FIRST RECORD OF LONG-TAILED SKUA STERCORARIUS LONGICAUDUS IN TERRE ADELIE (66°40'S, 140°1'E)

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FIRST RECORD OF LONG-TAILED SKUA *STERCORARIUS LONGICAUDUS* IN TERRE ADÉLIE (140°1'E, 66°40'S)

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ABSTRACT

LEWDEN, A., KISS, S., BARRACHO, T. & BARBRAUD C. 2023. First record of Long-tailed Skua *Stercorarius longicaudus* in Terre Adélie (140°1'E–66°40'S). *Marine Ornithology* 51: 253–256.

On 17 January 2023, a Long-tailed Skua *Stercorarius longicaudus* was observed and photographed along the coast of Terre Adélie (136–142°E, 67–90°S). This is the first observation of this species at this locality since seabird monitoring began in 1952, and it is only the second report of this species at latitudes this far south.

Key words: Antarctica, extralimital occurrence, Long-tailed Skua, *Stercorarius longicaudus*

INTRODUCTION AND OBSERVATIONS

The Long-tailed Skua *Stercorarius longicaudus* nests on the Arctic tundra and winters at sea in the Southern Hemisphere (Boertmann 1994, Wiley & Lee 1998). Mid-August, at the end of the reproductive season, individuals start their southward migration (Gilg *et al*. 2013). Birds reach wintering areas between September and November where they remain into March, after which time they start migrating north (Gilg *et al.* 2013).

Pointe Géologie Archipelago is located 5 km off the Antarctic continent in Terre Adélie (136–142°E, 67–90°S, Fig. 1). This is a key breeding area for eight Antarctic seabird species. Long-term avian population studies have been conducted here annually over the past 70 years (Barbraud *et al*. 2020, Youngflesh *et al*. 2021).

On 17 January 2023, a Long-tailed Skua was observed, which would be the first record for this locality since the beginning of the seabird monitoring program. The observation took place above Mont Joli, a nesting area for Cape Petrels *Daption capense* and Snow Petrels *Pagodroma nivea* (Fig. 2). The Long-tailed Skua was noticed as it hovered, a flight mode uncommon in Antarctic seabirds, and because several Snow Petrels engaged in mobbing behaviour towards it. South Polar Skuas *Stercorarius maccormicki*, which are present in numbers of approximately 70 breeding pairs annually in the archipelago, then joined the flock and chased away the Long-tailed Skua.

The Long-tailed Skua was identified by its lighter shape and narrow wings compared to South Polar Skuas (Fig. 3A–C). Its characteristic slim and long tail feathers (Fig. 3C) differentiated it from other jaeger species (Harrison *et al*. 2022). Moreover, it did not have the grey collar (Fig. 3B) that is characteristic of the Arctic Jaeger *S. parasiticus* (Harrison *et al*. 2022). First-year Long-tailed Skuas start molting their primary feathers in January, while second-year and older birds start molting in early November (van Bemmelen *et al*. 2018). The individual observed along the coast of Terre Adélie showed fresh plumage with fully-grown primary feathers (Fig. 3), indicating that it was at least two years old. Moreover, the length of the two central streamers relative to other tail feathers, the uniformly dark underwing pattern, and the neat blackish cap with yellow-suffused face and throat merging into whiter breast and greyish underbody indicated an adult that had acquired its breeding plumage (Fig. 3). Based on its pale belly, it may belong to the subspecies *S. l. pallescens*, which breeds in East Siberia, Alaska, northern Canada, and Greenland (Harrison *et al.* 2022).

Trans-equatorial migration occurs in several seabird species. However, collecting accurate data on the wintering locations for these species is difficult, likely because of the scarcity of observers in the southernmost regions of the globe. In recent years, tracking studies using miniaturized loggers have provided valuable insights. For example, Arctic Terns (*Sterna paradisaea*) were recorded south of 63°S in Antarctica, 19 500 km away from their breeding colony (Egevang *et al*. 2010, Hromádková *et al*. 2020). Similarly, Sabine's Gulls (*Xema sabini*) from the Atlantic population were recorded off the South African coast (Stenhouse *et al*. 2012), while their Pacific counterparts winter along the north coast of Chile (Gutowsky *et al*. 2021). Both Leach's Storm Petrels *Hydrobates leucorhoa* (Pollet *et al*. 2019) and Long-tailed Skuas have been previously tracked to the southwestern coast of Africa, with the latter recorded as far south as 40°S (Harrison *et al*. 2022), and a Pomarine Jaeger *Stercorarius pomarinus* was observed to overwinter in Micronesia (Harrison *et al*. 2022). Finally, a recent tracking study of 45 Long-tailed Skuas breeding in the Canadian Arctic confirmed that the majority of individuals (68%) winter in

