

The number of poplar trees on the average acre at present—it being 8 years or 16 years since the last burning—is practically the same as after the first burning. Eighty-five per cent of these trees, however, belong to the one-inch and two-inch diameter classes, and are not over 16 years old. They are mostly sprouts, stimulated to growth by the last fire. The number of commercial trees averages six per acre, while the number of like trees on the areas burned but once averages 27 per acre. There is one-fifth of a cord of poplar now fit for pulpwood on the average acre, while the pulpwood on the areas burned but once averages one cord per acre. Trees of other species of potential commercial value average practically the same (100 per acre) as on the areas burned but once.

#### AREAS SEVERELY BURNED THREE TIMES

The areas severely burned three times cover 9,300 acres. Deducting the usual one-fourth of the area for swamps, there are 6,975 acres actually occupied by this type. The area in Methuen township was burned approximately 25 years, 18 years and 5 years ago, while the areas in Burleigh township were swept by fires 25 years, 16 years and 10 years ago. One of the Burleigh areas extends into Methuen, near the point at which Jack creek leaves the township.

The last fire on the Methuen area was very severe. The dead trees resulting were counted on sample plots totalling eight acres. Before the fire there were 276 poplar trees; 23 pine trees and 41 oak trees per acre; after the fire there were only two living poplar trees, one pine and one oak tree per acre.

The area burned three times in south-eastern Burleigh is on crystalline limestone, and the stand is open and park-like in many places, where the three generations of trees, due to the three fires, are quite easily distinguished. Continued burnings on limestone areas stimulate the development of grass beneath the trees. The soil being thin, however, the grass completely dries up in the drier portions of the year, so that such areas would be of only temporary service for grazing purposes. The area burned three times in the central portion of Burleigh is chiefly composed of low granite ridges, the tops of which, in many cases, have been burned practically clear of trees.