

**BRAZIL. PROGRESS REPORT ON CETACEAN RESEARCH, MARCH 2004 TO FEBRUARY 2005,
WITH STATISTICAL DATA FOR THE CALENDAR SEASON 2004/05**

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This report summarises information obtained from the following institutions/organizations:

Brazilian institutions/organizations:

1. Associação de Pesquisa e Preservação de Ecossistemas Aquáticos (AQUASIS), Caucaia, Ceará;
2. Bryde's Whale Project, Santos, São Paulo;
3. Centro de Estudos Costeiros, Limnológicos e Marinhos (CECLIMAR), Imbé, Rio Grande do Sul;
4. Centro de Estudos de Mamíferos Marinhos (CEEMAM), Santos, São Paulo;
5. Centro Mamíferos Aquáticos/IBAMA (CMA/IBAMA), Itamaracá, Pernambuco;
6. Everest Tecnologia em Serviços LTDA, Vitória, Espírito Santo;
7. Grupo de Estudos de Mamíferos Aquáticos do Rio Grande do Sul (GEMARS), Porto Alegre, Rio Grande do Sul;
8. Instituto Baleia Jubarte (IBJ), Caravelas, Bahia;
9. Instituto de Estudos da Ecologia de Mamíferos Marinhos (Instituto ECOMAMA), Niterói, Rio de Janeiro;
10. Instituto de Pesquisas Cananéia (IPEC), Cananéia, São Paulo;
11. Instituto Nacional de Pesquisas da Amazonia, Laboratório de Mamíferos Aquáticos (INPA/LMA), Manaus, Amazonas;
12. International Wildlife Coalition/Brazil (IWC/Brazil), Florianópolis, Santa Catarina;
13. Museu Oceanográfico "Prof. Eliézer C. Rios", Fundação Universidade Federal do Rio Grande (MOFURG), Rio Grande, Rio Grande do Sul.
14. Projeto Atlantis, Instituto de Biologia da Conservação, São Paulo, São Paulo;
15. Projeto BioPesca, Ubatuba and Guarujá, São Paulo;
16. Projeto Golfinhos, Guarujá, São Paulo;
17. Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos, Projeto Mamíferos Marinhos e Centro de Resgate de Mamíferos Aquáticos (MAMA), Salvador, Bahia;
18. Universidade da Região de Joinville (UNIVILLE), Joinville, Santa Catarina;
19. Universidade do Estado do Rio de Janeiro (UERJ), Projeto MAQUA, Rio de Janeiro, Rio de Janeiro;
20. Universidade Estadual do Norte Fluminense (UENF), Laboratório de Ciências Ambientais, Campos dos Goytacazes, Rio de Janeiro;
21. Universidade Federal de Juiz de Fora, Minas Gerais;
22. Universidade Federal de Minas Gerais, Minas Gerais;
23. Universidade Federal de Santa Catarina, Florianópolis, Santa Catarina;
24. Universidade Federal do Rio Grande do Norte, Projeto Pequenos Cetáceos do Rio Grande do Norte (PPC-RN/UFRN), Rio Grande do Norte, Rio Grande do Norte;
25. Universidade Federal de Pernambuco, Recife, Pernambuco.

Foreign collaborative institutions/organizations:

26. Cornell University Ithaca, NY, USA
27. Greenland Institute of Natural Resources, DK
28. National Marine Mammal Laboratory/NOAA, Seattle, USA
29. Scotland & Natural Environmental Research Council, UK
30. Sea Mammals Research Unit, University of St. Andrews, UK
31. University of Washington, Seattle, USA

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1. Species and stocks studied

Common name	Scientific name	Area/stock(s)	Items referred to
Common minke whale	<i>Balaenoptera acutorastrata</i>	Bahia, Rio de Janeiro Ceará, Santa Catarina, São Paulo	2.1.2; 4.3
Antartic minke whale	<i>Balaenoptera bonaerensis</i>	Espírito Santo	2.1.2
Sei whale	<i>Balaenoptera borealis</i>	Santa Catarina, São Paulo	2.1.2; 6.2.1
Bryde's whale	<i>Balaenoptera edeni</i>	Rio Grande do Sul, Rio de Janeiro, Santa Catarina, São Paulo	2.1.1; 2.1.2; 4.3; 5; 6.2.1; 8; 9
Fin whale	<i>Balaenoptera physalus</i>	Bahia, São Paulo	2.1.2
<i>Balaenoptera</i> sp	<i>Balaenoptera</i> sp	Bahia, Rio de Janeiro, São Paulo, Espírito Santo	2.1.2
Rorqual	<i>Balaenopteridae</i>	Pernambuco	4.3
	<i>Delphinus</i> sp	São Paulo, Santa Catarina	4.2; 8
Common dolphin	<i>Delphinus delphis</i>	Rio Grande do Sul, São Paulo	2.1.2; 4.3; 5; 8
Southern right whale	<i>Eubalaena australis</i>	Abrolhos Bank (Bahia), Bahia, Espírito Santo, Rio Grande do Sul, Rio de Janeiro, São Paulo, Paraná, Santa Catarina	2.1.1; 2.1.2; 3.1.1; 3.2; 4.1; 9
Pygmy killer whale	<i>Feresa attenuata</i>	Pará/Maranhão	2.1.2
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	Espírito Santo, Pará/Maranhão, São Paulo, Rio Grande do Norte, South Atlantic	2.1.2; 4.3
Long-finned pilot whale	<i>Globicephala melas</i>	Rio Grande do Sul	4.3; 5
Pilot whale	<i>Globicephala</i> sp.	Bahia, Sergipe	4.3; 8; 9
Risso's dolphin	<i>Grampus griseus</i>	Bahia, Espírito Santo, São Paulo	2.1.2; 4.3; 9
Amazon river dolphin	<i>Inia geoffrensis</i>	Central Amazon, Amazon river to Fonte Boa, Negro river, Madeira river	2.1.1; 3.1.1; 3.1.2; 4.2; 4.3; 5; 7.1
Pygmy sperm whale	<i>Kogia breviceps</i>	Bahia	4.3; 9
Dwarf sperm whale	<i>Kogia simus</i>	Bahia, Rio Grande do Norte	4.3; 9
	<i>Kogia</i> sp.	Ceará,	4.3
Fraser dolphin	<i>Lagenodelphis hosei</i>	Rio de Janeiro	5
Humpback	<i>Megaptera novaeangliae</i>	Antarctic Peninsula and adjacent areas, Bahia; Ceará, Abrolhos Bank (Bahia); Eastern Atlantic population (Gabon), Espírito Santo, Pará/Maranhão, Rio de Janeiro, Rio Grande do Sul, São Paulo, Sergipe, Alagoas	2.1.1; 2.1.2; 3.1.1; 4.1; 4.3; 5; 6.2.1; 6.2.2; 8; 9
Beaked whale	<i>Mesoplodon</i> sp	Bahia, South Atlantic	4.3
	Mysticeti	Ceará, Pernambuco/Paraíba, Bahia, Espírito Santo, Rio de Janeiro, São Paulo	2.1.2
Dolphin no identified	Odontoceti	Sergipe/Alagoas, Bahia, Rio de Janeiro, São Paulo	2.1.2
Orca	<i>Orcinus orca</i>	Antarctic Peninsula and adjacent areas, Bahia, Rio de Janeiro, Rio Grande do Sul, São Paulo	2.1.1; 2.1.2; 3.1.1; 5
Melon-headed whale	<i>Peponocephala electra</i>	Bahia	2.1.2

Sperm Whale	<i>Physeter macrocephalus</i>	São Pedro e São Paulo Archipelago, Bahia, Ceará, Espírito Santo, Pará/Maranhão, Rio Grande do Norte, São Paulo, South Atlantic	2.1.2; 4.3; 4.4; 6.2.1; 8; 9
Franciscana	<i>Pontoporia blainvillei</i>	Rio de Janeiro; Rio Grande do Sul, Santa Catarina, São Paulo	2.1.1; 2.1.2; 4.2; 4.3; 4.4; 5; 7.1; 8; 9
False killer whale	<i>Pseudorca crassidens</i>	Rio de Janeiro, São Paulo, Sergipe/Alagoas	2.1.2; 4.3
Tucuxi or marine tucuxi	<i>Sotalia fluviatilis</i>	Abrolhos Bank, Bahia; Central Amazon, Ceará, Espírito Santo, Paraíba, Pernambuco, Rio Grande do Norte, Rio de Janeiro, São Paulo, Santa Catarina, Sergipe	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
Estuarine dolphin	<i>Sotalia guianensis</i>	Abrolhos Bank (Bahia), Santa Catarina, São Paulo, Sergipe	2.1.1; 2.1.2; 2.2; 3.1.1; 3.2; 4.3; 5; 7.1; 8; 9
Pantropical spotted dolphin	<i>Stenella attenuata</i>	Bahia, Ceará, Espírito Santo, Pará/Maranhão, Rio de Janeiro, São Paulo, Sergipe/Alagoas	2.1.2; 4.3; 9
Clymene dolphin	<i>Stenella clymene</i>	Bahia, Rio de Janeiro, São Paulo, Sergipe, Alagoas,	2.1.2; 4.3; 7.1; 8; 9
Atlantic spotted dolphin	<i>Stenella frontalis</i>	Bahia, Espírito Santo, Paraná, Rio Grande do Sul, Rio de Janeiro, Santa Catarina, São Paulo	2.1.2; 4.3; 5
Spinner dolphin	<i>Stenella longirostris</i>	Bahia, Pará/Maranhão, Rio de Janeiro, São Paulo, Sergipe/Alagoas	2.1.2
	<i>Stenella sp</i>	Bahia, Ceará, Pará/Maranhão, Rio de Janeiro, São Paulo, Sergipe/Alagoas,	2.1.2
Rough-toothed dolphin	<i>Steno bredanensis</i>	Abrolhos Bank (Bahia); Bahia, Espírito Santo, Paraíba, Pernambuco, Santa Catarina	2.1.2; 3.1.1; 4.3
Bottlenose dolphin	<i>Tursiops truncatus</i>	Abrolhos Bank (Bahia); Bahia; Ceará, Espírito Santo, Pará/Maranhão, Pernambuco, Pernambuco/Paraíba, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Santa Catarina, São Paulo, São Pedro e São Paulo Archipelago (Northeast Brazil)	2.1.1; 2.1.2; 3.1.1; 3.2; 4.1; 4.3; 4.4; 7.1; 9
	Ziphiidae	Pernambuco	4..3
Cuvier's beaked whale	<i>Ziphius cavirostris</i>	Bahia, São Pedro e São Paulo Archipelago (Northeast Brazil), Sergipe	2.1.2; 4..3; 8; 9

