

Depletion.—The forestry situation in Canada is now distinctly promising in spite of the profligate manner in which the timber resources have been, or for that matter are, in some cases, still being treated. Having fallen heir to an apparently inexhaustible supply of timber, it is but natural that Canadians should have exploited it with little thought of succeeding crops. The urge to clear the land for settlement engendered carelessness with fire, which, under control, is a useful agent but, as a rule, it was allowed to extend far beyond the areas to be cleared.

During the ten years 1928-37, the average annual cut of timber for domestic and industrial use was equivalent to about 2,580 million cu. ft. of standing timber. It is perhaps not generally recognized that the principal use is for fuel, about 33·5 p.c. of the annual cut being utilized for that purpose. This amounts to about eight-tenths of a cord per capita and is equivalent to approximately 6,500,000 tons of anthracite coal. About 30·6 p.c. is used for the manufacture of sawmill products, including lumber, lath, shingles, etc., and 30 p.c. goes into the manufacture of pulp and paper. The remaining 5·9 p.c. includes hewn ties, posts, rails, mining timber, poles, and numerous other products. Only about 9 p.c. of this timber is exported in raw or unmanufactured state and 91 p.c. is either used for domestic requirements or was further manufactured before export.

The average annual loss from fire during these ten years is placed at 325 million cu. ft. of merchantable timber and the equivalent of practically the same amount of young growth. The annual loss due to insects and disease is estimated roughly at 700 million cu. ft., making a total annual depletion of 3,930 million cu. ft. of standing timber.

Increment.—The Dominion Forest Service and some of the provincial forest services and timber-owning companies have conducted investigations of increment and these indicate that, at least on the more favourable sites, the growth compares favourably with that secured in northern European countries, where an average of 25 cu. ft. or more per acre per annum is secured.

Investigations conducted in the various forest regions indicate that the natural reproduction of the principal species, both softwood and hardwood, is adequate to establish new stands, unless the forest has been subjected to very severe and repeated fires. Fire or the exclusive exploitation of one or more species may alter the composition of the stand temporarily and may cause local shortages of those species for a time, but natural reproduction can be depended on to replace them over a period provided seed trees are left. Artificial reforestation by seeding or planting has a definite, if limited, place in Canadian forestry in the rehabilitation of badly devastated areas, in the afforestation of lands mistakenly cleared for agriculture, and in the establishment and improvement of farmers' woodlots and shelterbelts.

It would therefore appear that there is sufficient timber of merchantable size to maintain the present annual cut and a reasonable amount of depletion from other causes until sufficient young growth attains merchantable size to meet the requirements. However, it must be remembered that it is necessary to have supplies of the kind of timber that industries require, located where they can be cut and delivered to the manufacturing plants at a cost that will enable products to be sold at a profit in the markets of the world. Then, too, the timber should be distributed in succeeding age-classes so that there will be a continuous accretion of merchantable timber.