

UNUSUAL RECORD OF FRANCISCANA DOLPHINS (*PONTOPORIA BLAINVILLEI*) IN INNER WATERS OF THE CANANÉIA ESTUARY, SOUTHEASTERN BRAZIL

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Franciscana dolphins, *Pontoporia blainvillei* (Gervais and d'Orbigny, 1844), dwell in coastal Atlantic waters of South America from Itaúnas (~18°S), Brazil (Siciliano, 1994), to Golfo San Matías (~42°S), Argentina (Crespo *et al.*, 1998). Two gaps along this distribution were described between Regência (19°40'S) and Barra de Itapoana (21°18'S), Espírito Santo state, and between Macaé (22°25'S) in Rio de Janeiro state and Ubatuba (23°18'S) in São Paulo state (Siciliano *et al.*, 2002). The species is usually found in shallow and turbid waters venturing out to 30m on the continental shelf (Pinedo *et al.*, 1989; Praderi *et al.*, 1989), generally associated to estuarine and riverine discharges (Bordino *et al.*, 2002; Siciliano *et al.*, 2002). Along the species distribution, several records are also known for inner estuaries and rivers. Praderi (1986) reported the occurrence of *P. blainvillei* in freshwaters of Río de La Plata (~34°S). Although many records were observed in the closer connection between the La Plata estuary and the coast, a few were reported in inner riverine waters. The author argued that strong winds coming from the east could be responsible for such records, influencing the chemical characteristics of inner waters. One sighting of a single individual 9km upriver in the Río Negro (40°S), Argentina, was described by Bordino *et al.* (1999), who believed it was an unusual record. On the other hand, franciscana dolphins have been frequently sighted in inner estuarine waters of Babitonga (26°S), southern Brazil (Cremer and Simões-Lopes, 2005). That estuary is placed at approximately 20km from the main opening to the sea and water depths reach up to 28m. The present note adds one more record of *P. blainvillei* in inner estuarine waters along its range.

In the morning of 23 January 2007, during a dedicated survey to evaluate ecological aspects of marine tucuxi dolphins (*Sotalia guianensis*) in the Cananéia estuary (~24 to 25°S), southeastern Brazil, a group composed by three adult franciscana dolphins was found. The exact location of the sighting was 24°55'S; 47°54'W, placed approximately 14km from the main connection to coastal waters (Figure 1). It was an ebb tide and sea

state was Beaufort 1. During a short length of time (17min) observers could follow and photograph those individuals, water depth (echo-sounder) ranged from 6 to 10.9m, the transparency (Secchi Disk) was 1.2m, the salinity (refractometer) was 19ppm, and the superficial temperature (alcohol thermometer) was 27°C. These environmental conditions are usually found in that location. One of the photographs taken (Figure 2), showing the long rostrum of one sighted individual, confirms the identification of the species. In the same photograph it is possible to observe another individual with a notch on its dorsal fin border. No tucuxi dolphins were observed close to the franciscana group.

