n = ~110 ^a	On going analysis	~270	Karina R. Groch, IWC-Brazil
Spinner dolphin	Fins and body	Fernando de Noronha	2003-2004/n = 57	Y	632	Jose Martins, Centro Golfinho Rotador
Tucuxi	Dorsal fin	Rio Grande do Norte	2003-2004/ n = 11	Y	34	Adolfo Hubner & Sandra Ananias, PPC – RN/UFRN
Tucuxi	Dorsal fin	Bahia	2002-04 / n = 84	Y	84	Marcos Rossi-Santos, Instituto Baleia Jubarte
Tucuxi	Dorsal fin	Guanabara Bay, Rio de Janeiro	2003-04 / n = 56	Y	67	José Lailson-Brito, UERJ
Tucuxi	Dorsal fin	Cananéia estuary, São Paulo	2003-04 / n = ca. 200-280	Y (40%)	147	Marcos Santos, Projeto Atlantis
Tucuxi	Dorsal fin	Babitonga Bay, Santa Catarina	2003-04 / n = 10 ^b	Y	50	Marta Cremer, UNIVILLE
Tucuxi	Dorsal fins and body marks	Florianópolis, Santa Catarina	2003-04/ n = 3	Y	~ 100	Paulo A.C. Flores, IWC-Brazil

^a Include possible double identifications

^b Video-identification techniques

3.1.2. ARTIFICIAL MARKING DATA

No data available

3.1.3 TELEMETRY DATA

Species	Tag type	No. successfully deployed	Maximum time transmitting	Contact person/institute
Humpback whale (Southeastern Brazil)	Satellite	11	>4 months	A. Zerbini, University of Washington, Seattle, USA & A. Andriolo, UFJF, Juiz de Fora, MG
Humpback whale (Area: Antarctic Peninsula)	Satellite	2	72 days	Luciano Dalla Rosa, MOFURG

3.2 Analyses/development of techniques

Results from Amazon River Dolphin Project 1 and Tucuxi Project 1 (2.1.1) – During 26 October to 04 November 2003, a total of 71 Amazon River dolphin or boto and three new tucuxis were captured, marked and released. From these, 43 were new botos and 28 recaptures. The techniques and methodologies of capture and marking are described in da Silva and Martin (2000). All 43 new botos and the three tucuxis captured during the report period, received a plastic tag. The duration of these tags vary from few days to several months. The plastic tag is used mainly to help the observation and monitoring of captured animals after release and until the freezing brand is healed (see da Silva & Martin, 2000).

Results from Tucuxi Project 9 (see 2.1.1) and Bottlenose dolphin Project 9 (see 2.1.2) – Biological parameters (calving interval, home ranges, movement pattern, site fidelity) and population parameters (abundance estimates, natality and mortality rates) are presented by Flores (2003).

Results from southern right whale Project 1 (see 2.1.1) – Within season residency, times/distances to resightings, biological parameters; habitat use and behavior of right whales in Central-Southern Santa Catarina are presented by Groch *et al.* (2003a, 2003b).

