



LETTERS

VELOCITY OF FLIGHT AMONG BIRDS.

To the Editors of BRITISH BIRDS.

SIRS,—The velocity at which birds fly must always be a matter of great interest to ornithologists, if only from the bearing which it has upon some of the problems of migration.

I am under the impression that there is, perhaps, at the present time a tendency rather to underestimate than overestimate this velocity, the result possibly of reaction from a belief in the incredible velocities attributed to certain birds by the late Herr Gätke in his well-known book on Heligoland.

The only bird whose speed can always be accurately ascertained over any measured distance is the Homing Pigeon, and Col. Meinertzhagen, in a very interesting paper on the "Velocity of Migratory Flight Among Birds" (*Ibis*, April, 1921), in which he gives the results of some two hundred observations made upon over fifty species of wild birds timed by means of theodolites or stop watches, quotes several velocities made by Racing Pigeons in the past.

As, however, he gives no more recent records than some of thirty years ago, and as most ornithologists seem to have very little knowledge of the distances over which Pigeons race nowadays, or the velocities they make, I thought the following six examples, taken from a list of recent record velocities published in the *Racing Pigeon* in 1921, might be of interest. Unfortunately no information is given as to the direction or force of the wind, so that these cannot, of course, be regarded as real, or air, velocities. Nevertheless they give some indication of a Pigeon's speed over various distances.

Distance Miles.	Race Point.	Velocity.	
		Yards per Minute.	Miles per Hour.
(1) 80	Malahide.	2,744	Over 82
(2) 366	Rennes (France).	1,933	„ 65
(3) 416	Lerwick, Shetlands.	1,763	„ 60
(4) 501	Thurso, Scotland.	1,545	„ 52
(5) 601	Lerwick, Shetlands.	1,684	„ 57
(6) *727	Mirande (France).	839	„ 28

Referring again to the paper by Col. Meinertzhagen, I find that, as the result of his observations, he is only able to record two velocities which exceed that of No. 1 Pigeon, these being Lammergeiers', which were descending to earth from a height (79½ m.p.h. and 110 m.p.h.) and which may, I think, for this reason be disqualified. In the data of the "Roubaix Swallow" (106 m.p.h.) which he quotes, Col. Meinertzhagen states that he does not place much reliance.

* In a race of this distance, where a Pigeon does not home on the day of liberation, the hours of darkness are deducted from the time taken in estimating the velocity.

There are only three other records of velocities amongst his observations which exceed that of No. 5 Pigeon, namely one of Swifts (well over 68 m.p.h.), one of Golden Plover, which were eluding pursuit (60 m.p.h.), and one of Duck (59 m.p.h.).

It is, I think, remarkable that a tame Pigeon should be able to maintain for 600 miles a velocity which, according to Col. Meinertzhagen's observations, is so very rarely attained by wild birds, including such apparently rapidly flying species as Ducks, Waders, and Hawks. Moreover, it must be borne in mind that in Pigeon racing the distance measured is a straight line from the race point to the loft, and as it is, to say the least of it, very improbable that a bird can or does maintain an absolutely straight course home, the actual velocity a Pigeon makes is probably always considerably in excess of that with which it is credited.

B. B. RIVIERE.

OBSERVATIONS ON SONG-PERIODS.

To the Editors of BRITISH BIRDS.

SIRS,—Perhaps some of your readers (from different parts of the country) who are interested in that branch of animal behaviour represented by birds' song would be good enough to take the following simple notes this June or July about Chaffinches, Blackbirds and Song-Thrushes, or any one of them, and send them to me. The object being to explore any relation between England and Ireland, or between latitudes in the same in respect to the termination of the spring song period. (This appears to be also an indication of the relative number of broods).

1. Week when there appears to be very little song left.
2. Date of last song noticed.

With me for example (1) will probably be Chaffinch, second or third week in June. Song-Thrush, second or third week in June. Blackbird, first week in June.

J. P. BURKITT.

ENNISKILLEN, IRELAND.

STATUS OF THE SURF-SCOTER IN ORKNEY.

To the Editors of BRITISH BIRDS.

