Noteworthy bird records from Fernando de Noronha, northeastern Brazil

Robson Silva e Silva¹ and Fábio Olmos²

¹Rua São José 48/31, Embaré, 11040-200, Santos, SP, Brazil. E-mail: rsilvaesilva@uol.com.br

²Largo do Paissandu 100/4C, 01034-010, São Paulo, SP, Brazil. E-mail: f-olmos@uol.com.br

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RESUMO. Novos registros de aves para o Arquipélago de Fernando de Noronha, nordeste do Brasil. O Arquipélago de Fernando de Noronha é conhecido como fonte de registros de espécies migratórias provenientes do Velho Mundo. Aqui são apresentados novos registros de migrantes paleárticos (*Ardea cinerea, Egretta gularis, Ardeola ralloides, Anas acuta, Numenius phaeopus phaeopus e Limosa lapponica*) e de um vagante proveniente da costa sul do Brasil (*Larus dominicanus*). É possível que a população de *Nycticorax nycticorax* estabelecida nas ilhas também seja originária do Velho Mundo.

PALAVRAS-CHAVE: Anas acuta, Ardea cinerea, Ardeola ralloides, Brasil, Egretta gularis, Fernando de Noronha, Larus dominicanus, Limosa lapponica, Numenius phaeopus, Nycticorax nycticorax.

KEY WORDS: Anas acuta, Ardea cinerea, Ardeola ralloides, Brazil, Egretta gularis, Fernando de Noronha, Larus dominicanus, Limosa lapponica, Numenius phaeopus, Nycticorax, nycticorax, transatlantic vagrancy.

The islands of Fernando de Noronha (c.03°52'S, 32°25'W) lie about 356 km from the mainland in northeastern Brazil (for a general description see Teixeira *et al.* 2003). The birds found in the island group are well-known, with 65 reported species, including three native and a few introduced land birds and a diverse community of seabirds and migratory shore and water birds (Olson 1982, Oren 1982, Teixeira *et al.* 1987, Nacinovic and Teixeira 1989, Soto *et al.* 2000, Schulz-Neto 2004).

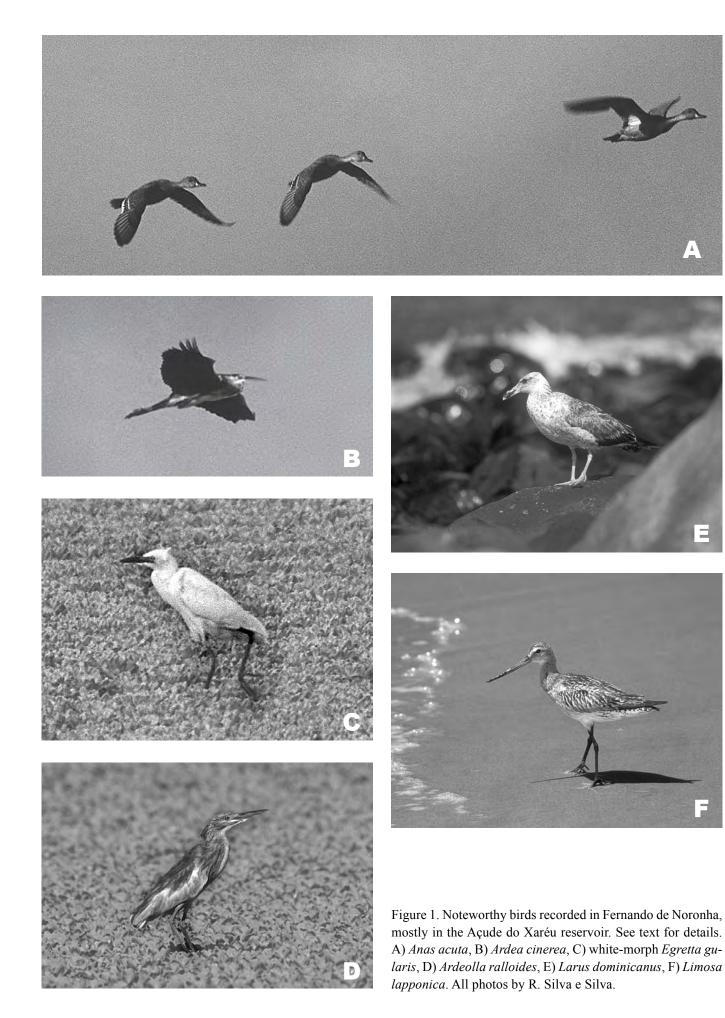
Fernando de Noronha is the sole source of Brazilian records of some Palearctic species such as *Ardea purpurea*, *Egretta gularis*, *Ardeola ralloides*, *Platalea leucorodia*, *Anas acuta*, and *Numenius* [*phaeopus*] *phaeopus* (Olson 1982, Nacinovic and Teixeira 1989, Ebels 2002, Schulz-Neto 2004), some apparently represented by multiple visits, making the site a prime example of transatlantic vagrancy. While studying birds in the island we found some of the above species plus others not previously recorded there that may represent the same phenomenon. Other records seem to represent instances of overshooting by migrant species coming from North America. All records described below have been documented by photographs and represent either new ones for Brazil or the first ones for Fernando de Noronha.