4. Tissue/biological samples collected

4.1 Biopsy samples

Species	Area/stock	Calendar year/ season no. collected	Archived (Y/N)	No. analysed	Total holdings	Contact person/institute
Amazon river dolphin	Central Amazon	74	Y	300	340	V. M. F. da Silva, INPA
Bottlenose dolphin	Patos Lagoon estuary, Rio Grande do Sul	2003-04/ n= 2	Y	On going study	2	Luciano Dalla Rosa, MOFURG
Humpback whale	Western Atlantic, Abrolhos Bank, Bahia	2003 / n = 48	Y	0	48	Márcia Engel, Instituto Baleia Jubarte
Humpback whale	Western Atlantic, Northern Bahia	2003 / n = 14	Y	0	14	Márcia Engel & Suzana Más Rosa Instituto Baleia Jubarte
Humpback whale	Group A, Southeastern Brazil	2003 / n = 10	Y	10	10	Alexandre Zerbini, UW & Artur Andriolo, UFJF
Humpback whale	Antarctic, B and C (I and II)	2003-04 / n = 5	Y	--	218	Luciano Dalla Rosa, MOFURG
Right whale	Rio Grande do Sul	2003-04 / n = 1	Y		1	Mônica Muelbert, MOFURG
Tucuxi	Central Amazon	2003 / n = 3	Y	3	8	V. M. F. da Silva/ INPA
Tucuxi	Cananéia estuary, São Paulo	2003-04 / n = 6	Y	4	17	Marcos Santos, Projeto Atlantis
Tucuxi	Florianópolis, Santa Catarina	2003-04 / n = 8	Y	On going study	8	Paulo A.C. Flores, IWC-Brazil & Haydée Cunha, Laboratório de Biodiversidade Molecular UFRJ/Projeto Maqua UERJ

4.2 Samples from directed catches or bycatches

Species	Area/stock	Calendar year/ season total	Archived (Y/N)	Tissue type(s)	Contact person/institute
Amazon river dolphin	Central Amazon	2003-04 / n = 5	Y	Heart, liver, skin, blubber, teeth, blood, skull, foetus and placenta	Dr. V. M. F. da Silva/ INPA

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Franciscana	Rio de Janeiro	2003-04 / n = 1	Y	Liver, kidney, gonads, stomach, blood, brain, muscle, skin, blubber, teeth	A.P. Di Benedetto, UENF-LCA
Franciscana	São Paulo	2003-04 / n = 17	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. & V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
Franciscana	Rio Grande do Sul	2003-04 / n = 10	Y	Gonads, liver, kidney, blubber, muscle, stomach contents, teeth and skull.	Daniel Danilewicz & Ignacio Moreno, GEMARS/CECLIMAR
Franciscana	Rio Grande do Sul	2003-04 / n = ?	Y	Gonads, liver, kidney, blubber, muscle, teeth, skeleton.	Mônica Muelbert, MOFURG
Rough toothed dolphin	São Paulo	2003-04	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. & V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
Tucuxi	Ceará	2003-04 / n = 1	Y	Stomach contents, parasites	Cristine Negrão, AQUASIS
Tucuxi	Ceará	2003-04 / n = 1	Y	Heart, lung, adrenals, spleen, kidney, gonads, brain	Cristine Negrão, AQUASIS
Tucuxi	Rio de Janeiro	2003-04 / n = 3	Y	Liver, kidney, heart, gonads, stomach, blood, muscle, skin, blubber, teeth	A.P. Di Benedetto, UENF-LCA

4.3 Samples from stranded animals

Species	Area/stock	Calendar year/season total	Archived (Y/N)	Tissue type(s)	Contact person/Institute
Antarctic minke whale	Ceará	2003(?) / n = 1	Y	Skull	Cristine Negrão, AQUASIS
Arnoux's beaked whale	Rio Grande do Sul	2003-04 / n = 1	Y	Skull, teeth, appendicular skeleton and stomach contents	Ignacio Moreno, GEMARS/CECLIMAR
Atlantic spotted dolphin	São Paulo	2003-04 / n = 2	Y	Skull	André Vicente, CEEMAM
Beaked whale	Alagoas	2003-04	Y	Muscle	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Bottlenose dolphin	Pernambuco	2003-04 / n = 1	Y	Muscle	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Bottlenose dolphin	Bahia	2003-04 / n = 2	Y	Liver, kidney, lung, blood, stomach	Luciano W. D. Reis, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Bottlenose dolphin	Rio de Janeiro	2003-04 / n = 1	Y	Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin	José Lailson-Brito , UERJ
Bottlenose dolphin	São Paulo	2003-04 / n = 1	Y	Skull, teeth	A.R. Santos-Lopes, IPeC
Bottlenose dolphin	Santa Catarina	2003-04 / n = 1	Y	Complete skeleton	Marta Cremer, UNIVILLE

