

Short Note

Repeated observations of a Cape Gannet *Morus capensis* on the coast of Patagonia, Argentina

Ginger A Rebstock^{1*}, María Laura Agüero², P Dee Boersma¹, Luis Augusto Ebert³, Agustina Gómez Laich², Nora Lisnizer², Walter S Svagelj² and M Magdalena Trivellini⁴

¹ Department of Biology, University of Washington, Box 351800, Seattle, WA 98195-1800, USA, and the Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, NY 10460, USA

² Biología y Manejo de Recursos Acuáticos, Centro Nacional Patagónico – CONICET, Boulevard Brown 2915, Puerto Madryn, Chubut, Argentina

³ Centro Universitário Leonardo da Vinci, Rodovia BR 470, Km 71, N° 1040, Santa Catarina, Brazil

⁴ Universidad Nacional de la Patagonia San Juan Bosco, Boulevard Brown 3700, Puerto Madryn, Argentina

* Corresponding author, e-mail: gar@u.washington.edu

The Cape Gannet *Morus capensis* (Lichtenstein, 1823) is a seabird endemic to southern Africa, breeding at only six localities, three in Namibia and three in South Africa. The population is currently estimated to be 151 000 pairs (Crawford et al. 2007). After the breeding season, some Cape Gannets disperse north, along the west coast of Africa, while many follow sardine *Sardinops sagax* schools eastward. The species is usually restricted to the continental shelf of Africa and rarely seen more than a few hundred kilometres offshore (Crawford 2005). In spite of this relatively restricted distribution, vagrants of this species have been reported in Australia, New Zealand, Amsterdam Island (Indian Ocean), Spain, Argentina, Brazil and Perú (Berteaux 1991, Ramírez Llorens 1996, García-Godos 2002, Vooren 2004, Crawford 2005).

During the 2007/08 and 2008/09 austral breeding seasons an adult Cape Gannet was sighted by several people at

Punta Tombo (44°03' S, 65°18' W) and Punta León (43°05' S, 64°30' W), Argentina (Table 1). These points are about 125 km apart (Figure 1). In both locations, the bird was identified as an adult gannet by its shape, white body plumage, yellowish-buff head, and green lines on the legs and feet (Figure 2). The bird was seen perched and in flight, and had black tail feathers, black secondaries, black primaries, a long black gular stripe, and a pale iris, all diagnostic characteristics of a Cape Gannet (Nelson 2005).

The Cape Gannet was always close to or in a colony of Imperial Cormorants *Phalacrocorax atriceps* or a mixed colony of Imperial Cormorants and Rock Shags *P. magellanicus*. During the 2008 sighting at Punta León, we observed the Cape Gannet interacting with Imperial Cormorants. The gannet displaced two Imperial Cormorant females from their nests. The gannet, without aggressive behaviour, occupied

Table 1: Sightings of Cape Gannet *Morus capensis* in South America, including published and new reports. All individuals were adults except the juvenile gannet seen in Brazil in 1995

Date	Country	Location	Seen on land?	Distance from coast	Source
23 July–2 August 1982	Brazil	Rio Grande do Sul	At sea	50–100 km	Vooren (2004)
24 April 1983	Brazil	Rio Grande do Sul	At sea	46 km	Vooren (2004)
7 November 1992	Argentina	San Antonio Oeste, Río Negro	Coast	<200 m	Bergkamp (1995)
12 November 1992	Argentina	San Antonio Oeste, Río Negro	On beach	n/a	Bergkamp (1995)
21 January 1995	Argentina	Ushuaia, Tierra del Fuego	At sea	<5 km	Ramírez Llorens (1996)
29 March 1995 (juvenile)	Brazil	Santa Catarina	At sea	≥150 km	Olmos (1997)
19 November 1995	Argentina	Bahía San Antonio, Río Negro	Island colony	2 km	González, Echave and Calvo (unpubl. data) ¹
31 October 1996	Argentina	Bahía San Antonio, Río Negro	Island colony	Unknown	González, Echave and Calvo (unpubl. data) ¹
22 July 1999	Perú	Isla Macabí, Libertad	At sea	9 km	García-Godos (2002)
23 November 2007	Argentina	Punta Tombo, Chubut	Continental colony	n/a	This study
29 November 2007	Argentina	Punta León, Chubut	Continental colony	n/a	This study
17 November 2008	Argentina	Punta León, Chubut	Continental colony	n/a	This study
28 November 2008	Argentina	Punta Tombo, Chubut	Continental colony	n/a	This study
25 December 2008	Argentina	Punta Tombo, Chubut	Continental colony	n/a	This study

¹ Cited in Mazar Barnett and Pearman (2001)

