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Western Reef-Heron *Egretta gularis* in Brazil (Ciconiiformes: Ardeidae)

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Resumo: **A garça-negra *Egretta gularis* no Brasil (Ciconiiformes: Ardeidae).** Em fevereiro de 2006, pesquisadores visitaram o Arquipélago de São Pedro e São Paulo e avistaram/fotografaram duas garças com plumagem escura. A partir da análise das fotos, as aves foram identificadas como *Egretta gularis,* espécie até então conhecida no Brasil por apenas dois registros no Arquipélago de Fernando de Noronha. Os animais permaneceram no local, saudáveis e alimentando-se, pelo menos até setembro de 2006.

Palavras-Chave: Ardeidae, *Egretta gularis,* garça-negra, Arquipélago de São Pedro e São Paulo, Brasil.

Key-Words: Ardeidae, *Egretta gularis,* Western Reef-Heron, Saint Peter and Saint Paul Archipelago, Brazil.

The Western Reef-Heron *Egretta gularis* is a polytypic species with discontinuous tropical range along West (nominate subspecies) and East Africa to the Red Sea, Persian Gulf and southwest India *(E. g. schistacea).* In West Africa, it breeds locally on coasts and offshore islands, from Mauritania (*c.* 10°N) to Gabon (*c.* 4°S) (Brown *et al.* 1982, Martínez-Vilalta and Motis 1992, Kushlan and Hancock 2005), and occasionally in Europe (*e.g.,* Dies *et al.* 2001). The taxonomy of the Western-Reef Heron is controversial. It is sometimes considered conspecific with the Little Egret, *E. garzetta* (*e.g.,* Martínez-Vilalta and Motis 1992, Kushlan and Hancock 2005), but both taxa have been reported to breed sympatrically in different ecological situations with limited interbreeding (Dubois and Yésou 1995, Kayser *et al.* 2000). Thus, *E. gularis* has been widely recognized as a valid species (Cramp and Simmons 1977, AOU 1985, Sibley and Monroe 1990, BirdLife International 2004).

Like many other Ardeidae, *E. gularis* disperses extensively and individuals have been recorded in Europe, Cape Verde and Azores Islands, USA, Canada, Lesser Antilles, West Indies, and Trinidad and Tobago (Cramp and Simmons 1977, Brown *et al.* 1982, Cardillo *et al.* 1983, Murphy and Nanan 1987, Martínez-Vilalta and Motis 1992, Parker *et al.* 1996, ffrench and Kenefick 2003, John 2004, Linegar 2005). For instance, in St. Lucia (West Indies) the species was recorded in 1984, 1985, 1987, 1992 and 2000. In Brazil, *E. gularis* is known from an apparently undocumented sight record of a single bird at Fernando de Noronha Archipelago (3°54'S, 32°25'W) in November 1996 (Schulz-Neto 2004) and from an additional record of a bird photographed there in November 2004 (Silva e Silva and Olmos 2006).

In February 2006, D.V. and D.P.V. visited Saint Peter and Saint Paul Archipelago (hereafter St. Peter and St. Paul; 0°55'N, 29°20'S) in the equatorial Atlantic Ocean, as part of an investigation into the ecology of large pelagic fishes in the area. St. Peter and St. Paul consists of a small and isolated horseshoe-shaped group of rocky islets, located 940 km from the north-east Brazilian mainland. Together with Fernando de Noronha and Rocas Reef, it is found within the convergence zone of the two trade-winds systems. North-east trade winds blow from subtropical latitudes (*c.* 30°N) along the eastern North Atlantic, towards the north-east coast of South America and the Caribbean. South-east trade winds blow from about 30°S, along the coast of Africa, and then across the Atlantic to the tropical South American coast (Brown and Lomolino 1998).

Whilst this study was being undertaken, a pair of active dark herons was seen fishing daily in the rock pools and several photographs were eventually taken. The birds were identified from these photographs as *E. gularis* (Figure 1). This occurrence – which has already been mentioned in Vaske Jr. (2006) – is discussed here. According to recent information (September 2006), both herons are still living in the archipelago, in close proximity with Brown Boobies *Sula leucogaster* and Brown Noddies *Anous stolidus.* Colour photographs will be available as supplementary documentation in the website of the Brazilian Ornithological Records Committee (http://www.cbro.org.br).

Initially, the birds at St. Peter and St. Paul were thought to be the Tricoloured Heron, *Egretta tricolor,* or the Little Blue Heron, *E. caerulea.* The former has been recorded in Fernando de Noronha (Oren 1984). However, after more careful analy-

