

EXPERIMENTAL STATION, FREDERICTON, N.B.**W. W. Hubbard, Superintendent.****WEATHER CONDITIONS.**

The winter was colder than the average, with spells of intense cold almost unprecedented: the average mean temperature for January, February, and March was 15.5 degrees against an average for the last forty years for these months of 18 degrees. There was, however, beginning on the 24th December a nice even blanket of snow; and frost did not penetrate as deeply as in more open winters. The snowfall was not above the average, on the whole. April was a cold and backward month with a below-zero record of -3.5 degrees on the 5th, cold high winds and with a precipitation of 4.54 inches, nearly twice the average for the month. May continued cold and windy with a minimum record on the 1st of 24 degrees, and frost on the 2nd, 5th, 7th, 8th, 12th, 13th and 29th. There were some warm days, the thermometer reaching 89 degrees on the 26th. There was only one-third of the normal precipitation that month and conditions were most favourable for cultivation. Vegetation was very backward, and cold, backward weather continued through June and up till the 22nd July, when a minimum temperature of 44 degrees was recorded. All crops consequently made slow growth till almost 1st August. The precipitation, though not quite up to the average, was ample for the Station land and for most soils in the province, and when continued warm weather came in August and September growth was most satisfactory and grain crops, where soil conditions were right, eventually were very good. The average mean temperature for August, September and October was 3 degrees higher than the average temperature for the last forty years. Harvest weather was ideal. Hay and grain being housed in splendid condition and fine weather continued into November, so that root crops as well as others were taken from the fields in the best possible condition.

On account of the prevalence of mustard in all the previously cultivated land on the Station and the fact that the land in process of clearing was not in sufficiently smooth or even condition, no cereal work was undertaken excepting to grow what grain could be grown for feeding purposes.

OATS.

Thirty-five acres of newly-cleared land was sown to oats. On account of the unevenness of the ground and the presence of small roots it was not possible to use the drill and the seed was therefore broadcasted.

The first oats were sown on the 23rd of May on land cleared and ploughed the preceding year. Banner oats, the seed of which was grown on the Station land last year, were used. There were 4½ acres in this piece and the yield was 220 bushels. No manure or fertilizer was applied.

On the 27th of May 4½ acres of land newly cleared and ploughed was sown to Newmarket oats. The yield was 200 bushels.

On the 28th, 29th and 30th of May, 25½ acres of land cleared and ploughed the preceding season, were sown to Newmarket, home-grown Banner, P. E. I. Banner, and Early Blossom oats, and the yield was 533 bushels.

All the land having only been ploughed once was very uneven in quality and for lack of cultivation did not afford by any means an ideal seed bed. On account of the very cold June and July weather the early growth of this crop was most disappointing and on the 1st August appearance would not indicate a yield of more than 12 bushels per acre. After August 1 portions of the field made splendid growth and the crop came up to an average of 22½ bushels per acre. The rate of seeding was 3 bushels per acre.