Vagrant Pintails *Anas acuta* in Brazil have been recorded in Fernando de Noronha (eight birds in eclipse plumage at Açude do Xaréu in the second week of December 1988, Antas *et al.* 1992) and Rio de Janeiro (an escapee?; Sick 1997). *Anas acuta* is widespread over North America (Greenland, Alaska and Canada south to California and Colorado) and northern Eurasia (Iceland and Scandinavia west to Siberia). American birds winter over southern North America and Central America south to Colombia, while eastern populations migrate to Africa, western Europe, the Mediterranean and most of tropical Asia (Madge and Burn 1988, Kear 2005). Between 23 and 27 November 2004, and again on 3 December, the same group of three brownish birds (Figure 1A) with light blue bills was seen in the largest water reservoir of Fernando de Noronha (Açude do Xaréu), a man-made lake subject to occasional dry-ups during the dry season. Pictures of the flying birds show that one has a blackish speculum bordered by two white stripes, as in female *A. acuta*, and that in the other two the upper stripe is more cinnamon, as in male birds. One of the latter shows a whitish neck contrasting with a faded chestnut head, as in an adult male entering eclipse.

Lone, wholly grey *Ardea* herons were recorded at Açude do Xaréu on 11 August 2000 (together with one *Ardea alba*) and 6 February 2003. Then, on 4, 5 and 10 September 2003 we sighted a clearly immature *Ardea* heron in the Açude do Xaréu (Figure 1B). The surface of the reservoir was almost completely covered by floating *Pistia stratiotis* but for small open ponds near the margins used by the bird and some *Nycticorax nycticorax* for fishing (the reservoir has introduced tilapia *Oreochromis niloticus* and mosquitofish *Gambusia affinis*, plus toads *Bufo schneideri* and tree-frogs *Scinax* cf. *similis*). The same bird was seen several times and photographed on 10 September, but was not found afterwards. It was very wary and did not allow a close approach.

The heron was mostly blue-grey (like a very worn adult Little Blue Heron *Egretta caerulea*) with black flight feathers (but no shoulder patch) visible during flight, and whitish underparts with sparse dark streaks. The face, cap and dorsal part of the neck were bluish-grey (the cap somewhat darker according to the light), contrasting with the white throat and ventral part of the neck. This was separated by longitudinal bands of dark streaks that continued into the chest.

Again, on 23, 25 and 27 November, and on 3 December 2004, a similar *Ardea* was seen several times at Açude do Xa-



réu. We believe the birds were immature Grey Herons *Ardea cinerea*, as immature *A. cocoi* and *A. herodias* lack the bluish ("cinereous") tinge in the upperparts, being more brownish, especially on the neck. Also, the observed bird lacked any rusty brown on its upperwing and upperparts, or chestnut thighs, a character to be expected in *A. herodias*. There is only one published record of *Ardea cinerea* in Brazil, based on a ring from a bird ringed in France and recovered in Pará (Sick 1997). Nevertheless there are several records from the Caribbean (Trinidad, Barbados, Martinique; Ebels 2002). The records from Fernando de Noronha show it is present almost every year in small numbers.