We present, in this report, the genus *Sotalia* with the common name “Estuarine dolphin” for the *Sotalia guianensis* and “Marine Tucuxi” or “Tucuxi” for *Sotalia fluviatilis*, following the contributors use.

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

The **R** letter preceding each project makes reference to the Progress Report filled out by the Brazilian Institutions.

R1 Project: Studies on behavioral ecology and photo-identification of marine tucuxi from land have been conducted in Iracema Beach, Fortaleza (3°43'S, 38°31'W) from September 2004 to February 2005. Group sizes varied from 1 to 6 animals (mean = 3.2). Thirteen animals were identified based on dorsal fin shape and scars. (**Contact person:** Ana Carolina Oliveira de Meirelles- AQUASIS)

R2 Project: Studies on occurrence and distribution of Bryde's whales were surveyed through the two cruises on board Oceanographic vessel Prof. Wladimir Besnard during the summer and autumn/2004 (January - 955 n.miles and other in May - 995 n. miles). The route was previously established by Projeto de Dinâmica do Ecossistema de Plataforma da Região Oeste do Atlântico Sul (DEPROAS – IOUSP) which is developed at the southeastern region of Brazil at variable distances from the coast comprising different depths. Two individuals (mother and calf) were sighted in January at the isobath of 3000m and six individuals in May. Among these eight individuals, four were sighted at 1200m presenting a jumping behaviour, and this represent the first Brazilian record (Gonçalves *et al.*, 2004). (**Contact person:** Mabel Augustowski, Leandra Regina Gonçalves and Thalassa Neder Teixeira Potiens, Bryde's Whale Project/Brazil)

R3-7 Project: Sighting data on bottlenose dolphins has been collected off São Pedro and São Paulo Archipelago (00°56'N; 029°22'W), northeastern Brazil. Photo-identification of bottlenose dolphin has been conducted in conjunction with the SECIRM, Brazilian Navy. (**Contact person:** Paulo Ott, GEMARS/CECLIMAR)

R8 Project 1: Tucuxi - During an effort of 400 hours (2260 nautical miles), *Sotalia fluviatilis* were monitored in 2004, aiming population dynamics, through photoidentification technique, behavioural ecology and bioacoustics in the southern coast of Bahia State, northeastern Brazil. Systematic studies have also been conducted in Abrolhos Archipelago, the most offshore area of the species' distribution. In the Caravelas River Estuary, land based surveys have been done to evaluate dolphin's daily use patterns and possible anthropogenic impacts (mainly caused by wood barges) on the *S. fluviatilis* population. (**Contact person:** Marcos Rossi-Santos, IBJ)

R8 Project 2: Humpback Whale – Photo-identification, behavioural ecology and biopsy sampling of humpback whales have been carried out from onboard surveys in Bahia State, northeastern Brazil, from 12°20'S to 19°30'S, including the Abrolhos Bank. In the latter, land based studies on behaviour and interactions between humpback whales 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 were collected following the methodology of linear transects (Burnham *et al.*, 1980; Hiby and Hammond, 1989; Buckland *et al.*, 1993). In the Abrolhos Bank from July to November, 796 humpback whales, including 132 calves, were detected during 1,447 n.miles of boat surveys (305 hours of effort). During land base station survey at Abrolhos Archipelago 1,638 humpback whales were sighted including 374 calves, during 112 one-hour scans. In northern Bahia 303 whales were sighted, including 19 calves during boat surveys and 227 whales were sighted, including 22 calves during whale watching trips. (**Contact persons:** Clarêncio Baracho, Luiza P. Godoy, Maria Emilia Morete, IBJ)

R9 Project: Video-identification and behavioral ecology studies of coastal bottlenose dolphins population have been conducted off Cagaras Archipelago (23°02'S; 43°12'W), located 2.7 nautical miles southwards of Ipanema Beach, Rio de Janeiro state, southeastern Brazil. From August 6th to November 26th, 2004, twelve observational cruises in the Cagaras Archipelago have been undertaken (50% in winter and 50% in spring). The observations were conducted once each week and employed two trawlers, one being 10 m in length and propelled by a YANMAR type BT-D33 (45 hp) engine, the other of 14 m length and equipped with an MWM series 10 (150 hp) engine. The observational cruises took place under sea conditions that were equivalent to, or calmer than, level 3 on the Beaufort scale. Images of the outlines, marks, scars, and pigmented areas of the dorsal fin, and along the dorsal region, were recorded using video-identification techniques. During all field trips, bottlenose dolphins were sighted on twelve different occasions providing a total of 55 hours and 25 minutes of effective observation time, representing 100% of the total time spent on field surveillance. The sizes of the dolphin groups varied from 12 to 30 individuals (mean = 13.5 ± 3.7 ; modal value = 15). The total average number of individuals per sighting was 1.5, and the total average number of individuals per day of observation was 13.5. Seventeen individuals were catalogued in eleven boat surveys by marks and scars on the posterior portion of the dorsal fin ($n = 12$) and also by association of spots, scratches and pigmented areas ($n = 5$). Amongst the identified individuals, 88.2% were identified twice or more in further sightings following inclusion in the catalogue. (**Contact person:** Liliane Lodi and Luiz Cláudio Mayerhofer, ECOMAMA-RJ)

R10 Project 1: Photo and video-identification, behavioural ecology, bioacoustic, age identification, reproductive biology, feeding ecology, population density, etnobiology and systematic studies of estuarine-dolphin have being conducted on a regular basis from land and boat based sightings in the estuary complex of Ubatuba and Iguape – Paranaguá (São Paulo, southeast Brazil) and in Guaraqueçaba, Paranaguá bay, Atonina bay and Guaratuba bay (Paraná, southern Brazil). (**Contact person:** Emygdio L..A Monteiro Filho and Gislaine Filla, Ana Rita dos Santos-Lopes / IPeC)

R10 Project 2: Monitoring board in fisherman boats and acoustic gillnet pingers to avoid franciscana's incidental mortality, anatomic studies and genetic analysis are being conducted off coast nearby the estuary complex of Iguape-Cananéia-Ilha Comprida - southern of São Paulo State - Brazil since 2000. (**Contact person:** Emygdio L..A Monteiro Filho, Gislaine Filla, Ana Rita dos Santos-Lopes / IPeC)

R10 Project 3: Regular monitoring of stranded cetaceans and coastal sightings are being carried out in the region along the São Paulo state southern coast and in the estuary complex of Iguape-Cananéia-Ilha Comprida, southeastern Brazil and northern of Parana state. The monitoring promotes the rescue and rehabilitation of injured animals and generates data that will be used for future proposes of conservation of the species. Studies of stranded cetaceans to determinate the cause of death, age identification, tissue and biological samples, contamination levels, anatomic studies and genetic analysis are being conducted using the material collected of the carcass of stranded cetaceans. These work is done year round with a constant monitoring for small animals and more intensively during the whale's migration season. **(Contact person:** Ana Rita dos Santos-Lopes, IpeC)

R11 Project 1: A series of monthly surveys along 30 km route in várzea habitat of Central Amazon between March 2004 to February 2005 was performed as part of a larger project to study the Amazon river dolphin in the Amazon river. These surveys started in December 1994 and were analysed up to September 2002. The objective of these surveys was a 'minimum count' of the Amazon river dolphin along the seasonal variation of the water level of the Amazon river and to identify the habitat used by the species. A 4m aluminium boat with an outboard engine of 15 Hp was used and the boat speed during survey was 1-15 km.h-1. Two observers, a recorder and a driver were involved on the survey. 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, especially in maintaining awareness of the spatial distribution of dolphin groups. This same methodology has been applied to sympatric populations of tucuxi (see Tucuxi - Project 2). Detailed methodology and results can be found in da Silva and Martin, 2000; Martin and da Silva 2004 and Martin, da Silva and Salmon, 2004. **(Contact person:** Vera Maria F. da Silva, INPA and A.R. Martin, NERC-UK)

R11 Project 2: The same methodology applied to Amazon river dolphins has been applied to sympatric populations of tucuxi (see Amazon river dolphins - Project 1). Detailed methodology and results can be found in (da Silva and Martin, 2000; Martin and da Silva 2004 and Martin, da Silva and Salmon, 2004). **(Contact person:** Vera Maria F. da Silva, INPA and A.R. Martin, NERC-UK).

