

SALVIN'S ALBATROSS *THALASSARCHE SALVINI* INTERACTING WITH FREEZER TRAWLERS IN WATERS OF THE PATAGONIA SHELF

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ABSTRACT

DELLACASA, R.F., CHAVEZ, L.N. & TAMINI, L.L. 2022. Salvin's Albatross *Thalassarche salvini* interacting with freezer trawlers in waters of the Patagonian Shelf. *Marine Ornithology* 50: 99–102.

We present a new record of Salvin's Albatross *Thalassarche salvini* in waters of the Patagonian continental shelf. During a seabird census on 06 December 2019, a sub-adult individual within a mixed-species flock was observed eating fishery discards. In addition, we review sightings of this species outside its known core range using published records and other information. The species' presence in Argentine waters has possibly been underestimated and further work to elaborate its interaction with fishery fleets is required.

Key words: albatross, Argentina, fishery discards, fishery interactions, South Atlantic Ocean

Presentamos un nuevo registro del albatros de Salvin *Thalassarche salvini* en la Plataforma Continental Patagónica. Durante un censo de aves marinas efectuado el 6 de diciembre de 2019 se observó la presencia de un ejemplar subadulto de esta especie, integrando una bandada mixta y alimentándose de descarte pesquero. Se compilaron las observaciones para esta especie por fuera de su área de distribución conocida en el mar a partir de registros publicados y otras fuentes de información. Posiblemente la presencia de esta especie en aguas argentinas ha sido subestimada y es necesario profundizar los trabajos para establecer el grado de interacción con la flota pesquera.

Palabras clave: albatros, Argentina, descarte, interacciones, Océano Atlántico Sudoccidental

INTRODUCTION

The Salvin's Albatross *Thalassarche salvini* is a medium-sized seabird of the "cauta" group, which also includes Shy Albatross *T. [c.] cauta/steady*, and Chatham Albatross *T. eremita*. Salvin's Albatross is endemic as a breeding species to New Zealand. Currently, it is classified as Vulnerable by the International Union for Conservation of Nature (IUCN 2021) in New Zealand waters and elsewhere due to its restricted breeding sites and evidence of incidental mortality in commercial longline and trawl fisheries (BirdLife International 2021, Robertson *et al.* 2003, Waugh *et al.* 2008, Suazo *et al.* 2014, 2017). Its global population in 2013 was estimated to be 39 995 breeding pairs, of which 99% of pairs nest at the Bounty Islands, New Zealand (Baker *et al.* 2014, BirdLife International 2021). The remainder (~1 000 pairs) nest at the Snares and possibly Chatham islands. In 1986, four breeding pairs were also recorded at Île des Pingouins, Crozet Archipelago, Indian Ocean (Jouventin 1990, ACAP 2009).

At sea, breeding Salvin's Albatrosses occur mainly on the eastern shelf of New Zealand (38°S–50°S), with a few also occurring in the Tasman Sea (Sagar 2013). Non-breeders have been recorded mostly in waters of the southeast Pacific Ocean along the coasts of Chile and Peru (Spear *et al.* 2003), including an area with operating fishing fleets off southern Chile (Cabezas *et al.* 2009). A few sightings have been made elsewhere, such as in the Diego Ramirez archipelago south of Chile (Arata 2003), in the Midway Islands (Robertson *et al.* 2005), and in Alaskan waters (Benter *et al.* 2005). An individual Salvin's Albatross was also caught and

banded in a Grey-headed Albatross *T. chrysostoma* colony at Bird Island, South Georgia in 1982 (Prince & Croxall 1983, 1996). During the last three decades, the species has been recorded in waters of the Patagonian continental shelf—25 Shy-type albatrosses (mostly immature) and one adult Salvin's Albatross were identified between January and May 1998–2001. These observations came from observers on board fishing patrol and supply vessels north and west of the Falkland Islands (Islas Malvinas; White *et al.* 2020). In 2006, one Salvin's Albatross was recorded 29 km off Puerto Deseado, Santa Cruz province, Argentina (Seco Pon *et al.* 2007); in 2013, another was recorded in Uruguayan waters (Jiménez 2013).

Instances have been recorded of procellarids interacting with fishing vessels in waters off Argentina. These include some less frequent species like the Shy and Buller's albatrosses *T. bulleri* (Seco Pon & Tamini 2013, Tamini & Chavez 2014), and the Spectacled Petrel *Procellaria conspicillata* (Chavez *et al.* 2014).

