Vagrant Subantarctic fur seal in the Mayumba National Park, Gabon

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A vagrant adult male Subantarctic fur seal *Arctocephalus tropicalis* was seen and photographed on the beach in Mayumba National Park in the Gabonese Republic. This is the northern most sighting on record for the species. The likely source of the vagrant is the population at Gough Island, South Atlantic.

Key words: ***Arctocephalus tropicalis,*** **Gabon, vagrant, dispersion.**

One sighting on the 10th of September 2010 of an adult male Subantarctic fur seal (*Arctocephalus tropicalis*) was recorded on the beach of the Mayumba National Park, Gabonese Republic (Fig. 1). The northern boundary of the National Park stretches inland perpendicular to the coast for 1 km, and runs parallel to the coast, southeastwards for 60 km to the Republic of the Congo border, creating a terrestrial zone of 60 km^2. The seal (Fig. 2) was located in the vegetation zone of the beach at 03°41′S, 10°56′E about 1 km south of the Koubula camp and about 45 km from the border with the Congo. It appeared exhausted but was able to raise itself and adopt a defensive attitude, including vocalizing when approached. It had an eye injury, the eye being closed and swollen (Fig. 2a), and an injury to the head (Fig. 2b). Subsequent inspection of photographs taken revealed that it did not appear to be overly emaciated (Fig. 2) and had an unidentified goose barnacle attached to the pelage of the dorsal neck area (Fig. 2b). The fur seal was carried back to the camp, wrapped in a bed sheet, with the intention of feeding it fish. The seal was startled by the noise of a quad bike approaching and it headed for the sea. It was allowed to escape and it swam off not to be seen again.

Subantarctic fur seals swim vast distances, e.g. lactating females sometimes make return feeding trips in excess of 600 km distant from their breeding site (de Bruyn *et al.* 2009) and a tagged subadult male from Amsterdam Island (37°50′S, 77°32′E) was seen 7000 km to the west at Gough Island (40°20′S, 9°54′W) amongst conspecifics (Hänel *et al.* 2005). Vagrant Subantarctic fur seals had been found as far south as the coast of Antarctica (Shaughnessy & Burton 1986), and amongst Antarctic fur seals on South Georgia (Payne 1979) and Bouvetøya (Hofmeyr *et al.* 2006a). In South Africa with an inhabited coastline and a number of marine facilities, 22 animals have been recorded between June 1966 and June 1979, 13 (59%) of which were adult males, three (14%) subadult and six (27%) females (Shaughnessy & Ross 1980). An unconfirmed number has been recorded since then (e.g. Bester 1989) by three separate regional authorities, which would render incomplete the inclusion of known sightings of the species in temperate South Africa in Fig. 1. In the tropics, however, extralimital records on the Atlantic seaboard include two adult males found on the coast of Angola at 9°20′S (Carr *et al.* 1985) and an immature male and female on the coast of Brazil between 9°40′S and 12°54′S (Neves *et al.* 1990; Pinedo 1990). In the Indian Ocean, an immature was found at Unguja (or Zanzibar) Island, Tanzania at 05°52′S (Hofmeyr & Amir 2010), a juvenile on the Comore Islands at 12°30′S (David *et al.* 1993), one on the east coast of Madagascar at 22°08′S (Garrigue & Ross 1996) and one on the island of Rodrigues at 19°43′S. A further two were recorded on Mauritius at 20°30′S (David & Salmon 2003).

Vagrant Subantarctic fur seals have not previously been recorded on the coast of Gabon, and the current sighting is the most northerly of a confirmed Subantarctic fur seal, with two vagrants, also adult males, found much further south on the west coast of Angola (Carr *et al.* 1985). The goose barnacle attached to the fur seal confirms that it has spent a long time at sea after settlement of the barnacle. Similarly, goose barnacles (*Lepas australis*) had also been recorded from conspecific females at Gough Island (Setsaas & Bester 2006), the closest population of Subantarctic fur seals to Gabon at

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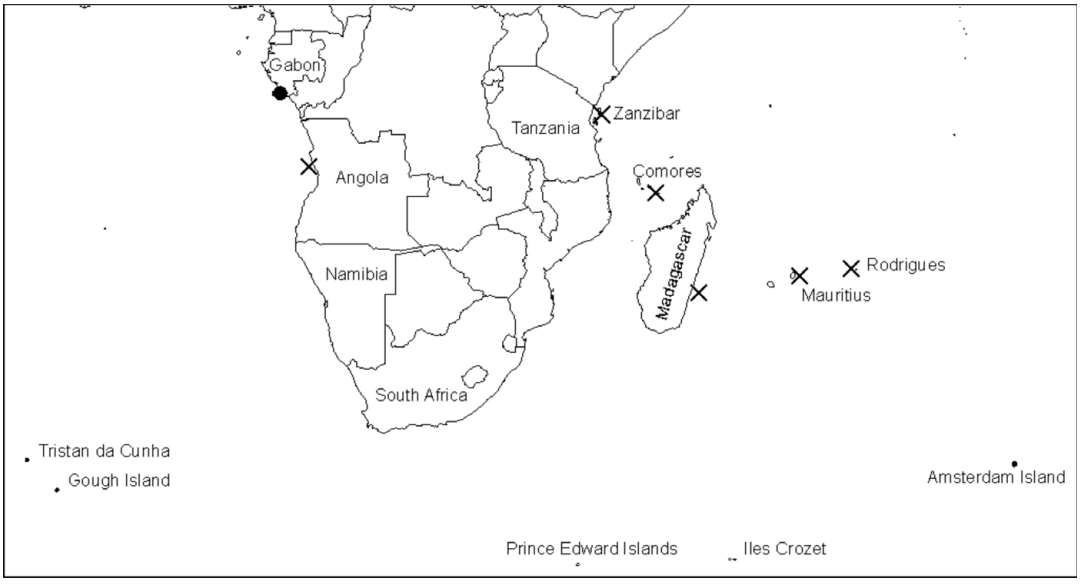

