

CHILE

PROGRESS REPORT ON CETACEAN RESEARCH, APRIL 2006 TO APRIL 2007, WITH STATISTICAL DATA FOR THE SEASON 2006/07

Compiled by

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1. Species and stocks studied

Common name	Scientific name	Area/stock(s)	Items referred to
Southern right whale	<i>Eubalaena australis</i>	X region	2.1.2
Blue whale	<i>Balaenoptera musculus</i>	III & X regions	2.1; 2.2; 3.1.1; 3.2
Fin whale	<i>Balaenoptera physalus</i>	I & IV region	2.2; 3.1.1; 4.1; 6.2.1; 8
Sei whale	<i>Balaenoptera borealis</i>	III & XII regions	2.1.2; 3.1.1
Antarctic minke whale	<i>Balaenoptera bonarensis</i>	XII region & Antarctic Peninsula	2.1.2; 3.1.1; 4.1
Dwarf minke whale	<i>Balaenoptera acutorostrata</i>	Antarctic Peninsula	2.1.2
Humpback whale	<i>Megaptera novaeangliae</i>	I, II, III, X and XII regions & Antarctic Peninsula / G	2.1; 2.2; 3.1.1; 3.2; 4.1; 4.4
Sperm whale	<i>Physeter macrocephalus</i>	I, V, VIII, X & XII regions	2.1; 4.3; 6.2; 8
Southern right whale dolphin	<i>Lissodelphis peronii</i>	III and X region	2.1
Risso's dolphin	<i>Grampus griseus</i>	I, IV & X regions	2.1
Peale's dolphin	<i>Lagenorhynchus australis</i>	X & XII regions	2.1.2; 4.1
Pilot whales	<i>Globicephala melas</i>	XII region	2.1.2; 4.3; 5; 7.3.1; 8
Strap-toothed whale	<i>Mesoplodon layardii</i>	VII region	7.3.1; 8
Bottlenose dolphin	<i>Tursiops truncatus</i>	III & IV regions	2.1.1; 3.1.1

2. Sighting data

2.1 Field work

2.1.1 SYSTEMATIC

CEQUA/INACH

Six systematic surveys on humpback whales were conducted in Magellan Strait and adjacent channels, between May 2006 to February/March 2007 on board M/V *Chonos*.

One marine survey was conducted between the Cape Horn and Antarctic Peninsula (Bransfield and Gerlache Straits) as part of the Project INACH 163 (Aguayo-Lobo *et al.* 1998) during the 43rd Chilean Antarctic Scientific Expedition, on board R/V *Contralmirante Oscar Viel* and ATF *Leucoton* during January 2007.

CCC

Systematic surveys from land, marine and aerial platforms have been carried out by CCC in different regions of Chile since 2003 in order to determine the geographical and seasonal distribution of great whales.

Under the Alfaguara Project, CCC conducted from 01 February to 29 April 2007, seventeen marine surveys on board artisan fishing vessels and one aerial survey on board Chilean Marine Navy aircraft.

Marine surveys were oriented to photo-identification and conducted during one day, thus cetacean groups were approached after detection.

During preliminary results on fifteen out of seventeen marine surveys, sightings included at least 126 groups of 156 individuals of blue whales, 4 groups of 5 individuals of humpback whales and one group of between 10 to 20 Risso's dolphin.

Feeding behavior and defecation was recorded for both whale species.

Individual photo-identification on blue whales during 2007 for left and right side respectively, resulted in 80 individual blue whales, including seven between years and sixteen within year recaptures; and 74 individual blue whales, including nine between years and fourteen within year recaptures.

The aerial survey was conducted in zig-zag transect and surveyed about 1.500 km from 35° S to 44° S. Sightings included at least 14 groups of blue whales comprising 18 individuals, one group of one individual humpback whale, 5 groups of twelve individual sperm whales and a mixed group of Risso's dolphin and southern right whale dolphins comprising more than 120 individuals.

CENTRO EUTROPIA

Systematic work has been conducted in the Humboldt Penguin National Reserve and the Isla Chañaral and individuals. Opportunistically sightings of other greater groups of bottlenose dolphins have been Islas Choros-Damas Marine Protected Area. During 2006 and 2007, behavioral observations, movements as well as breeding and feeding areas have been recorded for bottlenose dolphins. Resident population is about 40 encountered and 130 individuals have been catalogued.

