

ATLANTIC YELLOW-NOSED ALBATROSS *THALASSARCHE CHLORORHYNCHOS* FEEDING ON A DEAD SEA TURTLE

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ABSTRACT

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Albatrosses mostly forage for fish, squid, and crustaceans (including discards from fishing vessels), but they also scavenge animal carcasses, a behavior still poorly characterized for some albatross species. In July 2021 during a pelagic birding trip off the coast of São Paulo State, Southeast Brazil, three Atlantic Yellow-nosed Albatross *Thalassarche chlororhynchos* were spotted feeding on the floating carcass of a Loggerhead Sea Turtle *Caretta caretta*. This behavior had not been previously documented in the literature, on-line citizen science platforms, or by personal observations. We believe this to be an uncommon feeding strategy for this albatross species.

Key words: Atlantic Ocean, conservation, foraging behavior, ocean birds, scavenging

INTRODUCTION

Albatrosses (Diomedidae) include four seabird genera and 21 species that have a wide oceanic distribution (Gill *et al.* 2022). At sea, they forage on squid, fish, swarming crustaceans, and flying-fish eggs, while larger albatrosses also kill and eat smaller seabirds on occasion (Winkler *et al.* 2020). All albatross species also follow fishing vessels to feed on discards, resulting in incidental mortality that has led to strong population declines (Phillips *et al.* 2016) and changes in trophic webs (Vaske-Junior 2011, Bugoni *et al.* 2010). Scavenging on non-fish carcasses is known for several albatross, especially *Diomedea* spp., which feed on the remains of marine mammals and seabirds more often than other albatross species (del Hoyo *et al.* 2020a). The two species of *Phoebastria* will feed on dead penguins and the viscera and blubber of marine mammals left by predators such as Leopard Seals *Hydrurga leptonyx* and Killer Whales *Orca orcinus* (Carboneras *et al.* 2020a, 2020b). Among the mollymawks, *Thalassarche chrysostoma* and *T. melanophris* are also known to feed on the floating remains of penguins, seals, and whales, which may be locally important resources (Tickell 2000, Carboneras *et al.* 2020c, del Hoyo *et al.* 2020b, 2020c).

The Atlantic Yellow-nosed Albatross (AYNA) *T. chlororhynchos* breeds on the islands of the Tristan da Cunha and Gough groups and has a broad range over the Southern Atlantic north of the Subantarctic Convergence, with occasional records in the Northern Atlantic (Flood & Fisher 2016). This globally Vulnerable species (IUCN 2021) feeds mostly on fish and squid (Colabuono & Vooren 2007, del Hoyo *et al.* 2020b), and it is an enthusiastic attendee of fishing vessels off the Brazilian coast (Olmos 1997, Olmos & Bugoni 2006) where it is killed in significant numbers by longline fisheries (Bugoni *et al.* 2008).

RESULTS AND DISCUSSION

On 11 July 2021, 15h40 local time, while on a pelagic birding trip off the northern coast of São Paulo State, where AYNAs are among the most common open-sea birds over shelf waters, we spotted three AYNAs sitting on the water by a floating object about 53 km from shore (24°13'13"S, 044°46'51"W). As we approached, we found the object to be a dead Loggerhead Sea Turtle *Caretta caretta* (judging from its size and carapace shape), with its head and flippers missing and abdominal cavity exposed, probably as a result of scavenging by sharks. Strands of flesh were being pulled and eaten by one of the birds (Figs. 1, 2). The albatrosses, all third- to fourth-cycle immature birds (Flood & Fisher 2016), were observed for approximately 15 min. They remained around the carcass as we departed the area.

This observation caught our attention because we had not recorded AYNA feeding on dead sea turtles, despite considerable experience with the species off the Brazilian coast and several other encounters with dead sea turtles, a common casualty of longlines and fishing nets (Bugoni *et al.* 2008). Consultation of the literature and the most important on-line bird image libraries (Macaulay Library, <https://www.macaulaylibrary.org>; and WikiAves, <https://www.wikiaves.com.br/>) failed to find any record of similar behavior among 2130 AYNA images, as well as about 30 000 Diomedidae images posted up to 25 April 2022.

