NOTES ON SOME BIRDS' EGGS COLLECTED BY SIR CHARLES BELCHER IN NYASALAND.

By C. W. BENSON.

Sir Charles Belcher has most kindly sent me a complete list of clutches of birds' eggs in his collection taken in Nyasaland. I understand that these, together with all his other African eggs, are to be presented to the Coryndon Museum. This list was sent to me in connection with the preparation by myself of a check-list of the birds in Nyasaland, to include brief statistical data as to breeding seasons. The data below seem worthy of preliminary publication. They were either not included in Sir Charles' book, "The Birds of Nyasaland" (1930), or correct or amplify information therein. It will not be possible to include these details in the check-list. All measurements below are in millimetres.

Gallinula angulata Sundevall. Lesser Moorhen.

Eggs attributed by Belcher (1930, p. 68) to Porphyrula alleni are now considered by Sir Charles to be attributable to G. angulata. For further details, see Benson "The bird-life of Lake Nyasa," in MS for Nyasaland Journal.

Chrysococcyx spp.

The following data correct and amplify those given by Belcher (1930, pp. 109-110). With the further experience he has subsequently gained, Sir Charles feels sure that the eggs attributed below to C. caprius, at any rate, are correctly identified. In each case there was one egg only of the cuckoo. These records should be read in conjunction with the notes by Belcher, "Nature in East Africa", Bull. E.A. Nat. Hist. Soc., ser. 2, no. 2, 1949, pp. 19-20.

Chrysococcyx caprius (Boddaert), Didric Cuckoo.

- (a) Size 22 x 15, uniform light blue, taken by R. C. Wood, from nest of Euplectes sp., no eggs of host, Chiromo, February, 1918.
- (b) Size 22 x 14, very dull light blue, faintly spotted, with C/2 Anaplectes melanotis rubriceps (Lafresnaye), unspotted, Nyambadwe, Blantyre, 7th November, 1921.
- (c) Size 22×14.5 , well spotted on greenish blue, with C/I ploceus n. nigriceps (Layard), Chinteche, 31st October, 1926. The latter, size 23.25×14.75 , is clearly of the same general type as the cuckoo's egg, but differs in shade of ground-colour and markings.
- (d) Size 21 x 14, very dull light blue, from nest of Anaplectes melanotis rubriceps, with 2 eggs of the host, Nyambadwe, 7th November, 1921.
- (e) Size 22 x 14.25, uniform light blue, taken by R. C. Wood, with C/2 Euplectes orix sundevalli Bonaparte, Chiromo, 15th February, 1917.
- (f) Size 21 x 15, with C/2 Euplectes hordeacea sylvatica (Neumann), Nyambadwe, Blantyre, 14th April, 1924. Sir Charles remarks that it is a "fatter" egg than is usual with this cuckoo, and immaculate, of a more greenish blue than eggs of the host.

I may mention that I collected near Salima, 20th February, 1950, an egg which is probably attributable to C. caprius. It measured 23.5 x 13.5. It is glossy white, plentifully faeckled all over with reddish brown and some underlying greyish lilac. It was found on the ground, immediately below a nest of Anaplectes m. rubriceps. containing a single still naked young bird. It contained an only slightly developed embryo. It will be presented in due course to Captain C. R. S. Pitman.

Chryscococcyx klaasi (Stephens). Klaas's Cuckoo.

Size 17 x 15, uniform dark turquoise blue, with C/2 hatching of Euplectes orix sundevalli, Port Herald, 26th February, 1926. Sir Charles remarks that he kept no record of the colour of the host's eggs, but that the cuckoo's egg is noticeably darker than any of some fifty eggs of E. orix that he has.

Chrysococcyx cupreus intermedius Hartlaub. Emerald Cuckoo.

Single eggs from two nests of Chalcomitra senegalensis gutturalis (Linnaeus), attributed by Belcher (1930, p. 110) to C. klaasi, measurements not 20 x 13.5 as given previously, but 19.5 x 12.5 (Nyambadwe) and 19.75 x 13.5 (Ncheu). Sir Charles emphasises again that these eggs are just like each other, and unlike normal Chalcomitra eggs. They are pointed, like eggs of C. caprius, yet too small for that species, and too long for C. klaasi. They may therefore be attributable to C. cupreus. Caprimulgus tristigma lentinginosus Smith. Frekled Nightjar.

