

loss from fire is estimated at 730 million cubic feet of conifers and 170 million cubic feet of hardwoods. Though no very wide-spread epidemics of insects or fungous diseases have occurred, the spruce bud-worm and various bark-beetles have been active in some localities, and there is a constant loss through decay. In the absence of any basic data on which to estimate the losses from these causes, they have been taken to nearly equal that from fire—perhaps 800 million cubic feet. The total depletion during the five years is therefore estimated to have been approximately 22,000 million cubic feet. To what extent this has been replaced by increment, no one knows, but considering the preponderance of the younger age-classes in the reproduction, it is felt that there has been a considerable net depletion in merchantable timber, amounting to perhaps 9,000 million cubic feet. Additional data secured by the Royal Commission on Pulpwood, together with a deduction for timber on the area awarded to Newfoundland and subsequent investigations, account for the balance of the reduction from the estimate of 246,792 million cubic feet in 1923 to that of 224,304 million cubic feet in 1929 as shown in Table 1.

It is still more difficult to divide the stand into merchantable timber and that which is inaccessible or unprofitable, since merchantability depends not only on the location, but on the density of the stand, the demands of the market for certain species or qualities of product, and the regulations governing cutting. Light stands covering large areas may in the aggregate carry very large amounts of timber and still not be exploitable at a profit. For some species, such as aspen and white birch, which comprise three-quarters of the hardwoods, there is very little demand, and therefore these cannot properly be classed as merchantable, though accessible as far as location is concerned.

In June, 1929, a conference of the Dominion and provincial forest authorities was held in Ottawa and it was decided to undertake a national inventory of the forest resources of Canada, each authority conducting the necessary stock-taking surveys on the land under its jurisdiction. In connection with the inventory, definite data are being secured regarding the depletion due to use, fire, insect damage, etc., and the increment accruing. Five years was set as an objective for the completion of an inventory of at least the more accessible parts of the area.

Under present conditions it is doubtful whether more than 100,000 million cubic feet of conifers and 15,000 million cubic feet of hardwoods can be considered as merchantable.

1.—Estimate of Total Stand of Timber of Merchantable Size in Canada, by Regions, 1929.

Regions.	Conifers.			Broad-leaved.			Total.		
	Saw material.	Small material.	Total equivalent in standing timber.	Saw material.	Small material.	Total equivalent in standing timber.	Saw material.	Small material.	Total equivalent in standing timber.
	Million feet board measure.	1,000 cords.	Million cubic feet.	Million feet board measure.	1,000 cords.	Million cubic feet.	Million feet board measure.	1,000 cords.	Million cubic feet.
Eastern Provinces.....	45,193	476,322	65,662	31,845	160,995	25,811	77,038	637,317	91,473
Prairie Provinces.....	17,484	275,564	36,070	9,338	159,921	20,756	26,822	435,485	56,826
British Columbia.....	320,000	47,435	75,630	777	1,756	375	320,777	49,191	76,005
<b>Total.....</b>	<b>382,677</b>	<b>799,321</b>	<b>177,362</b>	<b>41,960</b>	<b>322,672</b>	<b>46,942</b>	<b>424,637</b>	<b>1,121,993</b>	<b>224,304</b>