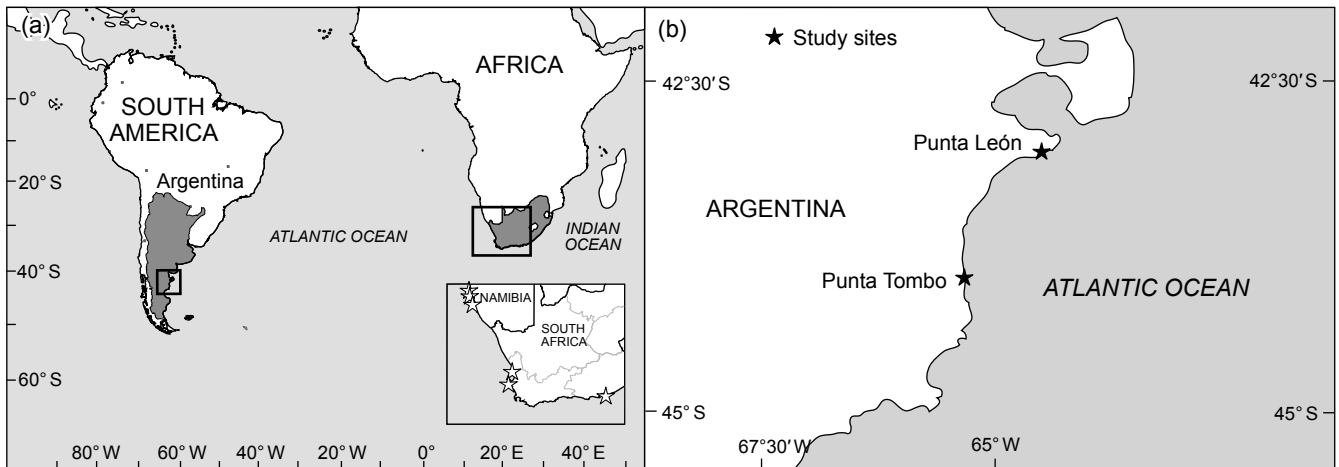


Figure 1: (a) Locations of Cape Gannet sightings in Patagonia, Argentina (box), and the species' breeding range in southern Africa (box and inset). Stars in the inset indicate the six extant breeding colonies in Namibia and South Africa. (b) Sites in Argentina where the Cape Gannet was seen in 2007 and 2008 (Punta León and Punta Tombo)

