Estimating population size of *Phaeton lepturus* in Fernando de Noronha Archipelago (Northeast Brazil)

L. Mestre, A. Amaral, E. Mariano, J. Rechetelo and A. Roos

Centro Nacional de Pesquisa e Conservação de Aves Silvestre (ICMBio) Br 230 km 10, Floresta Nacional da Restinga de Cabedelo, 58310-000, Cabedelo, PB, Brazil
Email: luiz.mestre@gmail.com

This study reports the estimated population size of the white-tailed tropicbird (*Phaeton lepturus*) by boat transects and bird counting around the *Fernando de Noronha* (FN) Archipelago, Northeast Brazil. Despite its large tropical range, *P. lepturus* occur in few localities in the Brazilian territory, breeding only in FN. For this reason, it is considered as endangered species in the country. FN is a volcanic archipelago with 21 islands; breeding sites for two species of *Phaethon* (*P. lepturus* and *P. aethereus*). The population census of *P. lepturus* were made during 19 to 30 October 2009 by counting the birds in two boat trips around the islands, and in other 10 sites were we registered their occurrence. These boat transects were accomplished between 6:00 and 12:00 h, and were divided by 29 (1km) sectors. No *P. aethereus* were observed in the expedition. We observed 57 and 68 individuals of *P. lepturus* in the two boat trips. We found 72% of sectors around the islands with their presence. We observed no aggregations of individuals, and most of them in pairs. We also measured and banded 24 individuals in Chapéu island. Including the individuals counted in the other 10 independent sites (sampled separately) and other 25 nests (about 50 breeding individuals), we conclude about 150 individuals of *P. lepturus* occurring in FN Archipelago in this period. Published data reports about two times this population size. Therefore, it is important to consider migration of individuals in other seasons. We emphasize the need of continued studies addressing detailed annual samplings in these sites.