2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

CEQUA/INACH

During the systematic surveys of CEQUA/INACH at the Magellan Strait and adjacent channels, and between the Cape Horn and Antarctic Peninsula, other cetacean species were recorded opportunistically, including Antarctic and dwarf minke whale, sei whale, Peale's dolphins.

CCC / Chilean Navy

Sightings reported to CCC by members of the Chilean Marine Mammal Sighting Network (MMSN) in 2006 along the Chilean coast included 145 additional sightings comprising at least 535 great whales and 406 small cetaceans. Most of the sightings were reported by the Chilean Navy.

Of the total sightings, in 10 opportunities the species were positively identified from pictures and included southern right whale (n=1), sperm whale (n=1), humpback whale (n=3), pilot whales (n=1), Peale's dolphin (n=2) and Risso's dolphin (n=2).

Additional records received during austral summer 2007 included sightings of blue whale, sei whale and Peale's dolphin. (Contact person: Barbara Galletti/CCC)

CENTRO EUTROPIA

During systematic surveys at Islas Choros-Damas or Isla Chañaral Marine Protected Area, other cetacean species were recorded opportunistically, including Risso's dolphin, three southern right whale dolphins, eleven sightings of 2 to 4 individual fin whales, four sightings of 2 to 4 individual blue whales and two sightings of 2 to 3 individual humpback whale.

2.2 ANALYSES/DEVELOPMENT OF TECHNIQUES

CEQUA/ INACH

Analyses are conducted to investigate the temporary and spatial distribution, group size, reproductive rates and feeding modes of humpback whales of Magellan Strait by CEQUA/INACH. In addition, one report on dwarf minke whale in Antarctic Area I and II is presented to IWC of this year (Acevedo *et al.*, 2007: SC/59/IA24).

During the six systematic surveys on humpback whales conducted in Magellan Strait and one survey between the Cape Horn and Antarctic Peninsula by CEQUA/INACH, photo identification was undertaken on all the sightings. Opportunistic photo identification was conducted on Antarctic minke and Sei whales.

CCC

Blue whale sightings made in the northwestern Chiloe Island during 2007 had been preliminary analyzed and reported (Galletti Vernazzani *et al.*, 2007).

Abundance estimates of blue whales through capture-recapture and line-transect methods are under development.

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
Blue whale ¹	Left side pigmentation pattern	Atacama, Isla de Chiloe, Corcovado Gulf	2007 / 156	Y	143	Elsa Cabrera / CCC
	Right side pigmentation pattern	Isla de Chiloe, Corcovado Gulf	2007 / 156	Y	137	Elsa Cabrera / CCC
Humpback whale	Fluke pigmentation pattern, dorsal fin shape	Atacama, Isla de Chiloe, Corcovado Gulf	2006 / 8	Y	16	Elsa Cabrera / CCC
Resident Bottlenose dolphin	Natural marks	Islas Chañaral, Choros-Damas	*	*	40	Maria Jose Perez / Centro Eutropia
Bottlenose dolphin	Natural marks	Islas Chañaral, Choros-Damas	*	*	130	Maria Jose Perez / Centro Eutropia

Fin whale	*	Islas Chañaral, Choros-Damas	*	*	32	Maria Jose Perez / Centro Eutropia
Humpback whale	Natural marks	Islas Chañaral, Choros-Damas			5	Maria Jose Perez / Centro Eutropia
Humpback whale	Tail, dorsal fin	Magellan Strait / G	2006-07/43	Y	100	J. Acevedo / CEQUA
Humpback whale	Tail, dorsal fin	Antarctic Peninsula / G	2007/11	Y	247	A. Aguayo-Lobo / INACH
Sei whale	Dorsal fin	Magellan Strait	2006/01	Y	5	J. Acevedo / CEQUA
Antarctic minke whale	Dorsal fin	Antarctic Peninsula/Area I-II	2007/04	In process	0	A. Aguayo-Lobo / INACH

¹Analyses of two additional marine surveys consisting on 33 groups of 49 blue whales are not included.

3.1.2. ARTIFICIAL MARKING DATA

3.1.3 TELEMETRY DATA

3.2 Analyses/development of techniques

CEQUA/ INACH

Analyses of the migratory destinations of humpback whales from the Magellan Strait were recently published by Acevedo et al. (2007). This analysis is an ongoing effort and is updated.