R11 Project 3: A series of three expeditions to the area above the large falls of the Madeira River (circa of 300km above Porto Velho and the Teotônio Falls up to Beni-Mamoré Rivers) was performed in order to confirm the occurrence of *Inia* sp. between the several falls that exist in this part of the Madeira River, and to obtain tissue of these dolphins to define the boundaries between the two species of *Inia* described for this river basin. These expeditions were performed as part of an impact assessment study for two hydroelectric dams planned to be constructed by the Brazilian government in the Madeira River. These dams will be build at the two main falls, eliminating the natural barrier separating the putative *I. geoffrensis* and *I. boliviensis* (da Silva, 1994, Banguera-Hinestroza, 2002; Hamilton et al, 2001). **(Contact person:** Vera Maria F. da Silva / INPA)

R12 Project 1: Marine tucuxi and bottlenose dolphins as well as franciscanas have been studied through boat surveys in an area of ~250km² (Baía Norte, SC), conducted without following a regular course and year round, every month (Flores 1999, 2003, Flores and Bazzalo 2004). The study area is divided into 18 zones using topographic references easily identifiable from the boat to plot sightings locations (Flores 1999) also aided by a GPS (Flores 2003, Flores and Bazzalo 2004, Flores et al 2004). **(Contact person:** Karina R. Groch and Paulo A.C. Flores, International Wildlife Coalition/Brasil)

R12 Project 2: Southern right whales have been surveyed from a helicopter in a coastline of 400km from Santa Catarina Island (central coast of SC) to the northern coast of RS (Palazzo et al. 1999; Flores et al. 2000; Groch et al. 2004) and from shore in 14 observation stations covering about 100km of coastline (Groch, 2000, 2001, 2002; Groch et al. 2003). In September 2004 an extended survey was made from the border of Uruguay with Rio Grande do Sul State (33°40'S 53°28'W) to Macaé (22°22'S 41°47'W) on the central coast of Rio de Janeiro State, covering ~2000 km of coast. 592 whales including 213 calves (includes possible double counting) were sighted during land-based surveys (Groch, unpublished). From five aerial surveys conducted from July to November (one per month), we had 99 sightings of 203 individuals, of which 81 were calves (includes possible double counting) (K.R. Groch, J.T. Palazzo Jr. and P.A.C. Flores). A total of 95 different individuals were counted in two days (covering adjacent areas) in September during the extended aerial survey. 83 individuals were sighted in the regular surveyed area (in one day) and 12 south of this area. No sightings of right whales were recorded to the North of the regular surveyed area (K.R. Groch and J.T. Palazzo Jr., unpublished). **(Contact person:** Karina R. Groch and Paulo A.C. Flores - International Wildlife Coalition/Brasil)

R13 Project 1: Photo-id surveys of *Tursiops truncatus* in the Patos Lagoon are being conducted since December 2004 twice a month. **(Contact person:** Pedro Fruet or Eduardo Secchi, Marine Mammals Laboratory/ Museu Oceanográfico do Rio Grande)

R13 Project 2: Abundance estimates of whales, especially humpbacks: surveys were conducted in the Gerlache Strait during the austral summer 2004/05. **(Contact person:** Eduardo Secchi, Projeto Baleias/PROANTAR - c/o Museu Oceanográfico do Rio Grande)

R16 Project 1: Studies of habitat use and ecological preference of estuarine dolphins (*Sotalia guianensis*) are being conducted at the Santos Estuary, São Paulo (23°55'S; 46°19'W). The animals were identified through video-identification considering individual marks. (**Contact person:** Samuel Gomes de Farias Junior, Projeto Golfinhos)

R16 Project 2: The monitoring of occurrence of orcas and other species is being conducted in the Southern and Southeast coast of Brazil in partnership with the Projeto Golfinhos and fishing industries based in Guarujá, in the São Paulo coast. (**Contact person:** Projeto Golfinhos, Samuel Gomes de Farias Junior)

R17 Project: The Projeto Mamíferos Marinhos has conducted regular systematic land-base sightings and also, monthly 4 day cruise in August-2003 until December –2004, in the estuary of Paraguaçu river (Todos os Santos Bay), Northeastern coast, to study behavioural ecology of *Sotalia fluviatilis* and photo-identification. (**Contact person:** Maria do Socorro Reis, Projeto Mamíferos Marinhos)

R18 Project: Systematic sampling using scan method of observation was applied at the Baía da Babitonga, SC, between January and December/2004. Two boats were used to survey established transects covering the whole area focussing on *Pontoporia blainvillei* and *Sotalia guianensis* species. (**Contact person:** M. Cremer, Laboratório de Nectologia, UNIVILLE)

R19 Project: Photo-identification, bioacoustic and behavior studies on *Sotalia fluviatilis* have been conducted in Guanabara Bay, Rio de Janeiro. (**Contact person:** José Lailson Brito Jr. and Alexandre de Freitas Azevedo, MAQUA)

R21 Project: Satellite telemetry was applied to study migratory routes and identification of feeding ground of Western South Atlantic humpback whale population. This is an international cooperative project involving the following institutions: Universidade Federal de Juiz de Fora, MG; Universidade Federal de Santa Catarina, SC; Universidade Federal Rural do Rio de Janeiro, RJ; University of Washington, Seattle, USA; National Marine Mammal Laboratory/NOAA, Seattle, USA; Greenland Institute of Natural Resources. (**Contact person:** A. Zerbini, University of Washington, Seattle, USA and A. Andriolo, UFJF, Juiz de Fora, MG)

R22 Project: Photo-identification, size estimates, behavioural ecology, and vocal behaviour of *Humpback whale* sampling carried out from onboard surveys in the Abrolhos Bank region in 2004 (previous acoustic recordings done since 1999 in collaboration with IBJ). Control experiments of boat approaches were also conducted since 2000 (see Sousa-Lima *et al.* 2002). Boat surveys in 2004 resulted in over 280 groups sighted during 56 days at sea, and 35.5 hours of recorded acoustic behaviour. Acoustic data from 2000-2002 has been compared to data from Gabon, Africa and results indicate that Western and Eastern Atlantic populations of humpback whales interact at least acoustically (Darling and Sousa-Lima *in press*). This project is part of Renata S. Sousa-Lima PhD research at the Cornell University under the supervision of Dr. Christopher W. Clark. The Brazilian counterpart in this endeavour is the Universidade Federal de Minas Gerais/Departamento de Zoologia and the project is also done in collaboration with other local institutions: Instituto Baleia Jubarte; Parque Nacional Marinho dos Abrolhos; Conservation International do Brasil; and the Brazilian Navy. (**Contact person:** Renata S. Sousa-Lima, Cornell University Ithaca, NY, USA and Universidade Federal de Minas Gerais)

R25 Project: Observations of *Sotalia fluviatilis* are being conducted in four areas of the state of Pernambuco aiming to recognise the ecology of the species and the interactions with the traffic of boats in the areas studied. (**Contact person:** Cristiano Leite Parente, Departamento de Oceanografia, Universidade Federal de Pernambuco)

2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

R1 Project: Sightings of marine tucuxi were recorded from land observation sites at Iparana beach (03°44'S, 38°39'W) and Iracema beach (3°43'S, 38°31'W), Ceará, from scientists and local people. (**Contact person:** Ana Carolina Oliveira de Meirelles, AQUASIS)

R2 Project: Opportunistic sightings of Bryde's whales during dive tour operations have been recorded in São Paulo, southeastern Brazil since 2003, close to Laje de Santos State Marine Park (24°19'S; 046°10'W). Seven opportunistic sightings were recorded in 2004 (March-December), almost all with only one individual, just two sightings with two individuals (n=09 whales). In 2005 (January - February) we have registered eight sightings, with groups varying of the 1-3 individuals per sighting (n=16 whales total). These data were collected either by dive operators or by Bryde's whales researchers. These preliminary results show that Bryde's whales tend to concentrate in Laje de Santos State Marine Park mainly during the summer season. (**Contact persons:** Mabel Augustowski, Leandra Regina Gonçalves and Thalassa Neder Teixeira Potiens, Bryde's Whale Project/Brazil)

R3-7 Project: Sightings of sperm whale and short-finned pilot whale were recorded during a cruise from São Pedro e São Paulo Archipelago to Fernando de Noronha Archipelago. Sperm whales and Cuvier's beaked whales

were sighted during the surveys for bottlenose dolphin off São Pedro e São Paulo Archipelago. Right whale sightings were recorded off Northern Rio Grande do Sul. (**Contact person:** Paulo Ott & Glauco Caon, GEMARS/CECLIMAR)

