

7 June 1939.

The Secretary of State
for the Colonies,
Colonial Office,
Downing Street, S.W.1.

Dear Sir,

Mr. S.N.Bax and Dr. G.H.N.Jackson have this morning consulted me on the position of the calculations of tse-tse fly numbers, rates of death and reproduction and migratory movements, which the latter has been studying experimentally in Tanganyika territory. I have followed this work now for many years with the greatest interest and have on several occasions during his leave in England discussed various aspects of it with Dr. Jackson.

The position arrived at at the present time is broadly as follows. Many of the calculations based on routine observations check with each other extremely closely, so verifying beyond reasonable doubt some aspects at least of the hypothetical bases on which the calculations are made. These refer especially to estimates of the total fly density and the extent to which the population active in any one area remains the same for a succession of weeks. Attempts have also been made by different methods to estimate the extent to which migration on the one hand and normal reproduction and death on the other, are responsible for the turnover observed from the fly population. Some of these estimates show surprising discrepancies, showing that in some way or other at present undetermined some aspects of the hypotheses used are at fault.

Dr. Jackson has under consideration further experimental procedures and methods of computation designed to check these discrepant values from points of view which have not hitherto been fully explored. During his present leave the available possibilities have not been ~~fully~~ ^{completely} explored, and I suggest that it would in the present state of the work be extremely desirable for him to have the opportunity of carrying these theoretical studies to a more advanced stage before putting the results into practice in

the field.

I am, Yours sincerely,