The sole Brazilian record of *Egretta gularis* was made in Fernando de Noronha in November 1996 at the mangroves of Sueste Beach (Schulz-Neto 2004), but no documentation was made available. One white-morph Reef Egret *Egretta gularis* was present at Açude do Xaréu on 25 November 2004 (Figure 1C). It was along with 10 *Nycticorax nycticorax*, four Whimbrels *Numenius phaeopus*, 25 Turnstones *Arenaria interpres*, 18 Golden Plovers *Pluvialis dominica*, seven Grey Plovers *P. squatarola*, 20 Cattle Egrets *Bubulcus ibis* (an abundant breeder in the islands), three Squacco Herons *Ardeola ralloides*, three Pintails *Anas acuta* and one Grey Heron *Ardea cinerea*.

The pictures taken show a bird with dark legs, greenishyellow lores and feet, and yellowish iris. The bill is comparatively short and robust (recalling Cattle Egret *Bubulcus ibis*) and curved downward, being dark with a paler base. The shape of the bill puts the bird apart from other egrets known from Brazilian islands (*Egretta thula* and *E. garzetta*, Bencke *et al.* 2005), while the color of the lores and legs exclude juvenile *E. caerulea*. Bill and head shape and bill and leg colors agree with *E. gularis* (Raffaele *et al.* 1998, Svensson *et al.* 2003).

Egretta gularis is widespread in western Africa, the most likely source of birds crossing the Atlantic. There it is mostly a coastal species and dark-morph birds are commonest, white-morph ones occurring mainly in Guinea, Ivory Coast, Cameroon and São Tomé (Borrow and Demey 2001, Kushlan and Hancock 2005). *Egretta gularis* is a classic example of transoceanic vagrancy, with increasing records from the Caribbean (Puerto Rico, Barbados and Santa Lucia; Raffaele *et al.* 1998) and northern South America (Trinidad and Tobago; ffrench 1991, Ebels 2002).

Squacco Heron *Ardeolla ralloides* was first noticed in Fernando de Noronha on 11–13 June 1986 (Teixeira *et al.* 1987), when a single non-breeding adult was sighted, but has not been found since then. From 24 November to 3 December 2004, two to five birds were seen together at Açude do Xaréu (Figure 1D). Two birds were also seen foraging on the rocky coast by Sueste beach on 24 November, and one bird was roosting in the mangroves behind Sueste beach on 4 December. Photographed birds were in juvenile or adult winter plumage, displaying the characteristic streaked neck and lack of elongated head feathers (Svensson *et al.* 2003). One bird in the same plumage was observed at Açude do Xaréu on 5–6 October 2005. In Eurasia, nominate *Ardeolla ralloides* nests in a wide area ranging from the southern Iberian Peninsula east through the Black, Caspian and Aral seas basins, including the Caucasus and Mesopotamia. The Palearctic birds migrate to Africa, where they mingle with resident populations (the ones in tropical Africa considered a different taxon, *A. r. palludivaga*). Breeding African populations are scattered from Morocco to South Africa and Madagascar (where a recent colonist; Turner 2000), usually associating with large swamps and lake basins (Hancock and Kushlan 1984, Turner 2000). There are several instances of vagrancy (including the Atlantic islands of Cape Verde, Azores, Madeira and Canaries; Hancock and Kushlan 1984, Svensson *et al.* 2003).

The simultaneous presence of several Squacco Herons at Fernando de Noronha represents an unexpected case of transatlantic displacement and may be the first step for the establishment of a local population.

Black-crowned Night-herons *Nycticorax nycticorax* seem to have been first noticed in Fernando de Noronha in 1996 (Schulz-Neto 2004), when present in very small numbers. On 25 November 2004 there were 10 birds together at Açude do Xaréu and more were seen roosting in the mangrove patch of Baía do Sueste, suggesting a total population of a few tens of birds. The species has now obviously established in the main island of Fernando de Noronha, using water reservoirs such as Xaréu for foraging and the mangroves behind Sueste beach both for roosting and nesting, as proved by the finding of old nests and two juvenile birds in October 2005.

Compared to the more whitish birds in the mainland, night-herons in Fernando de Noronha show a noticeably darker grey ground color on the head, neck, underparts and wings, a fact that can be appreciated from color pictures. This color difference suggests Noronha birds may belong to the Old World nominate form rather than to the South American *N. n. hoactli* (see Martínez-Vilalta and Motis 1992:418 for a comparison of both forms), which would represent a successful instance of transatlantic vagrancy followed by colonization. The issue can be resolved by finding birds in full breeding plumage and recording leg color (red in African birds, pink in American ones).

