

85×66.5 mm. (not 3×2½ inches as given by Pollard). *Texture*.—Coarse, rough and granulated. *Shape*.—Strikingly broad and "stumpy"; both ends sharply tapered; very little difference between the wide and the narrow end. (The South African egg mentioned by Roberts is about the same size—83.5×68 mm.—and would seem to be very much the same colour.)

On 4 August 1946 I re-visited this site with Hook, but it was unoccupied and no birds were to be seen there. However, a friend who is well acquainted with Lammergeyers informs me that some days afterwards he saw a pair only a few miles from the crag. Perhaps they possess an alternative site which has yet to be located.

The Lammergeyer's habit of dropping bones from a height in order to get at the marrow is well known, though there do not seem to be many detailed accounts of the procedure adopted. However, Verner ('My life among the wild birds of Spain', 1909) saw the act, which he describes and illustrates. R. E. Moreau visited the Nanyuki crag on 6-7 July 1943. The hill above the nest rises to a granite peak on one side of which there is a considerable expanse of gently-sloping rock with little or no vegetation cover. This is where he found the ossuary. He has given me leave to quote from a letter in which he told me about this: "Over an area of some forty yards each way the bare rock was littered with white splinters of bone. In hollows they lay in drifts. I could have collected a dozen pailfuls. Actually I did take a couple of quarts, most of which I left with Dr. Leakey at the Coryndon Museum. None of the bones showed any signs of tooth marks (as they should have done if they had been cracked by hyaenas), and Leakey agrees with me that they had most likely been smashed by impact on the rocks. A few jaw-bones were present, including those of hyrax, klipspringer and reed-buck. This may mean that the skulls had been dropped, which would have given access to the brain. Most of the fragments seemed to belong to limb-bones, the splinters having come off lengthwise. About 2½ inches was about the biggest diameter indicated. Most of the bones were very clean, white and sharp-edged. One fragment still had skin adhering to it and was still attractive to flies. It surprised me that the rocks thereabouts were almost devoid of bird dung. I saw only one white splash.

"If one comes to think of it, to break and afterwards get the marrow from such bones is not so easy. A flattish piece of rock of fair expanse is necessary, or else the bone would be liable to bounce away and be lost. Also any covering of lichen, let alone other vegetation, would be against a good cracking effect. The implied requirements are well met by this ossuary, but only a part of the apparently suitable rocky cap of the hill has been utilized. In fact, the comparatively small area littered with bones suggests good precision in dropping them if one accepts the view that a pretty long drop must be needed to bring about the high degree of splintering observed.

The comparative rarity of really fresh bones suggests that cracking is only a side-line (as one would expect)."

I visited the place myself on 20 February 1944, and found bones scattered round exactly as Moreau describes.

THE "NAIVASHA" SITE.

So called because in my 1944 account I describe it as within 50 miles of Naivasha. This was found by me in December 1940, and re-visited in February and November 1941, as detailed in the account above-mentioned. The site was then independently discovered by Pollard in December 1943 (1944, para. 2, also 1947: 121, para. 2). The place was last visited by me on 8 June 1947, when a pair of adults were present. Hitherto nobody has found out when or where they breed.

THE GORGES VALLEY SITE ON MOUNT KENYA.

Found by Pollard in October 1943 (1944, para. 1 and 1947, para. 1). On 5-6 January 1947 I was in this locality but saw no Lammergeyers about. I believe, however, that I did see an immature flying at a great height over Lake Ellis (11,000 feet) on 3 January, but it was too high for me to be certain.

CONCLUSION.

To date, only one nest of the Lammergeyer has been located in East Africa and only one egg seen. Evidence is, however, accumulating that the bird is widely, if thinly, distributed over the highlands of Kenya Colony and northern Tanganyika Territory (*cf.* van Someren, 'J. E. Afr. Nat. Hist. Soc.' 14 (1939): 24, and Fuggles-Couchman and Elliott, 'Ibis', 88 (1946): 330). It is remarkable that for so many years such a large bird should have escaped observation in eastern Africa.

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RELATIONSHIPS WITHIN THE STERNINÆ AS INDICATED BY THEIR MALLOPHAGAN PARASITES.

By THERESA CLAY, B.Sc.

Received on 25 August 1947.

During a recent revision of the species of the genus *Semundsonia* (Mallophaga) occurring on the Sterninæ it was found that the host distribution illustrated both the close classificatory relationships between

host and parasite, as well as the occasional completely anomalous distribution of parasite; and emphasizes further (Clay, 'Ibis', 1946: 403) that in the present state of knowledge the relationships between parasites cannot be used as an invariable clue to the relationships of the hosts. The distribution of these species raises some questions of interest to the ornithologist.