CCC

Photo-identification techniques for blue whales were made following Sears *et al.* (1990).

The 2004/2005 CCC photo-ID catalogue was provided to Cascadia Research for comparison with the East Pacific blue whale catalogue (A. Douglas, Cascadia Research, per. comm.). No matches were found between the 14 photo-IDs from 2004/2005 CCC catalog and the subset of 55 identifications Cascadia had for the Eastern Tropical Pacific (which includes photos from Costa Rica, Galapagos and Peru primarily collected by Southwest Fisheries Science Center, Cascadia Research and Whale Conservation Institute).

Catalogued individuals of humpback whales were compared to the Antarctic Humpback Whale Catalogue and no matches have been found (Allen *et al.*, 2007).

4. Tissue/biological samples collected

4.1 Biopsy samples

Species	Area/stock	Calendar year/season	Archived (Y/N)	No. analysed	Total holdings	Contact person/institute
Fin whale	Islas Chañaral, Choros-Damas	*	*	*	12	Maria José Pérez / Centro Eutropia
Humpback whale	Magellan Strait / G	2006-07/15	Y	1	92	C. Olavarría / CEQUA

Humpback whale	Antarctic Peninsula / G	2007/06	Y	0	85	C. Olavarría / INACH
Peale's dolphin	Magellan strait	2006/1	Y	0	57	C. Olavarría / CEQUA
Antarctic minke whale	Antarctic Peninsula	2007/1	Y	0	01	C. Olavarría / INACH

4.2 Samples from directed catches or bycatches

4.3 Samples from stranded animals

Species	Area/stock	Calendar year/ season total	Archived (Y/N)	Tissue type(s)*	Contact person/institute
Pilot whales ¹	Beagle Channel	2006/12	Y	Blubber, skin, teeth, ovaries, stomach content	Barbara Galletti/CCC
Sperm whale	Magellan Strait	2007/2	Y	Skin	C. Olavarría / CEQUA
Pilot whales ¹	Beagle Channel	2006/12	Y	Skin	C. Olavarría / CEQUA

¹ The pilot whale samples were collected thanks to the support of the Chilean Navy in a collaborative work between Centro de Conservación Cetacea (CCC), Centro de Estudios del Cuaternario (CEQUA) and Fundación Cethus (Argentina).

4.4 Analyses/development of techniques

CEQUA/INACH

The latest genetic analysis of humpback whales from the Magellan Strait and Antarctic Peninsula feeding areas was reported to the workshop for the Comprehensive Assessment of Southern Hemisphere Humpback Whales held in Hobart, April 2006 (Olavarría *et al.* 2006). This report included a comparison with breeding areas, based in a recently published analysis (Olavarría *et al.*, 2007).

A recent comparison of the Magellan Strait and Antarctic Peninsula feeding areas and the breeding ground of Ecuador is presented in this meeting (Felix *et al.*, 2007: SC/59/SH11)

5. Pollution studies

Blubber samples from stranded pilot whales will be analyzed CCC in the near future.

6. Statistics for large cetaceans

6.1 Direct catches (commercial, aboriginal and scientific permits)

6.2 Non-natural mortality

Species	Area/stock	Males	Females	Total	Cause	Methodology
Sperm whale	V Region	1	0	1	Probably vessel collision	Chilean Navy

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
Fin whale	U	Iquique – I region	U		CCC
Sperm Whale	U	Isla Chiloe – X region	U		CCC
Sperm whale	M (02)	Magellan Strait – XII region	U		CEQUA

6.2.2 OBSERVED OR REPORTED SHIP STRIKES

Species	Area/stock	Males	Females	Total	Cause	Methodology
Sperm whale	Ritoque - V Region	1	0	1	Probably vessel collision	Chilean Navy

6.2.3 FISHERY BYCATCH*6.3 Earlier years' statistics***7. Statistics for small cetaceans****7.1 For the season 2006/2007****7.2 Direct catches (commercial, aboriginal and scientific permits) for the calendar year 20XX or the season 20XX/XX****7.3.1 Strandings or dead SMALL CETACEANS encountered at sea**

Whale species	Sex	Location	Cause of death	Det.	Source or contact institution, contact name and telephone and/or e-mail
Pilot whale	M (2) F (10)	Beagle Channel – XII region	U		Chilean Navy-CCC-CEQUA-Fundación Cethus (Argentina)
Strap-toothed whale	F	Constitucion – VII region	U		Chilean Navy

7.3.2 Observed or reported Ship strikes**7.3.3 Fishery bycatch****7.4 Earlier years' statistics****8. Strandings****CEQUA/INACH**

Two stranded were recorded. One involved two sperm whales (*Physeter macrocephalus*) stranded in the eastern entrance of the Magellan Strait. Another stranding involved 13 individual pilot whale (*Globicephala melas*) stranded in southern Chile, at Navarino Island, in the Beagle channel.

