

A Successful Tamarack Plantation in Saskatchewan

So little is known of the possibilities of native trees when grown in plantations that this record of growth of Tamarack is of value. The eastern Tamarack has not appeared extensively in the lumber market because of the almost complete destruction of the mature timber by the sawfly, about thirty years ago. A young forest has sprung up quite widely over its original range and by its growth promises to produce merchantable timber at an early date. Tamarack is the hardest and heaviest of the northeastern coniferous timbers.

This plantation of 6.8 acres was established in 1908 at Walseley, Sask., by the Forestry Branch of the Canadian Pacific Railway, from native Tamarack stock obtained from a muskeg near Molson, Manitoba. The stock was about six years old when collected, and was planted three feet apart in rows four feet apart. The object of close planting was to get an early cover on the sandy loam soil.

After the close of the growing season in 1914, one hundred and ten average trees were measured and tagged. They were remeasured in 1915 and again early in 1921 before the current year's growth had taken place. Ten trees showed broken tops, and nine others were dead or could not be located in 1921.

The average of 99 trees in 1914 shows a height of 12 feet and a breast-high diameter of 2.26 inches. The average height of these same trees six years later is 18.5 feet with an average diameter, breast high, of 3.33 inches. This gives a diameter growth of one inch in 5.6 years and an annual height growth of 1.08 feet. The total volume of the average tree in 1914 was .193 cubic feet and .553 cubic feet in 1921.

Computation of volume growth for the complete plantation is made difficult by uncertainty in the record of the number per acre. The crowns of the trees have closed and were crowding to an extent that made a thinning necessary in 1921.

Trees in this plantation may be expected to make a greater annual height growth in the immediate future than that shown by the measurements.

This species has thus far made a satisfactory growth, and has established a cover over the soil which will check the loss of water by evaporation from the soil. Later measurements will doubtless show an equally satisfactory volume growth of wood per acre.