Fig. 1. Map showing location of most sites mentioned in the text. Crosses indicate the location of recorded vagrants of the Subantarctic fur seal (*Arctocephalus tropicalis*) in tropical Africa and nearby islands, and the filled circle shows the location of the sighting in Gabon.

40°20′S, 9°54′W, some 4500 km to the south-southwest. This is the largest breeding population of the species and numbers well in excess of 200 000 seals (Bester *et al.* 2006). The second largest breeding population numbering approximately 150 000 fur seals (Hofmeyr *et al.* 2006b) is at the Prince Edward Islands (PEIs), approximately 5600 km to the southeast of Mayumba National Park in Gabon, 1100 km further than Gough Island, at approximately 46°S, 38°E. While either of these populations could be a source of the vagrant recorded in Gabon, fur seals from Gough Island would be assisted by the West Wind Drift to reach Africa, and then by the North Westerly Benguela

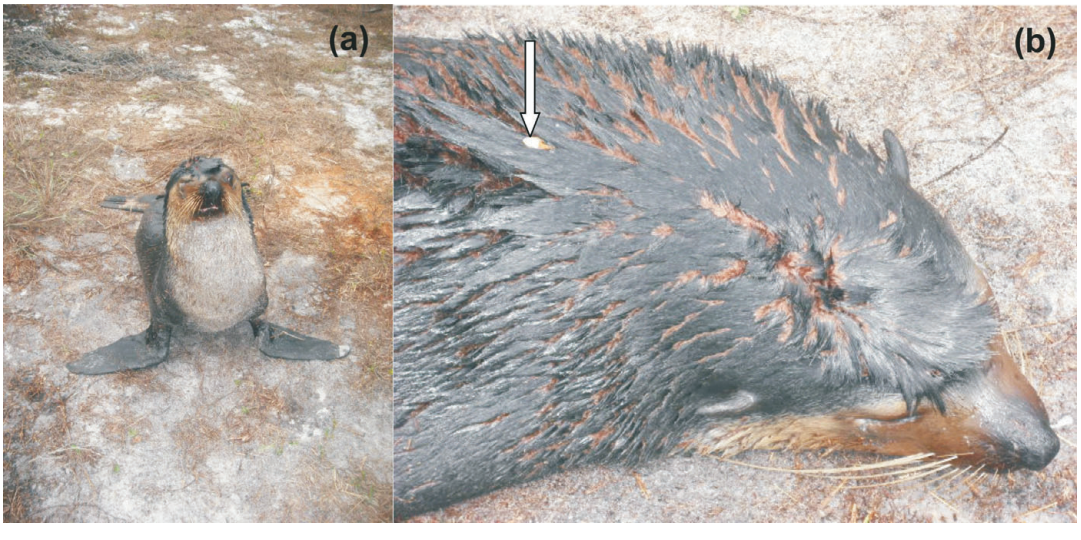

Fig. 2. The adult male Subantarctic fur seal seen on the coast of the Mayumba National Park, Gabonese Republic with (**a**) a closed, swollen right eye, and (**b**) a head wound and the goose barnacle (arrowed) attached to the pelage of the neck.

Drift to migrate to the tropics and ultimately to reach Gabon, whereas seals from the PEIs would have had to swim against the Antarctic Circumpolar Current, across the Subtropical Convergence and then against the Agulhas Return Current. The second alternative is feasible, because a juvenile Subantarctic fur seal tagged at the PEIs had been sighted on the southwest coast of South Africa (Bester 1989). In addition, comparing the vagrant Subantarctic fur seals' mitochondrial DNA control sequences from Brazil to exclusive haplotypes from the main breeding colonies of the species, not all the vagrant individuals arrived from Gough Island (the closest breeding population site). Some also came from other breeding populations such as Iles Crozet (950 km east of the PEIs), approximately 16 500 km from the Brazilian coast (Ferreira *et al.* 2007). Therefore, any of the major colonies of Subantarctic fur seals could have been the source for the vagrant in the present study. The continued reporting of extralimital vagrants improves our understanding of the species' dispersal and dispersion abilities and patterns.

Mayumba National Park is run by the Agence Nationale des Parcs Nationaux (ANPN), with WCS providing technical and logistical field support to park management. These observations were recorded during field patrols conducted by ANPN ecoguards and WCS staff. We are especially grateful to ANPN staff members Makoundi Pascal, Koumba Sene and Elie Ibouanga and WCS staff member Quevain Makaya for the locating and reporting of the vagrant; and to Quevain Makaya for the photographs. W.C.S. is grateful to donors USAID-Central African Regional Program for the Environment and EC-Central Africa World Heritage Finance Initiative for the financial support provided to field patrols. Mia Wege of the MRI produced the map.

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