CCC

The total reported strandings for this period was 8 including 20 animals. Species stranded included sperm whale (n=3), fin whale (n=1), pilot whale (n=1, 12 individuals plus one additionally dead whale at sea), strap-toothed whale (n=1) and unidentified large whales (n=2, 3 individuals).

9. Other studies and analyses

10. Literature cited

- Acevedo J., K. Rasmussen, F. Félix, C. Castro, M. Llano, E. Secchi, M. Saborío, A. Aguayo-Lobo, B. Haase, M. Scheidat, L. Dalla-Rosa, C. Olavarría, P. Forestell, P. Acuña, G. Kaufman & L.A. Pastene. 2007. Migratory destinations of humpback whales from the Magellan Strait feeding ground, Southeast Pacific. *Marine Mammal Science* 23(2): 453-463
- Acevedo J., C. Olavarría, J. Plana, D. Cortes, A. Aguayo-Lobo and Luis A. Pastene. 2007. Dwarf minke whale (*Balaenoptera acutorostrata*) in Antarctic Areas I and II. Report SC/59/IA24 presented to the Scientific Committee of the International Whaling Commission. 7-18 May 2007 Anchorage, USA. 8 pp.
- Aguayo-Lobo, A., D. Torres, C. Olavarría, R. Bernal, A. Larrea, M.J. Pérez, C. Lippi, M. Flores, V. Vallejos and J. Acevedo. 1998. Ecología de cetáceos en las aguas del Océano Austral y de sus ecosistemas asociados Proyecto INACH 163, presentado al Instituto Antártico Chileno. [No publicado], Santiago, Chile.
- Allen, J., Carlson, C., Holm, B. and Stevick, P. 2007. Interim Report: IWC Research Contract 16, Antarctic Humpback Whale Catalogue. Paper SC/59/SH17 presented to the IWC Scientific Committee, May 2007 (unpublished). 7pp.
- Félix, F., S. Caballero and C. Olavarría. 2007. Preliminary assessment of the genetic diversity in humpback whales (*Megaptera novaeangliae*) from Ecuador and population differentiation with other Southern Hemisphere breeding grounds and feeding areas. Report SC/59/SH11 presented to the Scientific Committee of the International Whaling Commission. 7-18 May 2007 Anchorage, USA.
- Galletti Vernazzani, B., Carlson, C., Cabrera, E. and Brownell Jr., R.L. 2007. Status of blue whales off Isla de Chiloe, Chile, during 2007 field season. Paper SC/59/SH1 presented to the IWC Scientific Committee, May 2007 (unpublished). 7pp.
- Olavarría C., A. Aguayo-Lobo, J. Acevedo, L. Medrano, D. Thiele & C.S. Baker. 2006. Genetic differentiation between two feeding areas of the Eastern South Pacific humpback whale population. Update on SC/57/SH3. Workshop on the Comprehensive Assessment of Southern Hemisphere Humpback Whales. Hobart, Tasmania, Australia. April 2006.
- Sears, R., Williamson, J.M, Wenzel, F.W., Berube, M, Gendron, D. and Jones, P. 1990. Photographic identification of the blue whale (*Balaenoptera musculus*) in the Gulf of the St. Lawrence, Canada. *Rep. int. Whal. Comm.* (Special Issue) 12:335-342.

11. Publications

11.1 Published or 'In Press' papers only

- Acevedo J., A. Aguayo-Lobo & L.A. Pastene. 2006. Filopatría de la ballena jorobada (*Megaptera novaeangliae* Borowski, 1781), al área de alimentación del estrecho de Magallanes. *Revista de Biología Marina y Oceanografía* 41(1): 11-19.
- Acevedo J., A. Aguayo-Lobo, P. Acuña & L.A. Pastene. 2006. A note on the first record of the dwarf minke whale *Balaenoptera acutorostrata* in Chilean waters. *Journal of Cetacean Research and Management* 8(3): 293-296.