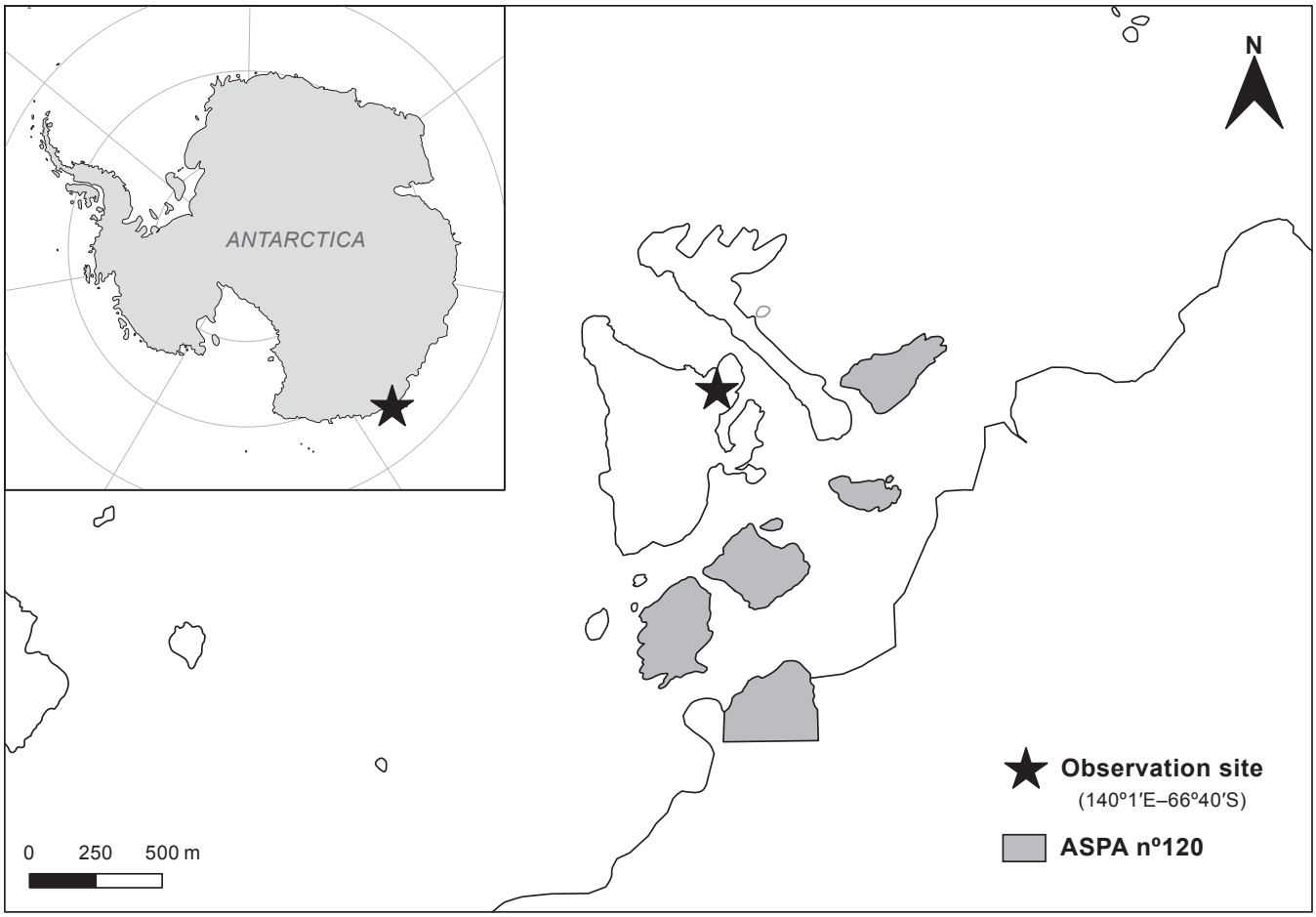

Fig. 1. Map of the main islands of the Pointe Géologie Archipelago (140°1'E–66°40'S) and its position in Antarctica (top left). The Antarctic Specially Protected Area (ASPA) n°120 is depicted in grey on the main map.

Fig. 2. Long-tailed Skua *Stercorarius longicaudus* (centre of the picture) observed in Terre Adélie, off the coast of Antarctica, above Mont Joli (left). The Astrolabe glacier (background) and Lamarck Island's characteristic Donjon (right) are also visible. Several Snow Petrels *Pagodroma nivea* are visible on the top left. Photo: SK, French Polar Institute.