R6 Project: Sightings of cetaceans during seismic surveys of PGS Investigação Petrolífera Ltda along the Brazilian coast (01°21'N-27°10'S) were recorded during October 2001 to February 2005. 11,344 hrs were spent watching for marine mammals. In the period there were traveled more than 30.000 km of seismic lines (~21.000km² of area) in 24 blocks licensed of Oil and Gas Industry, at 4,5 until 240 km of the coast, with 50 to 3000m of the depth, between Para-Maranhão (01°21'N) and Santos (27°10'S) Basins. The bridge was used as the observation platform and was located 20m above the surface. Brazilian environmental technicians (biologists, oceanographers and veterinary) onboard of the seismic vessels, supply vessel and assistant boats recorded and identified the cetaceans during daylight. Sightings made continuously during daylight by observers of the seismic vessel (with air-guns) were considered "on effort". Those occasional recorded by observers of the supply and assistant vessels (without air-guns) or ship's crew were considered "off effort". Studies on species' distribution and behavioural reactions to seismic source have been conducted from data base sightings (see Ramos, *et al.*, not published). From October 2001 to February 2004, sightings of humpback, Antarctic minke, Bryde's, sei, fin, sperm whales and small cetaceans were recorded. (**Contact person:** Renata Ramos, Everest)

R8 Project 1: Opportunistic observations of humpback whales have been made in northeastern Brazil from eucaliptus barges at Espírito Santo and Bahia State coast since 2003. Other species sighted included Southern right whales (8), tucuxis (75), bottlenose dolphins (3) and rough toothed dolphins (3). In 2003, during 583.12 hours of observation and 6294.64 miles traveled, 623 humpback whales (66 calves) were sighted. In 2004, in 390.78 hours of observations and 3541.78 miles traveled 307 humpback whales (94 calves) were sighted. Composition, behaviour and localization of all groups sighted were registered. Data will be analyzed using Distance methodology. (**Contact person:** Claudia Brigagão Petta IBJ)

R8 Project 2: During land base station survey at Abrolhos Archipelago, 5 sightings of mother and calf of Southern right whale and one sighting of alone whale, 5 sightings of tucuxi groups and 1 sighting of rough toothed dolphins group were registered during one-hour scans. Two groups of Southern right whale were observed as focal follow group. (**Contact person:** Maria Emilia Morete and Tatiana Lemos Bisi)

R8 Project 3: During humpback whale survey (by means of periodic cruises) in 2004 it was sighted two Southern right whale, 26 tucuxi, nine rough toothed dolphins and 19 non-identified cetaceans. (**Contact person:** Luiza Pacheco and Milton Cesar Marcondes)

R8 Project 4: Opportunistic sightings and photo-identification of bottlenose dolphin and rough toothed dolphins have been made from boat surveys during the humpback whale surveys in northern Brazil. Occasional sightings of minke whale, Clymene dolphin, Atlantic spotted dolphin, pantropical spotted dolphin, melon-headed whale and tucuxi have also been recorded. (**Contact person:** Clarêncio Baracho, Instituto Baleia Jubarte)

R9 Project: Opportunistic observations of cetacean species have been made in southeastern Brazil from ships and land at Rio de Janeiro. The species sighted include Southern right whale, Bryde's whale, humpback whale, killer whale, and bottlenose dolphin. (**Contact person:** Liliane Lodi, Instituto ECOMAMA)

R12 Project: A sighting of one individual Bryde's whale was recorded during an aerial survey for individual identification of southern right whales along the coast (see item 2.1.1 for details), in September 2004. The sighting was 200m off the coast of Rio de Janeiro State (22°57'S 42°07'W) and the species identification was obtained through video and photography. (**Contact person:** Karina R. Groch and Paulo A.C. Flores - International Wildlife Coalition/Brasil)

R13 Project: Abundance estimates of whales, especially humpbacks, have been investigated. Sightings took place in January and February 2005 onboard R/V Ary Rongel around Antarctic Peninsula and adjacent areas. The distance sampling was performed by experienced scientists. (**Contact person:** Eduardo Secchi – Projeto Baleias/PROANTAR – c/o Museu Oceanográfico do Rio Grande)

R14 Project: Photo-identification studies have been conducted since 1996 at the Cananéia estuary (25°00'S, 47°58'W), southeastern Brazil through land and boat-based investigations. Efforts have been extended to Guaraqueçaba and Pinheiros bays, Paraná state, southern Brazil, since 2000.. Biopsy samplings were also collected in the Cananéia estuary. (**Contact person:** Marcos César de Oliveira Santos - Projeto Atlantis, Instituto de Biologia da Conservação)

R15 Project: Opportunist land and boat based sightings mainly of franciscanas and marine tucuxi were registered in São Paulo State (Ubatuba, Guarujá). (**Contact person:** Carolina Bertozzi, BioPesca)

R17 Project: Photo-identification to study estuarine dolphin populations in the estuary of Paraguaçu river has been conducted in the Todos os Santos bay. (**Contact person:** Maria do Socorro Reis / Projeto Mamíferos Marinhos)

R19 Project: Opportunistic observations of humpback whale, commun minke whale and bottlenose dolphin were made from Brazilian Navy ships and others. (**Contact person:** José Lailson Brito Jr. and Alexandre de Freitas Azevedo Projeto MAQUA)

R22 Project: Opportunistic sightings of small cetaceans (*Sotalia guianensis* – “tucuxi”, *Tursiops truncatus*, *Steno bredanensis*) and right whales (*Eubalaena australis*) in the Abrolhos Bank region were carried out from onboard during humpback whale research. Opportunistic photo-identification and acoustic recordings of *Steno* and *Sotalia* were also collected.) (**Contact person:** Renata S. Sousa-Lima, Cornell University Ithaca, NY, USA (CU) and Universidade Federal de Minas Gerais)

2.2 Analyses/development of techniques

R10 Project: Systematic studies of photo and video-identification, behavioural ecology, bioacoustic, and population density of estuarine-dolphins have being conducted on a regular basis from land and boat based sightings in the estuary complex of Ubatuba and Iguape – Paranaguá (São Paulo, southeast Brazil), Guaraqueçaba, Paranaguá bay, Atonina bay and Guaratuba bay (Paraná, southern Brazil). (**Contact Persons:** Emygdio L. A. Monteiro Filho and Gislaïne Filla, Ana Rita dos Santos-Lopes / IPeC)

R14 Project 1: Marine tucuxi social organization and use of area in the Cananeia estuary were revealed by the use of the photo-identification technique. Fusion-fission society was proved by the use of the SOC PROG software. A total of 34,000 dorsal fin photos was analysed in surveys conducted from 2000 to 2003. Skin sample analyses, added to the social structure analyses, proved that monogamy does not exist in this population as published elsewhere (Santos, 2004). (**Contact person:** Marcos César de Oliveira Santos - Projeto Atlantis, Instituto de Biologia da Conservação)

R14 Project 2: Bioacoustic studies on marine tucuxi dolphins at the Cananéia estuary were also conducted. Studies were based on sound emissions in foraging and feeding behaviors (Pivari, 2004). (**Contact person:** Marcos César de Oliveira Santos, Projeto Atlantis, Instituto de Biologia da Conservação)

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
Bottlenose dolphin	Dorsal fin	Patos Lagoon population	ca 20	Not analysed yet	ca 45	P. Fruet and E. Secchi, Marine Mammals Laboratory/ Museu Oceanográfico do Rio Grande
Bottlenose dolphin	Flanks and dorsal fin	São Pedro e São Paulo Archipelago (Northeast Brazil)	March 2004, January and February 2005 n=20	N	20	Paulo Ott, GEMARS/CECLIMAR
Bottlenose dolphin	Dorsal fin	Central Santa Catarina	20	Y	60	P. A.C. Flores, IWC-Brazil
Bottlenose dolphin	Dorsal fin and flanks	Cagarras Archipelago, Rio de Janeiro	17	Y	17	L. Lodi and L. C. Mayerhofer, Instituto Ecomama
Estuarine dolphin	Dorsal fin and body marks	Peças island, northern of Parana State	5	Y	5	L. V. de Oliveira, IpeC
Estuarine dolphin	Dorsal fins and body marks	Cananéia Estuary, Southern of Sao Paulo State	20	Y	35	L. V. de Oliveira, IpeC
Estuarine dolphin	Dorsal fin	Southern Brazil, northern Santa Catarina State	19	Y	50	M. Cremer, UNIVILLE