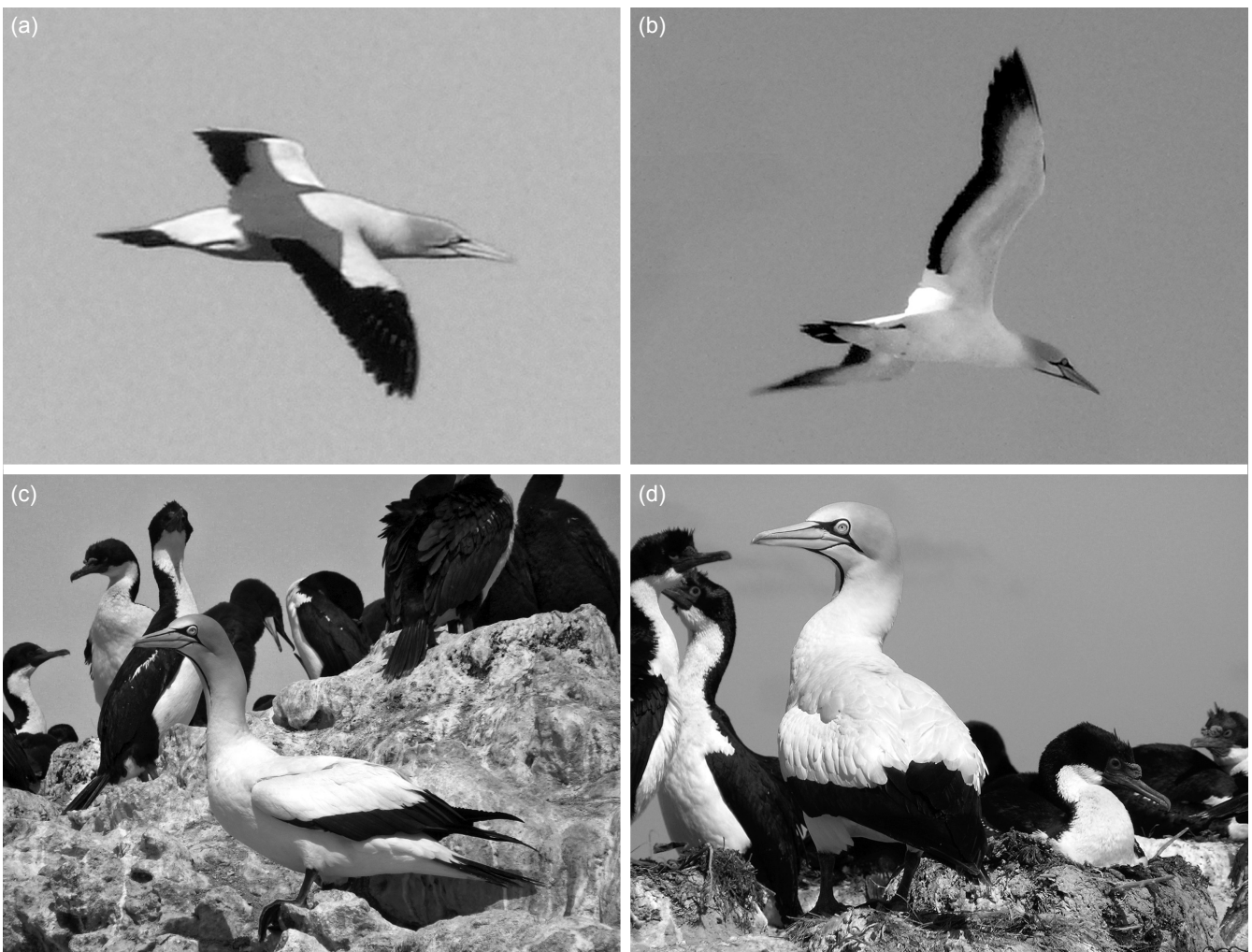


Figure 2: Photographs of a Cape Gannet in Chubut Province, Argentina: (a) and (b) 17 November 2008, Punta León; (c) 25 December 2008, Punta Tombo; (d) 23 November 2007, Punta Tombo

the nests, and the cormorants attempted to defend their nests by pecking. The mismatch of size and mass—approximately 2 650 g for the gannet (Nelson 2005) and 1 950 g for the female cormorant (Svagej and Quintana 2007)—resulted in the smaller cormorants surrendering their nests for approximately 30 min. One nest contained two cormorant chicks of about 5 d of age, which were ejected from the nest by the gannet. The other nest was under construction and contained no eggs or chicks. In the other sightings, the gannet remained between nests and did not attempt to occupy a nest.

Cape Gannets have been reported on both coasts of South America, especially off Brazil and Argentina (Table 1). The Cape Gannets in Brazilian waters were seen in the austral late summer, autumn, or winter (March–August), generally outside the Cape Gannet breeding season. Cape Gannets in Argentine waters were seen in austral spring and summer (October–January), corresponding to the Cape Gannet breeding season. Cape Gannets typically lay eggs between mid-September and mid-December, with chicks fledging from mid-January to April (Crawford 2005). Our sightings, in November and December, correspond to the incubation and early chick-rearing periods of Cape Gannets in Africa.

Our sightings of only one Cape Gannet at a time within a few weeks of each other in 2007 and 2008 were probably of the same individual. We also think it likely that it was the same individual in both years at the cormorant colonies. Adult survival is 0.93 in Cape Gannets with breeding adults having an average longevity of 13–14 years (Crawford 2005). Argentine anchovy *Engraulis anchoita*, which supports seabird, pinniped and predatory fish populations on the Patagonian shelf (Koen-Alonso and Yodzis 2005), is related to the anchovy *Engraulis encrasicolus* in southern African waters that is one of the primary prey species of Cape Gannets there (Crawford et al. 2007). A Cape Gannet could survive on anchovy in Argentine waters.

References

- Bergkamp PY. 1995. First record of Cape Gannet *Sula capensis* for Argentina. *Bulletin of the British Ornithologists' Club* 115: 71.
- Berteaux D. 1991. Long range movement of a Cape Gannet *Morus capensis* in the southern Indian Ocean. *Marine Ornithology* 19: 134–135.
- Crawford RJM. 2005. Cape Gannet. In: Hockey PAR, Dean WRJ, Ryan PG (eds), *Roberts birds of southern Africa* (7th edn). Cape Town: Trustees of the John Voelcker Bird Book Fund.
- Crawford RJM, Dundee BL, Dyer BM, Klages NTW, Meyer MA, Upfold L. 2007. Trends in numbers of Cape gannets (*Morus capensis*), 1956/1957 – 2005/2006, with a consideration of the influence of food and other factors. *ICES Journal of Marine Science* 64: 169–177.
- García-Godos I. 2002. First record of the Cape Gannet *Morus capensis* for Peru and the Pacific Ocean. *Marine Ornithology* 30: 50.
- Koen-Alonso M, Yodzis P. 2005. Multispecies modeling of some components of the marine community of northern and central Patagonia, Argentina. *Canadian Journal of Fisheries and Aquatic Sciences* 62: 1490–1512.
- Mazar Barnett J, Pearman M. 2001. *Lista comentada de las aves Argentinas/Annotated checklist of the birds of Argentina*. Barcelona: Lynx Edicions.
- Nelson JB. 2005. *Pelicans, cormorants and their relatives: Pelicanidae, Sulidae, Phalacrocoracidae, Anhingidae, Fregatidae, Phaethontidae*. Oxford: Oxford University Press.
- Olmos F. 1997. Seabird flocks attending bottom long-line fishing off southeastern Brazil. *Ibis* 139: 685–691.
- Ramírez Llorens P. 1996. *Sula capensis* in the Beagle Channel. *Hornero* 14: 67–68.
- Svagej WS, Quintana F. 2007. Sex determination by morphometric measurements in breeding Imperial Shags (*Phalacrocorax atriceps*). *Waterbirds* 30: 97–102.
- Vooren CM. 2004. The first two records of *Sula capensis* in Brazil. *Ararajuba* 12: 76–77.

