

keep the moisture from escaping. Cultivation during the summer to loosen the surface soil and destroy weeds must always be done.

Cultivation of the Trees.

After the trees are planted, they should at once be cultivated to loosen the soil and keep in the moisture. This is a matter that is often neglected and the trees suffer. It does not take long to do, and it pays well, for often one finds a plantation doing probably well enough, but not nearly so well as that of a neighbor's under precisely similar conditions, even to the number of times the cultivator was used, the only difference between them being that one was cultivated at the right time and the other was not.

In Other Parts of Alberta.

With the country to the east—the 'dry-farming' country—there need be no difficulty about tree-growing, for the same methods of preparation and treatment found so successful in Saskatchewan and Manitoba are just as successful here, and there is no more risk of damage from frost-hurt (indeed, probably less) than in some of the districts toward the north of these two provinces.

The growing of trees in the other parts of Alberta (i.e., north and east of the Chinook country) does not differ materially from what has been said about the south. The winters are steady and the drying effects of the winds are not so apparent, but the same cultivation and preparation previous to planting are just as necessary as farther south.

Arranging the Plantation.

The best way to arrange the plantations would be to plant, say, three belts, running north and south across the farm, one on the extreme west, and the other two one-third and two-thirds of the way across, respectively. There would soon furnish shelter enough for all purposes, and when such a movement comes to be universally taken up, there will be quite a change in the appearance of Alberta's prairies, as well as in some of the climatic conditions of the country. An alternative arrangement would be to plant similar belts all around the fields, but, as the prevailing winds in Southern Alberta are from the west southwest, probably the north and south strips would be best.

In order that they may be established and maintained economically, the plantations would require to be about twenty-two yards wide and the trees three feet apart. This seems close planting, but it would mean at least one year less cultivating — a matter of some importance to a busy farmer. Trees at three feet apart usually require only two years cultivation, while those at four feet take three years and sometimes more.

The cost need not be excessive. A few thousand cuttings of Russian poplar and willow and a thousand cottonwood trees (these to be used as a supply nursery from which to get cuttings for the plantations) and about two thousand maple, ash and elm seedlings every year would be sufficient to plant an acre, at 4,840 trees to the acre.

Planting can be done at the rate of one thousand trees per day per man, working with a spade, so that two men could finish an acre in about two and a half days. The poplars, cottonwoods and willows would speedily reach a good height and furnish a great deal of shelter, which could not fail to benefit the land to the eastward of them, while the maples would maintain the necessary ground shade and incidentally develop into poles.

Tree-planting has a great future in Alberta. It is a country of very recent settlement and there is consequently very little soil drift at present. But it is also a country of much wind—much worse than its neighbors to the east—and in a very few years the farmers of Alberta will be face to face with the problem many of the farmers of Saskatchewan are facing now, viz., 'How to prevent the drifting of the soil', only in a more accentuated form. The growing of winter wheat will help to some extent, but the only sure and safe way is for each farmer to protect his own farm by planting trees.

This wholesale planting may appear a little premature, but it is not. No one will question the need of it and we know now what trees will grow and the best way to set about growing them. There are plenty of farmers now in the country prosperous enough to stand the little extra time necessary to prepare and maintain an acre or two of trees. If such plantations are ever undertaken (and they will be some day) they must just be figured on as part of the year's work on the farm, and attended to systematically like everything else; otherwise they had far better be left alone.

Three four-rod belts across the fields would come to about twelve acres per quarter-section, and a plantation of similar width all around would be sixteen acres—not a very large area, and certainly not too much if the country is to have its proper complement of trees. Such plantations would answer, to some extent, the fuel question, which is just as likely, in some hard winter in the future, to become acute as it has in past seasons of that character. Moreover, if mixed farming is to become the system followed in the west (and no one can doubt that it will come sooner or later) such belts of trees will be of the greatest use in sheltering the stock. Work for the hired men in the winter, too, is a pressing problem which the thinning of the woods and the cutting up of the cordwood will help to solve in the years to come.