Humpback	Fluke	Antarctic IWC Areas I and II	ca 25	Not analysed yet	ca 382	L. Dalla Rosa and E. Secchi, Projeto Baleias/PROANTAR (c/o Museu Oceanográfico do Rio Grande)
Humpback	Fluke	Abrolhos Bank, Bahia	300	Y	2,400	L. P. Godoy, Instituto Baleia Jubarte
Humpback	Fluke	Northern Bahia State	147	Y	414	C. Baracho, Instituto Baleia Jubarte
Humpback	Fluke and dorsal fin	Abrolhos Bank, Bahia	n>110 individuals (based on fluke only), n=146 groups photoidentified (fluke and/or dorsal fin), not accounting for recapture	On going analysis (to be merged with IBJ's catalogue)	On going analysis (to be merged with IBJ's catalogue)	R. S. Sousa-Lima, Cornell University
Killer whale	Dorsal fin	IWC Areas I and II	ca 30	Not analysed yet	ca 32	L. Dalla Rosa, Projeto Baleias/PROANTAR – c/o Museu Oceanográfico do Rio Grande
Marine tucuxi	Dorsal fin and body marks	Central Santa Catarina	3	Y	~ 103	P. A.C. Flores, IWC-Brazil
Rough-toothed dolphin	Dorsal fin	Abrolhos Bank, Bahia	10	On going analysis (to be merged with IBJ's catalogue)	On going analysis (to be merged with IBJ's catalogue)	R. S. Sousa-Lima, Cornell University
Southern right whale	Head callosities and dorsal marks	Santa Catarina, Rio Grande do Sul	122**	Ongoing analysis	332	K. R. Groch, IWC-Brazil
Tucuxi	Dorsal fin	Fortaleza, Ceará, Northeast Brazil	13	Y	13	A. C. Meirelles, Aquasis
Tucuxi	Dorsal fin	Todos os Santos Bay, Northeast Brazil	5	N	Ongoing analysis	M. S. Reis, Projeto Mamíferos Marinhos, Bahia
Marine tucuxi	Dorsal fin	Guanabara Bay, Rio de Janeiro	32	Y	69	J. Lailson-Brito, UERJ
Marine tucuxi	Dorsal fin	Cananéia estuary, São Paulo	ca.200-300 including repetitive countings	Y (40%)	154	M. Santos, Projeto Atlantis

** Includes possible double identifications

3.1.2. ARTIFICIAL MARKING DATA

Species	Type of Mark	No. branded/photographed	Catalogued (Y/N)	Catalogue Total	Contact person/institute
Amazon river dolphin	Freezing brand and Plastic tags	46*	Y	386	Vera da Silva/ INPA, Brazil and A.R. Martin / BAS, UK

* A total of 45 botos were recaptured and rebranded (freezing brands) before released.

3.1.3 TELEMETRY DATA

Species	Tag type	No. successfully deployed	Maximum time transmitting	Contact person/institute
Humpback whale (Southeastern Brazil)	Satellite	1	5 days	A. Zerbini, University of Washington, Seattle, USA and A. Andriolo, UFJF, Juiz de Fora, MG

3.2 Analyses/development of techniques

R10 Project: Times/distances to resightings, biological parameters, habitat use and behavior of estuarine-dolphin are presented by De Oliveira, 2002 and in her Master degree data. (**Contact Persons:** Emygdio L..A Monteiro Filho and Gislaïne Filla, Ana Rita dos Santos-Lopes / IPeC).

R12 Project 1: Biological parameters such as calving interval, home ranges, movement pattern of tucuxi and bottlenose dolphin are presented by Flores and Bazzalo, 2004. They use GIS software for home range, movement and habitat use analysis and SocProg for social (such as association patterns, residency, site fidelity) and population parameters (abundance estimates, natality and mortality rates). (**Contact person:** Karina R. Groch and Paulo A.C. Flores, International Wildlife Coalition/Brasil)

R12 Project 2: Data analyses on season residency, site fidelity, coastal movements and distribution, , habitat use and behavior of right whales have been carried out in Central-Southern SC. Biological parameters are presented by (Groch *et al.* 2004). (**Contact person:** Karina R. Groch and Paulo A.C. Flores, International Wildlife Coalition/Brasil)

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
Bottlenose dolphin	Patos Lagoon population	23	Y	14	23	P. Fruet and L. Dalla Rosa, Marine Mammals Laboratory/ Museu Oceanográfico do Rio Grande
Bottlenose dolphin	São Pedro e São Paulo Archipelago	19	Y	Not analysed yet	19	Paulo Ott (GEMARS)
Bottlenose dolphin	Rio Grande do Norte	1	Y	Not analysed yet	1	Paulo Ott (GEMARS)
Humpback whale	IWC area I and II	4	Y	Not analysed yet	ca 250	E. Secchi, Projeto Baleias/PROANTAR – c/o Museu Oceanográfico do Rio Grande
Humpback whale	Abrolhos Bank, Bahia	14	Y	0	264	M. Engel, Instituto Baleia Jubarte
Humpback Whale	Western South Atlantic	16	Y	0	26	M. Engel, Instituto Baleia Jubarte
Marine tucuxi	Central Santa Catarina	8	Y	On going	8	P.A.C. Flores, IWC-Brazil and H. Cunha, Laboratório de Biodiversidade Molecular UFRJ/Projeto Maqua UERJ
Marine Tucuxi	Cananéia Estuary, São Paulo	2	Y	2	19	M. Santos, Projeto Atlantis
Southern right whale	Rio Grande do Sul	2	Y	Not analysed yet	2	Paulo Ott (GEMARS)

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 Solimões River	50	Y	Skin, blood, milk	Vera da Silva/ INPA, Brazil and A.R. Martin / BAS, UK
Amazon river dolphin	Negro River	4	Y	Skin	Vera da Silva / INPA-Brazil
Amazon river dolphin	Madeira River	1	Y	Skin, skull, blubber, organs, bones	Vera da Silva / INPA-Brazil
Tucuxi	Ceará	1	Y	Oesophagus, heart, lung, stomach, intestine, liver, kidney, bladder, adrenal, testicles, spleen, skull, skeleton, teeth, stomach contents Skin, blubber	A.C. Meirelles, AQUASIS
Marine tucuxi	Rio de Janeiro	4	Y	liver, kidney, heart, gonads, stomach, blood, muscle, skin, blubber, teeth	A.P. Di Benedetto/UENF-LCA
Franciscana	Rio de Janeiro	1	Y	liver, kidney, gonads, stomach, brain, blood,, muscle, skin, blubber, teeth	A.P. Di Benedetto/UENF-LCA

Franciscana	São Paulo	21	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. and V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
Tucuxi	São Paulo	5	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. and V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
<i>Delphinus</i> sp	São Paulo	1	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. and V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
Franciscana	Management Area III	28	Y	Skin, blubber, liver, muscle, kidney, stomach, teeth, skull, skeleton, gonads	E. Secchi, Marine Mammals Laboratory/ Museu Oceanográfico do Rio Grande
Franciscana	Northern Rio Grande do Sul	12	Y	Gonads, liver, kidney, blubber, muscle, stomach, teeth and skull	Ignacio Moreno GEMARS

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

4.3 Samples from stranded animals

Species	Area/stock	Calendar year/ season total	Archived (Y/N)	Tissue type(s)*	Contact person/institute
Amazon river dolphin	Madeira River	1	Y	Skull	Vera da Silva / INPA-Brazil
Amazon river dolphin	Amazon River	2	Y	Skin, blubber, liver, heart and bones	Vera da Silva / INPA-Brazil
Atlantic spotted dolphin	Santa Catarina	1	Y	Skeleton	P.C. Simões-Lopes, Lamac, UFSC
Atlantic spotted dolphin	Northern Rio Grande do Sul	1	Y	Gonads, liver, kidney, blubber, muscle, stomach, tongue, vestigials, axial skeleton, teeth and skull	Ignacio Moreno, GEMARS
Beaked whale	Pernambuco	1	Y	Skeleton, teeth	Jociery E. Vergara-Parente, CMA/IBAMA
Bottlenose dolphin	Patos Lagoon	18	Y	Muscle, skull, teeth, stomach, gonads, blubber, liver, kidney	Pedro Fruet/ Eduardo Secchi – Marine Mammals Laboratory/ Museu Oceanográfico do Rio Grande
Bottlenose dolphin	Northern Rio Grande do Sul	2	Y	Muscle, stomach, teeth and skull	Ignacio Moreno, GEMARS
Bottlenose dolphin	Northern Santa Catarina State	2	Y	complete skeleton	M. Cremer/laboratório de Nectologia/UNIVILLE
Bottlenose dolphin	Bahia	1	Y	Bones	M. Marcondes, Instituto Baleia Jubarte
Bottlenose dolphin	Bahia	1	Y	Skeleton	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Bottlenose dolphin	Pernambuco	1	Y	Muscle, Skull, skeleton,	Jociery E. Vergara-Parente, CMA/Ibama
Bottlenose dolphin	Pernambuco	1	Y	Skeleton, teeth	Jociery E. Vergara-Parente, CMA/Ibama
Bottlenose dolphin	Ceará	1	Y	Teeth	Ana Carolina Meirelles, AQUASIS
Bryde whale	Northern Rio Grande do Sul, southern Brazil	02	Y	Skull and muscle	Ignacio Moreno, GEMARS
Bryde's whale	São Paulo	1	Y	skull	Ana Rita dos Santos-Lopes / IpeC
Clymene dolphin	Bahia	2	Y	Skeleton	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Common dolphin	Northern Rio Grande do Sul, southern Brazil	04	Y	Gonads, liver, kidney, blubber, muscle, stomach, tongue, vestigials, axial skeleton, teeth and skull	Ignacio Moreno, GEMARS
Common dolphin	São Paulo	1	Y	Skull and teeth	Ana Rita dos Santos-Lopes / IpeC