A local ocean fishing and birdwatching guide (Jeronimo Matias Gomes), who sails in the region where the ANYA event described herein was observed, reported that although he had seen sea turtle carcasses many times, he had only once observed seabirds feeding on them. On 27 September 2020 he encountered Wilson's Storm Petrel *Oceanites oceanicus* feeding on the leaking fat of a sea turtle carcass. The authors FB and FO observed the same behavior of Wilson's Storm Petrels feeding on turtle carcasses in July 2018 in a coastal region further

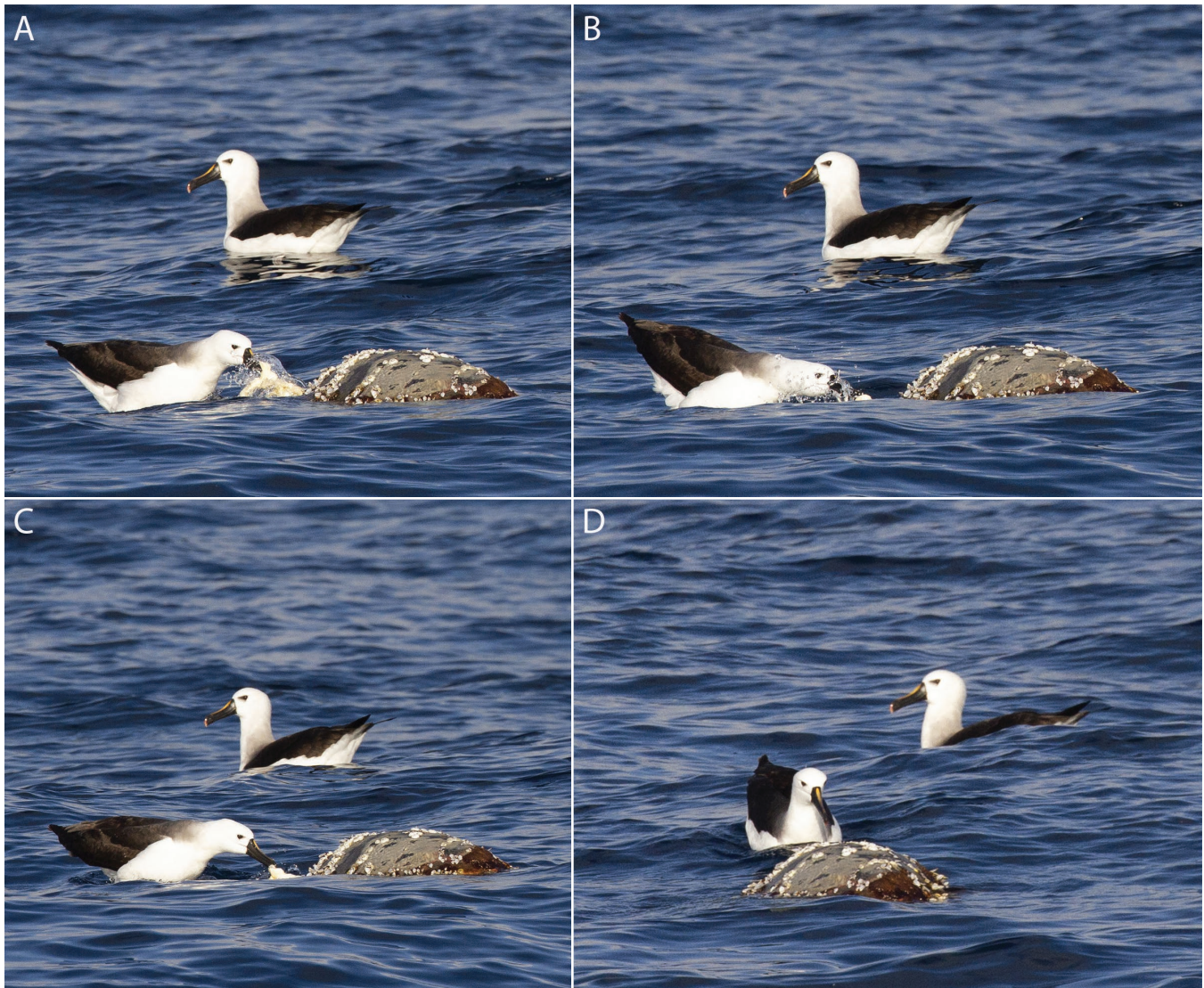


Fig. 1. Individuals of Atlantic Yellow-nosed Albatross *Thalassarche chlororhynchos* feeding on a sea turtle carcass. Sequence of images from A to D. (Photos: Fabio Schunck)

south of the current observations (Olmos, 2019). Therefore, this record of AYNA feeding on a dead sea turtle represents an unusual occurrence, and drawing any conclusions would be speculative. Nevertheless, it shows that the species can use carcasses when available and the birds are motivated, a circumstance that may have arisen from a scarcity of natural prey or from fishing boats producing discards in the general area we visited. Alternatively, our record of ANYA feeding on a sea turtle carcass might be an instance of exploratory behavior by young birds.

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Fig. 2. Detail of the carcass of the Loggerhead Sea Turtle *Caretta caretta*. (Photo: Fabio Schunck)

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