

NEW RECORDS OF BLUE WHALES *BALAENOPTERA MUSCULUS* (LINNAEUS, 1758) IN WINTER SEASON IN THE INLET WATERS OF CHILOÉ CONTINENTAL-CHILE.

NUEVOS REGISTROS DE BALLENAS AZUL *BALAENOPTERA MUSCULUS* (LINNAEUS, 1758) DURANTE EL INVIERNO EN AGUAS INTERIORES DE CHILOÉ CONTINENTAL-CHILE.

José Z. Abramson¹ & Jorge Gibbons²

Knowledge of blue whale *Balaenoptera musculus* (Linnaeus, 1758) distribution is limited, particularly in the Southern Hemisphere (Clapham *et al.*, 1999). Blue whales sightings in Chile peak in summer and early autumn months (Branch *et al.* 2007). A feeding ground was described in southern Chile (Hucke-Gaete *et al.* 2004). Marine, aerial and land-based platforms surveys have documented the regular presence and concentration of blue whales from 2003 to present in the waters of the northern Los Lagos region (Galletti Vernazzani *et al.*, 2008, 2009), the outer coast of Chiloé Island (Cabrera *et al.*, 2005), the Corcovado Gulf, Guaitecas and Chonos Archipelagos and the Moraleda Channel (Hucke-Gaete *et al.* 2004).

In a recent article Viddi *et al.* (2010) showed that mysticetes were distributed disproportionately along a north-south gradient from Puerto Montt to south of Taitao Peninsula in northern Patagonian fjords, in open gulfs with oceanic influence, and close to shore. In contrast, odontocetes were observed mainly within narrow channels, areas with complex coastal morphology, peaking at different water depths.

However, the systematic research of Centro de Conservación Cetácea (Cabrera *et al.* 2005,) and Centro Ballena Azul (Hucke-Gaete *et al.* 2004, Viddi *et al.* 2010) work were just undertaken during the austral summer and early autumn months.

Therefore, to our knowledge, so far there is no previous work (effort) in fall in the area and there are no sightings of blue whales in winter season in the inshore waters of continental Chiloé.

In this note we report a first record of blue whales in winter season obtained in an opportunistic way during winter months in the Chilean Patagonian channels and fjords (Los Lagos region of Chile), extending its season presence and its range to the inlet waters and narrow channels of continental Northeastern-Chiloé.

¹ Dpto. Psicobiología. Universidad Complutense de Madrid. zabramson@psi.ucm.es

² Instituto de la Patagonia, Universidad de Magallanes. Punta Arenas, Chile.