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Bottlenose dolphin	Rio Grande do Sul	2003-04 / n = 4	Y	Muscle, liver, heart, intestine, kidney, lung, stomach contents, gonads, teeth and skull	Ignacio Moreno, GEMARS/CECLIMAR
Bottlenose dolphin	Rio Grande do Sul	2003-04 / n = ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Bryde's whale	Rio de Janeiro	2003-04 / n = 2	Y	Muscle, blubber, skin	José Lailson-Brito , UERJ
Bryde's whale	São Paulo	2003-04 / n = 3	Y	Skull, stomach contents	A. R. Santos-Lopes, IPeC
Bryde's whale	Rio Grande do Sul	2003-04 / n = ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Clymene dolphin	Ceará	2003-04 / n = 1	Y	Heart, lung, stomach, liver, spleen, linfonodos, adrenals, kidney, bladder, gonads, brain, parasites	Cristine Negrão, AQUASIS.
Clymene dolphin	Bahia	2003-04 / n = 8	Y	Liver, kidney, lung, blood, stomach.	Luciano W. D. Reis, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Common minke whale	Rio Grande do Sul	2003-04 / n = 2	Y	Skull, muscle, right pectoral fin	Ignacio Moreno, GEMARS/CECLIMAR
Common minke whale	Rio Grande do Sul	2003-04 / n = ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Common dolphin	Rio de Janeiro	2003-04 / n = 2	Y	Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin	José Lailson-Brito , UERJ
Common dolphin	Rio Grande do Sul	2003-04 / n = 1	Y	Skull, teeth	Ignacio Moreno, GEMARS/CECLIMAR
Common dolphin	Rio Grande do Sul	2003-04 / n ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Common porpoise	Rio Grande do Sul	2003-04 / n = ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Cuvier beaked whale	Bahia	2003-04 / n = 2	Y	Skull, skeleton	Luciano W. D. Reis, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Cuvier beaked whale	Sergipe	2003-04 / n = 1	Y	Skull, skeleton	Adolfo Hubner de Jesus, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Cuvier beaked whale	Bahia	2003-04 / n = 2	Y	Muscle, skull	Milton Marcondes, Instituto Baleia Jubarte
Dwarf sperm whale	Rio Grande do Norte	2003-04 / n = 1	Y	Skull	Priscila Medeiros, UFRN
Franciscana	Espírito Santo	2003-04 / n = 1	Y	Skin, muscle, skeleton, stomach contents, blubber	Milton Marcondes, Instituto Baleia Jubarte
Franciscana	São Paulo	2003-04 / n = 4	Y	Muscle, blubber, stomach contents	André Vicente, CEEMAM