SIRS,—In the *Practical Handbook of British Birds* the Surf-Scoter (*Oidemia perspicillata*) is given as a "Rare migrant. Most frequent Orkneys, where occasional examples, usually young, not infrequently seen and six recorded obtained." During the winters which I spent in Orkney, hardly an autumn passed without this bird being seen, one or more of the flocks of Velvet-Scoters having sometimes an adult male Surf among them. Wild as the Velvet species is, it was much more so with an adult male Surf in attendance. I can hardly agree with the statement that those seen are usually young birds, for if such were present they would not be detected, nor would females. What becomes of these adult male Surf-Scoters which come south with the flocks of Velvets I cannot say, for they usually disappear when autumn becomes winter, and are not shot, at any rate locally. During one very stormy spell, when the harbour was full of storm-bound steam trawlers, there was actually one of these adult males in Stromness harbour for nearly a fortnight, which survived, although fired at continually by rifles and guns of all descriptions during its stay. A pure white Shag, also storm-bound at the same time, met with the same reception, but lived through it.

H. W. ROBINSON.

THE RACES OF EIDER DUCKS.

To the Editors of BRITISH BIRDS.

SIRS,—I notice in the *Practical Handbook of British Birds*, p. 361, that the basal part of the upper mandible of the adult male Common Eider (*Somateria mollissima mollissima*) is given as oil-green. In *British Birds*, Vol. VII., p. 119, I pointed out that this is orange-yellow in life, but commences to fade soon after death, finally becoming green. I also mentioned that in the wrongly named Pacific Eider with the black V-mark on the throat, in the Oldham Museum, this orange was so stable as to still survive after the bird was set up (the bird was of course only a Common Eider).

In the Greenland Eider (*S. m. borealis*) you state that the bill in spring is bright orange-yellow. If this be the case, then it is comparatively common in Orkney and Shetland, particularly in early spring. Personally I do not think that *norvegica*, *faeroensis* and *borealis* are worthy of sub-specific rank, but that if they are, then *dresseri* and *v-nigrum* should be given full specific rank. Finally I might add that, according to the description of them given in this *Handbook*, I have shot and handled *norvegica*, *faeroensis* and *borealis* in Orkney, but still contend that they are Common Eiders (*S. mollissima*), although I have handled some peculiar types and seen even more peculiar ones through the glass. If these races are separable, then, considering what a truly marine duck the Eider is, and the close proximity of their supposed ranges, one would naturally expect to find them in Orkney in winter.

H. W. ROBINSON.

[The Editor having submitted Mr. Robinson's letter to me for reply as the author of the descriptions of the Ducks in the *Practical Handbook*, I have consulted Sharpe's *Catalogue of Birds*, Macgillivray's *British Birds*, Dresser's *Birds of Europe*, Dr. Hartert's *Vog. pal. Fauna*, and Millais's *British Diving Ducks*, and in no case do I find that the basal part of the upper mandible of *S. m. mollissima* is described as orange-yellow. Sharpe and Dresser describe it as "dull olive-green almost olive-yellow in old birds," while Millais, who I take it has seen a considerable number in the flesh, describes the bill as "olive-green above blending to blue-grey below and in front of nostril, etc." Koenig in his *Avifauna Spitzbergensis* gives a coloured plate of the bills of *S. m. norvegica* and *S. m. borealis* for comparison, the bill of *S. m. norvegica* has the base of the upper mandible olive-green with an olive-yellow tinge, that of *S. m. borealis* is shown as bright orange-yellow. I believe I am right in stating that this plate is from paintings made on the spot by the artist. I have also obtained the opinions of Lord William Percy and Mr. E. L. Schiöler. Lord William Percy describes it as "Olive-green above (the shade of Spanish olives as *hors d'œuvres*) blending into french grey below the nostril and slightly forward from it, lower mandible french grey along the edge, nail yellowish-horn," while Mr. Schiöler remarks that orange-yellow is certainly the word he would use to describe the bill of *S. m. borealis* and should not be used for *S. m. mollissima*, and he sends a plate to demonstrate the difference.

As to the supposed occurrence of *norvegica*, *faeroensis* and *borealis* in Orkney, I should much like to see the specimens referred to, and also suggest that Mr. Robinson should submit them to the B.O.U. List Committee for identification. At the same time I would point out that the Common Eider, except in the far north, is normally a resident and not a migratory species.

A. C. MEINERTZHAGEN.]