Herein, we present a new record of a Salvin's Albatross that was associated with a freezer trawler that was part of a fleet that habitually interacts with albatrosses and petrels in waters of the Patagonian shelf (Granadeiro *et al.* 2014, Tamini *et al.* 2015, 2019).

METHODS

Since 2012, as part of the activities of the Albatross Task Force Argentina (Programa Marino, Aves Argentinas) in waters of the Argentine shelf, we have worked onboard freezer trawlers to record flock composition, mortality events, and interactions between

seabirds and fishing gear, and to study the impact of mitigation measures. This fleet contains four industrial trawl vessels (64–120 m length) that operate between 51–57°S and 61–67°W and is based in Ushuaia, Argentina (54°48'30"S, 68°18'30"W). Monitored fishing trips last 35–70 d with 100–220 hauls of bottom and mid-water trawl nets that are most often monitored by a netsonde (third wire or net monitoring) cable. Southern blue whiting *Micromesistius australis* (mid-water trawl), Argentine hoki *Macruronus magellanicus* (bottom and mid-water trawl), and Patagonian toothfish *Dissostichus eleginoides* (bottom trawl) are the main targeted species. This fleet constitutes a small fraction of the entire Argentine trawl fleet (> 180 deep-sea trawlers).

On each cruise during trawls, seabird censuses were conducted every 15 min. In each census segment, species composition

and relative abundance, as well as the presence of discard and environmental conditions, were recorded. Censuses were performed during daylight covering a semi-circular area (200 m in radius) from the stern using 10 × 50 binoculars. All setting and hauling operations were fully observed.

During 11 November–15 December 2019, a fishing trip that targeted hoki and southern blue whiting was monitored. Overall, 86 net hauls were made (mainly with the mid-water net), during which 134 seabird censuses were compiled.

RESULTS

At 53°17'S, 64°07'W (150 km north of Staten Island; Fig. 1) on 06 December 2019 at 17h20, a single albatross was observed

