

SHORT NOTE

An opportunistic sighting of a flock of black petrels (*Procellaria parkinsoni*) at Galápagos Islands, Ecuador

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The black or Parkinson's petrel (*Procellaria parkinsoni*) is endemic to New Zealand, breeding only on 2 Hauraki Gulf islands, Aotea (Great Barrier Island) and Te Hauturu-o-Toi (Little Barrier Island) (Marchant & Higgins 1990; Imber 1987; Heather & Robertson 1996; Bell *et al.* 2011). They are known to migrate during non-breeding period (June-September) to the eastern Pacific Ocean. Historically, at sea sightings have shown they can occur from California, USA (Pitman & Ballance 1992; Spear *et al.* 2005) to Chile (Pitman & Ballance 1992; Spear *et al.* 2005), however, recent tracking has shown that they favour an area off Ecuador (Bellet *et al.* 2011).

Black petrels have been assessed as the most at-risk seabird species from commercial fishing in New Zealand waters (Richard *et al.* 2011; Abraham *et al.* 2013). By-catch has also been recorded in South America (northern Peru and Ecuador) through band return information (J. Mangel, *pers. comm.*).

On 12 July 2014, 4 of the authors (CG, KB, PH and FC) were on board MV *Pirata*, a Galápagos-based vessel (Puerto Ayora, Isla Santa Cruz) authorised for research within Galápagos waters, cruising through the Canal Isabela, between Isla Isabela and Isla Santiago, en route to Canal Bolívar. The purpose of the expedition was part of a 3 month project to research and search for the breeding grounds of the white-vented storm petrel (*Oceanites gracilis galapagoensis*).

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Fig. 2. Raft of black petrels with 1 Galapagos petrel and 5 white-vented storm-petrels. Photo: Karen Baird



white-vented storm petrels and other taxa actively foraging in this area.

Using geo-locator loggers, the east and west migration pathways of black petrels across the Pacific Ocean were found to cover an area between 175°E to 95°W and 13°N to 50°S; this suggests that black petrels migrate east in a more southerly route and migrate back west toward New Zealand in a more northerly route (Bell *et al.* 2011). The distribution of birds during the non-breeding phase was concentrated off the coast of Ecuador with little variation by gender, indicating that black petrels concentrate their foraging effort during the non-breeding season in a relatively small area, even though the birds are not restricted by central place foraging as during breeding phases. The area of highest activity of black petrels was centred over the Ecuadorian coast (Bell *et al.* 2011) where oceanographic conditions, determined by the Equatorial Front and Humboldt Current, generate strong upwelling with subsequent increased primary production and secondary consumers such as forage fish for seabird predators (Cucalon 1989). Ironically, the size of the group we observed was larger than most groups of black petrels that can be seen during seabird birding trips in the Hauraki Gulf, New Zealand, particularly when not attracted to chum or seen around a fishing boat.

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