

New record of the brown pelican *Pelecanus occidentalis* in continental waters of the Brazilian Eastern Amazon

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Received on 17 March 2015. Accepted on 3 May 2015.

ABSTRACT: A brown pelican (*Pelecanus occidentalis*) individual was recorded and photographed in the urban area of Santarém, northern Brazil. The bird perched on the roof of a fish market (2°25'S, 54°43'W) located on the Tapajos River bank in Santarém urban area, and stayed in the region for at least 45 days. This is the third record and the first photographic record of the brown pelican for inland Brazil.

KEY-WORDS: Amazon; Brazil; sea bird; Western Pará.

INTRODUCTION

The brown pelican (*Pelecanus occidentalis*) is a marine bird with broad distribution in the Americas, mainly on the coast. It occurs in the U.S., Central America, Caribbean, Galapagos, and northern South America (Enticott & Tipling 1997). Sometimes, this species goes further south and reaches northern and southeastern Brazil, and sporadically Tierra del Fuego, the southernmost extreme of South America (Sick 1997, Elliott *et al.* 2014).

In Brazil, the Brazilian Ornithological Records Committee (CBRO 2014) classifies *P. occidentalis* as an occasional visitor from the Northern Hemisphere, and Sick (1997) considers the species an occasional visitor from the northern region of Brazil. Some records of this species have already been made in Brazil.

There are five documented records of *P. occidentalis* for the Brazilian coast. The first was made by Mitchell (1957 *apud* Sick 1997), who recorded a brown pelican in the Rio de Janeiro. The second record was made by Sick (1997), who reported the occurrence of a white pelican in Guanabara Bay, state of Rio de Janeiro, in 1960. However, the author was not sure whether the observed individual was an albino *P. occidentalis* or a *P. erythrorhynchos*, which could probably escaped from captivity. The third record was made by Teixeira *et al.* (1993), who saw an individual brown pelican in Todos

os Santos Bay, state of Bahia, in 1982. In 2005, Patrial and collaborators recorded an individual *P. occidentalis* flying over Ipióca Beach, Maceió, state of Alagoas (Patrial *et al.* 2011). This individual was photographed (Patrial 2010, WA88534). Patrial *et al.* (2011) also reported an individual pelican of the subspecies *P. occidentalis thagus*, which was photographed in 2008 flying over the sea, close to the city of Santos, state of São Paulo. These authors identified the pelican as *P. thagus*, but other researchers identified it as *P. o. thagus*, a subspecies of *P. occidentalis* (CBRO 2014, Elliott *et al.* 2014). Following the nomenclature used by these authors, this would be the fifth record of *P. occidentalis* in the Brazilian coast.

In continental Brazil, there are only two records of *P. occidentalis*, both for the northern region. The first record was made in the middle Tapajós River, in the city of Itaituba, state of Pará. In this locality, one individual was collected and deposited in the Emílio Goeldi Museum in Belém by Emilie Snethlage (MPEG 00433, Snethlage 1914). A second record was made in the Uricóera River, state of Roraima (Pinto 1978, Sick 1997). Unfortunately, there is no precise indication of the observation site for this latter record. We present here the first photographic record of *P. occidentalis* for continental Brazil. The record was made in Eastern Amazon, in the city of Santarém, Pará, Northern Brazil.

METHODS

The brown pelican was observed and photographed in the urban area of Santarém (2°25'S, 54°43'W), on the right margin of the Tapajós River, in its confluence with the Amazonas River. We made periodical checking of the permanence of the bird in the area and observations on its behavior for 38 days.

RESULTS

On 22 November 2013, E.V.L and D.A.A.S recorded a *P. occidentalis* individual perched on the roof of a local fish market (Figure 1). Based on its color we believe it was a juvenile or sub-adult. According to reports by local fishermen, the bird was observed for the first time at the site one week before our record. From November 22 on, we made periodic visits to document the presence of the bird at the site. The last observation was made on 28 December 2013, which totals at least 45 days of presence of the pelican at the observation site.

We observed that, during its permanence in the region, the pelican spent most of its time perched on the fish market roof together with great egrets (*Ardea alba*) and black vultures (*Coragyps atratus*), which are common at the site (Figure 2). These birds consumed small fish and fish viscera discharged in the Tapajós River by fishermen and people of the fish market. In some occasions, the pelican was observed perched on boats and actively foraging in the Tapajós River, diving from the

air or from the water, as its typical hunting strategy. The pelican was also observed swimming and foraging with cormorants (*Phalacrocorax brasilianus*). In addition, it frequently made circular flights in the surroundings using air currents, together with black vultures.

