

It needs to be driven home to every Canadian that in spite of foolish assertions to the contrary and exceptional cases observed on single individuals, the growth of trees in the forest in our northern climate in the East, and on the thin or rocky soils, which are the eventual heritage of the forester it takes in the average not less than 100 years to make a 12 inch tree, and the majority of the trees of Nature's growing which the lumberman cuts have required 150 years and more to make log sizes.*

This long time element is the strongest argument not only for the governments retaining and managing forests as crops, but for the need of timely consideration of the future. Such considerations of the future, as we shall see, would involve the breaking away from the license system hitherto in vogue, and this, indeed, is involved in our desire to see the government change its attitude.

We want, then, the governments to realize that there are other ways of utilizing forest properties than merely exploiting them; that a rational, properly directed, technical management is capable of securing all the value without destroying the capacity for further production, in other words, that forests can be managed as crops to be reproduced while the utilization is going on. More than that: poor forests of Nature can be improved and made to produce more valuable material than the untouched natural woods. Nature is not, as some bigoted nature worshippers would make us believe, the best forester, for in Nature's production the economic thought is left out. She produces weeds as readily as valuable kinds, she is lavish in space and time, wasteful and without regard of human needs.

No such simple provision as setting a diameter limit in cutting the timber limits will suffice to secure the needed supplies for the future. While such a diameter limit may under certain conditions save at least a part of the value and make future recuperations easier in the end, only a real forest management—the application of forestry—by educated foresters will satisfy the situation. And let it be well understood that forestry is not tree-planting, but begins best when the first tree is cut.

Next we want the governments of the Provinces, especially the Eastern ones, to realize that not less than two-thirds of their territory and most likely more, is not fit for agriculture and only fit to grow timber. Hence, there should be a more careful distinction made in the treatment of the two situations. As long as rich agricultural soils in bulk were available, and the location of farms progressed by natural selection on the glacial drift and alluvial soils, there was no need of any special consideration, although here, too, it would have been better if the denudation of absolute forest soils had been prevented, so that the laudable effort of the Ontario government of buying up and reforesting waste lands would have been unnecessary. But, as settlement progresses into the true forest region, which is destined to the largest extent to remain in forest, a more definite policy of disposal becomes necessary. It is true there are some restrictions placed on settlement by the governments, at least in Ontario, by which a township is excluded from farm settlement unless a certain percentage can

*The growth of trees is exceedingly variable, according to species and growths conditions. The careful measurements of several thousand White Pines, the most rapid growing conifer in our woods, show that it takes, in favourable sites, in the average not less than sixty years to make a twelve-inch tree, and under the most most favourable growth conditions, it would not be over twenty-four inches in the one hundredth year. The Spruce, a much slower grower, makes under most favourable forest conditions one inch in seven, more frequently one in nine years, which would bring a twelve-inch tree in the average to one hundred years. But in the virgin forest where competition among species and individuals retards the development, one inch in twelve to fifteen years and more is the more usual rate of growth.