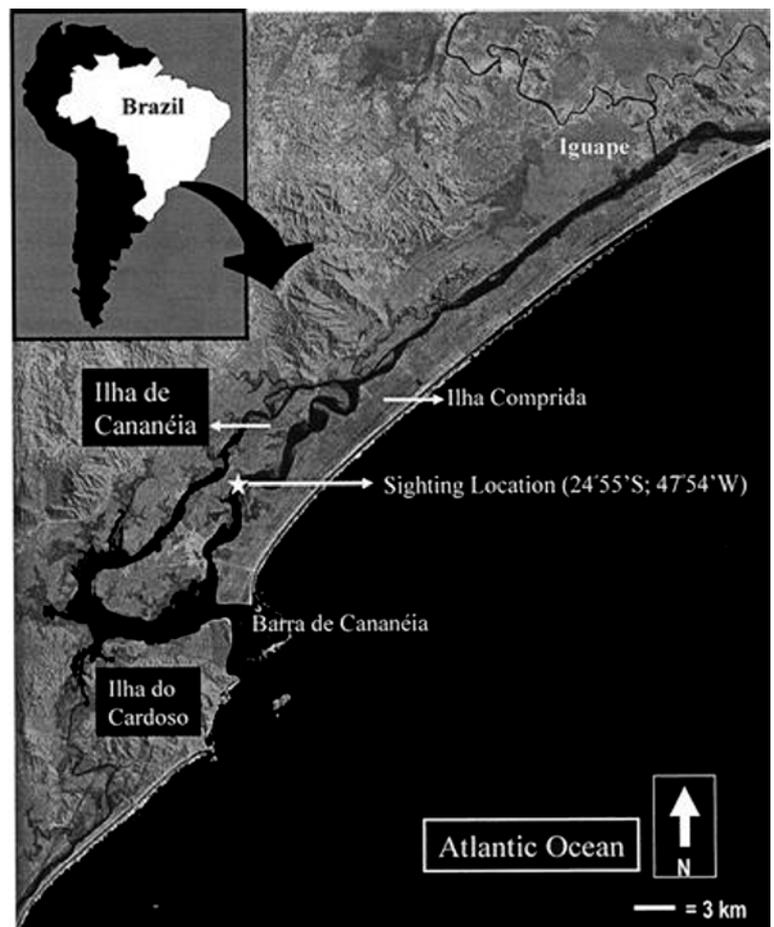


Figure 1. Map showing the exact location franciscana dolphins (*P. blainvillei*) were sighted in the Cananéia estuary, southeastern Brazil.

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After a fast-speed boat crossed a few meters close to the group, it was no longer sighted. Although no notable reactions by *P. blainvillei* were previously observed in response to the presence of research vessels (see Bordino *et al.*, 2002), in this case the fast-speed boat provoked a negative reaction as it posed an eminent threat. In the short length of time observers spent with this franciscana group, it was possible to notice that individuals usually showed up in the water surface on two or three occasions and then dove, probably to avoid the boat approach after engaging in hyperventilation. Dives lasted from 40 to 70s. It was not possible to gather further information on behavior.

The present *P. blainvillei* sighting may represent an unusual record. Since 1996, a longitudinal study of *S. guianensis* based on the application of the photo-identification technique has been conducted in the same estuary (see Santos *et al.*, 2000; 2001; Santos, 2004), which has been meticulously surveyed by boat. Although franciscanas are difficult to be sighted in their habitat (Crespo, 2002), previous sightings would be expected if these dolphins were common in inner estuarine waters as is the case of Babitonga estuary. However, as of 2007, no live or dead individuals have been reported in inner waters of the Cananéia estuary. In the Franciscana Management Areas 4, 3 and 2 (see Secchi *et al.*, 2003), which include the coasts of Argentina, Uruguay, southern and part of southeastern Brazil, respectively, *P. blainvillei* calving and mating have been described to occur in spring and summer (e.g. Harrison *et al.*, 1981; Brownell Jr, 1984; Rosas and Monteiro Filho, 2002; Danilewicz, 2003). Bordino *et al.* (1999) suggested that movements to shallower waters may occur in these seasons, allowing the unusual use of estuarine and riverine areas. If this is the case, such movements could contribute for usual sightings in Cananéia, which have yet to be reported. On the other hand, the predation of a franciscana dolphin by a killer whale (*Orcinus orca*) was observed in closer coastal waters (25°20'S) between São Paulo and Paraná states (Santos & Netto, 2005). Moving to inner estuarine waters could allow *P. blainvillei* to find shelter against predators. A potential shift in the use of area posed by food availability could also be listed as another possible reason for this unusual record. To address this hypothesis, further investigations on local franciscana dolphins feeding habits should be conducted. So far, this is the only known report of *P. blainvillei* inside the



Figure 2. Two sighted adult franciscana dolphins (*P. blainvillei*) in the Cananéia estuary.

Cananéia estuary. Efforts should be continued in order to evaluate possible sightings in the future.

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