

Windbreaks for the Prairie

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FROM the horticulturists' point of view, windbreaks on the prairie are an absolute necessity. It is true that even in the open a considerable amount of success may be attained in the growing of many of the coarser vegetables and bush fruits, but without a certain amount of shelter it is absolutely impossible to look for profitable return from the garden, or to hope for any degree of satisfaction in the growing of flowers and the more tender flowering shrubs.

There is probably no part of Canada, where finer vegetables, flowers and small fruits can be grown, having consideration for the comparative shortness of the growing season, than in the prairie provinces. We are at present only beginning to realize the horticultural possibilities of the plains. It is not so very many years since the general impression was held that even trees could not be grown. Now we hear reports from scattered points throughout the west of the successful maturing of standard apples. The most successful grower, Mr. A. P. Stevenson, of Dunston, Man., has several hundred trees in bearing in his orchards. Several farmers in southern Manitoba have also had success and now we hear from points further west—from Saskatoon in Saskatchewan and Edmonton in Alberta—that apples have been brought to maturity.

In travelling over the country one sees well laid out city parks and farm homesteads surrounded by well kept lawns and ornamental grounds where a few years ago the "old timers" would have scoffed at the idea of such planting as a waste of time and money. We know that, provided good windbreaks are established, the soil properly worked and suitable varieties naturally adapted to local conditions, selected for cultivation, the horticulturist has abundant scope for his energies with every assurance of success. A discussion as to the best varieties for windbreaks, the manner of laying them out to best advantage, the respective advantages of wide belts or sin-

gle rows, with numerous other points, can hardly be gone into fully in a short article.

The main windbreak round a farm steading should naturally be composed of tall growing varieties of trees. What might be termed the secondary windbreaks—that is, for protecting the vegetable and flower beds and lawns inside the main belt—might better be of lower growing shrubby varieties.

Where the main belt is to consist of several rows—that is, from ten to twenty or more in width—it has been found best to plant a mixture of varieties, the following being most usually recommended: Manitoba maple, green ash, acute-leaf willow, American elm, white birch and Dakota cottonwood. This main belt should be placed well back from the buildings and ample room allowed for subsequent development.

SHELTERS FOR GARDENS

In planning shelters for gardens it must be remembered that after the trees attain some height it will not be possible to grow flowers and vegetables within ten to fifteen feet of the trees unless plenty of water is available for irrigation, which is not a usual condition on the prairies. For a single row making tall growth and effective shelter within three or four years the acute-leaf willow is most satisfactory. Cuttings should be set about one foot apart and as the break grows up the tips of the side branches may be cut or trimmed about twice during the season. This soon forms a very thick break most suitable for a vegetable garden.

Where one already has a good main belt, but also desires small breaks within, we should advise the *Caragana arborescens* as being most easily propagated and generally suitable for a medium-sized hedge. This plant stands trimming well and makes an extremely thick hedge. It may be kept down to about four feet high or if allowed to grow will reach a height of ten to twelve feet in a very few years. The common

lilac is also very suitable, though not making such a rapid growth as the *Caragana*.

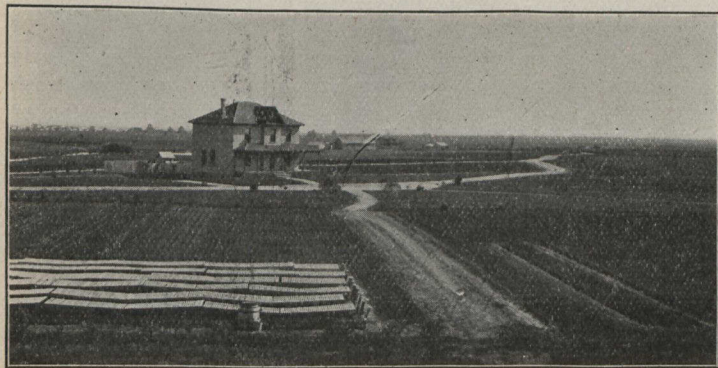
VALUE OF EVERGREENS

The evergreen conifers will make the most ideal windbreaks, but they are rather slow to become established and would not be of much benefit as shelter until probably eight or nine years after planting, presuming that plants about four years old or twelve inches to eighteen inches are used to set out. However, the enormous advantage of the evergreen varieties over the deciduous kinds of the same height, as windbreaks, cannot be gainsaid. It would be well worth while for any settler on the prairies to set out such varieties as, white spruce, Scotch pine and Jack pine where young stock can possibly be obtained. The white spruce is the best variety. It is a native and hardy. The growth is compact and the lower limbs remain green to the ground in later years.

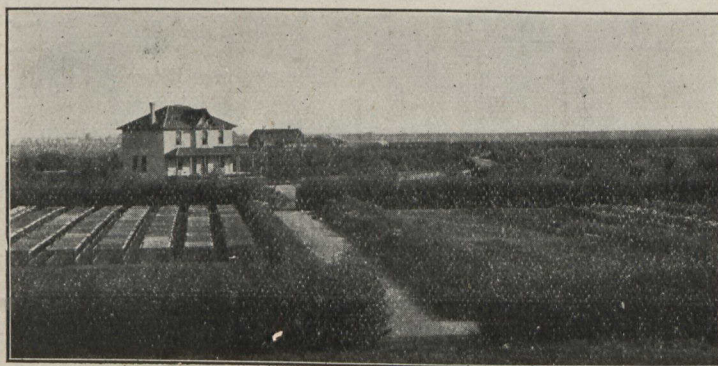
The Scotch pine appears hardy and rather quicker growing than the white spruce, though in later years it becomes straggly and the lower limbs die off. The native Jack pines have the advantage of being very hardy and fairly rapid growers, but will not compare with the white spruce either in appearance or in effectiveness for shelter purposes.

In growing evergreens on the prairies however, experience would indicate that to get the best results one must first provide some other shelter. This shelter must be sufficient to hold snow on the young conifers for the first two or three winters, but must not be so close to them as to overshadow or check their growth in any way.

In any plan then for permanent shelter belts on a farm or around gardens, it would be advisable to make arrangements for planting evergreens with a view to their being, eventually, the final windbreaks; the faster growing deciduous varieties being gradually cut out as their usefulness decreases, or as they commence to take up too much room,



View at Nursery Station, Indian Head, Saskatchewan, in Spring of 1905



From Same Viewpoint in August, 1907