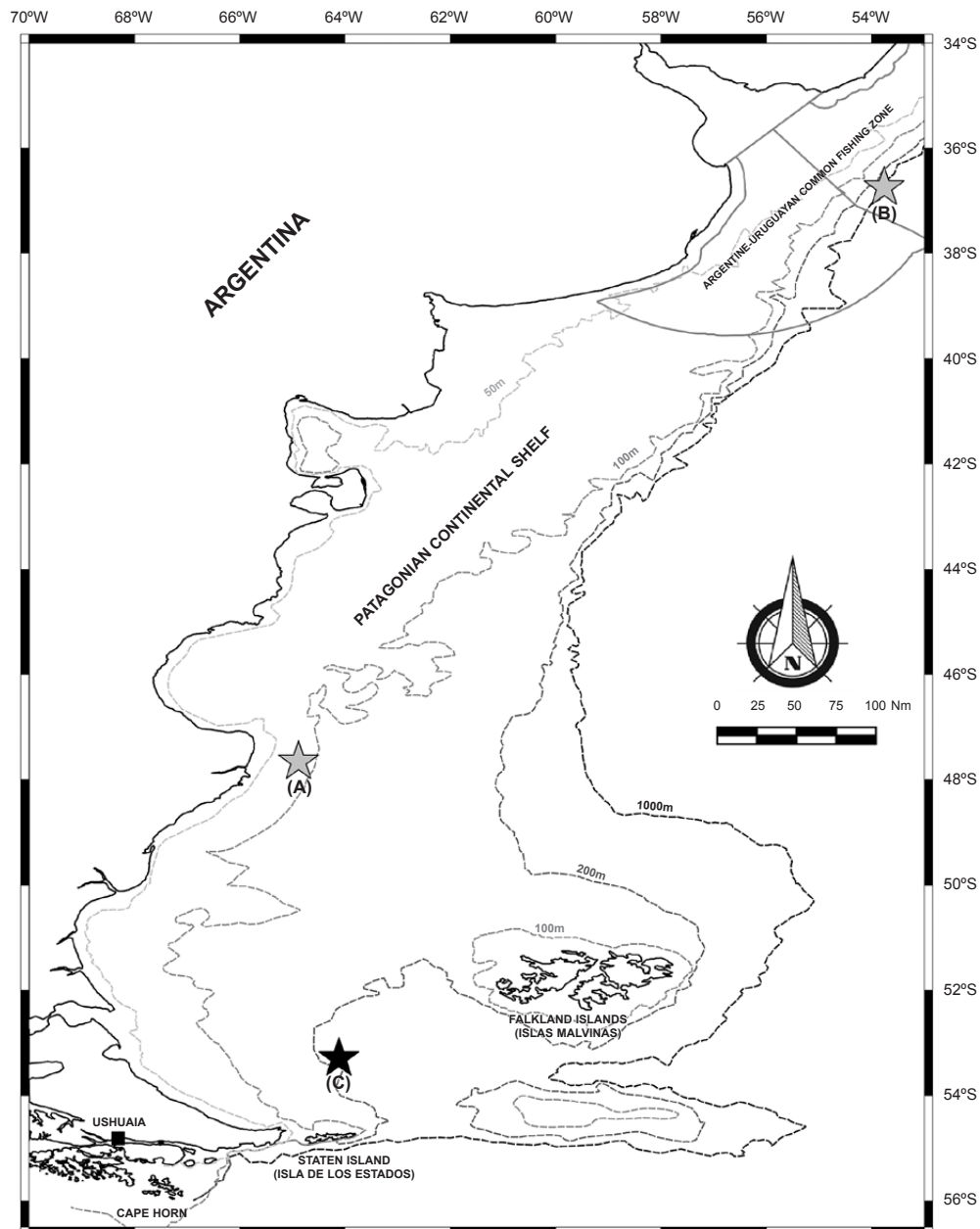


Fig. 1. Locations of recently published records of Salvin's Albatross *Thalassarche salvini* in the Southwest Atlantic: (A) Seco Pon *et al.* (2007), (B) Jiménez (2013), and (C) this work.

feeding on discards within a mixed-species flock (see details in Table 1). Weather and visibility were good. The albatross had a grey bill with a pale-yellow top and a dark spot on the tip of its jaw. Its head was grey, with a lighter forehead and crown. In addition, a conspicuous narrow line of bright orange skin occurred at the base of its beak on the sides of the upper jaw, which became very visible when the bill opened during feeding (Fig. 2). These traits indicated that it was a sub-adult Salvin's Albatross (Harrison 1983, Onley & Bartle 1999, Onley & Scofield 2010). The bird rested on the surface for 15 min, approximately 50 m from the vessel.

Three records for this species (possibly obtained from tourism ships) were found for southern South America in eBird. Each record was documented with photographs and occurred in the Drake Passage: 27 November 2006, 60°17'S, 65°33'W; 06 December 2014, 57°33'S, 64°37'W and 58°37'S, 64°46'W (eBird 2021).

DISCUSSION

The level of interaction between Salvin's Albatrosses and Argentine freezer trawlers remains to be determined. For this fleet, three types of interactions with albatrosses and petrels have been identified: entanglement in the net, collisions with the trawl cables, and collisions with the netsonde cable (Tamini *et al.* 2015, 2019). Bycatch and mortality of Salvin's Albatross have been reported in pelagic and demersal longlines and trawl fisheries in New Zealand (Robertson *et al.* 2003, Waugh *et al.* 2008, ACAP 2009). We observed no interaction with the vessel in our observation, but the vulnerability of this species is likely similar to others of the genus *Thalassarche*. The Salvin's Albatross record presented here, plus records in the literature (Fig. 1), indicate that this species visits the Patagonian continental

shelf (White *et al.* 2002, Seco Pon *et al.* 2007, Jiménez 2013). Further work needs to confirm whether Salvin's Albatrosses are uncommon vagrants or more regular visitants in the area.

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TABLE 1

Species and number of individuals in the mixed flock that included a sub-adult Salvin's Albatross *Thalassarche salvini*, on 06 December 2019 at 53°17'S, 64°07'W

Species	Individuals
Southern Giant Petrel <i>Macronectes giganteus</i>	194
Wilson's Storm Petrel <i>Oceanites oceanicus</i>	128
Black-browed Albatross <i>Talassarche melanophris</i>	91
Northern Giant Petrel <i>Macronectes halli</i>	90
Cape Petrel <i>Daption capense</i>	55
White-chinned Petrel <i>Procellaria aequinoctialis</i>	7
Southern Royal Albatross <i>Diomedea epomophora</i>	6
Salvin's Albatross <i>Thalassarche salvini</i>	1



Fig 2. Salvin's Albatross *Thalassarche salvini* (sub-adult) recorded in waters off the Patagonian shelf on 06 December 2019, resting (left) and feeding on discards (right).

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