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On the occurrence of the Eurasian Kestrel Falco tinnunculus Linnaeus, 1758 and Little Egret Egretta garzetta (Linnaeus, 1766) in the Archipelago of São Pedro e São Paulo, Brazil

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RESUMO: Sobre a ocorrência do Peneireiro-de-dorso-malhado Falco tinnunculus Linnaeus, 1758 e da Garça-branca-pequenaeuropéia Egretta garzetta (Linnaeus, 1766) no Arquipélago de São Pedro e São Pedro e São Paulo, Brasil. Por ocasião das expedições científicas 243 e 275 ao Arquipélago de São Pedro e São Paulo diversas aves foram fotografadas casualmente. Duas espécies do Velho Mundo, com apenas um registro prévio para o Brasil, foram observadas, uma fêmea jovem de Falco tinnunculus e dois indivíduos de Egretta garzetta. Adicionalmente, os pescadores que auxiliam as pesquisas na região relataram a ocorrência concomitante de pelo menos sete indivíduos da pequena garça no local. Para se compreender com clareza que processos podem trazer estas espécies do Velho Mundo para o território brasileiro faz-se necessário um acompanhamento mais preciso desses eventos.

PALAVRAS-CHAVE: Ardeidae, Falconidae, Arquipélago de São Pedro e São Paulo, Novos Registros.

KEY-WORDS: Ardeidae, Falconidae, St. Peter and St. Paul Rocks, New Records.

The Archipelago of São Pedro e São Paulo (St. Peter and St. Paul Rocks) is an isolated group of islets lying on the mid-Atlantic ridge just north of the equator (00°55′01"N, 29°20′44"W). Of volcanic origin, these islets are approximately 1000 km offshore from Natal, Rio Grande do Norte State, the nearest continental city. The archipelago has a total area of 1.7 km² and the vegetation is scarce without permanent sources of freshwater (Both and Freire 2004, Pinheiro and Lins-Oliveira 2006).

The archipelago has a scientific station which is occupied, normally, by four researchers that are changed in regular periods of 15 days. The present study was carried out in two expeditions: expedition 243 from October 21 to November 13 of 2007 and expedition 275 from February 18 to March 5 of 2009. These expeditions aimed to study the benthic fauna of the archipelago and during these periods several birds were photographed casually. Within the birds photographed we found the Eurasian Kestrel *Falco tinnunculus* Linnaeus, 1758 (expedition 243) and the Little Egret *Egretta garzetta* (Linnaeus, 1766) (expedition 275).

The Eurasian Kestrel *Falco tinnunculus* is an Old World bird known to occur throughout Europe, North

Africa, and Asia including Japan and has been categorized as casual or accidental in North America (AOU 1998, Hull *et al.* 2008). In the New World *F. tinnunculus* has 12 records for the North America (Pranty *et al.* 2004, Hull *et al.* 2008). In the Central America this species was recorded in Lesser Antilles. In the South America it was recorded in Trinidad and Tobago, French Guyana and Brazil (Bencke *et al.* 2005 and references therein, Kenefick and Hayes 2006, Renaudier 2009). The first Brazilian record was a second winter male seen in the main islet of the Archipelago of São Pedro e São Paulo (Benke *et al.* 2005).

The specimen of *F. tinnunculus*, photographed in the present study, was observed in the main islet of the archipelago also; it was very weakened and showed signs of dehydration and malnutrition (Figure 1A). The kestrel died two days after arriving in the archipelago, and unfortunately was thrown into the sea by the support team before we could collect the specimen. The specimen observed in the Archipelago of São Pedro e São Paulo is the second Brazilian record.

Diagnostic characters that separate *F. tinnunculus* from its congeners are discussed in detail by Ferguson-Lees and Christie (2001) and del Hoyo *et al.* (1994).

Unlike most hawks, the Eurasian Kestrel displays a sexual color dimorphism, with males having less black spots and streaks, as well as a blue-grey cap and tail. In the females, the tail is brown with black bars. This fact makes us to believe that the observed specimen is a female, probably a young that can be migratory (Ferguson-Lees and Christie 2001) (Figure 1A). Also, the adult females have the dorsal side of the tail ash-gray to brownish gray with often incomplete blackish brown bars, and the juvenile females are reddish brown with noticeably wider brown bands (Clark and Schmitt 1999, Hull et al. 2008). Falco tinnunculus is easy to distinguish from other kestrels except for females and juveniles, which are very similar to the Lesser Kestrel F. naumanni Fleisher, 1818. The most significant difference between females of these two species is the white claws of the F. naumanni, black in F. tinnunculus (Figure 1A). Other differences between these two species, like the smaller size or the slightly shorter wings and tail of F. naumanni (Ferguson-Lees and Christie 2001), could not be applied here.