Commun minke whale	Santa Catarina	1	Y	Skeleton	P.C. Simões-Lopes, Lamaq, UFSC
Cuvier's beaked whale	Bahia	1	Y	Skeleton	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Dwarf sperm whale	Bahia	2	Y	All (intact)	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Dwarf sperm whale	Rio Grande do Norte	1	Y	Skeleton	Jociery E. Vergara-Parente, CMA/IBAMA
Estuarine dolphin	Northern Santa Catarina State	3	Y	Complete skeleton	M. Cremer, Laboratório de Nectologia/UNIVILLE
Estuarine dolphin	Santa Catarina	1	Y	Skeleton	P.C. Simões-Lopes, Lamaq, UFSC
Estuarine dolphin	São Paulo	7	Y	Skull, teeth, appendicular skeleton, stomach contents, penis, ovaries, tongues, skin, blubber, liver, kidney	Ana Rita dos Santos-Lopes / IpeC
Franciscana	Management Area III	ca. 150	Y	Muscle, skull, teeth	M. Muelbert or E. Secchi, Marine Mammals Laboratory FURG or MML Museu Oceanográfico do Rio Grande
Franciscana	Northern Rio Grande do Sul	26	Y	Gonads, liver, kidney, blubber, muscle, stomach, tongue, vestigials, axial skeleton, teeth and skull	Ignacio Moreno GEMARS
Franciscana	Northern Santa Catarina State	1	Y	Stomach, intestines, gonads, liver, kidney, blubber, complete skeleton	M. Cremer/laboratório de Nectologia/UNIVILLE
Franciscana	Northern Santa Catarina State	1	Y	complete skeleton	M. Cremer/laboratório de Nectologia/UNIVILLE
Franciscana	São Paulo	10	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. and V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
Franciscana	São Paulo	5	Y	Skull, teeth, appendicular skeleton, stomach contents, penis, ovaries, tongues, skin, blubber, liver, kidney	Ana Rita dos Santos-Lopes, IpeC
Franciscana	Ilha Comprida	5	Y	Skull	Marcos Santos/Projeto Atlantis
Humpback Whale	Bahia, Espírito Santo, Sergipe	9	Y	Skin, blubber, muscle, kidney, bones, barnacles, hearth, lung, blood	M. Marcondes, Instituto Baleia Jubarte
Humpback whale	Ceará	1	Y	Muscle, lung, kidney, skull, skeleton	Ana Carolina Meirelles, AQUASIS
Humpback whale	Sergipe	2	Y	Parasites, baleen	Adolfo Hubner de Jesus, Projeto Mamíferos Marinhos – Sergipe
<i>Kogia</i> sp.	Ceará	1	Y	Muscle, skull	Ana Carolina Meirelles, AQUASIS
Long-finned pilot whale	Northern Rio Grande do Sul	1	Y	Skull, teeth, skeleton, muscle, and stomach	Ignacio Moreno GEMARS
Marine tucuxi	Cananéia, São Paulo	1	Y	Skull	Marcos Santos/Projeto Atlantis (sotalia@gmail.com)
Mesoplodon sp	Bahia	1	Y	Bones	M. Marcondes, Instituto Baleia Jubarte
Pantropical spotted dolphin	Bahia	1	Y	All (intact)	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Pilot whale	Sergipe	1	Y	Skeleton, teeth, intestinal parasites, stomach contents	Adolfo Hubner de Jesus, Projeto Mamíferos Marinhos – Sergipe
Pygmy sperm whale	Bahia	1	Y	Skeleton, lungs	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Risso's dolphin	Bahia	1	Y	All (intact)	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Rorqual	Pernambuco	1	Y	Muscle, spleen, lung, stomach contents, liver	Jociery E. Vergara-Parente, CMA/IBAMA

Rough toothed dolphin	São Paulo	1	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. and V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária - USP
Rough-toothed dolphin	Paraíba	1	Y	Skeleton, teeth	Jociery E. Vergara-Parente, CMA/IBAMA
Rough-toothed dolphin	Pernambuco	1	Y	Blood	Jociery E. Vergara-Parente, CMA/IBAMA
Short-finned pilot whale	Espirito Santo	1	Y	Bones, skin	M. Marcondes, Instituto Baleia Jubarte
Sperm whale	Sao Paulo	2	Y	Skin, blubber, liver, kidney, stomach contents, teeth	Ana Rita dos Santos-Lopes / IPeC
Sperm whale	Bahia	2	Y	Teeth, skin, blubber, bones, blood	M. Marcondes, Instituto Baleia Jubarte
Tucuxi	São Paulo	6	Y	Brain, lung, heart, stomach, intestine, liver, kidney, pancreas, adrenals, gonads, muscle, blubber, skin, teeth	C. P. Bertozzi, J. Marigo. and V. Ruoppolo, Projeto BioPesca and Faculdade de Medicina Veterinária – USP
Tucuxi	Bahia	2	Y	Skin, blubber, bones, liver, lung, muscle, hearth, brain, testicle, tongue, feces	M. Marcondes, Instituto Baleia Jubarte
Tucuxi	Bahia	18	Y	Skeleton	R. Maia-Nogueira, Sociedade Pesquisa e Conservação dos Mamíferos Aquáticos
Tucuxi	Rio Grande do Norte	1	Y	Skull	F. J. L. Silva, DECB/UERN
Tucuxi	Pernambuco	1	Y	Skeleton, teeth	Jociery E. Vergara-Parente, CMA/IBAMA
Tucuxi	Paraíba	1	Y	Skeleton, teeth	Jociery E. Vergara-Parente, CMA/IBAMA
Tucuxi	Paraíba	1	Y	Skeleton, teeth	Jociery E. Vergara-Parente, CMA/IBAMA
Tucuxi	Pernambuco	1	Y	Lung, heart, spleen, stomach contents, kidney, gonads, liver	Jociery E. Vergara-Parente, CMA/IBAMA
Tucuxi	Ceará	1	Y	Heart, lung, stomach, adrenal, liver, intestine, trachea, skull, skeleton, teeth, stomach contents	Ana Carolina Meirelles, AQUASIS
Tucuxi	Ceará	2	Y	Skull	Ana Carolina Meirelles, AQUASIS
Tucuxi	Sergipe	6	Y	Skeleton, teeth, parasites	Adolfo Hubner de Jesus, Projeto Mamíferos Marinhos – Sergipe

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

4.4 Analyses/development of techniques

R1 Project 1: Stomach contents of stranded marine tucuxi dolphins from Ceará are being analysed. (**Contact person:** Ana Carolina Oliveira de Meirelles, AQUASIS)

R1 Project 2: Parasitological and Histopathological studies are being carried out in stranded animals. (**Contact person:** Ana Carolina Oliveira de Meirelles, AQUASIS)

R8 Project: Determination of cause of death was made in stranding events, including analyses of the interaction with fishing activities, samples for pollution studies, and necropsy examination. (**Contact person:** Milton Cesar Marcondes, IBJ)

R10 Project 1: Anatomic studies and genetic analysis of franciscana incidentally caught in the estuary complex of Iguape-Cananéia-Ilha Comprida, southeastern Brazil, are being conducted (**Contact Persons:** Emygdio L.A. Monteiro Filho, Gislaine Filla, A.R.Santos-Lopes, IPeC).

R10 Project 2: Diet and age estimation studies of franciscana and estuarine-dolphin are being conducted in the estuary complex of Iguape-Cananéia-Ilha Comprida, southeastern Brazil. (**Contact Persons:** Emygdio L.A. Monteiro Filho, Gislaine Filla, A.R.Santos-Lopes, IPeC).

R10 Project 3: Age estimation studies of stranded sperm whales are being conducted in the estuary complex of Iguape-Cananéia-Ilha Comprida, southeastern Brazil. (**Contact Person:** A .R. Santos-Lopes, IPeC).

R12 Project: Analysis of mtDNA and nuclear DNA sequencing has been conducted. (**Contact person:** Karina R. Groch and Paulo A.C. Flores - International Wildlife Coalition/Brasil)

R13 Project: Genetic analysis of bottlenose dolphins from Rio Grande do Sul coast, southern Brazil, were carried out (**Contact person:** Pedro Fruet - Marine Mammals Laboratory/ Museu Oceanográfico do Rio Grande).