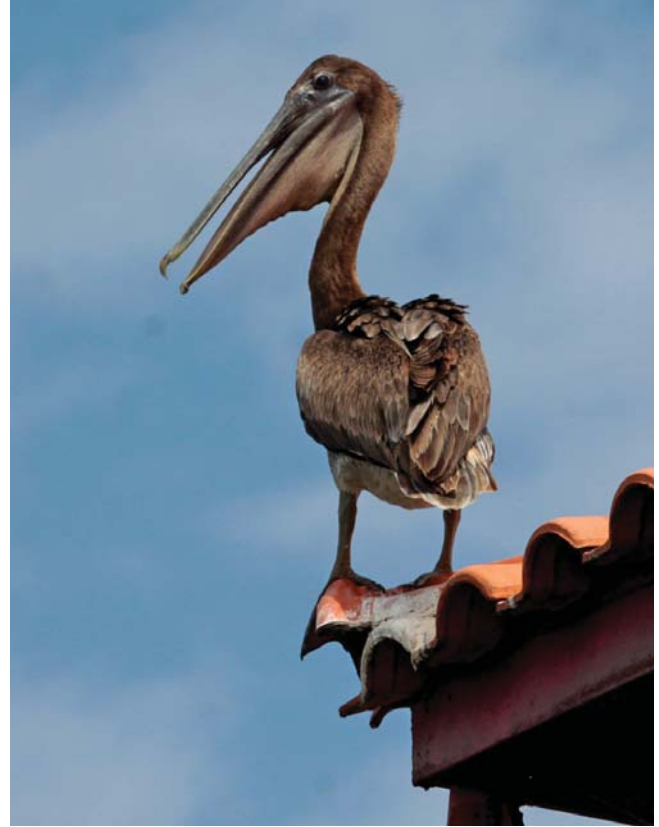


FIGURE 1. A juvenile *Pelecanus occidentalis*, perched on the roof of a fish market in Santarém, Pará, 22 November 2013.



FIGURE 2. The *P. occidentalis* individual (red circle) perched on the roof of a fish market, together with individuals of *Ardea alba* and *Coragyps atratus*.

DISCUSSION

Pelecanus occidentalis is a typical marine bird (Elliott *et al.* 2014), and hence its occurrence in continental waters very far from the sea would be unexpected. Some marine birds, such as species of the families Sternidae and Rynchopidae, also occur in continental waters (Sick 1997), but some species of the families Laridae and Pelecanidae are seldom seen inland. Santarém is located at approximately 600 km from the closest coast at the Marajó Island. This *P. occidentalis* individual probably followed the channel of the Amazonas River and arrived at Santarém, in a supposedly erratic movement. This could also explain other inland records of this species (Snethlage 1914, Pinto 1978). As the bird we recorded was a juvenile (and probably naive) individual, this hypothesis is even more plausible. Another possibility is that this individual arrived at Santarém perched on one of the large ships that frequently arrive at Santarém harbor. We can also speculate if large-scale climatic phenomena, such as the El Niño, can sometimes affect the movements of marine birds in a way not fully understood as yet, and their migratory movements might be irregular. However, this latter suggestion is difficult to demonstrate.

Regardless of why and how this typical marine bird reached far inland, it is important to record the presence and the period of permanence of bird species at sites where their occurrence is unexpected or occasional. This kind of information is important to plan for bird conservation. It is also important to stress that *P. occidentalis* is not on the recent list of bird species recorded in the past 135 years in Santarém (Lees *et al.* 2013), and this is the first record of the brown pelican for the Santarém city. We believe that some species considered atypical in this region perhaps are not so uncommon, but rather poorly documented, due to the lack of bird watchers able to identify them. However, with the help of online photo archives such as the websites www.wikiaves.com.br, www.xeno-canto.org, and <http://ibc.lynxeds.com>, and a greater exchange of information among scientists, unexpected occurrences such as the one reported here became more common. A record of the kelp gull (*Larus dominicanus*) also in the Tapajós River on Santarém city, on 2 June 2013 (Cruz 2013) is another example of the usefulness of these new tools of bird documentation in Brazil.

ACKNOWLEDGMENTS

D. A. Almeida-Santos and G. S. Ferreira received CAPES grants during the development of this study. We thank Alexander Lees for the information about the brown pelican skin collected by Emilie Snethlage.

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