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## Short communications

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# First record of a vagrant Commerson's dolphin, *Cephalorhynchus commersonii*, at the southern African continental shelf

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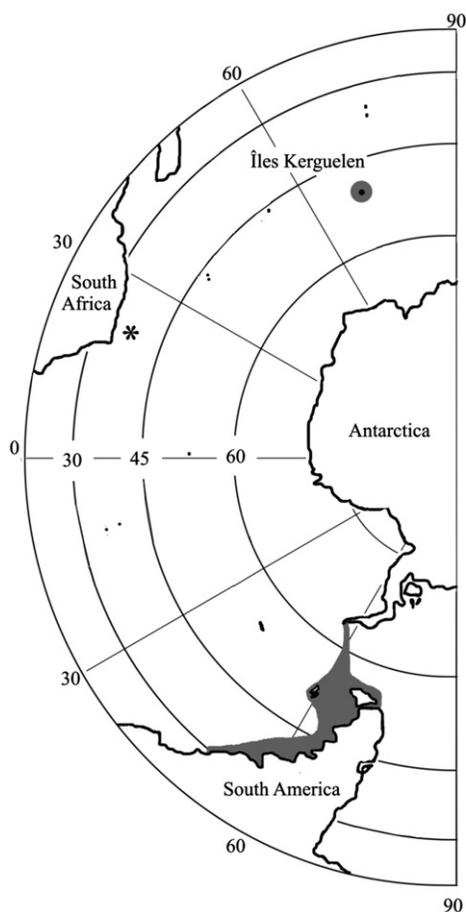
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Commerson's Dolphins *Cephalorhynchus commersonii* are distributed in two disjunct populations, one around southern South America and the other around the sub-Antarctic Kerguelen Islands. These populations have been shown to be morphologically and genetically distinct and movement between the two populations is unlikely. We report on the sighting of a single specimen over the South African continental shelf on 13 November 2004. To our knowledge this is the first record of this species in South African waters and such a vast distance (over 4000 km) from the known distribution limits.

**Key words:** *Cephalorhynchus commersonii*, vagrant, distribution, South Africa.

Two disjunct populations of Commerson's Dolphin, *Cephalorhynchus commersonii*, are currently identified (Jefferson *et al.* 1993) and are separated by at least 130° of longitude or 8500 km (Goodall 1994) (Fig. 1). The range of larger extent is centred in the Atlantic coastal and inshore waters of southern South America with the area of highest density stretching from Peninsula Valdes to northern Tierra del Fuego (42°S to 54°S) (Goodall 1994). The second population inhabits a more restricted range of coastal waters around the Subantarctic Kerguelen Islands in the southern Indian Ocean (Goodall 1994). The distribution of reported vagrants is limited to the coast of South America (Brownell & Praderi 1985; Pinedo *et al.* 2002; Capella & Gibbons 1991). Sightings from the vicinity of South Georgia have been rejected by some workers (Jefferson *et al.* 1993).

On 13 November 2004, during a voyage from Cape Town (33°55'S, 18°27'E) to Subantarctic



**Fig. 1.** Distribution of Commerson's Dolphin *Cephalorhynchus commersonii* (shaded) following Goodall (1994). The asterisk denotes the location of the sighting of 13 November 2004.

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Marion Island (46°52'S, 37°51'E) aboard the research vessel *SA Agulhas*, we sighted a single Commerson's dolphin at 10:30 GMT at the position 35°54.263'S, 20°32.686'E (Fig. 1). The sea surface temperature (SST) at the position of the sighting was 19.9°C and the water depth to the seafloor 130 m. Viewing conditions were optimal (i.e. undisturbed sea surface and no cloud cover) and the animal was sighted less than 10 m off the starboard side of the ship, at the surface for approximately one minute. We were positioned on the 'monkey deck' above the bridge and were therefore able to view the dolphin from above with binoculars. The combination of unique characteristics of this species, including the black and white colouration (particularly the white shawl extending around the body, anterior to the rounded dorsal fin), presence and shape of the dorsal fin and head and beak shape, allowed us to distinguish it from other cetaceans. None of us had previously seen this species, but we had all seen (on the same and other voyages) other substantially 'black-and-white' cetacean species within these waters, including Heaviside's dolphin, *Cephalorhynchus heavisidii*, Hourglass dolphin, *Lagenorhynchus cruciger*, Dusky dolphin, *L. obscurus*, and Southern right whale dolphin, *Lissodelphis peronii*. In light of the optimal viewing conditions and experience with similar species, we are confident of our identification of this distinctive species.

Earlier published sightings of vagrants are from waters linked by a common continental shelf to the species' regular range (Brownell & Praderi 1985; Capella & Gibbons 1991; Pinedo *et al.* 2002). To our knowledge, the sighting reported here is the first outside the known range and the first within the waters off the South African coast. While in its known range this species is known to migrate locally (De Buffrenil *et al.* 1989; Borsa 1997), it also keeps to shallow waters (Robineau 1985). It is unlikely that there is any movement between the South American and Kerguelen populations. Differences in size and colouration (Robineau 1984; Robineau 1986), skull proportions and number of teeth (Robineau & De Buffrenil 1985), vocalization (Dziedzic & De Buffrenil 1989), and genetics (Pichler *et al.* 2001) indicate that the Kerguelen population is a geographical isolate, possibly warranting subspecific status (Robineau 1986).

The animal sighted is more likely a vagrant than a migrant. The shallow neritic waters above the

Agulhas Bank in which the animal was sighted resemble the shallow waters typical of this species' usual ranges (Gewalt 1990; Goodall 1994). Genetic evidence suggests that the Îles Kerguelen population of Commerson's dolphins arose from a small founder group from the South Atlantic population (Pichler *et al.* 2001). This would have required that small numbers of this species, despite being generally limited to shallow waters, have moved a far greater distance in the past. The sighting of this individual indicates that this is possible. The population of origin of the presumed vagrant is unknown. While the Kerguelen Archipelago is closer (4200 km), a vagrant from this site would only reach the Agulhas Bank by swimming against the West Wind Drift (Antarctic Circumpolar Current). An animal from the larger South American population (6300 km distant) would not need to do this.

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