

A GUIDE TO ONTARIO TREE PLANTERS

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The urgent necessity for extensive reforestation is evident when we observe the rapidity with which the productive forest area in Ontario is decreasing and the condition in which the greater part of the cut-over land is left. Heretofore when one region was exploited, and the timber removed, new areas of virgin forests were cut, leaving ever increasing tracts of waste land. In the southern part of the province, or "Old Ontario" there are frequent farm woodlots, which although providing wood products now, are not reproducing naturally. The time is fast approaching when these woodlots will be entirely cut down, hence it is apparent that future wood crops must be provided by means of reforestation.

MEANING OF REFORESTATION.

Reforestation means the growing of new forests. This may be attained by natural reproduction from "mother" trees, or by artificial restocking. The latter system has been found to be the most satisfactory, providing uniform stands of pure or mixed sorts as desired. Natural seeding is patchy, uncertain and incomplete. Abandoned farms and waste lands that have been allowed to run out, or that have been repeatedly lumbered and burned over, are more often lacking in sufficient seed trees, and consequently reproduction is possible only by means of artificial reproduction. This issue is attained by procuring forest seedlings with due regard to their suitability to the area or site on which they are to be planted.

CHOICE OF SPECIES.

Although the first factor in the choice of species is that those selected are sufficiently correlated to develop into a good stand, they must also conform to the particular object that the owner has in view when he makes the selection.

The two general objects that are usually entertained in establishing a plantation may be classified, viz:

(a) The production of wood or other forest products;

(b) The protection which a forest affords.

Where the choice is made with the object of producing fuel, posts, lumber, etc., in the greatest quantity in the shortest possible time, such species as birch and Carolina poplar form a

rapid wood crop, which though of somewhat inferior quality, provides good summer wood and brings a fair price on the market. Black locust is without peer for posts and poles, making an exceptionally rapid growth and possessing excellent qualities as to durability. Where a timber crop is the object, White, Scotch, and Red Pines excel in lumber production.

TO MODERATE WINDS.

Trees grown for protective purposes should be effective in checking wind velocity, in preventing land slip on steep hill sides, in regulating water flow and in retarding soil erosion by both wind and water. Hemlocks, pines and spruces for the best windbreaks, while the deeper-rooted hickories and oaks excel in preventing land slip and erosion. The nature of the soil whereon the planting is to be done, must also be taken into consideration. Artificial regeneration may fail on account of the soil not meeting with the requirements of certain species. All trees grow better on deep, porous, moist, soil, rich in humus and mineral nutrients.

In many places although the soil is fertile, the ground surface is so steep and rough that farming thereon is impossible. On such places as these, walnut, white ash, cherry, beech and other exacting species might be advisably planted. On less exacting sites, that is on light sandy or gravelly soils, white pine, Scotch pine, red pine, red cedar and upland oaks should do well, while the shallow rooted species such as spruce, maple, elm, etc., are best suited to the heavier clay soils. A safe guide in choosing which species are best suited to the prospective area to be planted, is to observe stands of timber on adjacent woodlands, comparing the soil conditions and assessing the development in order to judge, whether or not, the trees are growing under favorable conditions.

WHERE SEEDLINGS ARE OBTAINED.

Careful attention having been given as to choice of species, the next step is to procure the seedlings. Upon applying to E. J. Zavitz, Provincial Forester for Ontario, Forestry Branch, 17 Queen's Park, Toronto, forest seedlings may be obtained from the provincial forest nurseries at St. Williams, Ont. These seedlings are packed and shipped early in May. They