

April 2, 1942

Dear Dalling,

I am rather puzzled by the comparison of the Cambridge and Weybridge flocks (Inside), for I think you mentioned that these were selected from the same batch of 60 as those at Cambridge, and that you thought at first that the worst-looking sheep of this batch had been sent to you and the better half kept at Cambridge.

I have been comparing my what data we have on these two flocks, and find first for average weight

Cambridge, initially	74.9	lbs
finally	67.5	

showing an average loss of 7.4 lbs. This loss <sup>was</sup> ~~has~~, as I previously mentioned, ~~was~~ associated with dosage, and greatly <sup>er</sup> on the whole in the more heavily dosed sheep. At Weybridge the

initial weight was	80.2	lbs
rising to	83.6	

an average gain of 3.4 lbs per sheep, without the association with dosage seen at Cambridge. These weight comparisons suggest that it was the better, rather than the worse, half of the flock that was sent to Weybridge, and that the more heavily infested, if this was the cause of weight difference and difference in increase in weight, were kept at Cambridge.

Comparing the total initial egg counts, one has

	Cambridge	Weybridge
Nematodirus	15	39
Strongyloides	2369	22595
Others	3427	2102

so that one may say of initial egg count that Weybridge may have had more Nematodirus, Cambridge more of the group of species under "Others", and that Strongyloides was equally distributed between the two halves of the flock. If it is these other species which are really damaging in lamb growth, the initial egg count confirms the weight records in making the Cambridge half of the flock the more severely affected.

The worm counts, however, are more puzzling. The response to treatment at Weybridge was, on the whole, clear, while that at Cambridge is <sup>very</sup> obscure and irregular. At zero dosage Weybridge seems to show many more Trichostrongylus axei, which is responsive to the drug, and therefore best estimated at low dosages; but in most species the irregularity seen is ~~great~~ great that I can get no clear comparison.

If a selection were made in dividing the flock, I wonder if you could find out on what basis it was made, i.e., general appearance of health, or something more specific and objective.

Yours sincerely,