sis, the following characters were noted: yellow iris; slightly down-curved bill with blackish upper mandible and yellowish lower mandible; overall brownish-grey plumage with a prominent white chin and throat, the white extending back to mid-neck; whitish belly; no nuptial plumes; black legs; and yellow feet. Brown *et al.* (1982), as well as Cardillo *et al.* (1983), provided a series of field characters, which facilitate separation of several species of the genus *Egretta.* These authors mention the brownish cast in the body plumage and whitish belly, characters consistent with the description of the immature dark-morph *E. gularis.* This species has a polymorphic plumage, which can be dark grey – usually with a white throat –, white or intermediate, with a mixture of white and grey (Brown *et al.* 1982, Martínez-Vilalta and Motis 1992, Dubois and Yésou 1995). Furthermore, the conspicuous white throat, the coloration of the iris and bare parts, and down-curved appearance of the bill match the description of *E. gularis* (Brown *et al.* 1982, Cardillo *et al.* 1983). *Egretta tricolor,* by contrast, usually has a reddish iris; slate blue to blackish neck and upperparts; chin and middle line of foreneck whitish, tinged with dark-chestnut, and legs wholly greenish-yellow. The adult plumage of *E. caerulea* is slate blue with a reddish purple head and neck (sub-adults lack the reddish purple). Immature birds are entirely white, or pied and mottled gray to varying degrees. Bill and legs are dark in all plumages (Blake 1977, Cardillo *et al.* 1983, Martínez-Vilalta and Motis 1992, Kushlan and Hancock 2005).

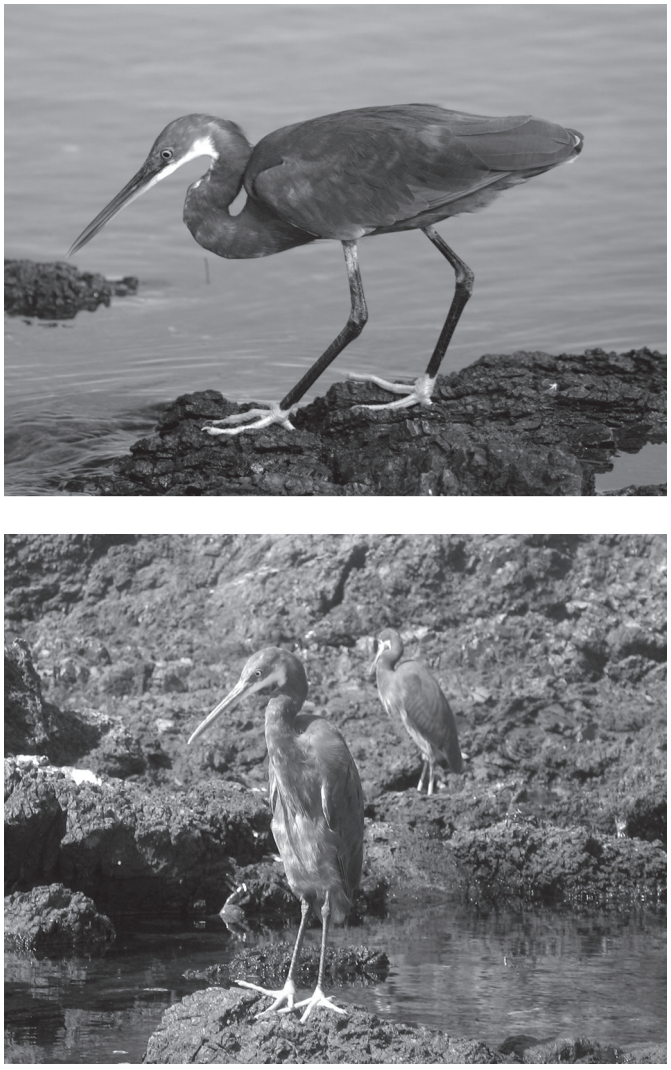

FIGURE 1. Western Reef-Heron, *Egretta gularis,* Saint Peter and Saint Paul Archipelago, February 2006 (photos by D. V.).

Only three seabirds breed on St. Peter and St. Paul: Brown Booby, Brown Noddy, and the Black Noddy *A. minutus* (Murphy 1936, Both and Freitas 2004). In addition, several other bird species have been recorded as vagrants from the Old World and elsewhere (Both and Freitas 2004, Bencke *et al.* 2005, Vaske Jr. 2006). Prevailing westerly winds may assist the displacement of birds from Africa and Europe to the Americas, which may explain their apparently accidental occurrence in Brazilian oceanic islands, the Caribbean and North America. Moreover, ship-assisted passage may also be important, particularly for herons, as these birds are regularly reported on ships at sea, sometimes making long oceanic journeys travelling as hitchhikers (Casement *in* Murphy and Nanan 1987).

Some herons have recently expanded their ranges; the most notorious example is the African Cattle Egret *Bubulcus ibis.* This heron crossed the South Atlantic Ocean from Africa, becoming established in north-east South America by the late 1800s. From there it rapidly expanded its range, and it is now one of the commonest herons in the New World, and the most abundant heron worldwide (Crosby 1972, Martínez-Vilalta and Motis 1992, Telfair 1994, Kushlan and Hancock 2005). Regarding the Little Egret complex, which includes *E. gularis,* there is a recently established breeding population in Barbados (40 birds) and Lesser Antilles (see review in Kushlan and Hancock 2005). The currently discontinuous coastal distribution of *E. gularis* in both West and East Africa suggests that a colonization process probably occurred in the past. The potentially high colonization ability of this species, the simultaneous occurrence of two healthy individuals in St. Peter and St. Paul during several months, the availability of suitable habitats in the Western Hemisphere, as well as the frequent records from a number of Caribbean islands, all increase the chances of breeding populations being established in South America.

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