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**Seabirds on Agalega (Indian Ocean) – survival of boobies and Frigate-birds  
into the 1870s, with comments on other species**

*by*

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In a recent discussion on boobies *Sula* spp. in the Mascarene-Agalega area of the Western Indian Ocean (Cheke 2001), I repeated an earlier statement (Cheke & Lawley 1983) that there were no records of the Red-footed Booby *S. Sula* colony on Agalega after 1848. I have since come across two accounts of passengers on ships passing close to Agalega who saw boobies later in the 19<sup>th</sup> century.

In early 1867 Edward Newton, Colonial Administrator and Ornithologist, returned home to UK on leave from Mauritius. He travelled via the Seychelles where he did what turned out to be his last piece of active field-work in the Indian Ocean. His bird-watching diaries, for long uncatalogued with his brother Alfred's papers in the Zoology Department at Cambridge University [1], have been transferred to the University Library's manuscript department and are now available for study. While transcribing the diaries I found that, en route to the Seychelles on the Messageries Imperiales Steamer *Emirza*, on February 3, he passed Agalega, making the following brief note: "Saw Frigate-birds, Sooty terns, boobies abreast of Agalega which we passed about 20 miles on starboard but did not see it".

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A few years later, Nicolas Pike, then US Consul in Mauritius, travelled with Governor Sir Arthur Gordon on the frigate HMS *Forte* to the Seychelles, which he toured assiduously, collecting many natural history specimens. En route, on 22 August 1871, he made the following observations (Pike 1872): “On Tuesday about 3.00 p.m we sighted Agalega, but it lies so low, it is not observed till near. We ran within two miles of it, hove to, and fired a gun, but saw no signs of houses or people. The sea was breaking roughly over the coral reefs which nearly surround the island and extend some distance from the shore: so we did not land, which I much regretted, for I wished to obtain some of the wild partridges, guinea fowls [2] and peacocks [3] said to be native there, as well as other things of great interest to me. ... We constantly saw Frigate-birds and others flying to Agalega from the sea to rest for the night, and two species of Paille-en-queue or Tropic bird. This evening a booby alighted on the main boom, and one of the sailors crept cautiously along it and caught it for me”.

The seabirds were apparently flying to and from ‘some extensive banks’ which they passed over soon after, i.e. Fortune Bank. Gordon (1893), in his account of the trip, reported that over ‘the banks’ “Frigate-birds, and tropic birds (Paille-en-queue) were flying about in plenty, and we saw several sperm whales close to the ship”. Fortune Bank is near Coetivy, and a third closer to the now extinct seabird colony on Ile Plate than to Agalega, but it is likely that the seabirds then breeding on Agalega would have fed there.

Although both were experienced bird-watchers, neither Newton nor Pike mentioned what species of booby they saw, however the only kind recorded for Agalega is the Red-Footed Booby (Cheke & Lawley 1983, Guého & Staub 1983, Cheke 2001). This species, in company with the equally unidentified Frigate-birds, were clearly present into the early 1870s. The main seabird colony on Agalega is known to have been deliberately destroyed by fire in 1943, but there is no evidence to suggest that boobies and frigates still survived at that date - the birds in the colony appear to have been mainly Sooty Terns *Sterna fuscata*, but also included Red-tailed tropic birds *Phaethon rubricauda* and probably Common Noddies *Anous stolidus* (Cheke & Lawley 1983). Staub (*in* Guého & Staub 1983) noted that boobies and frigates were prized as food and were probably wiped out through overcropping by the inhabitants during the 19<sup>th</sup> century. The then manager of the Agalega coconut plantations, a Mr Feuillerhade, collected birds’ eggs for Edward Newton in the mid-1870s, but, frustratingly, Newton described the seabirds as “all well-known species” without further detail (Newton 1883). He appears not to have retained the eggs as

they are not included in his substantial Mascarene and Madagascar egg-collection in the Zoology Museum at Cambridge (Cheke & Lawley 1983, M de L Brooke, pers. comm. 2001).

