

19th. December 1949.

Dear Dr. Gordon,

I have your letter of December 13th., and, in view of what you say, think there is a strong case for putting forty of the Scottish calves in programmes 1 and 2, for the doubly and triply inoculated groups, so getting a true comparison for these pregnancies.

The practical question is, where can these forty animals come from, and this depends in part on what the limiting factors of your experiment are.

You list 450 Scottish calves and 111 Superity cattle, or 561 in all. I forget what they were, but I believe you had some good reasons for not using exclusively Scottish calves, so I will suppose the number of these is inexorably limited to 450, of which certainly 32 will be needed as controls.

Using the existing numbers only therefore, the 40 cattle needed in the first two programmes must come either from the spares or from the later <sup>pregnancies</sup> ~~programmes~~. I do not think you can tell which until you know how rapidly the spares are used up in replacing animals that have come to grief. In fact, all that are not used up to any stage must be regarded as a mobile pool, capable of being expended rapidly as soon as protection seems to have worn off so far that its actual proportion must be determined at once.

Yours sincerely,