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Franciscana	São Paulo	2003-04 / n = 7	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C.P. Bertozzi, J. Marigo & V. Ruopolo, Projeto BioPesca and Faculdade de Medicina Veterinária da USP
Franciscana	São Paulo	2003-04 / n = 5	Y	Skull, teeth, penis, stomach contents, gonads, tongue	A.R. Santos-Lopes, IPEC
Franciscana	Santa Catarina	2003-04 / n = 3	Y	Blubber, kidneys, stomach, liver, intestines, muscle, complete skeleton.	Marta Cremer, UNIVILLE
Franciscana	Rio Grande do Sul	2003-04 / n = 62	Y	Gonads, liver, kidney, blubber, muscle, stomach contents, tongue, vestigial, axial skeleton, teeth and skull	Ignacio Moreno, GEMARS/CECLIMAR
Franciscana	Rio Grande do Sul	2003-04 / n = 55	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Humpback whale	Alagoas	2003-04 / n = 1	Y	Skin, blubber, muscle	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Humpback whale	Alagoas	2003-04 / n = 1	Y	Baleen	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Humpback whale	Bahia	2003-04 / n = 4	Y	Muscle, parasites, kidneys, liver	Luciano W. D. Reis & Renata L. G Batista, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Humpback whale	Bahia, Espírito Santo	2003-04 / n = 6	Y	Bones, skull, blubber, skin, muscle, blood	Milton Marcondes, Instituto Baleia Jubarte
Humpback whale	Rio de Janeiro	2003-04 / n = 1	Y	Skin, blubber, muscle	A.P. Di Benditto, UENF/LCA
Killer whale	Rio Grande do Sul	2003-04 / n = 1	Y	Skull, teeth	Ignacio Moreno, GEMARS/CECLIMAR
Long-finned pilot whale	Rio Grande do Sul	2003-04 / n = 1	Y	Skull, teeth, skeleton, muscle, intestine, heart, liver, tongue, blubber and stomach contents	Ignacio Moreno, GEMARS/CECLIMAR
Melon headed whale	Ceará	2003-04 / n = 1	Y	Stomach contents	Criatine Negrão, AQUASIS
Melon headed whale	Bahia	2003-04 / n = 1	Y	Skeleton	Renata L. G Batista, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Minke whale	Santa Catarina	2003-04 / n = 1	Y	Complete skeleton	Marta Cremer, UNIVILLE
Pygmy killer whale	Bahia	2003-04 / n = 1	Y	Skeleton	Renata L. G Batista, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Pygmy sperm whale	Rio Grande do Norte	2003-04 / n = 1	Y	Teeth	Priscila Medeiros, UFRN
Pygmy sperm whale	Bahia	2003-04 / n = 1	Y	Liver, kidney, lung, blood, stomach	Luciano W. D. Reis, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Right whale	Rio Grande do Sul	2003-04 / n = ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG

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Risso's dolphin	Rio de Janeiro	2003-04 / n = 1	Y	Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin	José Lailson-Brito , UERJ
Rorqual	Alagoas	2003-04 / n = 1	Y	Bones	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Rorqual	Rio Grande do Sul	2003-04 / n = 2	Y	Skull, muscle, gonads, blubber and baleen	Ignacio Moreno, GEMARS/CECLIMAR
Rough-toothed dolphin	Rio Grande do Norte	2003-04 / n = 1	N	Stomach contents	Priscila Medeiros, UFRN
Rough-toothed dolphin	Pernambuco	2003-04 / n = 1	Y	Muscle, bones, teeth	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Rough-toothed dolphin	Rio de Janeiro	2003-04 / n = 2	Y	Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin	José Lailson-Brito , UERJ
Short-finned pilot whale	Ceará	2003/04/ n = 1	Y	Stomach contents	Cristine Negrão, Aquasis
Short-finned pilot whale	Bahia	2003-04 / n = 1	Y	Muscle, blubber	Milton Marcondes, Instituto baleia Jubarte
Southern right whale	Rio Grande do Sul	2003-04 / n = 1	Y	Muscle	Ignacio Moreno, GEMARS/CECLIMAR
Sperm whale	Ceará	2003-04 / n = 1	Y	Intestine, rectum	Cristine Negrão, Aquasis
Sperm whale	Alagoas	2003-04 / n = 1	Y	Bones, muscle	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Sperm whale	Rio Grande do Norte	2003-04 / n = 1	Y	Teeth	Priscila Medeiros, PPC-RN
Sperm whale	Bahia	2003-04 / n = 3	Y	Teeth, muscle, blubber	Milton Marcondes, Instituto Baleia Jubarte
Sperm whale	São Paulo	2003-04 / n = 1	Y	Skull	André Vicente, CEEMAM
Spinner dolphin	Ceará	2003-04 / n = 1	Y	Lung, stomach, gonads, prostate	Cristine Negrão, AQUASIS
Spinner dolphin	Ceará	2003-04 / n = 1	Y	Lung, heart, spleen, intestines, parasites, liver, adrenals, kidney, gonads, brain	Cristine Negrão, AQUASIS
Spinner dolphin	Rio Grande do Norte	2003-04 / n = 1	Y	Completed skeleton, parasites, kidney, lung, lung, liver	Priscila Medeiros, UFRN
Spinner dolphin	Rio Grande do Norte	2003-04 / n = 1	Y	Lung, liver, intestine, stomach, bladder, gonads, muscle, kidney	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Spinner dolphin	Pernambuco	2003-04 / n = 1	Y	Stomach, lung, parasite, linfonodo, muscle, liver, bones, teeth	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
<i>Stenella</i> sp.	Bahia	2003-04 / n = 1	Y	Skeleton, muscle	Milton Marcondes, Instituto Baleia Jubarte
<i>Stenella</i> sp.	Santa Catarina	2003-04 / n = 1	Y	Complete skeleton	Marta Cremer, UNIVILLE

