

RECENT RECORDS OF THE ATLANTIC PETREL (*PTERODROMA INCERTA*) FOR THE ATLANTIC REGION OF THE SOUTHERN OCEAN AND ANTARCTICA

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ABSTRACT.— New records of the Atlantic Petrel (*Pterodroma incerta*) at-sea for the Atlantic region of the Southern Ocean and Antarctica were reported during summer 2009 and 2010. Most of these observations occurred outside the accepted range for this species and improve the available information on its distribution. The Atlantic Petrel has been regularly recorded north and south of the Antarctic Convergence for more than 30 years, although these records are still considered casual and not part of their usual pelagic range.

KEY WORDS: *Antarctica, Atlantic Petrel, Pterodroma incerta, South Atlantic Ocean.*

RESUMEN. REGISTROS RECIENTES DEL PETREL CABEZA PARDA (*PTERODROMA INCERTA*) EN EL OCÉANO ATLÁNTICO SUR Y LA ANTÁRTIDA.— Se reportan nuevos registros obtenidos en el mar del Petrel Cabeza Parda (*Pterodroma incerta*) en el Océano Atlántico Sur y la Antártida durante los veranos de 2009 y 2010. La mayoría de estas observaciones ocurrieron fuera de las áreas de distribución aceptadas para la especie y mejoran la información disponible acerca de su distribución. El Petrel Cabeza Parda ha sido registrado regularmente al norte y al sur de la Convergencia Antártica por más de 30 años, aunque estos registros aún son considerados ocasionales y no como parte de su distribución pelágica habitual.

PALABRAS CLAVE: *Antártida, Océano Atlántico Sur, Petrel Atlántico, Pterodroma incerta.*

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Censuses of pelagic seabirds at sea are an effective tool for monitoring and control of spatial and temporal evolution of the communities under study. One of the more important benefit of these censuses is that allows the recording of distribution data for all species, especially those less frequently or with not well known pelagic ranges. The Monitoring Seabirds Program Onboard Ships (“Programa de Monitoreo de Aves Marinas a Bordo de Buques”) currently being developed by the Instituto Antártico Argentino has allowed extensive new distributional information (e.g., Orgeira 1995, 1996, 1997, Montalti and Orgeira 1997, 1998), especially when combined with existing data (e.g., Brown et al. 1975, Trivel-piece et al. 1987, Enticott 1991, Imberti 2005).

One pelagic species whose distribution at sea is still poorly documented is the Atlantic Petrel (*Pterodroma incerta*), an endemic breeding seabird from Tristan da Cunha and Gough

Island (Watson 1975, Harrison 1987, Enticott 1991, del Hoyo 1992, Rodríguez Mata et al. 2006, Onley and Scofield 2007). It is widespread to the west of its breeding grounds covering most of the Argentine continental shelf (Onley and Scofield 2007) and in deepwaters areas to the north and east of the Malvinas Islands (White et al. 1999, 2002). It has also been sighted in Antarctica (Brown et al. 1975, Orgeira 1997). Data on the distribution of this species in the South Atlantic and Antarctic Ocean have already been published (Enticott 1991, Orgeira 2001). Orgeira (2001) reported high concentrations of birds only 2 km from Buenos Aires coast and the southernmost records of this species. During the summers 2009 and 2010, new records of the Atlantic Petrel were obtained in the Atlantic region of the Southern Ocean and Antarctica. The aim of this paper is to report these records and to compare them with previous published

Table 1. Presence of the Atlantic Petrel (*Pterodroma incerta*) at South Atlantic Ocean, Drake Passage and Antarctica, summer 2009 and 2010.

