



Under his own green ash tree. Nine years before, this spot was bare prairie.

wards the improvement of their home surroundings without assistance.

Over 3,500 Applicants

The Dominion Nursery Station centred at Indian Head, Saskatchewan, and laid out in 1904, has since been the distributing point supplying farmers with shelter belt material. From 58,000 seedlings and cuttings in the first year of operation, the distribution has now reached the enormous total of over 4,000,000 annually to between 3,500 and 4,000 applicants. Up to the spring of 1921, 60,000,000 seedlings and cuttings have been grown and distributed in the prairie territory from this source.

Established primarily to grow hardy stock for distribution under certain conditions to bona fide farmers, the nursery has been developed along lines to afford a practical demonstration of the possibilities of tree planting, horticultural, and landscape work under prairie conditions.

The development of this nursery has been rapid and the growth of many varieties of trees, ornamental shrubs, fruit and flowers phenomenal.

While the distribution of hardy stock progressed each year, definite information was lacking as to the rate of growth, permanency and future value of the varieties planted. Many demonstration belts have been planted and maintained at the central distributing point for the purpose of obtaining definite and reliable data concerning tree growth. Records carefully compiled each year from the actual measurement and observation of thousands of trees of all varieties have given the following rates of growth:

	At 5 years. ft. in.	At 10 years. ft. in.	At 15 years. ft. in.
Russian Poplar_	12 6	25 0	30 0
Cottonwood_ --	10 9	20 0	26 6
Maple_ -- --	8 6	15 0	20 0
Birch_ -- --	6 0	15 9	22 0
Ash_ -- --	5 0	10 6	15 0
Elm_ -- --	4 0	8 9	13 0

Wise to Mix the Stands

The permanency and usefulness of a shelter belt depends a great deal upon the varieties planted. Plantations of the faster growing Willow and Russian Poplar have been found to make a good temporary windbreak in quick time but in a few seasons become comparatively ineffective on account of the general habit of growth. To be effective as a shelter belt and more permanent it is essential to plant varieties in mixture combining the faster growing species with those of slower growth and better wood value. Splendid results have been obtained with mixtures of Maple and Ash, and Ash, Birch and Maple. Such mixtures with perhaps willow, poplar and caragana alternated throughout the belt are more likely to provide a permanent woodlot than any of these in pure stand. In a pure stand the permanency of the belt is greatly reduced because of many factors notably grass and insect menace.

Plantations of tamarack, spruce and

GROWTH OF PRAIRIE PLANTING.

The Dominion Nursery Station at Indian Head is now distributing each year over 4 million seedlings and cuttings to between 3500 and 4000 applicants. Up to the spring of 1921, 60 million seedlings and cuttings have been grown and distributed from this source.

pine have been particularly successful and can be considered the most valuable trees for prairie planting both from the point of permanency and shelter.

Rates of growth recorded over a period of 15 years show:

	At 5 years. ft. in.	At 10 years. ft. in.	At 15 years. ft. in.
Tamarack_ --	3 3	12 6	20 0
Siberian Larch	4 6	15 0	22 6
European Larch	4 3	13 9	21 0
White Spruce_	1 0	5 3	12 0
Scotch Pine_	1 6	7 6	15 6
Jack Pine_	2 0	8 9	15 6
Lodgepole Pine_	0 9	5 0	12 6

A large number of evergreens are now being planted with success throughout the west. Their hardiness and rapid growth once established has placed these varieties above all others for permanency and shelter. As soon as a broad leaf belt is established several rows of evergreens set out on the lee side will maintain the shelter and effectiveness in later years after the growing varieties have reached their limit under prairie conditions.

Fruit Growing Now a Success.

Many other features have followed the establishment of the prairie shelter belt, notably the growing of small fruits and standard fruit trees. A prediction years



This beautiful vegetable and small fruit garden on the prairie was made possible by the planted wind-break sheltering it.