

10 October 1964

My dear Henry,

I was so very delighted that you should be ^{pleased} pleased with what I have done with the domizilla data. I ~~would~~ ^{would} not deny that it has been a chore, but it is just because the data are so essential and ~~of~~ comprehensive and cover four years in full, that the effort should be done to find out exactly what information data of this kind can give.

I do think the estimate of general death-rate must be reliable. Any large deviation from the value adopted would begin to make nonsense of the actual record of recaptures. It may vary somewhat from year to year, e.g. be higher in a wet year like 1962, and this would make one overestimate the population in such years, though I feel sure not greatly as compared with other years. It would be unreasonable to suppose that it was quite constant throughout life after emergence, but not unreasonable to think of it as approximately constant, and we have at least objective data up to a 12-day recapture interval showing no

sign of departure from constancy. It is the distribution of hatched
insects that we can estimate in this manner, and I think it is
really reasonable^{surprisingly} that it gives an average length of life between 6
and 7 days in reasonable~~accord~~ accord with what you would expect for winged
insects. The easiest guess is that by pure chance we have had excep-
tionally few recaptures in the first few catching days of two of the
years, and that really the population was already rapidly falling
off when catching ceased. In this case it would, I think, certainly
be right to suppose that the total numbers emerged in different years
were proportional to the numbers shown by a smooth curve, but that
the ratio of total emergences to the maximum would be higher than
that which I have estimated from the curve.

Apart from the real pleasure I have got from tackling this
most interesting problem, it would ~~thank you~~ thank you for any trouble
I have taken that you should be pleased with the results.

Yours sincerely,