Date	Number of birds recorded	Location	Distance to land (km)	Wind speed (Beaufort scale)	Sea state (Beaufort scale)	Sea surface temperature (°C)
5 Mar 2009	1	60°15'S,55°19'W	51.0	7	6	2.0
5 Mar 2009	2	60°12'S,54°54'W	0.1	8	6	2.3
10 Mar 2009	1	61°06'S,56°19'W	2.0	5	4	2.2
10 Mar 2009	2	60°44'S,57°03'W	40.0	7	6	3.0
10 Mar 2009	1	60°19'S,57°48'W	70.0	6	5	4.0
10 Mar 2009	1	60°14'S,57°58'W	70.0	6	5	4.0
11 Mar 2009	1	58°26'S,61°21'W	250.0	6	5	5.3
11 Mar 2009	1	57°58'S,62°21'W	190.0	6	5	4.8
11 Mar 2009	1	57°56'S,62°26'W	190.0	6	5	4.8
11 Mar 2009	1	57°32'S,63°11'W	140.0	5	4	4.0
11 Mar 2009	1	57°03'S,64°03'W	130.0	5	4	6.5
14 Mar 2009	1	55°03'S,66°17'W	2.0	9	6	0.0
14 Mar 2009	1	55°00'S,65°39'W	6.0	10	7	9.7
14 Mar 2009	1	54°51'S,65°10'W	1.0	10	7	9.7
14 Mar 2009	1	54°45'S,65°05'W	1.0	10	7	9.7
9 Jan 2010	1	46°06'S,65°49'W	63.4	5	4	13.0
9 Jan 2010	3	45°50'S,65°48'W	50.0	5	4	13.0
9 Jan 2010	1	45°35'S,65°45'W	38.0	5	4	12.0
9 Jan 2010	2	44°48'S,65°34'W	5.4	7	3	12.0
9 Jan 2010	1	44°46'S,65°29'W	8.4	7	6	12.0

information based on seven years of research (1990–1996; Orgeira 2001) made during the first part of the Monitoring Seabirds Program Onboard Ships.

The information comes from the Monitoring Seabirds Program Onboard Ships surveys in Antarctica and South Atlantic Ocean. These surveys include the 10 min strip transect onboard ships methodology (SCAR 1981, BIOMASS Working Party on Bird Ecology 1985). Observations were made from the ship's bridge (12–20 masl) by two experienced observers. Counts were made while the ship steamed at speeds above 6 knots; observers worked with two 10 × 50 binoculars in turns during daylight covering a scope about 180° ahead and about 500 m from each side of the ship. The area covered was South Atlantic Ocean, including the Argentine Sea and Drake Passage (35–59°S, 50–63°W) and the Antarctic territory to the north of the Antarctic Peninsula (60–63°S, 44–63°W). The first part of the study took place aboard *BIO Puerto Deseado* (CONICET-Armada Argentina) between 17 February 2009 and 21 March 2009; the second part was carried out aboard *ARA Canal Beagle* (Armada Argentina) between 17 December 2009 and 23 March 2010. From all

counts conducted in both seasons, the Atlantic Petrel was recorded in 15 in 2009 and 23 in 2010. Densities were not calculated; numbers of birds recorded are for absolute abundances. Different environmental variables were recorded during censuses by the meteorological equipment of the vessels (Table 1). Data was presented in the same way as Enticott (1991) and Orgeira (2001), grouping all the information in the Monitoring Seabirds Program Onboard Ships, which involves nine years of censuses (period 1990–1996 and the present study).

The first record of the Atlantic Petrel in Antarctic waters was reported by Brown et al. (1975) who observed five individuals south of 61°S. This and other observations obtained in the Drake Passage by these authors have been considered for many years as occasional records. Atlantic Petrel has previously been reported in summer and autumn in many parts of the South Atlantic Ocean, Drake Passage and Antarctica, including the southernmost record known for this species: south of 65°S (Orgeira 2001).

During March 2009, 17 Atlantic Petrel individuals were recorded, 8 of them in Antarctic waters and the rest in the Drake Passage and

south of Tierra del Fuego and Isla de los Estados (Table 1, Figs. 1 and 2). During January 2010, 8 individuals were sighted near San Jorge Gulf (Table 1, Fig. 2). These reports mirror those obtained during 1990–1996 in Antarctic waters (Orgeira 2001). Given that the nesting period of the Atlantic Petrel begins in June on Tristan da Cunha and Gough Island (Onley and Scofield 2007), the individuals were probably post-breeding or immature. When all the records obtained in the periods 1990–2010 are pooled, it is apparent that the Atlantic Petrel is seen throughout January, February and March in the South Atlantic Ocean, Drake Passage and Antarctica (Table 2). No association or interaction of any kind were reported between the Atlantic Petrel and other bird or mammal species and no mixed flocks were seen of this species with other birds.

