# [SP8] REAL TIME RT-PCR DETECTION OF AVIAN INFLUENZA VIRUS AND NEWCASTLE DISEASE VIRUS IN PELAGIC BIRDS FROM FERNANDO DE NORONHA ARCHIPELAGO, BRAZIL

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The Fernando de Noronha archipelago ($3^0$54'S $32^0$25'W), 340 km off the Northeastern Brazilian coast, hosts the largest seabird breeding colonies of the tropical South Atlantic. Among these, a small number of Audubon's Shearwaters (*Puffinus iherminieri*), Red-billed Tropicbird (*Phaeton aethereus*) and White-tailed tropic birds (*Phaeton lepturus*) nest in rock and cliff cavities. Due to the difficulty in capturing pelagic birds (some of which are endangered in Brazil), particularly in protected areas, little is known on the circulation of viruses in these animals. Although these birds do not have migratory habits, they are frequently in contact with others that do migrate over large distances, such as the Cattle egret (*Bubulcus ibis*) which migrates between the African and South American continents. The direct contact amongst these birds may introduce pathogens of economic, public health or conservation importance, such as the influenza and Newcastle disease viruses. The objective of this study was to investigate the occurrence of influenza virus type A and paramyxovirus type 1 (Newcastle Disease Virus) in pelagic birds at the Fernando de Noronha archipelago, Pernambuco, Brazil. Oral and tracheal swabs were collected from 52 birds (47 *Phaeton lepturus*, 3 *Puffinus iherminieri*, 2 *Phaeton aethereus*) in August and November 2010. Real-time reverse transcription PCR (qRT-PCR) revealed no positive samples for the examined viruses. The surveillance and early detection of these pathogens in Brazil is important to assure the rapid implementation of control and prevention measures, as well as appropriate conservation actions.