

have twice the value of the latter the following spring. And no one who has watched the animals under the two conditions and felt the difference for himself can doubt it. It is a matter of dollars and cents, not sentiment.

These benefits are great and very plain, and yet it is doubtful if the most important economic use of the wind-break has been realized by the farmer at all. This benefit lies not in the protection of the home, important as that function is, not in the comfort of the stock, which could be protected in another way, but in the protection of the field crops, where it has been given very scanty consideration.

And yet the prairie farmer will admit to-day that the howling winds of winter that sweep the snow from his clover field, and the violent spring winds that blow his seed out of the ground, and the dry, parching, southwest winds of summer that wither his grain in a day, are the greatest hazards to his field crops.

He has never considered this seriously, because he has never realized clearly either the actual amount of the damage done to his crops by the winds or the probable benefit which might be received from a windbreak. He has only a vague prejudice against a windbreak, because he thinks that it piles snow on his fields in the spring and delays his plowing, that it sucks moisture from the soil and robs the adjacent crops, and that it occupies land which would otherwise be producing valuable crops. Of the benefits he has never thought.

But others have thought, and science has investigated. The results of the study are altogether worthy of the farmer's attention. They show that the windbreak pays a good rent for the land it occupies and is no trespasser.

The question of repopulating the Western prairie with trees that are adapted to its climatic conditions has been so often and so thoroughly discussed, it may now be fairly assumed that no one but a petrified social dead-beat will any longer seek to belittle the urgency of the case—whether for pressing economic reasons, or for the simple purpose of beautifying the home and making it, to the young

folks a home that will outweigh all the attractions of the city.

To get at the real business end of this subject, we are glad to reproduce the address of Norman M. Ross, B.S.A., B.F., Chief of the Tree Planting Division (Dominion Forestry Branch, Indianhead), delivered to the Convention of Manitoba Horticultural Association in Winnipeg last month. There is nothing in print

cannot be expected immediately. The permanency of the planting must be recognized, and therefore considerable thought and study should be devoted and evolving the best possible plan and selection of varieties to meet the individual requirements in each case. The very common practice of hap-hazard and indiscriminate planting cannot be too much discouraged; disappointment and

decide to put the trees on this. If one advises these men to wait and prepare ground that the belts can be planted where they will give satisfaction in later years, the answer is invariably "But I shall be losing a whole year."

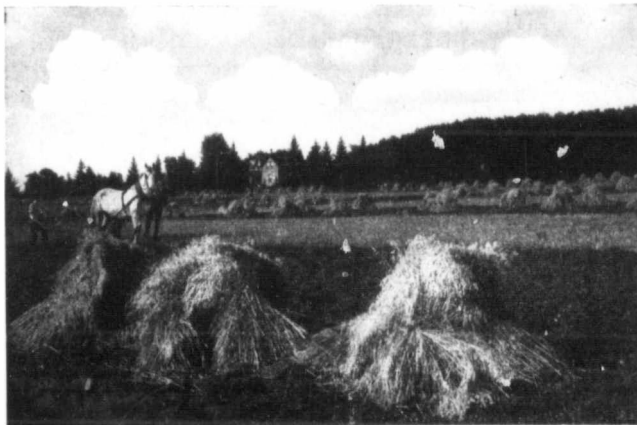
Personally, I think it would be advisable to lose many years rather than plant trees where they will ultimately be a source of continual annoyance and dissatisfaction. In any of the older settled districts we can find examples of poor planning. We find patches, which were once gardens, now so overgrown with the trees that were supposed to provide shelter that no vegetables or small fruits can be grown. We find lanes almost impassable because the rows on either side were not set sufficiently far apart to allow for their later growth; in other places the roads drift full of snow in the winter and cannot be used till late on in the spring. Again we find the trees cause huge drifts to accumulate in most inconvenient situations and so on. All these troubles can be easily avoided by a little common-sense planning.

Let the preparation of a preliminary plan, therefore, be the first step in any planting work. Such a plan should, as far as possible, be drawn to scale and should embrace all the ground to be set aside for buildings, gardens, ornamental grounds, roads, tree belts, etc. The mistake most commonly made is to leave too little room inside the belts. From six to ten acres should be devoted to this purpose.

In planning the main belts it must be borne in mind that wide belts, unless protected by an outside snow-break, are liable to be broken down in the centre by heavy snow drifts, and unless such snow-breaks are provided for it is unwise to plant the belts more than ten to fifteen yards wide. For a similar reason it is not well to set out a close

row of trees on each side of a roadway unless the snow can be held back by other belts of trees further away; otherwise such roads pile up full with snow and cannot be used in the winter time.

The trees immediately round garden plots should never consist of tall fast-growing varieties, such as Russian poplar or willow, but for this purpose low-growing

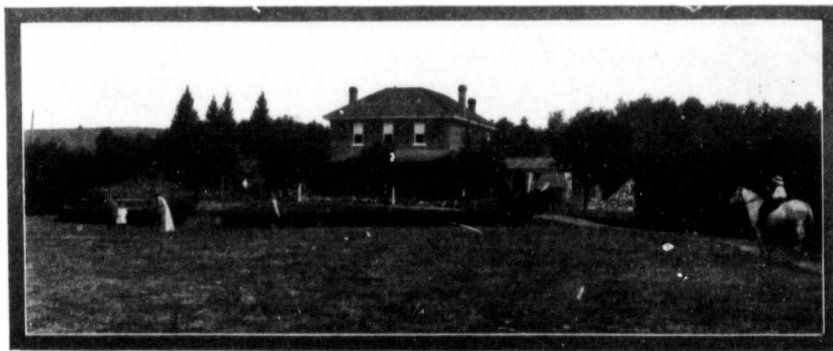


A Real Gem of Manitoba Farming

that more completely covers the case in such a common sense way. It is the outcome of an experience and careful observation, all the more valuable because the job has been gone after from the first attempt in one of the baldest spots in Saskatchewan, with an enthusiasm that nothing could damp out. "Tree planting," says Mr. Ross, "from the prairie farmer's standpoint, comes under one or other of the following three heads.

discouragement are sooner or later bound to be the result.

It is a very easy matter to make an individual tree grow, but it requires thought and careful planning if the shelter belts and plantations are to meet the future requirements after the farm becomes fully developed. In my opinion one of the most important points is that no farmer should undertake any planting until he has a clear idea of the arrange-



Another Complete off-set to the best of City Life

1. Windbreaks and shelter belts.

2. Ornamental or landscape planting.

3. Wood lots, where trees are grown for the material they may produce.

No matter what the object may be, it must be realized that the work is of a more or less permanent character and that results

ment of belts that will best meet his possible future needs.

We meet, every spring, men who have suddenly got the desire to plant trees. They have made no previous preparation, but generally there is some patch of garden ground, an old fire guard, or a piece of summerfallow somewhere near the buildings, and without any further thought, they