

LES
lished principles
g on the prairies.
ese be observed.
they have been
t be too much

ghly prepared.
ted with a view
local conditions.
e cultivated for
gainst stock.
bserved, success
everything else
soil well. Such
ate. All that is
v or root ground.
l, but very fre-
tely killed out
ees are planted.



AD
n feet high.

he best. Plant-
pecially avoided.
atisfactory, but
it will lead to
Do not manure
ity of cases it

ST
only a matter of
e that our choice
h the varieties
East. Manitoba
several varieties
poplar and white
ieties. Among
pruce, jack and
ch pine are the
ac, a deciduous



The above varieties do not exhaust the list of hardy trees for the West, but they are the kinds most suitable for our conditions. Do not try to grow Ontario maples, beech, horse chestnut, etc. The result will merely be disappointment. It would be almost as reasonable to plant oranges and other semi-tropical varieties in Ontario.

There are hundreds of homes on the prairies absolutely destitute of shrub or tree. This need not be. There is no difficulty nowadays in obtaining plenty of planting material. There are several nursery companies now operating in Manitoba, Saskatchewan and Alberta from whom seedlings of hardy varieties may be purchased at moderate prices. If the settler cannot afford to buy stock, he may avail himself of the free distribution carried on from the Nursery Station of the Forestry Branch at Indian Head. There are certain regulations governing this distribution which some do not care to observe, but these regulations have been so framed that at least ninety per cent. of those availing themselves of this system are successful in growing good wind-breaks and plantations.

FIRST GET READY TO PLANT

The old saying: "More haste, less speed," applies with particular aptness to tree planting. We must realize that once planted the trees are likely to remain growing for fifty or a hundred years. When the suggestion is made, "don't plant this year, wait till next spring, so that in the meantime you can more thoroughly prepare and cultivate your ground," how often do we hear this answer: "I can't afford to wait. I shall lose a whole year." Well, what is one year in the life of a tree? In most cases where a man tries to save a year by planting before the ground is ready, he sees his neighbor, who is wise enough to wait and spend that year in preparing his ground, a few years later the owner of a splendid plantation, while his own efforts have resulted only in a few scattered and stunted shrubs, which detract from, rather than add to, the beauty of his farm. Cases of this nature are unfortunately only too familiar to those who drive much through the country.

In the course of our tree planting work we come in touch with hundreds of farmers wishing to set out wind-breaks, and therefore, know from experience how little thought the majority of them spend on the laying out of the proposed plantation.

It would seem that most people do not realize the permanent nature of a tree belt, nor the fact that in twenty years or so a well-managed plantation should be from thirty to forty feet high. The larger number of our settlers at present occupy more or less temporary buildings, and must remember that in a few years they will want to erect more pretentious structures to keep pace with the development of their farms. It is not wise, then, to plan a plantation to surround merely a homesteader's shack and sod stable. Keep in view your future requirements. Make provision for a wind-break that will enclose a large barn yard, vegetable garden and ornamental plot in front of the house. Remember that the north and west are the most exposed sides and allow for a good wide belt of from twenty to forty rows, with the trees about four feet apart each way. On the south and east have belts of from five to ten rows. Also keep in view the fact that trees, as they develop, rob the adjoining ground of moisture and plant food to the detriment of neighboring crops. So in planning the garden leave lots of room—in ten or twelve years you will not be able to grow many vegetables within as many feet of your shelter belt. Leave room to admit of horse cultivation and to allow a wagon to get in to haul away rubbish or bring in manure. In fact, try to picture what your surroundings will be like when the trees are twenty feet high and plan accordingly.

Wherever possible, the main wind-break should consist of several rows of trees—fifteen at least, and better twenty to thirty. Inside the main belt, single rows may be used for temporary shelters to be cut out later as the outside belt gets high and thick enough to protect the whole piece. Single rows of trees are not satisfactory unless the soil on both sides can be kept cultivated. When planted thickly in wide belts, trees will protect each other. After the third season, no cultivation should be required as they will then cast a dense enough shade to smother out all weeds and grasses, and each year the falling leaves will form a natural mulch on the surface.

DO NOT PRUNE

It might not be out of place to mention pruning. Not by any means to advocate it, but rather to warn the inexperienced planter from touching his trees with a knife. Remember that now we are considering shelter belts and wind-breaks—not single, ornamental or avenue trees. These of course require pruning. As a general rule pruning in a shelter plantation during the early years should be strictly avoided. If one prunes up each tree to a single stem, practically no obstacle is opposed to the wind, the ground is not properly shaded and natural conditions, which it should be our object to maintain, are totally lacking. Such a plantation would require constant cultivation and would be of little value for shelter purposes. Pruning is permissible in only exceptional cases, as for example, in a plantation consisting principally of maple with only a few scattered tamaracs. In some places the comparatively worthless maple might overcrowd some of the tamaracs. In these cases, light pruning of the surrounding maples would be the proper thing to do, but only enough to permit the tamaracs to keep their tops clear with room enough to grow properly. Pruning entails considerable labor and unless done with intelligence is likely to produce bad results rather than good. Therefore, before going into a plantation with a knife consider well what you do. Do not merely act upon the suggestion of a neighbor unless you know him to be a man with considerable experience among trees.