R15 Project: Pathology occurring in bycaught animals has been investigated. Intestines are being analysed 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)

R19 Project: Tests of precision and accuracy of analytical methods for organochlorine determinations in blubber samples of cetaceans have been performed. (**Contact person:** José Lailson Brito Jr. and Alexandre de Freitas Azevedo Projeto - MAQUA)

R20 Project 1: Helminthological research on marine tucuxi specimens through macroscopic observation of internal organs has been conducted. (**Contact person:** Ana Paula Madeira Di Beneditto, Universidade Estadual do Norte Fluminense – UENF/CBB – Laboratório de Ciências Ambientais)

R20 Project 2: Stomach contents analysis on marine tucuxi and franciscana specimens through prey identification have been identified (species level, length and weight estimates). (**Contact person:** Ana Paula Madeira Di Beneditto, Universidade Estadual do Norte Fluminense – UENF/CBB – Laboratório de Ciências Ambientais)

R20 Project 3: Histological analysis on gonads of marine tucuxi and franciscana specimens through microscopy techniques has been carried out. (**Contact person:** Ana Paula Madeira Di Beneditto, Universidade Estadual do Norte Fluminense – UENF/CBB – Laboratório de Ciências Ambientais)

5. Pollution studies

R7 Project: Samples of blubber, kidney and liver of all cetaceans species found have been collected for future contaminant studies. (**Contact person:** Paulo Ott, GEMARS)

R10 Project: Trace metals and organochlorines determinations in cetacean tissues of franciscana incidentally caught, estuarine-dolphins and others stranded cetaceans are being conducted. (**Contact person:** A. R. Santos-Lopes, IPeC)

R11 Project: Blood from 51 alive individuals, and samples of blubber, liver, muscles and heart from 3 Amazon River dolphins captured accidentally in fishing nets were collected for trace metals and organochlorines determinations. The samples are being analysed in collaboration with José Lailson from Instituto de Biociências-UERJ, Rio de Janeiro. (**Contact Person:** Vera Maria F. da Silva, INPA)

R13 Project 1: Blubber, kidney and liver samples of franciscana are being analyzed for organochlorines and heavy metals. (**Contact person:** Eduardo Secchi, Marine Mammals Laboratory, Museu Oceanográfico do Rio Grande)

R13 Project 2: Blubber samples of humpback whales are being analyzed to detect the presence of organochlorines. (**Contact person:** Eduardo Secchi, Marine Mammals Laboratory, Museu Oceanográfico do Rio Grande).

R17 Project: A study including ingestion of plastic debris by cetaceans has been initiated. (**Contact person:** Maria do Socorro Reis, Projeto Mamíferos Marinhos)

R19 Project: Trace metals and organochlorines determinations in cetaceans tissues were performed on *Megaptera novaeangliae*, *Sotalia fluviatilis*, *Pontoporia blainvillei*, *Orcinus orca*, *Lagenodelphis hosei*, and *Stenella frontalis*. (**Contact person:** José Lailson Brito Jr. and Alexandre de Freitas Azevedo, Projeto MAQUA)

6. Statistics for large cetaceans

6.2.1 STRANDINGS OR DEAD WHALES ENCOUNTERED AT SEA

Whale species	Sex	Location	Cause of death	Det.	Source or contact institution, contact name and telephone and/or e-mail

A. Sei whale	F	28°12'S, 048°39'W	U	U	Org.: IWC/Brasil Address: C.P. 201, Imbituba, SC, Brazil, 88780-000 Contact: Karina Groch Tel. +55 48 9971-1161 E-mail. kgroch@terra.com.br
B.Sperm whale	M	Peruibe - Southern of Sao Paulo State	U	N	IPeC Address: Tristão Lobo, 199 Cananéia - SP Contact: Ana Rita dos Santos-Lopes Tel. (13) 3851-3959 Santos-lopes@whale-mail.com
C. Sperm whale	M	Iguape - Southern of Sao Paulo State	U	U	. IPeC Address: Tristão Lobo, 199 Cananéia - SP Contact: Ana Rita dos Santos-Lopes Tel. (13) 3851-3959 Santos-lopes@whale-mail.com
D. Humpback whale	M	Iguape - Southern of Sao Paulo State	V	V	IPeC Address: Tristão Lobo, 199 Cananéia - SP Contact: Ana Rita dos Santos-Lopes Tel. (13) 3851-3959 Santos-lopes@whale-mail.com
E. Bryde's whale	U	Lat 23°59'S Long 046°15'W	U	V	Org.: Ceemam - Santos - SP Contact: André Vicente E-mail. vicente.afc@gmail.com
F. Humpback whale	F	Saquarema beach, Rio de Janeiro State	Probably incidental catch	V	Org.: P. MAQUA Address: Universidade do Estado do Rio de Janeiro - Departamento de Oceanografia - IGEO Rua São Francisco Xavier, 524 sala 4002 E Maracanã - Rio de Janeiro - 20550-013 RJ-Brazil Contact: José Lailson Brito Jr. Tel. 55 21 25877133 E-mail. lailson@uerj.br
G. Bryde's whale	M	Recreio dos Bandeirantes beach, Rio de Janeiro State	U	U	Org.: P. MAQUA Address: Universidade do Estado do Rio de Janeiro Departamento de Oceanografia - IGEO Rua São Francisco Xavier, 524 sala 4002 E Maracanã - Rio de Janeiro - 20550-013 RJ-Brazil Contact: José Lailson Brito Jr. Tel. 55 21 25877133 E-mail. lailson@uerj.br
H. Humpback whale	U	Forte Imbuí, Niterói, Rio de Janeiro State	Stranded alive and couldn't back to the sea	V	Org.: P. MAQUA Address: Universidade do Estado do Rio de Janeiro Departamento de Oceanografia - IGEO Rua São Francisco Xavier, 524 sala 4002 E Maracanã - Rio de Janeiro - 20550-013 RJ-Brazil Contact: José Lailson Brito Jr. Tel. 55 21 25877133 E-mail. lailson@uerj.br
I. Humpback Whale	M	Lat. 17,75949 S Long. 39,20361 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
J. Humpback Whale	M	Lat.15,7153 S Long. 38,91473 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br

L. Humpback Whale	U	Lat. 17,87215 S Long. 39,0777 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
M. Humpback Whale	U	Praia do Degredo, Espírito Santo	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
N. Humpback Whale	F	Lat. 12,95833 S Long. 38,38333 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
O. Humpback Whale	U	Lat. 17,90748 S Long. 39,37157W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
P. Humpback Whale	F	Lat. 18,42176 S Long. 39,70047 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
Q. Humpback Whale	U	Lat.14,76667 S Long. 39,05833 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
R. Humpback Whale	M	Lat. 20,00876 S Long. 40,15143 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
S. Humpback Whale	U	Lat. 17,54083 S Long. 39,19075 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
T. Humpback Whale	F	Lat.19,18438 S Long. 39,70788 W	Entanglement	N	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br

U. Humpback Whale	U	Lat. 17,47292 S Long 39,19282W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
V. Humpback Whale	U	Lat. 17,70276 S Long. 39,14829 W	U	U	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br
X. Humpback whale	M	Praia de Moitas, Ceará. 03°00'S, 39°40'W	U	U	Org.:AQUASIS Address: SESC Iparana, Praia de Iparana s/n, Caucaia-Ceará BRAZIL, 61600-000 Contact:Ana Carolina Meirelles Tel. (85) 3318-6011 E-mail. mamiferos@aquasis.org
Z. Sperm whale	M	Almofala, Ceará 02° 56' S, 39° 49' W	U	U	Org.:AQUASIS Address: SESC Iparana, Praia de Iparana s/n, Caucaia-Ceará BRAZIL, 61600-000 Contact:Ana Carolina Meirelles Tel. (85) 3318-6011 E-mail. mamiferos@aquasis.org
AA. Sperm Whale	U	Porto das Dunas, Ceará	U	U	Org.:AQUASIS Address: SESC Iparana, Praia de Iparana s/n, Caucaia-Ceará BRAZIL, 61600-000 Contact:Ana Carolina Meirelles Tel. (85) 3318-6011 E-mail. mamiferos@aquasis.org
Comments: A. Live stranding. Died during attempt to rescue. B. Animal stranded alive C. The animal's body was so deteriorated that was impossible determined the cause of death. D. The animal's body presented marks of nets and fishermen boats pull the carcass back to the sea before the necropsy be completely realized. E. Stranding in the Enseada Beach – Guarujá X. Calf in moderate decomposition Z. 16m male in advanced decomposition degree AA. Skull of a calf N = full necropsy V = visual observation entangled, cuts, etc. U = could not be determined F = Female M = Male					

6.2.2 OBSERVED OR REPORTED SHIP STRIKES

Whale species	Sex	Date	Location	Vessel type	Speed	Fate	Source or contact
Humpback whale	M	Aug/04	Caravelas - Bahia State	U	U	D	Instituto Baleia Jubarte Pr. do Kitongo S/No Caravelas - BA - 45900-000 - Brazil DVM Milton Marcondes 55-073-32971320 jubarte@maximidianet.com.br

Comments: This is a 14-meter whale and has 5 healed ribs fractures. This was an old process and aren't the cause of death.