The Little Egret Egretta garzetta is commonly found in southern Europe, Africa and Asia, and has been observed more than 50 times in the Americas (Murphy 1992, Hayes and White 2001). However, in Brazilian lands this is the second documented record of E. garzetta. The first Brazilian record was a postjuvenile seen in the main islet of the Archipelago of São Pedro e São Paulo (Benke et al. 2005). Much has been said about the occurrence of this species in Brazil (Benson and Dowsett 1969, Sick 1997, Both and Freire 2004) but these records were not documented and seem to be questionable (Bencke et al. 2005:127). According to the fishermen, who support the research activities, a total of seven specimens of E. garzetta were seen occupying the islets during a period of about ten days. In the occasion of our arrival, only two remained at the archipelago and were photographed (Figure 1B). After the ending of the expedition 275 the two observed egrets stayed in the archipelago. The egrets were observed fishing in the pools several times during the day. They looked very active and healthy, and were not disturbed by other resident birds of the islets.

Diagnostic characters that separate *E. garzetta* from its congeners are discussed in detail by Murphy (1992) and Massiah (1996). Characteristics that lead us to believe that the individuals observed were little egrets were, mainly, the basic-plumage, a greenish lore, yellowish feet and dark legs, and a flat forehead (Figure 1B), the latter being successfully used to identify specimens of *E. garzetta* from relative species (Murphy 1992)

This work represents, only, the second record of *E. tinnunculus* and *E. garzetta* in the Brazilian territory, although both have been recorded for other places of the





FIGURE 1: A. Eurasian Kestrel *Falco tinnunculus* Linnaeus, 1758 photographed in the Archipelago of São Pedro e São Paulo between October 21 and November 13 of 2007. Photo by Cristina Engel. B. Little Egret *Egretta garzetta* (Linnaeus, 1766) photographed in the Archipelago of São Pedro e São Paulo between February 18 and March 5 of 2009. Photo by A. P. Pinheiro.

New World. Nevertheless, we would like to emphasize that, according to the fishermen, *E. garzetta* could be found in a greater number and frequency on the archipelago. It is fundamental to study with precision these events to found a possible pattern in these occasional migrations. This will allow us to understand the mechanisms bringing this non typically trans-Atlantic species to Brazil.

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REFERENCES

- AOU [American Ornithologists' Union]. (1998). Check-list of North American birds, 7th ed. Washington, D.C.: American Ornithologists' Union.
- Bencke, G. A.; Ott, P.; Moreno, I.; Tavares, M. and Caon, G. (2005). Old World birds new to the Brazilian territory recorded in the Archipelago of São Pedro and São Paulo, equatorial Atlantic Ocean. *Ararajuba*, 13(1):126-129.
- Benson, C. W. and Dowsett, R. J. (1969). Correspondence. *Auk*, 86:806.
- Both, R. and Freitas, T. O. R. (2004). Aves marinhas no arquipélago de São Pedro e São Paulo, p. 193-212. In: J. O. Branco (org.) Aves marinhas e insulares brasileiras: bioecologia e conservação. Itajaí: Editora da UNIVALI.
- **Ferguson-Lees, J. and Christie, D. A (2001)**. *Raptors of the world.* Boston: Hougthon Mifflin Harcourt.
- Hayes, F. E. and White, G. L. (2001). Status of the Little Egret (*Egretta garzetta*) in Trinidad and Tobago. *El Pitirre*, 14(2):54-58.
- del Hoyo, J.; Elliot, A. and Sargatal, J. (1994). Handbook of the birds of the world. Vol. 2. New World Vultures to Guineafowl. Lynx Edicions, Barcelona.

- Hull, A. C.; Armer, M. G.; Sturgeon, B. J. and Fish, A. M. (2008). First documentation of a Eurasian Kestrel in California. *West. Birds*, 39:184-187.
- Kenefick, M. and Hayes, F. E. (2006). Trans-Atlantic vagrancy of Paleartic birds in Trinidad and Tobago. J. Carib. Ornithol. 19(2):1-72.
- Massiah, E. (1996). Identification of Snowy Egret and Little Egret. *Birding World*, 9(11):434-444.
- **Murphy, W. L.** (1992). Notes on the occurrence of the Little Egret (*Egretta garzetta*) in the Americas, with reference to other Palearctic vagrants. *Colonial Waterbirds*, 15(1):113-123.
- **Pinheiro, A. P. and Lins-Oliveira, J. E. (2006)**. Reproductive biology of *Panulirus echinatus* (Crustacea: Palinuridae) from São Pedro and São Paulo Archipelago, Brazil. *Nauplius*, 14(2):89-97.
- Pranty, B.; Kwater, E.; Weatherman, H. and Robbinson, H. P. (2004). Eurasian Kestrel in Florida: First record for the southeastern United States, with a review of its status in North America. North Amer. Birds, 58:168-169.
- Renaudier, A. and le Comité d'homologation de Guyane. (2009). Les oiseaux rares en Guyane en 2005-2006-2007. Rapport du Comité d'homologation de Guyane, 1-29.
- Sick, H. (1997). Ornitologia brasileira. Rio de Janeiro: Nova Fronteira.