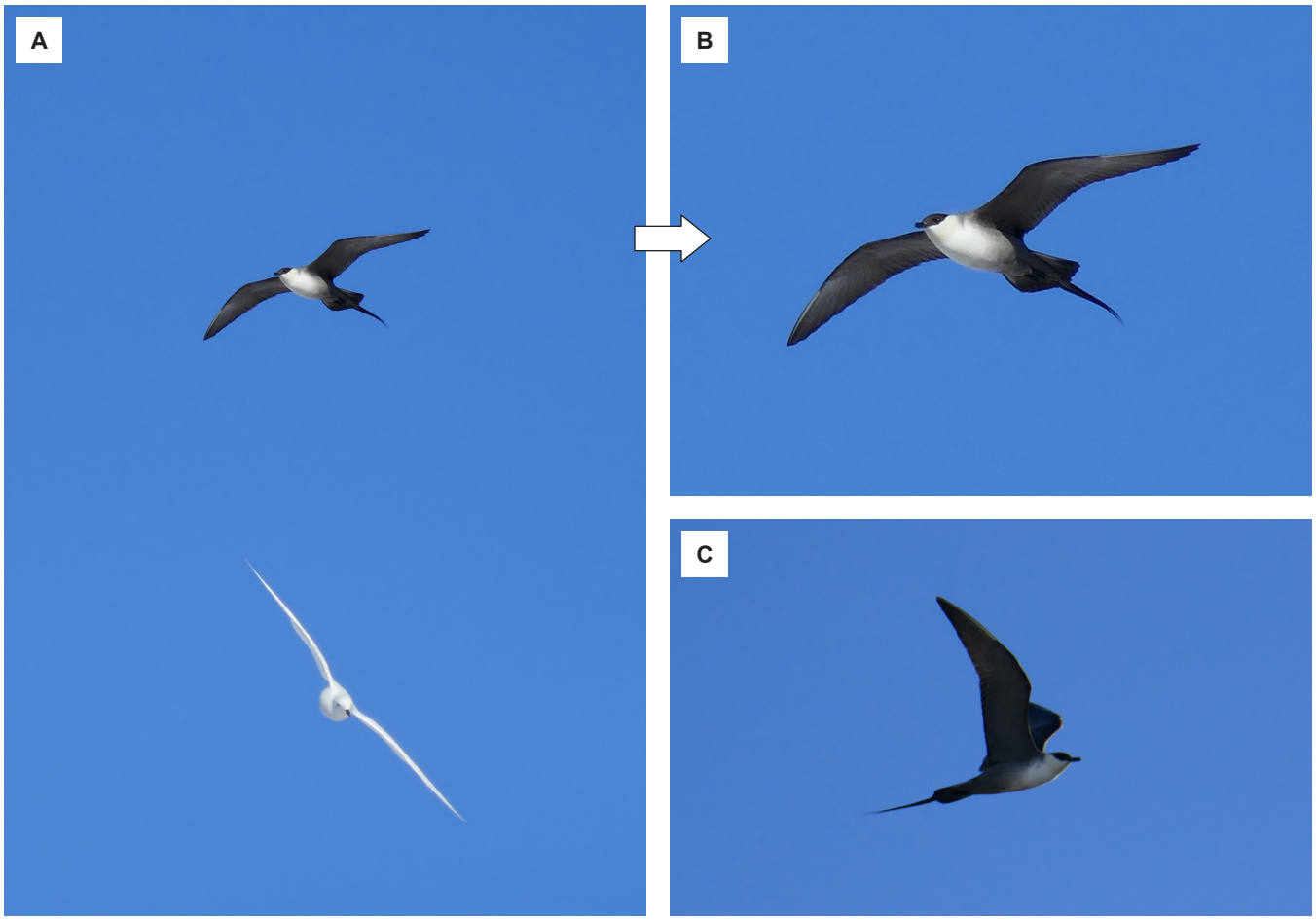

Fig. 3. Long-tailed Skua *Stercorarius longicaudus* observed on 17 January 2023 in Terre Adélie, off the coast of Antarctica, alongside a Snow Petrel *Pagodroma nivea* (A). Zooming in on the pictures (B, C) revealed the absence of a grey collar, light shape, long tail, and narrow wings. Photo: SK, French Polar Institute.

the Benguela Current (Seyer *et al*. 2021). With the exception of Arctic Terns, even when the Atlantic or Pacific migratory routes of similar seabird species are considered, the southernmost wintering areas are still several thousand kilometers from our observation area (8 368 km to Micronesia, 9 694 km to Coast of Chile, and 8 056 km to South Africa). Thus, our observation seems to be an unusual visit for Long-tailed Skuas at this southern latitude, with only one observation reported in the Ross Sea, Antarctica (http://www.eBird.org). These two observations at high southern latitudes could also suggest that inter-individual variation in migrating strategies may lead to underestimation of wintering habitats for the species. Additionally, these observations may also indicate that individuals from the subspecies *pallescens*, for which there is no tracking study, winter in different areas than the subspecies *longicaudus*. Finally, observations indicate that the Long-tailed Skua is the southernmost migrating species of the *Stercorarius* genus (Harrison *et al*. 2022), showing long-distance migration similar to Arctic Terns (Hromádková *et al*. 2020). This long migration would allow the Long-tailed Skua to maximize daylight and to exploit the food-abundant areas of the Southern Ocean (Bost *et al*. 2009, Raymond *et al*. 2010, Hromádková *et al*. 2020) during the austral summer. While Long-tailed Skuas feed on fish and small invertebrates at sea (Wiley & Lee 2020), they also rely on kleptoprasitism (Furness 1987). The individual observed in Pointe Géologie may have been attracted by the large seabird population of the archipelago and the opportunity for kleptoparasitism that it provided.

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