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Striped dolphin	São Paulo	2003-04 / n = 1	Y	Skull, teeth, penis, tongue	A.R. Santos-Lopes, IPeC
Striped dolphin	Rio Grande do Sul	2003-04 / n = 1	Y	Skin, vestigial, skeleton, teeth and skull	Ignacio Moreno, GEMARS/CECLIMAR
Striped dolphin	Rio Grande do Sul	2003-04 / n = ?	Y	Muscle, liver, kidney, blubber, gonads, skeleton, teeth	Mônica Muelbert, MOFURG
Tucuxi	Piauí	2003-04 / n = 1	Y	Bones	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Tucuxi	Ceará	2003-04 / n = 1	Y	Heart, lung, liver, brain	Cristine Negrão, AQUASIS
Tucuxi	Ceará	2003-04 / n = 1	Y	Blubber, heart, lung, intestines, liver, pancreas, adrenals, kidney, gonads, brain	Cristine Negrão, AQUASIS
Tucuxi	Rio Grande do Norte	2003-04 / n = 13	Y	Skin, teeth, lung, kidney, stomach contents, skull or completed skeleton	Priscila Medeiros, UFRN
Tucuxi	Paraíba	2003-04 / n = 1	Y	Heart, lung, kidney, liver, adiposity, parasite, bones, teeth	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Tucuxi	Pernabuco	2003-04 / n = 1	Y	Liver, lung, lung parasite, mouth parasite, bones, teeth	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Tucuxi	Alagoas	2003-04 / n = 1	Y	Bones	Jociery Vergara, Centro Mamíferos Aquáticos, IBAMA
Tucuxi	Sergipe	2003-04 / n = 5	Y	Skeleton, teeth, parasites, gonads, kidneys	Adolfo Hubner de Jesus, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Tucuxi	Bahia	2003-04 / n = 16	Y	Liver, kidney, lung, blood, stomach	Luciano W. D. Reis, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Tucuxi	Bahia	2003-04 / n = 7	Y	Hearth, adrenal gland, Skin, Muscle, Skeleton, Stomach contents, blubber, parasites,	Milton Marcondes, Instituto Baleia Jubarte
Tucuxi	Rio de Janeiro	2003-04 / n = 9	Y	Kidney, liver, lung, muscle, stomach,, intestine, heart, blubber, skin	José Lailson-Brito , UERJ
Tucuxi	São Paulo	2003-04 / n = 1	Y	Skin, muscle, stomach contents	Marcos Santos, Projeto Atlantis
Tucuxi	São Paulo	2003-04 / n = 1	Y	Skull	André Vicente, CEEMAM
Tucuxi	São Paulo	2003-04 / n = 3	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C.P. Bertozzi, J. Marigo & V. Ruopolo, Projeto BioPesca and Faculdade de Medicina Veterinária da USP
Tucuxi	São Paulo	2003-04 / n = 6	Y	Skull, teeth, gonads, stomach contents, gonads, tongue	A.R. Santos-Lopes, IPeC
Tucuxi	Santa Catarina	2003-04 / n = 2	Y	Blubber, kidneys, stomach, liver, intestines, complete skeleton	Marta Cremer, UNIVILLE
Tucuxi	Santa Catarina	2003-04 / n = 1	Y	Skin, blubber and muscle	Paulo A. Flores, IWC-Brazil