The geographic locations of historic records agree with those reported in this study and in Orgeira (2001). The Atlantic Petrel has been recorded in these regions for about 30 years and these are still considered occasional or casual records. Notwithstanding, the presence of this species north and south of the Antarctic Convergence should not be regarded as casual or of uncertain status (Chebez 2008) but as part of their usual pelagic range, because despite its low abundance, censuses at sea show that these observations were made annually in the same seasons and geographic regions. With the exception of the records of the Patagonian

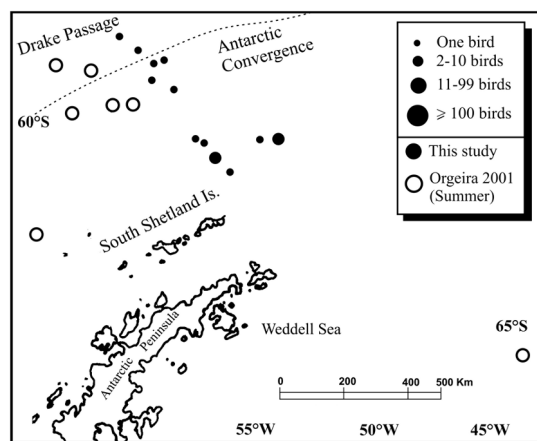


Fig. 1. Records of the Atlantic Petrel (*Pterodroma incerta*) at Drake Passage and Antarctica, years 1990-1996, 2009 and 2010.

Table 2. Seasonal distribution of the Atlantic Petrel (*Pterodroma incerta*) at South Atlantic Ocean, Drake Passage and Antarctica, years 1990-1996, 2009 and 2010.

	Nov	Dec	Jan	Feb	Mar	Jun
South Atlantic Ocean	X	X	X	X	X	
Drake Passage			X	X	X	X
Antarctica			X	X	X	

coasts in January 2010, the majority of records are outside the accepted pelagic range of this species reported in the mainstream literature (Watson 1975, Clark 1986, Harrison 1987, del Hoyo et al. 1992, Narosky and Yzurieta 2003, 2004, Rodríguez Mata et al. 2006, Onley and Scofield 2007, Chebez 2008). There is no clear pattern regarding sea surface temperature, distance to land, sea state and wind speed values under which the Atlantic Petrel was recorded in this study (Table 1). I hypothesise that this species is generalist for environmental conditions, which helps explain its dispersion and suggests that newer records will be made in high latitudes over the course of time.

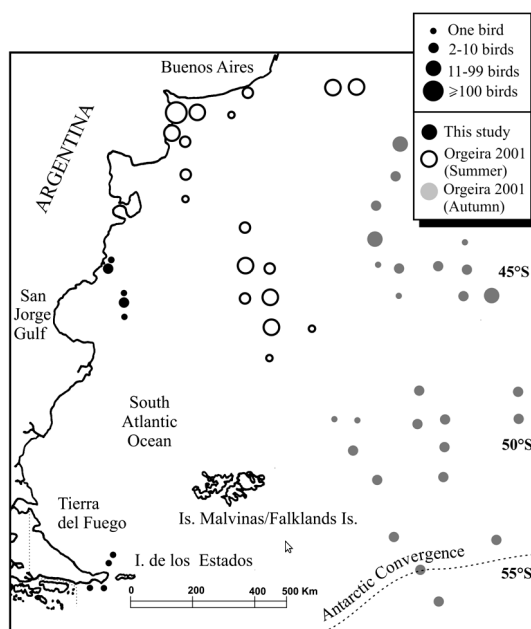


Fig. 2. Records of the Atlantic Petrel (*Pterodroma incerta*) at South Atlantic Ocean, years 1990-1996, 2009 and 2010.

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