What appeared to be the same juvenile Kelp Gull *Larus dominicanus* was observed and photographed several times on 2, 3 and 8 December 2004 (Figure 1E) near the main island's port (where it was fed by fishermen, moving to São José island for roosting) and, on the last day, flying over Atalaia beach, when it was followed by three Cattle Egrets. These are the first records for Fernando de Noronha. It was identified as a second year Kelp Gull by its bill being very thick throughout its length, the adult-type dark gray showing in the mantle (much too dark for *L. smithsonianus*, a species that had been considered based on the length and shape of the bird's bill) and the legs developing the characteristic olive-gray look of adult Kelps. While adult Kelps show much black on the upperparts, the first set of adult-like feathers on the upperparts are often darker gray rather than black (Martin Reid *in litt*.

2005; Olsen and Larsson 2002). In Brazil, Kelp Gulls normally range north only to Espírito Santo (Sick 1997), but there are many records from the Caribbean and North America as far north as Maine, and a breeding population is established in Louisiana (Olsen and Larsson 2002).

Whimbrel Numenius [phaeopus] phaeopus from Eurasia were first recorded in Fernando de Noronha by Olson (1982), who collected specimens. While North American Whimbrels Numenius [phaeopus] hudsonicus are regular migrants to Brazil, with large numbers appearing along the northern and northeastern coasts (Morrison and Ross 1989), the nominate, white-rumped form has been little recorded from the country. Zink *et al.* (1995) suggested *hudsonicus* might be considered a different species from Eurasian populations, but this view has not been implemented so far (AOU 1998).

On 15 September 2004 one white-rumped Whimbrel was briefly seen foraging along the rocky shore of Santo Antonio peninsula. At least 12 dark-rumped birds were also using the same area and roosting on the Caieira dunes of the peninsula. Lone birds were also recorded by the road next to the airport and Hotel Dolphin in October 2005.

On 19 October 1999 two Bar-tailed Godwits *Limosa lapponica* were observed foraging along Sueste beach with 35 Turnstones and two Sanderlings *Calidris alba*. A lone Bar-tailed Godwit in winter plumage was later recorded on 1–2 December 2004 at Sueste beach (in the first day together with two Sanderlings and two dark-rumped Whimbrels), and again on 4 December at Conceição beach (with two Sanderlings and five Turnstones).

The pictures taken in 2004 (Figure 1F) show a juvenile bird with a broad buff supercilium and a streaked appearance given by the blackish-brown feathers edged with buff on the back and wing-coverts. Adult birds in winter plumage lack the buff overall tinge of juveniles (Rosair & Cottridge 1995). The barred tail is not found in Hudsonian Godwit *Limosa haemastica*, Black-tailed Godwit *L. limosa* and Marbled Godwit *L. fedoa*, ruling these species out. Marbled Godwits also have striking cinnamon wingbars and underwings when flying, and Back-tails lack streaked back (Hayman *et al.* 1986).

Limosa lapponica breeds in western Alaska and across northern Eurasia from Siberia to Scandinavia. In the Americas it is a scarce migrant, and few wintering birds are found south to the Virgin Islands, Venezuela (Rosair & Cottridge 1995). In Brazil one bird was recorded in Fernando de Noronha at Leão beach on 16 December 1988, two birds in a small water reservoir near IBAMA's headquarters (Açude da Ema) in November 1996 and two birds at Atol das Rocas in February and March 1990 (Antas *et al.* 1992, Schulz-Neto 2004). No documentation was made available.

The presence of man-made water reservoirs in Fernando de Noronha helps transatlantic migrants (mostly waterbirds) to stay in the islands and, maybe, to attain adequate condition for return flights. This is a novel ecological feature that, coupled with lessened poaching (intensive before the setting of Fernando de Noronha National Park), may also be the key for species such as *N. nycticorax* and *B. ibis* to settle islands with very limited foraging and nesting habitats. If other species, such as *A. ralloides*, will manage to settle at Fernando de Noronha remains to be seen. Unhappily, the possibility of a Neotropical population of *A. ralloides* establishing in the islands has been compromised, as rains were very scarce in 2004 and 2005. In October 2005, all smaller reservoirs dried out and only Açude do Xaréu had some water, but with only 5% of its capacity remaining in early 2006. The island's administration makes no attempt to manage the reservoirs in a sensitive way, which contributes to decimate the populations of aquatic species and all bird species relying on them.

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