4.4 Analyses/development of techniques

Project 1 – Stomach contents of stranded tucuxi from Rio Grande do Norte are being analysed. (Contact person: Priscila Medeiros, PPC-RN)

Project 2 - Population genetics of spinner dolphin are being studied using nuclear markers (microsatellites). (Contact person: José Martins, Centro Golfinho Rotador)

Project 3 – Tests of precision and accuracy of analytical methods for organochlorine determinations in blubber samples of cetaceans are being performing. (see item 5) (Contact person: Jose Lailson Brito, UERJ)

Project 4 – Immunological analysis (toxoplasmosis) on marine tucuxi and franciscana specimens through ELISA test, Die test and Western Blotting test are being performed; helminthological research on marine tucuxi specimens through macroscopically observation on the internal organs are being conducted; stomach contents on marine tucuxi and franciscana specimens through prey identification (species level, length and weight estimates) are being analysed; histological analysis on the gonads of marine tucuxi and franciscana specimens through microscopy techniques are being carried out. (Contact person: Ana Paula Di Benedetto, UENF)

Project 5 – Pathology occurring in bycatched animals has been investigated. Intestines are being analyzed for metazoan parasites that can be used for franciscana stock identity studies. Fixed brains are being studied to describe the anatomy of the blood supply in franciscanas. (Contact person: Carolina Bertozzi, BioPesca).

Project 6 - Anatomic studies and genetic analysis of franciscana's incidentally caught in the estuary complex of Iguape-Cananéia-Ilha Comprida, southeastern Brazil, are being conducted (Contact Persons: Emygdio L..A Monteiro Filho, Gislaïne Filla, IPeC).

Project 7 - Diet, age estimation and heavy metals contamination studies of franciscana and marine tucuxi are being conducted in Babitonga Bay, Santa Catarina (Contact person: Marta Cremer, UNIVILLE)

Project 8 – Genetic analysis, including mtDNA and nuclear DNA markers, of marine tucuxi off Santa Catarina are being conducted as part of a larger project of population structure of the species. (Contact person: Paulo A. Flores, IWC-Brazil)

Project 9 – Morphometric and distribution of *Stenella* sp. and *Delphinus* sp. in Southwestern Atlantic Ocean are being investigated (Contact person: Ignacio Moreno for *Stenella* and Mauricio Tavares for *Delphinus*, GEMARS/CECLIMAR).

Project 10 – Life history of franciscanas off Rio Grande do Sul, southern Brazil, is being investigated (Contact person: Daniel Danilewicz, GEMARS/CECLIMAR).

Project 11 – Mitochondrial and nuclear DNA analysis, as well as organochlorine studies of humpbacks from Antarctic Ocean (Areas B and C – I and II) are being conducted. (Contact person: Luciano Dalla Rosa, MOFURG)

5. Pollution studies

Project 1 – Samples of blood of 36 living botos were collected and are being analysed for contaminants. Blubber, muscle, brain and samples of all organs from three botos killed during interaction with fisheries were also collected and analysed. (Contact person: Vera M.F. da Silva, INPA)

Project 2 – Trace metals and organochlorines determinations in tissues of cetaceans occurring in the Brazilian coast are being conducted for the following species: *Megaptera novaeangliae*, *Sotalia fluviatilis*, *Pontoporia blainvillei*, *Orcinus orca*, *Tursiops truncatus*, *Grampus griseus*, *Delphinus* sp. and *Stenella frontalis*. (Contact person: J. Lailson Brito, UERJ)

Project 3 – Chlorinated pesticides and polychlorinated biphenyls in marine tucuxi from the Cananéia estuary, southeastern Brazil, were analyzed (Yogui *et al.* 2003). (Contact persons: Marcos C. Santos & Rosalinda Montone, Projeto

Atlantis).

