

UNIVERSITY OF CAMBRIDGE  
DEPARTMENT OF GENETICS.

Whittingehame Lodge,  
44, Storey's Way,  
Cambridge,  
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8th. November 1918.

Dear Jackson,

Thanks for your letter. Naturally I am delighted to hear from you again. As usual, however, it is taking me some time to get the hang of what it is all about, for one way and another you do run into some wonderfully difficult problems.

In the second sheet of your letter there is a table giving, I think, numbers of flies caught (a) at various intervals of time from previous marking, and (b) with weights classified according to their relation with <sup>their</sup> previous marking.

Now, looking for an approximate periodicity, I wonder whether the variance in weight difference classified by length of ~~interval~~ would not give a tolerably good clue. This, of course, involves separating flies which have gained from flies which have lost a milligram <sup>(and perhaps allowing for regression on first weight)</sup> but in other respects is not altogether unlike what you have been doing. If there is a clear maximum of this variance this should indicate the half hunger cycle period, and the following minimum the whole period. But very likely, especially if the cycle is so short as  $2\frac{1}{2}$  days, it will be impossible to get any such indication. Tell me, at any rate, whether I am beginning to understand your problem.

Yours sincerely,