

THE NIDIFICATION OF CERTAIN TERNS.

BY W. J. F. WILLIAMSON, F. Z. S., M. B. O. U.

I recorded in Vol. II of this Journal (p. 63) that I had obtained the eggs of *Sterna bergii* (the Large Crested Tern), *S. melanauchen* (the Black-naped Tern), and *S. anæsthesia* (the Panayan Tern) on some islets in the Inner Gulf of Siam in June and July 1916. Nearly all of these, however, were procured by my collector in the first-named month, and he kept no record of the number of eggs in each clutch. By the time I was able to visit the locality, in the middle of July, the laying season was over, and only a few addled eggs and some chicks remained, so I was not in a position to repair the deficiency.

During 1917 and 1918, I made a point of visiting these islets again, as well as some others, and it may be of interest to record the results. The dates of my visit were:—2nd June, in the former year, and 9th May, in the latter.

STERNA BERGII (subsp.?). The Large Crested Tern.

In 1917 I obtained 9 eggs of *S. bergii*, laid singly on the bare shingle of a beach at one end of a small islet, near Koh Rin—not the slightest attempt having been made by the birds to scrape out any sort of a depression or hollow to receive the eggs. In this respect my experience agrees with that of Colonel Butler, quoted in Hume's "Nests and Eggs of Indian Birds" (2nd Edition, Oates (1890), p. 297). Despite their large size, and the promiscuous way in which they were laid, these eggs required to be carefully looked for, as their colouration and markings (varying from a dead to a creamy white, with spots, blotches and streaks of reddish brown to dark brown) exactly matched those of the white streaky pebbles on which they were laid. As a consequence of this, one or two eggs were, unfortunately, trodden on inadvertently. All those obtained were perfectly fresh.

In 1918 I collected 23 single eggs and 2 pairs on a perfectly bare, low-lying rock near Koh Chuan, some little distance further south than Koh Rin. I have already alluded to this islet (*antea*, p. 38), in connection with the record of *Anous stolidus* (the Noddy) from Siam.

The ground-colour of a number of the eggs taken in 1918 was a very pale greenish blue; but this tint fades gradually to a dead white.

There appears to be no very definite information available as to the usual complement of eggs laid by the eastern form of *S. bergii*, and the only notes on the subject, which I have been able to trace, are all very old ones. Butler (*op. cit. supra*), in describing his personal visit to Astolah Island, off the Mekran coast, Baluchistan, on 29th May 1877, states that he obtained 93 eggs in one day, all laid singly. On the other hand, a large batch collected for him about three weeks later, by (apparently) a native of the locality, were said by the man to have been "usually three in each nest."! This statement is quoted by Hume without comment, but it cannot, I think, be given any credence. It is true that Butler, in speaking of his own find, says that the number of eggs was "at that time only one.....to each pair of birds"—thus implying that, at a later date, the number of eggs might have been increased, but apparently he himself never found more than one. On the other hand, it is to be noted that Captain Shopland (also quoted by Hume), who took eggs near Akyab, states that some of them were in pairs, though he does not give any figures.

My observations would seem to show that Siamese birds usually lay a single egg, but that occasionally there are two in a clutch.

STERNA MELANAUCHEN. The Black-naped Tern.

As regards *S. melanauchen*, I obtained 37 single eggs and 26 pairs in 1917—all of them quite fresh. About a week later, I had 4 single eggs and 3 pairs sent to me by a reliable European friend from a small islet near Koh-Si-Chang (in the same neighbourhood), all of which were more or less incubated. The number procured on the second occasion is somewhat small, but the proportion of double eggs to single ones is almost exactly the same as that of the very much larger number obtained by me, *viz.*, about 41 or 42 per cent. of the total assignable to each pair of birds. In 1918 I obtained very few eggs of this species, which appears to lay somewhat later than *S. bergii* and *S. anaetheta*—the actual number collected being 3 singles and 5 pairs. Osmaston [Journ. Bombay N. H. S., XVII (1906), p. 491] in writing of Andaman birds, observes that they lay "one or two eggs." This remark appears to be correct, as far as it goes. In Siam, I should say, about half the clutches contain two eggs, and the remainder one only.

STERNA ANÆSTHETA. The Panayan Tern.

The most numerous of the three species of tern which breed on the islets in the Inner Gulf of Siam is *S. anæsthetæ*, of the eggs of which I procured 89 single specimens and 1 pair in 1917—several of the former being in an advanced state of incubation. In 1918 the men with me collected several scores of eggs—all of which were singles, with the exception, again, of 1 pair. I kept the latter, and a selection of 24 of the single specimens. Butler, quoted by Hume (*op. cit.*, p. 300) says, with regard to one lot of eggs of this bird taken for him by some fishermen in the Persian Gulf, in June 1878, that the nests contained “from two to four eggs each.”! Later he remarks, in connection with a second set of eggs obtained in the following month, that there was “seldom more than one egg in a nest, sometimes two but never more,” while in a subsequent note he observes, “lays but one single egg.” Hume makes no comment on these contradictory statements, and there is nothing to show whether either of the last two was based on Butler’s personal observations or not. Judging from my own experience, it would appear that (at all events so far as Siam is concerned) a single egg is the usual complement, while a pair is laid only very occasionally.

As regards the ground-colour of the eggs, Hume remarks (p. 301), that it seems “to vary from nearly pure white to a rich pinky stone-colour.” A number of my eggs are of a pale bluish tint, and two of them are entirely unmarked with the usual specks, spots and blotches of reddish brown or burnt sienna brown, with underlying paler markings. The ground-colour of the great majority of the eggs in my collection varies, however, from a pale stone-colour to almost a café-au-lait tint.