If Pike correctly identified both species of tropic-bird (*Phaeton rubricauda* & *P. lepturus*), it would constitute the only positive record of the White-tailed Tropic-bird at Agalega. The Red-tailed Tropic-bird was a common breeder until 1943 when the seabird colonies were torched (Dussercle 1949, Cheke & Lawley 1983, *contra* Guého & Staub 1983, who believed them extinct in the 19<sup>th</sup> century). Both species were well-known to Pike from his explorations in Mauritius and neighbouring Round island (Pike 1873b).

Previous investigators were unable to establish which frigates nested on Agalega (Cheke & Lawley 1983, Guého & Staub 1983). In the Paris museum there is a Lesser Frigate-bird *Fregata ariel* presented by 'Delisle' in 1837 as from 'Isle de France' (i.e. Mauritius (C Jouanin, *in litt.* 2001). I argued earlier (Cheke 2001) that this 'Delisle' was actually Théodore Delisse, and that the birds he gave to the museum were in fact collected on Agalega, which he visited with Bojer in 1835. A second Paris specimen of *ariel*, that may be of the same origin, is listed as from 'Deliste [sic] 1837' in the accession records, but the label on the mount reads 'ile Maurice, Plée 1837'. Plée sent two lots of specimens to the Paris Museum, in 1820 and 1828, both from Martinique - so the label is clearly in error (Jouanin, *in litt.*). The Greater Frigate-bird *F. minor* may also have nested; the surviving or recently extinct western Indian Ocean colonies south of the equator all have both species nesting together (e.g. Feare 1984; for details see Le Corre & Jouventin 1997 (Europa), Le Corre 1996 (Tromelin), Staub & Guého 1968 (St Brandon), Diamond 1994 (Aldabra), Symens 1999 (Chagos). The St Brandon colony is in serious decline (Swinnerton *et al.*, 1996), and frigates no longer breed on Tromelin (Le Corre 1996). The composition of colonies that died out earlier is not known for certain: frigates formerly bred on the Glorieuses (Stoddard 1984: only *F. minor* confirmed), Rodrigues (Cheke 1987, 2001: only *F. ariel* confirmed) and Mauritius (Cheke 1987: species unknown). Frigates are said by local fishermen to breed on Magnougni Island off Moheli (Comores); both species have been seen there, but breeding has not been proved (Louette 1988). As noted for the boobies, there are no land-based records of Frigates breeding on Agalega after 1848 (Cheke & Lawley 1983).

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## Notes

1. Alfred Newton was professor of Zoology at Cambridge for many years, outliving his younger brother Edward and acquiring the latter's papers when he died in 1897 (see obituary in *I bis* (7) 3: 474-479 (1897) & *Dictionary of Mauritian Biography* pp 58-59 (1941). Edward's diaries are held as part of the Alfred Newton Papers in Cambridge University Library, erroneously labelled: "Alfred Newton's Bird-watching Diaries/ Journals" - though I hope this has now been corrected.
2. The partridges are supposed to have been *Margaroperdix striata* from Madagascar (Cheke & Lawley 1983); these and Guinea-fowl *Numida meleagris* (neither, of course, native!) died out in the early 20<sup>th</sup> century following the introduction of rats in 1891 and subsequent release of cats and extensive use of hunting dogs in attempting to control them (Guého & Staub 1983, Cheke & Lawley 1983).
3. I previously dismissed the references to 'peacocks' as a mistranslation into English of the French/Creole 'pintade' (= Guinea-fowl) in reports dated 1885 and 1893 (Cheke & Lawley 1983); Staub did not mention them at all (Guého & Staub 1983). Pike's remark is 14 years earlier than the other reports, and is in addition to Guinea-fowl. This makes it more likely that *Pavo pavo* was indeed introduced to Agalega and survived for at least 25 years, perhaps much longer. Gordon (1893: vol 2, p 203), reporting the same trip, also referred to them: "I was very sorry not to land ... we might have had a chance of seeing wild guinea-fowl and wild peacocks, said to abound on the island".