

20th. May 1948.

Dear Henry,

I am enclosing a sheet, not of the original calculations which we have, perhaps, sufficiently explained, but of a summary of their results for the two sexes in Area I, which, you will remember, included two days of double catching. I have rearranged the order of columns, so as to tell as clear a story as possible and to give only one line to each batch caught.

You will see that I have assumed that marked insects caught on the second occasions on August 28th. and 29th. and which, because they were marked, you decided to release, were remarked before release, unless they had already been marked on the same day. If I am wrong in assuming this I will recalculate the results of later experience, but I think it will make very little difference.

You will see that I have taken different death rates for the two sexes on this area, to agree approximately with the total age of the marks recaptured. This agreement is nearer than might be expected from the correct death rate, owing to errors of random sampling, and it is at least an open point whether I should not have used a single death rate for all three areas or for both sexes, or indeed for the whole lot thrown together. In any case I think it would be preposterous to imagine that our estimated

numbers, which for this area look pretty unrealistic, have a precision that would warrant adjusting the death rates any further. If in this area I had given the two sexes the same death rate, the estimates of male numbers would have increased and of female numbers diminished, these effects being somewhat greater at the end of the season than at the beginning. Judging by the numbers captured, it seems to me not unrealistic to suppose that the males were, perhaps, five times as numerous as females up to 25rd., and that the female numbers rose rapidly, so that to the end of the season they may have been, relative to the mode of capture, about equally available. I therefore think the estimate for males for the last two days is probably grossly in excess of the facts, and presume that both sexes may have maintained about 600 individuals in the two intermediate periods, so that the female estimate had happened to be high and the male estimate for 24th. to 26th. had happened to be low.

However, what I particularly wanted was that you should look at this method of presentation and decide whether it is right factually, and whether you would like the other areas set out in the same way.

Yours sincerely,