Specimens of *Saemundsonia* have been examined from five of the seven species grouped by some authors in the genus *Thalasseus* Boie, and found to be conspecific and distinct from any other species examined; this supports the view that the host species form a group more closely related to each other than to the rest of *Sterna*. A distinct species common to the three known species of *Chlidonias* Rafinesque again suggests that the host species form a distinct and nearly related group. Mallophaga from only four of the twenty species of *Sterna* have been examined. The presence of a species of *Saemundsonia* common to *Sterna vittata* and *Sterna paradisaea* suggests a close relationship between these two hosts and supports the supposition of Kullenberg, 'Arkiv. Zool.' 38 A (17), (1946): 77) that *S. vittata* is a relatively recent derivation from *S. paradisaea*. *Sterna hirundo* has a species distinct from, but nearly related to, the species found on the two former hosts. One point of interest is that the Mallophaga species from *S. hirundo* and *S. paradisaea* are apparently more easily distinguished than are their respective hosts. *Sterna aurantia* Gray has a species of a different type from any found on *Sterna*, but which is closely related to that on *Chlidonias*; this would suggest a relationship between the host species. The opinion of ornithologists on this point would be of interest.

A case of an inexplicable distribution is that of a species common to *Sterna hirundo* and *Gelochelidon n. nilotica*—records from Sudan, Ceylon and Rajputana. This apparent relationship between the hosts is not confirmed by species of another Mallophagan genus found on the two hosts and some other explanation seems to be needed; it is possible that the species on *Sterna hirundo* was in some way transferred to *Gelochelidon*, where it became secondarily established.

EIDER DUCK PLUCKING DOWN DURING DISTRACTION-DISPLAY.

By KENNETH WILLIAMSON (the Yorkshire Museum).

Received on 31 August 1947.

I paid a brief visit to the holm off the settlement of Kirkjubour, South Streymoy, Faeroe Islands, on 20 July 1947, in order to renew acquaintance with the fine colony of Faeroe Eiders *Somateria mollissima faeroensis* Brchm. At the first nest the female left an unhatched egg and two small ducklings

and scurried down to the shore rocks a few yards below. Here she performed a long and interesting distraction-display, squatting low on bent tarsi on top of a prominent rock. She fluttered her wings up and down spasmodically, holding them half-extended, and with their upper surface considerably arched. During the display she peremptorily plucked a small tuft of down from the lower part of the belly, and nibbled it for several seconds at the tip of her bill before allowing it to fall. Subsequently, whilst still displaying, she turned her head on several occasions as though about to "false-preen", but these actions were not carried through. Another bird, four feet from and in full view of the first, continued to sit on her three eggs in an open nest among sun-dried, blackened wrack, her plumage harmonizing wonderfully with the surroundings: she did not display when finally put off, merely running about the rocks a few feet away. I have not been able to find a description (as opposed to a mere mention) of distraction-display in the Eider, nor can I find any reference to the down-plucking accompaniment in this or other species of the Anatidae. It is apparently an involuntary reflex action of the same order as the "habit-preening", "false-drinking" and "false-feeding" motions of other birds in similar circumstances, and a very interesting one considering the special significance of down in the nesting of this group.

BIRDS SEEN IN THE ATLANTIC OCEAN BETWEEN 50° N. AND 52° S.

By A. G. BENNETT.

Received on 11 September 1947.

I left Plymouth on 3 January 1946 and saw remarkably few birds all the way to Montevideo, only the following:—

5 January.—140 miles west of Oporto, two Great Skuas (flying south).

6 January.—700 miles west of Gibraltar, several groups of 3-5 Black-headed Gulls.

11-12 January.—About 8° N., 29° W., 1800 miles west of Sierra Leone, several single petrels ? *Fregatta tropica*.

13 January.—Off Fernando Noronha, 4 Tropic Birds and several Great-winged Petrels *Pterodroma macroptera*.

18 January.—28° S., 47° W., a fair number of *P. macroptera* and *P. incerta* and a few Mollymauks too far off to identify.

I left Montevideo for the Falklands on 18 February. In these latitudes, the "Roaring Forties", bird observation is made under the greatest difficulties, and it was in any case impossible for me to keep a continuous watch. The birds shown in the following list were, however, seen and have for brevity been plotted on a chart (text-fig. 1).