

VARIETIES OF THE COMMON GANNET.

BY

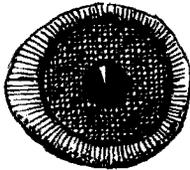
HENRY BALFOUR, M.A., F.Z.S., F.R.G.S.

THE Gannet (*Sula bassana*) in the adult state appears to be but little subject to variation, and one very rarely sees noteworthy instances of a departure from the normal. Hence, plumage or other variations, when they occur, are worth placing upon record. The adult bird with dark buff head and neck and with the back mottled all over with the same colour, which was reported by Mr. J. Atkinson and Mr. Riley Fortune as having been seen by them on the Bass Rock in July 1910, excited a good deal of interest, but, at the same time, provoked controversy, as doubts were expressed as to this being a *natural* "sport." Not having seen this bird, I can offer no comments upon it, and can merely say that, while recognizing the high value of an opinion expressed by these two distinguished ornithologists, one cannot but admit the force of Mr. Gurney's argument against their view (*The Gannet*, p. 488). If the variety can be proved to have been valid, it would be a most interesting, if, physiologically, disconcerting sport.

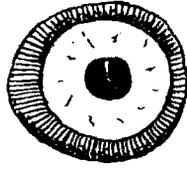
Two interesting abnormal Gannets have recently come under my personal notice, and about the validity of these there can be no question. In July of the present year my son and I spent three weeks on the Bass Rock, living in the lighthouse. On the first day, July 5th, while standing on the top of the north cliff watching the Gannets flying past in hundreds, one of them caught my eye while it was still a good way off. As it circled round and, meeting the wind, sailed slowly past the cliff edge, very close to where I was standing, I saw that it was a *pure white* example, fully adult, the white extending to the tips of the primaries, which normally are black, or, rather, very dark brown. Not a single dark feather was to be seen, though the buff coloration of the head and nape was normal, though very pale. I pointed this bird out to my son and Mr. Muir (the principal lighthouse-keeper), who were with me at the time. We saw this bird again on subsequent occasions, but, unluckily, my son was not able to secure a photograph of it. Undoubtedly a case of albinism, and, therefore, merely exhibiting a variation from the normal which is by no means uncommon in many species of birds. At the same time, it is the first instance of the kind among Gannets of which I have seen any record, and I have seen many thousands of these birds.

Mr. Gurney (*The Gannet*, p. 487) says that no instances of complete albinism in Gannets are recorded, though a few cases of *partial* albinism in young birds have been noted. Hence, the example which I am quoting may be worth calling attention to, as a possibly unique occurrence. I could not ascertain whether this bird was nesting or not, as it was only seen upon the wing and was not identified on any of the nesting-sites.

The other sport to which I wish to refer is a Gannet which has been known since 1914, when my son, Mr. Lewis Balfour, and some of the lighthouse-keepers first noted the bird. Mr. Andrew White, lighthouse-keeper, sent a brief note about it to the *Scottish Naturalist* (1920, p. 197), under the heading "Gannet with black eyes." "Black-eyed Susan," as "she" is now familiarly dubbed (though it is impossible to determine "her" sex with certainty), is now well known to many as a peculiar and annually welcome visitor to the Rock, and has been photographed many times (by my son in 1914, and by Mr. White and Mr. Alexander Scott in 1920 and 1921). The nickname is appropriate, since black eyes are "her" speciality. That is to say, they appear to be



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uniformly black even at a very short distance, say, a yard or two away.

This year I determined to examine the eyes closely, and I was able to do so under a strong magnifier, the bird having been caught for the purpose. With the bird in my hand I could see that the eyes, with the exception, of course, of the pupils, are not black but very dark, slightly greyish-brown (somewhat the colour of strong coffee with a very slight dash of milk). The irides are deeply pigmented all over, instead of being of the very pale vitreous hue, recalling mother-o'-pearl, which characterizes the irides of the normal adult Gannet. Both eyes are pigmented alike. The effect is very striking and renders this unique bird conspicuous among "her" neighbours on the nesting-cliffs. As compared with the cold, hard, staring eye of the ordinary Gannet, the dark eye gives a mild, almost, benevolent appearance

to "Black-eyed Susan." The difference, rendered semi-diagrammatically, is as represented in the two sketches. Fig. 1 shows the darkly-pigmented iris, and Fig. 2 the hyaline, practically unpigmented iris of the normal bird. In both the shaded outer ring represents the ring of bright blue naked skin which surrounds the eye, and which is quite normal in the dark-eyed bird.

What the physiological significance of the deep-brown pigmentation may be I am unable to say. Possibly it may indicate a persistence of the iris-pigmentation of the newly-hatched nestling, which is described by E. T. Booth (*Rough Notes*, III., "Gannet," p. 10) as dark hazel. At later stages the iris of immature birds is described (Gurney, p. 491) as ranging from pale grey at twelve weeks old, to purplish-grey at seven months, so that, if it is a case of persistence of an early condition, it must be from a very early, almost embryonic, stage.

The clever drawing of a Gannet's head by Mrs. Hugh Blackburn (*Birds Drawn from Nature*, 1862) suggests a dark-eyed bird similar to the one I am referring to. But this is evidently accidental, as the drawing was made from a specimen picked up dead, and the appearance of the eye seems to have been guessed at by the artist when filling in the details.

A point of considerable interest in regard to the dark-eyed Gannet is the fact that "she" has returned to nest on the *identical spot* in the gannetry which "she" occupied in 1914. Mr. White, it is true, says that the bird was not occupying this particular nesting-site from 1915 to 1919, so that there appears to have been a break in the sequence; but both in 1920 and 1921 "she" nested *within a foot or two* of the 1914 site, and was again photographed there with "her" young. This seems to suggest very strongly that individual Gannets select, if possible, the old spots on the ledges, when they renew nidification, and that there is a more or less permanent claim upon a given "pitch." The evidence of a readily distinguishable bird is of importance in this connection.

I am much indebted to Mr. White for having caught the bird for me for close examination. After "her" detention in the cause of science, against which "she" protested vigorously and aggressively, "Susan" was carefully placed upon the wall of the lighthouse terrace and, with a parting *arrah*, sailed away in the direction of "her" nest. Very shortly afterwards she was seen by my son on the nest, apparently none the worse for "her" adventure.