6. Statistics for large cetaceans

6.2 Other non-natural mortality for the season 2003/04

Species	Area/stock	Males	Females	Total	Cause	Methodology
Southern right whale	São Paulo	-	-	1	Gillnet	Post mortem
Bryde's whale**	São Paulo	-	1	1	Collision with ship	Post mortem

** Identify by the head skull

7. Statistics for small cetaceans

7.1 For the calendar year 2003/04

Species	Area/stock	Directed catch		Incidental mortality			Live-capture
		Reported	Est. total	Reported	Est. total	Source	Reported
Amazon river dolphin	Central Amazon	Ca. 150	>150	3	-	Gillnet	0
Bottlenose dolphin	Bahia	0	0	1	-	Gillnet	0
Bottlenose dolphin	São Paulo	0	0	1	-	Gillnet	0
Clymene dolphin	Bahia	0	0	6	-	Gillnet	0
Franciscana	Rio de Janeiro	0	0	2	10	Gillnet	0
Franciscana	São Paulo	0	0	22	-	Gillnet	0
Franciscana	Rio Grande do Sul	0	0	77	-	Gillnet	0
Rough-toothed dolphin	São Paulo	0	0	1	-	Gillnet	0
Striped dolphin	São Paulo	0	0	1	-	Gillnet	0
Tucuxi	Ceará	-	-	4	-	?	-
Tucuxi	Ceará	-	-	1	-	Bottom Gillnet	-
Tucuxi	Sergipe	0	0	1	-	Gillnet	0
Tucuxi	Espírito Santo	0	0	5	-	Gillnet	4
Tucuxi	Espirito Santo & Bahia	0	0	4	-	Gillnet	0
Tucuxi	Bahia	0	0	16	-	Gillnet	0
Tucuxi	Rio de Janeiro	0	0	10	50	Gillnet	0
Tucuxi	São Paulo	0	0	6	-	Gillnet	0

8. Strandings

Information on strandings of cetacean in different provinces along the Brazilian coast can be obtained upon request from the following person/institution:

Region/Province	Contact Person	Institution
Northeastern Brazil / Ceará	Cristine Negrão	AQUASIS, email: cristine_negrao@yahoo.com

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Northeastern Brazil, Rio Grande do Norte	M. Emilia Yamamoto, Priscila Medeiros & Lídio F Nascimento	Projeto Pequenos Cetáceos, UFRN, email: prizamed@yahoo.com.br
Northeastern Brazil , Pernambuco	Jociery Vergara-Parente	Centro de Mamíferos Aquáticos. E-mail: jovergara@hotmail.com
Northeastern Brazil, Fernando de Noronha	José Martins	Centro Golfinho Rotador, email: rotador@golfinhorotador.org.br
Northeastern Brazil, Bahia	Adolfo Hubner de Jesus, Maria do Socorro Reis, Luciano Wagner Dorea Reis & Renata Guedes Batista	Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos. E-mail: mssreis@yahoo.com.br , promama95@yahoo.com.br
Northeastern Brazil, Bahia	Milton César C. Marcondes	Instituto Baleia Jubarte, email: jubarte@tdf.com.br
Southeastern Brazil, Rio de Janeiro	José Lailson Brito Jr.	Projeto MAQUA/UERJ, email: lailson@uerj.br
Southeastern Brazil, Rio de Janeiro	Ana Paula Di Benedetto	Universidade Estadual do Norte Fluminense – CBB, LCA, Ambientais, Email: anapaula@uenf.br
Southeastern Brazil, São Paulo	Marcos César de Oliveira Santos	Projeto Atlantis – USP, email: marcosos@usp.br
Southeastern Brazil, São Paulo	Carolina Bertozzi	Projeto BioPesca, email: carolinabertozzi@hotmail.com
Southeastern Brazil, São Paulo	Ana Rita Santos-Lopes	Instituto de Pesquisas Cananéia, email: anarita@ipepesquisas.org.br
Southeastern Brazil, São Paulo	André Fabiano de Castro Vicente	CEEMAM, email: ceemam@hotmail.com
Southern Brazil, Santa Catarina	Marta Cremer	UNIVILLE, email: mcremer@ilhanet.com.br
Southern Brazil, Santa Catarina	Paulo André de Carvalho Flores & Karina Groch	IWC-Brazil, email: krgroch@terra.com.br , flores.p@terra.com.br , Brazilian_wildlife@terra.com.br
Southern Brazil, Rio Grande do Sul	Ignacio Moreno	GEMARS/CECLIMAR, email: gemars@terra.com.br
Southern Brazil, Rio Grande do Sul	Mônica Muelbert	Mônica Muelbert, MOFURG, email: mamiferos@furg.br

