



REPORT ON DRY FARMING INVESTIGATIONS IN LILLOOET AND NICOLA DISTRICTS.

By PROFESSOR W. J. ELLIOTT.

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Hon. William R. Ross, K.C.,
Minister of Lands, Victoria, B.C.

SIR,—I have the honour to submit herewith a report covering the experimental work undertaken on the Dry Farm at 105-Mile House on the Cariboo Trail, and at Qullchena, located on the Comaonage south of Nicola, B.C. As will be remembered, the experiments were begun at your direction during June, 1913, the purpose being to determine the value of certain so called dry areas of British Columbia for agricultural and settlement purposes. The report covers the period from September 1st, 1914, to August 31st, 1915, and includes a full record of the crops grown during the summer of 1915.

While the present report deals particularly with the record of the crops grown during the past summer, yet we may frequently refer to the 1914 results that appeared in your report for the Department of Lands for last year, so that we may have a comparison of results. For it must be borne in mind that it is only an average over a series of years that gives accuracy to records of this kind.

This report, like last year's, includes the records of rainfall and snowfall, temperature records, and, in addition, actual records obtained by the growing of a variety of crops under various conditions. Some of the results of last year suggested that we might with profit undertake a "date of seeding" experiment with certain grains, and also a "rate of seeding" experiment. These were tried out this year on both farms, and the results will be found properly tabulated below.

105-MILE FARM REPORT.

PREPARATION OF SOIL AT 105-MILE HOUSE.

The land for the 1915 crop was broken during the spring and early summer of 1914, and as it was all native sod the results recorded below are those of the first crop grown upon the land. The ploughing had been done very thoroughly, and the frequent cultivations that were given during the summer prepared a very excellent seed-bed. The last thing in the fall all of the slopes were covered by the disk by facing each pair of disk-blades toward each other. This was done on all of the slopes, the purpose being to catch as much as possible of the melting snow in the spring. The plan was very successful, as the foreman reports that very seldom, if ever, did the snow-water in the depressions break through the small ridges left by the disk to run off the land and be lost for the crop.

CHARACTER OF SPRING AT 105-MILE HOUSE.

The spring of 1915, like the spring of 1914, opened up with a considerable amount of cold, backward weather. There was also much more wind than in 1914, and it was feared that this wind might make a heavy draught upon the stored-up moisture on our cultivated fields, but the results that are herewith given are splendid evidence of the fact that the cultivation had been thoroughly accomplished.

In comparing April, 1915, with April, 1914, we find that the former was, on the average, slightly cooler than the latter. The average maximum and minimum temperatures respectively for 1914 were 50.5 and 31.8 degrees, while the corresponding averages for 1915 were 48.7 and 29.6 degrees. For the same month the highest and lowest temperatures recorded during 1914 were 66 and 22 degrees respectively, while the corresponding highest and lowest for 1915 were 58 and 24 degrees. The above figures are mentioned particularly because April is the principal seeding month for both wheat and oats. The lower temperatures for 1915 as compared with 1914 seem to have no evil effect upon the proper germination and sprouting of the grain, and upon the final very excellent results that were obtained with practically all crops grown.