

A BLACK-BROWED ALBATROSS *THALASSARCHE MELANOPHRIS* CONSUMES A TERN *STERNA* SP.

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Albatrosses (Diomedidae) feed mostly on cephalopods and fish, caught by surface-seizing or shallow diving (del Hoyo *et al.* 1992). Other prey items, such as seabirds, are taken only occasionally. In a review of the food of albatrosses, Chérel & Klages (1998) listed at least 12 seabird species of two orders (Sphenisciformes and Procellariiformes) found in the stomach contents of seven albatross species. Albatrosses may take seabirds alive or consume carrion that they probably find floating on the surface of the ocean (Murphy 1936, del Hoyo *et al.* 1992, Chérel & Klages 1998).

We report the finding of remains of a tern *Sterna* sp. (Charadriiformes: Sternidae) in the stomach contents of a Black-browed Albatross *Thalassarche melanophris* found dead on the beach at São Simão (c. 30°55'S, 50°4'W), Rio Grande do Sul State (RS), Brazil in July 1998. Apparently, this is the first tern reported from the stomach of an albatross (Murphy 1936, del Hoyo *et al.* 1992, Chérel & Klages 1998).

The remains were found within the bird's proventriculus and consisted of several feathers (rectrices and small contour feathers from body and head), part of one leg (tibiotarsus and the complete foot—that is, tarsus and feet still covered with the podotheca), one ulna bone, and complete blackish maxillary and mandibular ramphothecas (Fig. 1). Measurements, taken with digital callipers to the nearest 0.1 mm, of the maxillary ramphotheca and tarsus were respectively 34.5 mm and 19.9 mm. In addition, an entire specimen of the Bluewinged Searobin *Prionotus punctatus* (Scorpaeniformes: Triglidae) with a total length of 69 mm was also present. This fish species is discarded as bycatch by a coastal trawl fishery (Haimovici *et al.* 1998).



Fig. 1. Remains of a tern *Sterna* sp. found within the proventriculus of a Black-browed Albatross *Thalassarche melanophris*.

Black-browed Albatrosses feed on crustaceans (mainly euphausiids), fish, squid and carrion. Remains of unidentified penguins and diving petrels *Pelecanoides* sp., presumably taken while floating at sea, have been found in the stomach contents (Murphy 1936, Chérel & Klages 1998). The tern was likely found dead, or moribund, and was dismembered before being ingested.

We attempted to identify the tern species by comparing the maxillary ramphotheca (exposed culmen) and tarsus measurements, as well as the colour pattern of the rectrices with published data (e.g. Malling Olsen & Larsson 1995) and specimens housed in the seabird collection of the Fundação Universidade Federal do Rio Grande (FURG), Rio Grande, RS, Brazil.

Of the 11 tern species known to occur along the coast of southern Brazil (Sick 1997), bill and tarsus measurements rule out the large Gull-billed *Gelochelidon nilotica*, Cayenne *Thalasseus (sandvicensis) eurygnathus*, Royal *T. maximus* and Large-billed *Phaetusa simplex* Terns, as well as the small Yellow-billed *Sternula superciliaris* and Black *Chlidonias niger* Terns (see measurements

TABLE 1

Culmen and tarsus length (mm) of the five tern species used in comparisons; measurements include specimens of both sexes

Species	Culmen	Tarsus	Reference
South American Tern <i>Sterna hirundinacea</i> ^a	39.5–44.0 n=29	19.0–23.0 n=29	Murphy (1936)
Common Tern <i>S. hirundo</i> ^b	32.1–40.3 n=304	17.4–22.0 n=310	Malling Olsen & Larsson (1995)
Arctic Tern <i>S. paradisaea</i> ^b	26.5–35.8 n=311	13.1–17.0 n=310	Malling Olsen & Larsson (1995)
Antarctic Tern <i>S. vittata</i> ^{a,c}	28.5–32.8 n=30	16.0–18.8 n=30	Murphy (1936)
Trudeau's Tern <i>S. trudeau</i> ^b	38.0–43.0 n=14	23.4–26.7 n=14	Murphy (1936)
Albatross specimen	34.5	19.9	Present work

^aIncludes only adult birds.

^bProbably includes only adult birds.

^cIncludes the subspecies *Sterna v. georgiae* and *S. v. gaini*.

in Murphy 1936, Malling Olsen & Larsson 1995). Thus the specimen in question could be assigned to South American *Sterna hirundinacea*, Common *S. hirundo*, Arctic *S. paradisaea*, Trudeauau's *S. trudeaui* or Antarctic *S. vittata* Terns.

Measurements of culmen and tarsus initially pointed to the Common Tern (Table 1). However, the colouration pattern of the rectrices (greyish and barred brown on the outer webs) does not match any plumage stage of that species (Malling Olsen & Larsson 1995), but it does resemble that described for juvenile South American Terns (Harrison 1983) and is very similar to the pattern on the three juvenile of this species (FURG 151, 154, 184) that we examined.

The culmen of the specimen is below the known range for the South American Tern (Table 1), and the FURG specimens have culmens of 35.1, 37.4 and 37.1 mm. Moreover, the longest culmen of chicks close to fledging in breeding colonies in Santa Catarina State (southern Brazil) was *c.* 31 mm (Branco 2003). Thus, given culmen and tarsus measurements and the rectrix colour pattern, we consider that the bird found in the albatross stomach was most likely a juvenile South American Tern.

The South American Tern breeds along the coasts of Brazil (from Espírito Santo to Santa Catarina States), Uruguay and Argentina (Sick 1997, Aspiroz 2001, del Hoyo *et al.* 1996). It is very common in the coast of RS, with abundance peaks during the austral winter (July–September; Bugoni & Vooren 2005), the same period that the albatross was found.

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