C/2, Zomba, 31st October, 1923.

Size 31 x 21.5, blotched with grey on white ground; thus agreeing well with the description by Benson, "Ibis", 1947, p. 566. There is no other locally breeding Caprimulgus to which this clutch could be attributed. This is only the second clutch of C. tristigma recorded from Nyasaland.

Indicator spp.

The following data correct and amplify those given by Belcher (1930, pp. 163, 167-8, 171-2).

Size a, probably Indicator variegatus Lesson. Scaly-throated Honey-guide.

C/3, with C/3 Buccanodon w. whytii (Shelley) and C/1 Indicator minor (see below), Blantyre, 16th October, 1921.

C/1 with C/5 Buccanodan w. whytii, Blantyre, 16th October, 1921.

C/I with C/2 Dendropicos fuscescens camacupoe Bowen, Nyambadwe, Blantyre, 22nd September, 1926.

Sir Charles considers that the first-mentioned clutch in each case above, the eggs of all of which measure approximately 22.75×18 , is attributable to I. variegatus, a species, which although he states in his book he did not meet in Nyasaland, he informs me he did in fact collect near Blantyre. He points out that these eggs are not so large as certainly parasitic eggs from Kenya Colony, presumed to be of I. indicator (Sparrman), measuring 24.5×19 . Moreover Roberts, "Ostrich," 1939, pp. 101-5, gives $23.2-26 \times 17.8-20$ (one 23×16.8) for I. indicator, while admitting that some of the eggs he examined might be of I. variegatus, for which otherwise he gives no measurements. It may also be mentioned that Benson gives a measurement of 23.1×18.0 for an egg almost certainly of I. indicator, not of I. variegatus, see "Parasitisation of Bee-eaters" (MeropidZ) by Honey-guides Indicator spp., "Ibis", 1950, p. 478.

Size b. Indicator minor minor Stephens. Lesser Honey-guide.

C/1, 20.5 \times 17, with C/2 Campethera scriptoricauda (Reichenow), Chirimo, 4th November, 1921.

C/1, 19.5×16 , with C/3 Buccanodon w. whytii and C/3 I. variegatus, Blantyre, 29th September, 1926.

C/1, 20.25 x 17, with C/3 Buccanodon w. whytii and C/1 I. variegatus, Blantyre. 16th October, 1921 (see above).

Sir Charles agrees that these size b. eggs must be attributed to I. minor, measurements of the eggs of which Roberts, op. cit., gives as 20.3-22.5 x 16-17.9. But the possibility of their being attributable to I. exilis, which does occur near Blantyre, see Benson and Benson, "Ibis", 1948, p. 392, should not be lost sight of, though eggs of that species may be expected to be appreciably smaller. Grant and Praed, Bull. Brit. Orn. Cl., vol. 58, 1938, pp. 144-5, give wing 73-80 for the local race. (I. e. meliphilus Oberholser compared to 80/79 for I. m. minor.

C/2 Chikonje, Chiromo, 9th April, 1917.

These eggs were attributed, though doubtfully, to Nicator chloris gularis Finsch and Hartlaub, see Belcher (1930, p. 274), but Sir Charles has subsequently found them to agree closely with eggs of Telophorus dohertyi (Rothschild), which he considers is conspecific with T. quadricolor. T. q. quadricolor does occur in the Chiromo area, see Benson and Benson, "Ostrich", 1948, p. 13. Moreover, in size $(23\frac{1}{2} \times 16\frac{1}{2})$ they agree with T. quadricolor rather than N. chloris, see Roberts, "The Birds of South Africa" (1940, pp. 306, 309).

C. W. BENSON.

P.S.—At Mkhoma, Nyasaland, 22nd October, 1950, I took C/3 Lybius t. torquatus (Dumont), size 24×18 , 24.5×18 , 25×17.5 , with C/1 almost certainly Indicator m. minor, size 21×16.5 . The latter egg is more rounded and markedly glossy, the other three having hardly any gloss. All the eggs were fresh. Those of the barbet and yolk apricot-red, showing through the shells of the unblown eggs as a pinkish suffusion, whereas that of the honey-guide had yolk yellow, not showing through the unblown shell. For earlier notes on parasitisation in Nyasaland, the same two species concerned, see "Ibis", 1940, p. 430.