HOW TO GROW LARGE SUPPLIES

I do not wish to go into the merits of each variety for shelter belt purposes, but would like to call attention to the particular suitability of the different kinds of hardy tree-willows for general planting. Any one purchasing, say, a thousand cuttings, can form the nucleus of an extensive plantation. From this original expenditure he can eventually get enough stock to, if he should so desire, plant up his entire farm without the cost of an additional cent for nursery stock. The acute leaf willow, the golden willow, the laurel leaf willow, and some others, all make excellent wind-breaks, are hardy and fast growers. They can be propagated most readily from cuttings made in the spring, if planted in suitably prepared soil.

No mention has been made in this article as to planting for fuel or other material. This is perfectly practicable, but at the present time the formation of shelters and wind-breaks is of most general interest.

To sum up briefly, then: (1) Do not plant till the ground has been thoroughly prepared. (2) Make your plans with an eye to the future development both of the trees and your farm stead. (3) Remember that tree belts accumulate snow drifts in winter, and keep the plantation thirty to forty yards back from all buildings. (4) Select only hardy varieties and insist upon the stock being Western grown.

If you cannot plant this spring begin now to plan for planting in spring of 1910.

NORMAN M. ROSS.
Chief of Tree Planting Division.

POULTRY

Eggs in Winter

EDITOR FARMER'S ADVOCATE:

To have hens lay during winter, when prices are high, is not a hard proposition if the hen is given a chance to show what she can do. To begin with, don't expect hens that roost in a corner of the stable during the night, and spend their daylight hours playing tag with the horses feet, to be very profitable. Give your hens a decent building of their own, with plenty of light, pure fresh air and a nice warm place to roost in at night.

A hen that is too fat is apt to be lazy, so be careful not to feed too much fattening food to your laying stock. Feed whole grain in the morning, in a deep litter of cut straw or chaff; this ensures a busy day for the hen, and a working hen is generally a good layer. By way of a variety, feed wheat one day the next give oats, or any other grain you may have. A mash composed of equal parts shorts and ground oats, sifted, and any odds and ends from the kitchen mixed together and slightly moistened with warm milk or water, to a state of stiffness, is a good evening feed for each day. By feeding the mash at this time, the hen goes to roost with a full crop and puts in a comfortable night.

Keep fresh drinking water before your poultry, and be sure to wash all watering troughs once a day.

An extra dish of sour or sweet milk, will be welcomed by the hens. Something to make up for the bugs and green stuff a hen picks up in summer is needed. This can be supplied to a certain extent in the use of mangels and turnips, fed raw, with a pig's head hung up for the hens to pick at between times.

Do not forget to furnish your hens with teeth in the shape of crushed crockery or small sharp gravel. This should be kept where the hens can reach it at all times. Something, too, for the hen to manufacture egg shells out of, should be provided. A mixture of crushed shells from the produce dealer or a small amount of lime added to the drinking water will do nicely. To further increase the happiness of your hens, have a large shallow box, in which keep a good supply of road dust, or sifted ashes, for dusting purposes.

W. R. BARKER.

Woman's Experience with Turkeys

EDITOR FARMER'S ADVOCATE:

I was a school teacher, but married a farmer. My parents were farmers, but I knew very little about the work, although I was always assured there were lots of drudgery, with little pay.

My first experience in the poultry line was with a small turkey hen. People told me young turkeys were hard to raise. I saw, with the very best of attention, they did not do well, so as soon as the birds were two days old I let them away with the mother. I brought them back and fed them at night for a few nights, and then they came of their own accord. I rarely lost a turkey. They grew well, and the heaviest rains did not hurt them, although I had been repeatedly warned by farmers' wives that even the dew would kill them.

SIMPLICITY.

FIELD NOTES

Events of the Week

CANADIAN

A hospital for sick children has been opened in Winnipeg.

* * *

Hon. William Templeman was elected by acclamation in the federal seat of Comox-Atlin constituency, British Columbia.

* * *

It is reported that within a few months China will establish a consulate-general at Ottawa and a vice-consulate at Vancouver.

* * *

The Postmaster General, after some consideration has decided to deny the mails to R. C. Edwards' paper.

* * *

George Ernest Stewart, a farmer near Shelburne, Ontario, in what is supposed to be an insane frenzy, killed John and James Stanhouse, father and son, and injured three other people, one of whom may die.

* * *

Montreal's much discussed ice palace is finished and their great carnival of winter sports is now on. The palace is lighted by 4000 electric lights.

* * *

Commander Spain and J. F. Fraser of the Canadian marine department have resigned as an outcome of Judge Cassel's report of the marine department.

* * *

Rinks to the number of 159 have entered for the Winnipeg bonspiel and play is now in progress. The Canadian curlers who are playing in Scotland are winning honors.

* * *

The Saskatchewan government objects to paying the expenses incurred in bringing the wandering Doukhobors back from Fort William to Yorkton last year. The government considers that the expense should come upon the federal powers.

BRITISH AND FOREIGN

The National Service league is creating more interest and enthusiasm in the territorial army scheme of Mr. Haldane, the British war secretary.

* * *

Captain Amundsen the Norwegian explorer of the north will carry powerful "wireless" apparatus when he goes in search of the North Pole next year.

* * *

The press censorship in Germany, which has been relaxed considerably since the famous interview, will be made more stringent again because of the lengths to which the papers have gone in cartoons and skits ridiculing the Emperor. Foreign correspondents who do not moderate their phrases will be gently, but firmly, conducted to the German border and thrust out.

* * *

Of eighty prisoners released on parole in Chicago all but ten appeared at the appointed time. Twenty-three were dismissed and will not need to come into court again unless they violate their promises to keep straight.