

February 5th, 1936

My dear Ford,

Thanks for your letter. I am afraid I cannot come up to see you on Saturday morning, as I shall be wrestling with some pigs at that time - indeed I am almost every week.

Many thanks for the reference to Federley's result. I do not know of it, though I had a notion of his hybridisation work in general. It really is a very suggestive case. I hope in sending it to me you are not losing the reference yourself, as I am quite unable to accumulate instances bearing on different points of interest and revise and review them from time to time as I ought, though constantly forgetting and losing all that comes my way.

Do you remember, by the way, some work on pigmentation of the wings of night-flying moths in which I cooperated with you some years ago? It led me to set about and get in order Jourdain's records of measurements of the length and breadth of eggs of British nesting birds. In the end it was

possible to assemble 100 pairs of measurements from nearly all of 150 odd species of bird. During a long time I had been, from time to time, calculating means, variances, and co-variances for each species, and, shortly before coming here, was able to go so far as to calculate in what way the observed variances would require correction in view of the differences between species in the average length and breadth of the eggs. Now I have adjusted variances for both length and breadth. W.B.Alexander, who, I think, is a colleague of yours, has very kindly prepared, in consultation with other ornithologists, estimated order of abundance within each group of birds: the groups being generally natural orders, though the Passerine birds are divided into families.

Of course the combination of such heterogeneous material is exceedingly difficult, but it is quite certain that the variance both of length and breadth increases with abundance, as it did with your, I think 35, species of moths. Available information as to abundance is, I suppose, weaker than it is with moths, and certainly variability of eggs is a very indirect approach to the variability of the birds, so it is not surprising that the percentage differs in

different abundance classes is less than you found with the moths. I expect differences of the order of 10 to 20% instead of 60 or 70%, which I think is what you got before. In fact the greater number of species is fully needed to bring out so small an effect clearly.

I was thinking of offering the paper, when I have got it written, to the Zoological Society, but I should like your opinion as to whether their Proceedings would reach everyone whom, in reason, one would want to know of the paper. Also, they might be averse to the full publication of the numerical results, in which case the *Phil. Trans.* might be a better medium. What do you think?

Yours sincerely,