

**Douglas Fir
Predominant**

The table below gives the average density per acre of the young Douglas fir forests grouped into age classes of ten-year intervals. The actual age of these stands will be found under the section upon the influence of fires on forest reproduction.

TABLE I
NUMBER OF YOUNG TREES PER ACRE, ACCORDING TO AGE BY DECADES, BASED UPON
32 ACRES OF SAMPLE STRIPS

Age, by decades	Douglas fir	Hemlock	Cedar	Balsam	White pine	Total trees
Less than 10 years	53,300	1,600	3,300	..	..	57,600
10 to 20 years	3,900	270	470	30	5	4,670
20 to 30 years	1,100	220	170	20	5	1,510
30 to 40 years	410	270	100	10	..	790

PERCENTAGES OF YOUNG TREES PER ACRE, ACCORDING TO DECADES, AS ABOVE

Age, by decades	Douglas fir, Per cent	Hemlock, Per cent	Cedar, Per cent	Balsam, Per cent	White pine, Per cent
Less than 10 years	93.0	2.0	5.0		
10 to 20 years	83.4	5.7	10.0	0.7	0.1
20 to 30 years	72.6	14.6	11.2	1.3	0.3
30 to 40 years	52.0	34.0	12.6	1.3	

One frequently finds small patches of fir in which the number of trees on an acre was much higher than given in the table above. For example, four-year-old stands sometimes ran as high as 322,000 little trees upon an acre, and even in the 16- and 18-year-old stands the number per acre frequently reached 30,000. The figures in the table, however, give a good idea of the general condition of the reproduction, including the poor as well as the good.

The table above clearly shows the natural thinning-out that takes place as the trees increase in age and size. In the case of the 57,600, less than 10 years old on an average acre a little tree occupies less than a square foot of soil. If all of these trees lived until they were a foot in diameter, the result would be a solid block of wood upon an acre. We know that trees do not grow that way. There is not room enough for them all, so the weak die and the strong survive. As shown by the table, in this case 91 per cent of the trees had died by the end of the nineteenth year, 97 per cent at the end of 29 years, and 98 per cent