

would prove a better investment, in the long run, if necessary, to withdraw some of the protection from the mature timber and concentrate it upon the young growth. Fire in young growth is much more disastrous than in old growth. The large mature fir trees are so fire-resistant that only a fire of exceptional intensity kills the majority of the trees. Even if commercial timber is destroyed, the forest-productiveness of the land is not destroyed, for, as we have seen, the first burning stimulates rather than retards the reproduction of Douglas fir. On the other hand, an ordinary fire kills the majority of the trees in a young stand. For reasons stated above, when young growth is once killed, it does not re-establish itself in commercial quantities on the same area and the result is idle non-productive land. Therefore, from the standpoint of the future forest-productiveness of the province, it would be better to concentrate the energies of fire protection on the areas of young growth.

The third recommendation is in reference to growth studies upon young fir. These are necessary in order to forecast future yields, and, as yet, very little work of this kind has been done upon trees below the present commercial size. The rate of growth is apparently remarkably rapid in certain situations and as remarkably slow in others. Studies should be made to determine the cause of this. The object could doubtless be best attained by establishing permanent sample plots, and investigating the various factors through a series of years. A related problem is that of the influence of density upon growth. Some of the stands of reproduction are evidently too dense to get the best commercial results in the future. Different degrees of thinning could be made upon permanent sample plots and the proper density for the best growth in this way determined.

The fourth recommendation is in regard to publicity as to the value of young growth and the necessity for its protection. The Forest Branch is to be highly commended for its publicity work in regard to forest protection and for the resultant attitude of the people toward forest fires. It is in striking contrast to the stolid indifference generally exhibited in the matter by the people of eastern Canada. This public demand for protection, however, as a rule is applied only to the mature timber. It should be extended to the young growth. By means of literature and placards similar to those already in use, the Forest Branch should educate public opinion to appreciate the value of the young growth.