- Acevedo J., K. Rasmussen, F. Félix, C. Castro, M. Llano, E. Secchi, M. Saborío, A. Aguayo-Lobo, B. Haase, M. Scheidat, L. Dalla-Rosa, C. Olavarría, P. Forestell, P. Acuña, G. Kaufman & L.A. Pastene. 2007. Migratory destinations of humpback whales from the Magellan Strait feeding ground, Southeast Pacific. *Marine Mammal Science* 23(2): 453-463.
- Aguayo-Lobo A., J. Acevedo & R. Vargas. En prensa. Diversidad de mamíferos marinos en las aguas del archipiélago de los Chonos (43°39'S – 45°50'S), XI Región de Chile. *Revista de Ciencia y Tecnología del Mar* (CONA) 29(2): 00-00.
- Branch, T.A., Stafford, K.M., Palacios, D.M., Allison, C., Bannister, J.L., Burton, C.L.K., Cabrera, E., Carlson, C., Galletti Vernazzani, B., Gill, P.C., Hucke-Gaete, R., Jenner, K.C.S., Jenner, M.-N.M., Matsuoka, K., Mikhalev, Y.A., Miyashita, T., Morrice, M.G., Nishiwaki, S., Sturrock, V.J., Tormosov, D., Anderson, R.C., Baker, A.N., Best, P.B., Borsa, P., Brownell Jr., R.L., Childerhouse, S., Findlay, K.P., Gerrodette, T., Ilangakoon, A.D., Joergensen, M., Kahn, B., Ljungblad, D.K., Maughn, B., McCauley, R.D., McKay, S., Norris, T.F., Oman Whale And Dolphin Research Group, Rankin, S., Samaran, F., Thiele, D., Van Waerebeek, K. and Warneke, R.M. (In Press). Past and present distribution of blue whales in the Southern Hemisphere and adjacent waters. *Mammal Review*. .
- Pérez MJ, F Thomas, F Uribe, M Sepúlveda, M Flores & R Moraga. 2006. Fin whale, *Balaenoptera physalus*, feeding on *Euphausia mucronata*, in Near Shore Waters off North-Central Chile. *Aquatic Mammals* 32 (1), 109- 113.
- Olavarría C., Baker C.S., Garrigue C., Poole M., Hauser N., Caballero S., Flórez-González L., Brasseur M., Bannister J., Capella J., Clapham P., Dodemont R., Donoghue M., Jenner C., Jenner M.N., Moro D., Oremus M., Paton D., Rosenbaum H., Russell K. 2007. Population structure of humpback whales throughout the South Pacific and the origin of the eastern Polynesian breeding grounds. *Marine Ecology Progress Series* 330: 257-268.
- Sekiguchi K., C. Olavarría, L. Morse, P. Olson, P. Ensor, K. Matsuoka, R. Pitman, K. Findlay and U. Gorter. 2006. The spectacled porpoise *Phocoena dioptrica* in Antarctic waters. *Journal of Cetacean Management and Research* 8(3): 265–271.

11.2 Unpublished literature

- Cabrera, E., Carlson, C., Galletti Vernazzani, B. and Brownell Jr., R.L. 2006. Preliminary report on the photo-identification of blue whales off Isla de Chiloé, Chile from 2004 to 2006. Paper SC/58/SH18 presented to the IWC Scientific Committee, May 2006 (unpublished). 5pp. [Available from the authors]
- Cabrera, E. and Galletti Vernazzani, B. 2007. Parámetros para determinar los efectos del turismo de avistamiento sobre cinco poblaciones de cetáceos en Chile. . En: *Memorias del Taller de Trabajo sobre el Impacto de las Actividades Antropogénicas en Mamíferos Marinos en el Pacífico Sudeste*. CPPS Es. Bogotá, Colombia, 28-29 de Noviembre 2006. 00:00
- Galletti Vernazzani, B., Carlson, C., Cabrera, E. and Brownell Jr., R.L. 2006. Blue, sei and humpback whale sightings during 2006 field season in northwestern Isla de Chiloé, Chile. Paper SC/58/SH17 presented to the IWC Scientific Committee, May 2006 (unpublished). 6pp. [Available from the authors]
- Galletti Vernazzani, B. and Cabrera, E. 2007. Varamiento de cetáceos en Chile 1970-2005 y su relación con impactos antropogénicos. En: *Memorias del Taller de Trabajo sobre el Impacto de las Actividades Antropogénicas en Mamíferos Marinos en el Pacífico Sudeste*. CPPS Es. Bogotá, Colombia, 28-29 de Noviembre 2006. 00:00

