

## FACTORS DETERMINING TYPES.

The nature of the soil and the drainage conditions are the two factors of growth which determine the various types of forest found here and also on the Laurentian country to the northeast. Fires have been influential as well in changing a spruce type to one of poplar and also in destroying the humus which improves the growth conditions to such an extent. Summing up, it may be said that the soil (drainage being a factor of soil conditions) determines the type of forest vegetation, the result being modified by the action of fires.

## TYPES.

The following types of forest may be definitely distinguished:—

1. Jack pine.
2. Poplar.
3. Muskeg { Open muskeg.  
Lightly timbered muskeg.  
Heavily timbered muskeg.

TABLE No. 1.—Area and Percentage Distribution of Types.

	Area in Sq. Miles.	Percentage of Total.
Total .....	3,816	100
Jack pine .....	287	7
Poplar .....	767	20
Muskeg .....	2,762	73

*Jack Pine Type.*

This type, which is found on the sand and gravel ridges, includes a large part of the country through townships 5 to 10 in ranges 10, 11 and 12, also township 3, range 12, and township 4, range 11, as well as considerable along the Lac du Bonnet branch of the Canadian Pacific railway.

The total area covered by this type of forest is approximately 287 square miles, or 7 per cent of the district included in the "Transition Area."

The greater part of the jack pine area consists of a series of low rolling ridges, with occasionally a small plain a few hundred acres in extent.

The soil varies from fine to coarse sand and may be classed as site I for jack pine. There is a small area, especially in the vicinity of the southeast part of section 8, range 9, in which the soil consists of fine and coarse gravel and larger boulders which may be classed as site II. The inferior growth conditions are well exemplified here in the short scrubby trees. There is no site III here, as there is on the barren rocks to the northeast.

The soil on these ridges grades from fine sand, through coarse sand and fine gravel to coarse gravel and, over limited areas, a boulder-strewn surface. The boulders are of granite and gneiss, ranging from six inches to several feet in diameter.