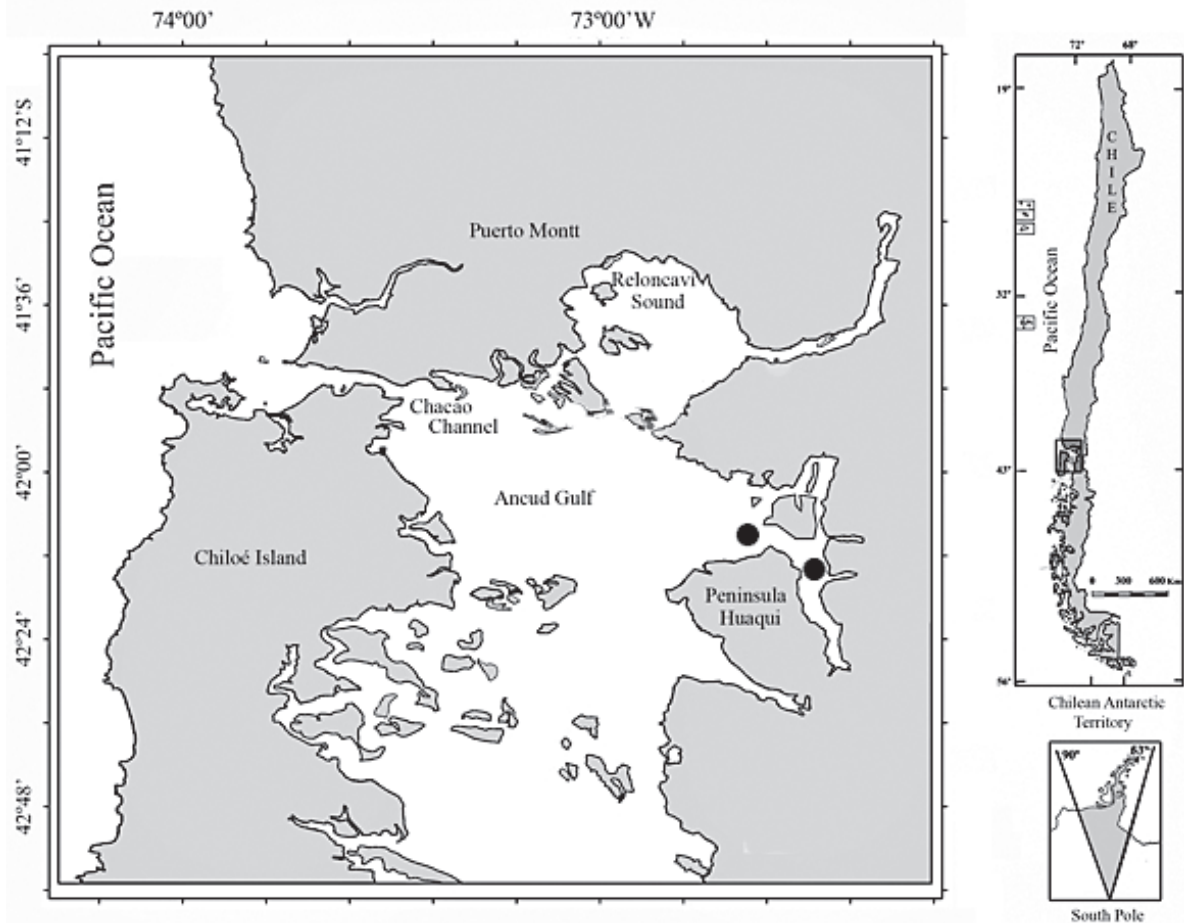


Fig. 1. Blue whale sightings on winter season in the Ancud Gulf and Comau Fiord.

The first new record corresponds to a sighting of a single adult blue whale observed by one of the authors (J.Z.A.) crossing the Gulf of Ancud around 14:30 on July 13 2009 (42°10'34"S 72°37'42"O) (Fig.1). The individual was photoidentified using marks on its dorsal fin (Fig. 2). The whale displayed no noteworthy behaviour, swimming in different directions and diving asynchronously. After 30-40 minutes, one boat approached the whale, and no change of behaviour was observed. The whale stayed in the bay for fifty minutes before swimming out to open sea.

We checked a video record of a second sighting, complementary to our record, that was done by salmon farms personnel in June 2009. The video corresponds to a group of two blue whales individuals inside the Comau fiord (42°15 "S 72°29") (Fig.1).

The whales were undertaking regular short dives and swimming parallel to the coastline between ten and twenty meters from shore.

This first record emphasize the necessity to make more effort on winter season to verify a possible year round presence of blue whales in Chiloé, probably influenced by feeding opportunities, thus highlighting the importance of the area for this specie.

ACKNOWLEDGMENTS

Research reported in this study was supported by project grants D/010828/07 and D/010828/08 "Acción Integrada Universidad Complutense de Madrid – Universidad de Magallanes" from the AECID (Agencia Española de Cooperación Internacional



Fig. 2. Right side of the dorsal fin of an individual of Gulf of Ancud. Photograph by J.Z. Abramson.

y Desarrollo); and by INNOVA Corfo. José Z. Abramson also wants to thank to Titaví and the local fishermen from Cahuelmó Raúl Castro and his team, for their help and for keeping him safe while navigating through the fiords.

The authors declared that they had no conflicts of interests with respect to their authorship and/or the publication of this note.

LITERATURE CITED

- Branch, T.A., K.M. Stanford, D.M. Palacios, C. Allison, J.L. Banister, C.L.K. Burton, E. Cabrera, C.A. Carson, B. Galletti, P.C. Gill, R. Huckle Gaete, K.S. Jenner, M.N. Jenner, K. Matsuoka, Y.A. Mikhalev, T. Miyashita, M.G. Morrice, S. Nishiwaki, V.J. Sturrock, D. Tormosov, R.C. Anderson, A.N. Baker, P.B. Best, P. Borsa, R.L. Brownell Jr., S. Childerhouse, K.P. Findlay, T. Gerrodette, A.D. Ilangakoon, M. Joergensen, B. Kahn, D.K. Ljungblad, B. Maughan, R.D. McCauley, S. McKay, T.F. Norris, Oman whale and dolphin research group, S. Rankin, F. Samaran, D. Thiele, K. Van Waerebeek & R.M. Warneke 2007. Past and present distribution, densities and movements of blue whales *Balaenoptera musculus* in the southern hemisphere and northern Indian ocean. *Mammal Review* 37 (2): 116–175.
- Cabrera, E., C. Carlson & B. Galletti 2005. Presence of blue whale in the northern coast of Chiloé Island, southern Chile. *LAJAM* 4(1): 73–74. ISSN 1676–7497.
- Clapham, P. J., S. B. Young & R. Brownell Jr, 1999. Baleen whales: conservation issues and the status of the most endangered populations *Mammal Review* 29, 35–60.
- Galletti Vernazzani, B. C. Carlson, E. Cabrera & R.L. Brownell Jr., 2008. Status of blue whales off Isla de Chiloé, Chile, during 2008 field season. Paper SC/60/SH24 presented to the IWC *Scientific Committee*, June 2008 (unpublished). 9pp. [Available from IWC]
- Galletti Vernazzani B., R.L. Brownell Jr., E. Cabrera & C. Carlson 2009. First aerial surveys to estimate abundance of blue whales off southern Chile. Paper SC/61/SH21 presented to the IWC *Scientific Committee*, June 2009 (unpublished). [Available from IWC]
- Huckle-Gaete R., L.P. Osman, C.A. Moreno, K.P. Findlay & D.J. Ljungblad 2004. Discovery of a blue whale feeding and nursing ground in southern Chile. *Proc. R. Soc. Lond. Ser. B (Suppl.) Biology Letters* 271, S170 – S173.
- Viddi, F. A., R. Huckle-Gaete, J. P. Torres-Florez, & S. Ribeiro, 2010. Spatial and seasonal variability in cetacean distribution in the fjords of northern Patagonia, Chile. – *ICES Journal of Marine Science* 67: 959 – 970.

