

# FORESTRY

"Rod and Gun" is the official organ of the Canadian Forestry Association. The Editor will welcome contributions on topics relating to Forestry.

*Editor*—E. Stewart, Chief Inspector of Forestry for the Dominion and Secretary Canadian Forestry Association, Ottawa, Ont.

*Sub-Editor*—R. H. Campbell, Treasurer and Asst. Secretary Canadian Forestry Association, Ottawa, Ont.

## THE GOVERNMENT PLAN FOR TREE PLANTING IN THE WEST.

For anyone who takes time to stop and consider the question there must be but one conclusion, that a wood lot is a very useful adjunct to a farm, both for its direct returns in supplying wood for fuel and other farm purposes, and for its indirect advantages as a protection from the winds and a conservator of moisture. This has been specially evident in the West, where there are such large extents of level land almost or entirely bare of trees. The land regulations which were adopted by the Dominion Government from the beginning of its administration showed a recognition of the importance of this question, as provision was made for dividing up wooded lands into wood lots for sale to homesteaders who had not sufficient wood on their own lands.

The forest tree culture claim regulation was also adopted to encourage planting on the prairie lands, but this provision did not remain long in force, and out of some 253 claims taken up under it only six were carried to completion. This plan did not work out with much greater success in the United States, from which Canada had adopted it. The fact is that the conditions to success were not understood even by the experts, as may be very well illustrated by the provision of the regulation referred to, which required that the trees should be planted not less than twelve feet apart.

The success which has rewarded the efforts of a few persevering individuals, and the work which has been accomplished by the experimental farms, has added much to the knowledge of the subject, and has given a sufficient basis on which a choice of species may be made and plans of management adopted with reasonable certainty of success, and, without repeating the somewhat extravagant estimates and prophecies of some of the earlier advocates of tree planting, it may be safely asserted that an intelligent and systematic effort to have the planting of trees carried out generally will result in very decided benefits to the individual and the country at large.

The forestry branch of the Dominion is making such an effort, and the plan upon which they propose to work is outlined in a circular which has recently been issued by the superintendent, Mr. E. Stewart. Applications from settlers in the West desiring to avail themselves of the co-operation of the Government in the planting and cultivation of a forest plantation, windbreak or shelter belt will be received at Ottawa. The local tree planting overseer will visit the property of the applicant and prepare a sketch and description thereof, with full particulars and suggestions as to the plantation to be set out. A working plan will be prepared from this information, a copy of which will be sent to the applicant together with an agreement to be signed by him. The department will, as far as possible, furnish seed and plant material, and it reserves the

right to take from any plantation set out under its direction any seed, seedlings or cuttings that should be removed and may not be required on the property. The department will render all services specified free of charge, but the owner must prepare the soil, set out the plantation, and properly care for it afterward. A minimum of half an acre of 1,500 trees and a maximum of five acres of 15,000 trees has been fixed. The agreement to be signed by the applicant contains the main provisions above cited.

In addition to this special work the forestry branch will issue circulars from time to time giving general information. In the first of these, which has recently been issued, are given general suggestions for the preparation of the soil for tree planting. The object is to reproduce natural forest conditions, particularly the loose, porous soil which characterizes it, and we quote a few paragraphs from the circular giving directions as to how this may be attained:

"A piece of land which it is intended to plant up should in every case be thoroughly worked up and cultivated some time before the time for planting arrives. Land which has already been under cultivation for some years will prove the best for tree planting. If planting is expected to take place in the fall the soil must be ploughed as deeply as possible during the summer, if possible using a subsoil plough as well as the ordinary plough. After ploughing, the surface must not be allowed to get hard, but should be frequently harrowed in order to preserve the moisture in the ground which would otherwise be lost by evaporation. The chief advantage in fall planting lies in the fact that at that season farm work is not usually so pressing as in early spring, but outside of this, spring planting should always be resorted to if possible, as the soil is moist then and the young plant has a whole season in which its roots may become well established before the winter sets in.

"Preparation of the soil for spring planting should be commenced in the previous fall by as deep cultivation as possible. The surface of the ground should, however, be left rough in order to catch as much snow as possible and also to expose a larger surface to the weathering action of the frost. Immediately before planting the ground should again be ploughed deeply and the surface harrowed down. In cases where it is wished to plant seeds instead of young plants the soil must necessarily be brought into a finer condition. In cases where seedling trees are available for planting it is recommended, as a general rule, that planting operations should be carried on in the spring rather than in the fall of the year. In the case of certain seeds it is often advisable and cheaper to plant in the fall.

"The site for a proposed plantation should be carefully selected with a view to the requirements of the species which it is intended to plant. As a general rule it may be taken that slopes facing towards the north are best adapted to tree growth, as they are usually moister, for the reason that they do not receive the direct rays of the sun, and are less liable to sudden changes of temperature than are southern slopes. Certain trees, as willow, ash, and balsam of Gilead, thrive best on moist soil in the neighbourhood of streams and ponds and will often prove a failure if planted on high land where the supply of moisture is somewhat scanty. Many species, however, as box elder, or Manitoba maple, are adapted to growth on higher ground, although the same varieties would probably attain larger proportions in low land where they could obtain more moisture. Such natural considerations as these must be carefully taken into account in connection with tree planting in order to attain to any degree of success."