- Garrigue C., C. Olavarría, C.S. Baker, D. Steel, R. Dodemont, R. Constantine and K. Russell. 2006. Demographic and genetic isolation of New Caledonia (E2) and Tonga (E3) breeding stocks. Report SC/A06/HW19 to the Inter-sessional workshop for the Comprehensive Assessment of Southern Hemisphere humpback whales, Scientific Committee of the International Whaling Commission. Hobart, 3-7 April 2006.
- Jackson J.A., C. Olavarría and C.S. Baker. 2006. Estimating the minimum historical population size of Southern Hemisphere humpback whales using diversity of mtDNA haplotypes. Report SC/58/SH22 to the Scientific Committee of the International Whaling Commission. St Kitts and Nevis 26 May-6 June 2006.
- Olavarría C., M. Anderson, D. Paton, D. Burns, M. Brasseur, C. Garrigue, N. Hauser, M. Poole, S. Caballero, L. Flórez-González and C.S. Baker. 2006. Eastern Australia humpback whale genetic diversity and their relationship with Breeding Stocks D, E, F and G. Report SC/58/SH22 to the Scientific Committee of the International Whaling Commission. St Kitts and Nevis 26 May - 6 June 2005
- Olavarría C., A. Aguayo, J. Acevedo, L. Medrano, D. Thiele and C.S. Baker. 2006. Genetic differentiation between two feeding areas of the Eastern South Pacific humpback whale population: Update on SC/57/SH3. Report SC/A06/HW29 to the Inter-sessional workshop for the Comprehensive Assessment of Southern Hemisphere humpback whales Scientific Committee of the International Whaling Commission. Hobart, 3-7 April 2006.
- Olavarría C., S. Childerhouse, N. Gibbs and C.S. Baker. 2006. Contemporary genetic diversity of New Zealand humpback whales and their genetic relationship with Breeding Stocks D, E, F and G. Report SC/A06/HW31 to the Inter-sessional workshop for the Comprehensive Assessment of Southern Hemisphere humpback whales Scientific Committee of the International Whaling Commission. Hobart, 3-7 April 2006.
- Rosenbaum H.C., C. Pomilla, C. Olavarría, C.S. Baker, M.C. Leslie, M.C. Mendez, S. Caballero, M. Brasseur, J. Bannister, P.B. Best, S. Bonatto, T. Collins, M.H. Engel, P.J. Ersts, K.P. Findlay, L. Florez-Gonzalez, C. Garrigue, N. Hauser, C. Jenner, M. Meyer, G. Minton, M. Poole and Y. Razafindrakoto. 2006. A first and preliminary analysis of mtDNA sequences from humpback whales for breeding stocks A-G and X. Report SC/A06/HW59 to the Inter-sessional workshop for the Comprehensive Assessment of Southern Hemisphere humpback whales Scientific Committee of the International Whaling Commission. Hobart, 3 - 7 April 2006.
- Stevick P.T., A. Aguayo-Lobo, J.M. Allen, K. Chater, L. Dalla Rosa, C. Olavarría and E. Secchi. 2006. Mark-recapture abundance estimates for humpback whales in the Antarctic Peninsula. Report SC/A06/HW54 to the Inter-sessional workshop for the Comprehensive Assessment of Southern Hemisphere humpback whales Scientific Committee of the International Whaling Commission. Hobart, 3-7 April 2006.
- Stevick P.T., A. Aguayo-Lobo, J.M. Allen, C. Castro, K. Chater, L. Dalla Rosa, F. Felix, B. Haase, M. Llano, C. Olavarría, K. Rasmussen and E. Secchi. 2006. Estimated abundance of humpback whales off the west coast of Central and South America. Report SC/A06/HW56 to the Inter-sessional workshop for the Comprehensive Assessment of Southern Hemisphere humpback whales Scientific Committee of the International Whaling Commission. Hobart, 3-7 April 2006.