9. Other studies and analyses

Project 1 – Interaction of humpback whales with whalewatching boats were observed at Santa Barbara Island at Abrolhos Archipelago, by means of continuous sampling (Mann, 1999) and theodolite tracking. (Contact person: Milton Cesar Marcondes, IBJ)

Project 2 – Possible disturbance by fishing, tourism boats and wood barges on marine tucuxi in Caravelas River and its estuary has been investigated. Bioacustics studies of the species are also being carried out. (Contact person: Marcos Rossi- Santos, IBJ)

Project 3 – Cause of death has been determined for stranded animals. Computer tomography has been used to search for damage in inner ear of animals stranded closed to areas where seismic surveys take place. (Contact person: Milton Marcondes, IBJ)

Project 4 – Bioacoustics studies of marine tucuxi have been conducted in the estuary complex of Iguape – Paranaguá and Ubatuba (São Paulo, southern Brazil) and in Guaraqueçaba, Paranaguá Bay and Guaratuba Bay (Paraná, southern Brazil). (Contact Persons: Emygdio L.A Monteiro Filho & Gislaïne Filla, IPeC)

Project 4 – Reaction of franciscanas and marine tucuxi to net alarms are being investigated in Babitinga Bay, Santa Catarina (Contact person: Marta Cremer, UNIVILLE)

Project 5 – Surface behavioural responses of marine tucuxi to tourism boats have being investigated in Baía Norte and in the Protected Area of Anhatomirim, a federal reserve created in 1992 to protect this dolphin population (Pereira *et al* 2003, Pereira 2004). (Contact person: Paulo Flores, IWC-Brazil)

Project 6 – Southern right whale interaction with boats, during whalewatching activities, has been investigated (Groch *et al.* 2003a, 2003b). (Contact person: Karina Groch)

Project 7 – Bioacoustics studies of marine tucuxi and franciscana are being conducted in Babitonga Bay, Santa Catarina (Contact person: Marta Cremer, UNIVILLE)

Project 8 – Monitoring of the coastal gillnet fleet is being carried out to evaluate the extent of incidental mortality of franciscanas in Rio Grande do Sul, southern Brazil. (Mônica Muelbert, MOFURG, & Ignacio Moreno, GEMARS/CECLIMAR)

Project 9 – Regular beach surveys for stranded franciscanas have been carried out at Rio Grande do Sul, southern Brazil (Contact person: Ignacio Moreno, GEMARS/CECLIMAR)

Project 10 – Recording of vocalizations and analysis of acoustics parameters of bottlenose dolphin are being carried out in Tramandaí Lagoon, Southern Brazil. (Contact person: Lilian S. Hoffman, UFRGS)

Project 11 – Age determination, age structure, diet analysis, reproduction and morphometrics analysis of franciscanas incidentally caught by coastal gillnets in southern Brazil are being conducted (Contact person: Mônica Muelbert, MOFURG)

Project 12 – A demographic study on the franciscana population to evaluate the impact of coastal gillnets in southern Brazil is being conducted. (Contact persons: Eduardo. R. Secchi & Paul G. Kinas, FURG).

Project 13 – A protocol for fatty acid analysis is being adapted in collaboration with the Food Analysis laboratory (Contact person: Mônica Muelbert, MOFURG)

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