HSF = High-speed Ferry

FV = Large cargo, Military, Fishing Vessel

PC = Passenger Carrying Excursion

O = Other

X = indicate if the whale swam away

I = appeared seriously injured

D = killed

U = could not be determined

F = Female

M = Male

7. Statistics for small cetaceans

7.1 For the calendar year 20XX

Species	Area/stock	Directed catch		Incidental mortality			Live-capture
		Reported	Est. total	Reported	Est. total	Source*	Reported
Bottlenose dolphin	Patos Lagoon	0	0	6	Not estimated yet	GNS	2**
Franciscana	Rio Grande do Sul/Franciscana Management Area III	0	0	28	Not estimated yet	GNS	0
Franciscana	Rio Grande do Sul	0	0	28	No estimated annual mortality were calculated for the 2004 data	GN	0
Estuarine-dolphin	Southern of Sao Paulo State	0	0	3		GN	0
Franciscana	Southern of Sao Paulo State			2		GN	1***
Marine tucuxi	W.S. Atlantic	0	0	8	40	GN	0
Franciscana	W.S. Atlantic	0	0	3	15	GN	1
Tucuxi	Bahia	0	0	1	?	PT	0
Tucuxi	Bahia	0	0	14	?	GN	0
Tucuxi	Sergipe	0	0	3	?	GN	0
Clymene dolphin	Bahia	0	0	1	?	GN	1
Amazon river dolphin	Amazon River and Madeira River	yes	yes	4	Not reported	GN	Not reported
Amazon river dolphin	Amazon River, from Manaus to Fonte Boa	Ca. 35	>150		Yes	Illegal catches using nets or harpoons for use as bait	Yes

*e.g. fishery type

**Two free-swimming dolphins with net fragments entangled in their bodies

***Killed by a fisherman with blows in the head

8. Strandings

Region/Province	Contact Person	Institution
Alagoas, Pernambuco, Paraíba, Piauí	Jociery E. Vergara-Parente	Centro Mamíferos Aquáticos/Ibama. email: vetpxboi@uol.com.br

Bahia	Milton C. C. Marcondes	Instituto Baleia Jubarte Pr. do Kitongo s/n 45900-000 Caravelas - BA Phone/fax: +55 73 32971340 E-mail: jubarte@maximidianet.com.br
Bahia	Rodrigo Maia-Nogueira and Maria do Socorro Reis	Sociedade de Pesquisa e Conservação dos Mamíferos Aquáticos CP 7314 41811-970 Salvador, BA Email: maianogueira@yahoo.com.br; mssreis@yahoo.com.br
Ceará	Cristine Pereira Negrão Silva	AQUASIS SESC/Iparana s/ n 616000-000 Caucaia – CEARÁ Email: cristine_negrao@yahoo.com
Rio de Janeiro	Liliane Lodi	Instituto ECOMAMA, email: lilodi@uninet.com.br
Rio de Janeiro	José Lailson Brito Jr; Alexandre Azevedo and Ana Bernadete Fragoso	Universidade do Estado do Rio de Janeiro Departamento de Oceanografia - IGEO Rua São Francisco Xavier, 524 sala 4002 E Maracanã 20550-013 Rio de Janeiro, RJ Phone: 55 21 2587-7133, e-mail: lailson@uerj.br
Santa Catarina	Karina R. Groch	International Wildlife Coalition/Brasil, C.P. 201 88780-000 Imbituba, SC Phone and Fax 55 48 255 2922, e-mail: krgroch@terra.com.br
Rio Grande do Sul	Ignacio Benites Moreno, Daniel Danilewicz, Paulo Henrique Ott, Maurício Tavares, Sue Bridi Nakashima, Márcio Borges Martins & Larissa de Oliveira	<i>Grupo de Estudos de Mamíferos Aquáticos do Rio Grande do Sul (GEMARS) - Rua Felipe Neri, 382/203 - Porto Alegre, RS 90440-150 Brazil. Phone: (51)3335.2886. Fax (51)3269.0298. Email: gemars@terra.com.br</i>
São Paulo	Carolina Bertozzi and Juliana Marigo	Projeto BioPesca, email: carolinabertozzi@hotmail.com, jumarigo@hotmail.com
São Paulo	Ana Rita dos Santos-Lopes	Instituto de Pesquisas Cananéia – IpeC, Cananéia – SP., Phone: 55 13 3851-3959, email: santos-lobes@whale-mail.com or coordenação@ipecpesquisas.org.br
São Paulo	Marcos César de Oliveira Santos	Projeto Atlantis, Instituto de Biologia da Conservação, email: sotalia@gmail.com
Sergipe	Adolfo Hubner de Jesus	Sociedade de Pesquisa e Conservação dos Mamíferos Aquáticos promama_se@uol.com.br

9. Other studies and analyses

R8 Project: Interactions of humpback whale with whalewatching boats and natural behaviour were observed from Santa Bárbara Island, Abrolhos Archipelago, by means of continuous sampling (Mann 1999) and theodolite tracking. (**Contact person:** Maria Emilia Morete and Tatiana Bisi)

R12 Project: An analyses of recordings of right whales in the last 10 years in Rio de Janeiro demonstrates their interactions with human activities, due to its coastal habits. The Project Baleia Franca implemented, in Rio de Janeiro in August 2004, the Southeast Campaign directed to the population in general, to the public institutions, and to the environmental organizations during the migration season of right whales (July to December). The objective of the campaign is to follow the events of sights of the rights and educate the public in order to avoid harm to the animals, promoting awareness to the people concerning the importance of preserving the species in Brazilian waters. From July to August, 2004, there were conducted 11 sights (45% of the pairs of females with calves) between Rio de Janeiro and Arraial do Cabo. In January, 2004, a juvenile stranded alive was intentionally killed by stabs and its meat was consumed by the local population. (**Contact person:** Liliane Lodi).

R22 Project: Vocal behaviour studies and effects of boat noise (mostly from whalewatching boats) on humpback whale communication using passive acoustics in 2003 (July-August = 670 hours of continuous recoding at 2kHz) and in 2004 (July-November = 12,000 hours of continuous recording at 2kHz) were conducted in the Abrolhos Bank region. Recording devices deployed on the ocean floor are used to locate and track the movements of vocally active humpback whales and assess their distribution in space and time as well as the effect of boat acoustic events on these distributions. Preliminary results from 2003 (Sousa-Lima and Clark 2004a, b) indicate that after a sharp increase in boat noise there is a decrease in vocal activity (number of singers). (**Contact person:** Renata Souza-Silva)

R14 Project: Population parameters are still been analysed based on the marine tucuxi photo-id data. Studies on the effects of dolphin watching on local dolphins are also in progress. (**Contact person:** Marcos Santos)

R25 Project: An analyses of the quality of the monitorings of marine mammals during seismic studies in shallow waters was conducted with information of observations occurred in the years of 2002 and 2003 in the Northeast region of Brazil. The results of the analyses demonstrated that the monitoring conducted up to the present does not answer essential questions about the effect of the seismic prospections on the identified species and suggests a series of modifications in the monitorings (Parente, 2005). (**Contact person:** Cristiano Parente)

R2 Project: All data obtained since 2003, and some previous recordings made by some dive operators since 1997, are being used to evaluate the potential for whale-watching tourism at the Laje de Santos State Marine Park. There is a strong potential for partnerships with this sector, since diving is the main tourism activity that has been practiced in this Marine Protected Area (MPA), and divers have the opportunity to sight whales during the time they remain aboard to reach the dive site (about 1:30 hs). In November/2002, a special capacity-building short course was specially held for these stakeholders, so as to prepare them to report their sightings and to promote a higher participation in the whole Project. (**Contact persons:** Mabel Augustowski, Leandra Regina Gonçalves and Thalassa Neder Teixeira Potiens).

R7 Projects: Other aspects of cetacean research conducted by GEMARS relevant to the Scientific Committee not covered in earlier sections include the following studies:

- a) Population genetics of franciscanas - The genetic variability and population structure of franciscana dolphins in the southeastern and southern Brazil are being studied using nuclear markers (microsatellites). (**Contact person:** Paulo Ott / GEMARS).
- b) Geometrics Morphometric and distribution of dolphins in Southwestern Atlantic Ocean. (**Contact person:** Ignacio Moreno (Genus *Stenella*) and Mauricio Tavares (Genus *Delphinus*)/ GEMARS).
- c) Life history of franciscanas (**Contact person:** Daniel Danilewicz / GEMARS).
- d) Photo-identification and population genetics of bottlenose dolphins. Genetic variability and population structure of bottlenose dolphins in the northern and southern Brazil are being studied using nuclear markers (microsatellites). (**Contact person:** Paulo Ott/ GEMARS).
- e) Population genetics of dolphins in Brazilian coast. (**Contact person:** Paulo Ott/GEMARS).
- f) Phylogenetic relationships of Delphinidae cetaceans using morphological characters (**Contact person:** Ignacio Moreno/GEMARS).

R12 Project 1: Surface behavioural responses of marine tucuxi to tourism boats have being investigated in Baía Norte and the Environmental Protection Area of Anhatomirim, a federal reserve created in 1992 to protect this dolphin population (Pereira *et al* 2003, Pereira 2004). (**Contact person:** Paulo Flores)

R12 Project 2: Southern right whale interaction with boats during whalewatching activities has been investigated (Groch, ongoing analysis). (**Contact person:** Karina Groch)

R13 Project 1: Studies of the interaction between cetaceans and pelagic longline fishery off Brazil are being conducted. Logbooks from onboard observers are being analysed (**Contact person:** Daniele Monteiro or Eduardo Secchi).

R13 Project 2: A review on the distribution of beaked whales in the Western South Atlantic is being made based on sightings str andings and literature review (**Contact person:** Juliana Couto di Tulio or Eduardo Secchi).

R18 Project: Bioacustics, habitat use and feeding ecology studies of marine tucuxi and franciscana are being conducted in Babitonga Bay, Santa Catarina (**Contact person:** Marta Cremer, UNIVILLE)

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