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SHORT NOTES

RED DEER IN SCOTLAND

Would not a maximum figure of 100,000 (probably less) red deer in Scotland be nearer the mark than Mr. Kenneth Whitehead's estimate of 200,000 (*Oryx*, November, 1953)?

May I emphasize his point that lack of winter feed is at present responsible for a far greater mortality among red deer in Scotland than all other causes put together. Moreover, available winter feed will continue to decrease, because hill-sheep stocks are, for various reasons, feeding lower on the hill every year. Lack of adequate wintering ground presents incomparably the most serious threat to the survival of the red deer in Scotland.

I should like to support Mr. Whitehead's contention that a herd of red deer represents a not insignificant reserve of meat-on-the-hoof. With the inevitable decline in hill-sheep farming, this potential value would be much increased; and one cannot envisage reindeer ever thriving on Scottish hills in large numbers, even if granted initially a more suitable reserve than that which they at present occupy in Glen More. I do not know whether it is generally realized that this is not the first introduction of reindeer to the Cairngorms.—RICHARD PERRY.

The question of deer population in a vast area like the mainland and islands of Scotland is a very complex one. Very few deer forest owners ever take the trouble to have an annual census taken and one can, therefore, only arrive at a general population figure by calculation from the number of stags killed although even this figure, due to illicit poaching, etc., is not exactly known. Pre-war approximately 11,000 stags were killed. annually and to-day about 8,000 to 8,500. As a basis of calculation I have assumed that it requires 25 live deer of all ages for each stag killed—a figure which was used in the Departmental Committee's Report of 1919, which stated that "at least 25 head of deer must on an average be kept for each stag killed". Writing on American deer, Aldo Leopold suggests that the unit herd should be about 24 and Dr. Fraser Darling, in his Herd of Red Deer, believes this figure is applicable to Scottish conditions. If it is correct, therefore, to use this unit herd figure as a basis of calculation, then it will be seen that the deer population will not be far short of 200,000. A study of the deer population on one of the island forests confirms that this "unit herd" figure of 25 live deer to every stag killed is an accurate basis for a calculation. On Rhum, for instance, the pre-war deer population was estimated at 1,750 beasts and about 70 stags were killed annually—exactly 1:25. Since the war the population has been in the region of 900 deer, which has yielded about 35 stags annually.

I am sure, therefore, that Mr. Perry's figure of "probably less than 100,000" is vastly underestimated, for this would mean, when hinds are also taken into consideration, that approximately 16 per cent of Scotland's deer population is being shot annually—a figure which does not take into consideration death from other causes which in a severe winter can be extremely heavy.

The area of Scotland scheduled as deer forest is about three million acres, and it has been suggested, therefore, that my figure of 200,000 deer would indicate a density of one deer to about 15 acres, which is too great. It is, however, quite erroneous to suggest that all the deer are concentrated on the deer forests, which in all, cover less than 25 per cent of the total area of the counties in which deer are to be found. There are, therefore, vast areas of Argyllshire, Inverness-shire, Perthshire, and Sutherland, etc., which, although not scheduled as deer forest, nevertheless hold stocks of deer which in some areas are quite considerable.—G. Kenneth Whitehead.

WHISKERED BAT IN NORFOLK

In the last number of *Oryx* (November, 1953, page 198), it is stated that the specimen of *Myotis mystacinus* (Kuhl) caught near Melton Constable in 1953 constitutes the first county record. This is not correct. The species was previously discovered in the neolithic flint mines at Grimes Graves, Norfolk, on 24th March, 1947, by Mr. D. E. Sergeant and Dr. D. L. Harrison (see *The Naturalist*, 1947, p. 152).—MICHAEL BLACKMORE.

LESSER HORSESHOE BAT IN SHROPSHIRE

A specimen of the lesser horseshoe bat (Rhinolophus hipposideros minutus Montagu), sex not determined, was caught by Mr. George Mason at Nash Court, near Ludlow, Shropshire, on 27th October, 1953, and identified by me. It is the first record for the county. The bat was found in a cellar which is also used as a boiler-house. Probably disturbed by the opening of the door and the switching on of the light, it was flying when Mason entered but soon settled. No measurements were taken, but the size of the wings and body, and the characteristic face left no doubt as to its identity. During inspection the animal frequently