

the county of Peterborough, Ont. The region was selected because it contains, in a relatively compact space, considerable areas which have been burned once, twice, thrice and many times.

The work was carried on for three and one-half months by the writer and two student assistants, Messrs. J. D. Aiken and Miles Burford, of the Faculty of Forestry, University of Toronto, whose efficient co-operation made possible the gathering and the organization of the data for the report.

The original plan was to run parallel compass lines one-half mile apart through the burns of various ages, and to measure all of the trees one inch and more in diameter. This plan was adhered to for the first month, when it was found that the composition of the various types was so constant that the running of the lines so near together appeared to be unnecessary. None of the lines, however, were more than a mile apart. At least one line was run through each type in its longest direction and the trees were counted and measured with calipers. Then paced reconnaissance lines were run parallel or perpendicular to the calipered lines and in this way the boundaries of the various types were determined. The strips, a chain (66 feet) wide, on which the trees were actually counted and measured, aggregated nearly 25 miles, while the reconnaissance lines aggregated over 80 miles.

Basis of Classification

In the field work, the following types were found within the burns of various ages, and separately tallied: (1) Low amphibolite ridges; (2) low granite ridges; (3) low limestone ridges; (4) sand ridges; (5) depressions between ridges; and (6) sand plains. Upon compilation of the results, however, it was found that, while there were interesting differences botanically, there were not differences enough as regards the amount of second growth pine and poplar to justify such classification. Hence, the differences due to topography, soil, and attendant conditions have been neglected, and the areas have been classified alone according to the number of times burned.

In the field work, also, an area burned a certain number of times was sub-divided into several smaller areas, according to the amount of pine and poplar reproduction per acre, but, in the final tabulation, it seemed best for the purposes of this report, to group these areas and to strike the average in terms of the young pine and poplar for the entire area burned a stated number of times.

The number of times an area had been burned was determined in

two ways: (1) number and would be for area fell into poplars 25 y base 8 and fire scars eig covering the be found tha 16 and 25 ye been burned duff down t beds for pop easily and wi rapidly for ti ground. Th years are too on the groun aged trees. 1 conditions fo the usual sul patches, but, poplar would The result w the presence t furnish the n burned areas.

One is, th ing the numl severe fire le and stamps it

Many Smaller Fires

severely burn- ciently to scar growth period where more t designation tal