

Feeding not Always Brings Safety to Brown Boobies

Abstract

Here we examined a carcass of a brown booby found during the monitoring of a beach conducted on northern Rio de Janeiro, Southeastern Brazil. After necropsy, it was concluded that the brown booby choked eating a banded croaker twice as long and five times as heavy as the usual fish consumed by brown boobies.

Keywords: Beach monitoring, Brown booby, Mortality, Prey induced, *Sula leucogaster*

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Introduction

Few cases of a bird choking with prey larger than its swallowing capacity are reported in the literature. Such cases include herons choked with frogs, snakes, or lampreys.¹⁻³ and a pied-billed Grebe with a prickly sculpin stuck between its mandibles.⁴ Besides that, Ryder⁵ reported a great blue heron killed by a carp due to incomplete regurgitation, because the spine of the dorsal fin pierced the heron's gullet. Regarding seabirds, young common terns choke to death with pipefishes, which are difficult to swallow.⁶ Here we report a case of seabird choked by a Banded croaker.

Results and discussion

On August 29th 2008 we found the carcass of an adult male brown booby (*Sula leucogaster*) (Figure 1A) during a survey for beached seabirds along Rio de Janeiro state coast, Southeastern Brazil (22°10'25"S, 41°20'45"W). Methods used in this survey are described in.⁷ Palpation of pectoral musculature revealed that the specimen was in good corporal condition, and no external evidence of cause of death. During necropsy we found a banded croaker (*Paralonchurus brasiliensis*) obstructing the entire digestive tract of the bird, from the bottom of the stomach to the oral commissure (Figure 1B and 1C). We concluded that the brown booby died of asphyxia due to airway obstruction. Adult brown boobies seem to choose fishes measuring 130 mm and weighing 29 g, on average.^{8,9} However, the banded croaker ingested was 270 mm long and weighed 156 g, which is twice as long and five times as heavy as the usual fish size consumed by brown boobies.

Total length of adult banded croakers is about 175 mm [10]. The species usually inhabits the bottom of coastal waters deeper than 10 m, and is not usually available for brown boobies.¹⁰⁻¹² Only juveniles tend to inhabit shallow waters.¹³ On the other hand, adult banded croakers are widely disposed of by trawl fishery along the coast of Brazil.¹⁴

Thus, it is possible to assume that the brown booby examined had consumed this fish after it was disposed of during trawl fishery activities. Indeed, it has been shown that banded croakers are important prey for brown boobies in Moleques do Sul Island, Brazil,

which suggests the influence of fishery activities in that they make fish species available that boobies do not consume regularly [8]. Curiously, in the present case report, the death of the seabird was directly linked to its potential prey.



Figure 1 A: Beached Brown booby found in Rio de Janeiro, Southeastern coast of Brazil. B and C: Banded croaker obstructing the entire digestive tract of the Brown booby specimen.

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Conflicts of interest

None.

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