The great areas of non agricultural land are divisible into two classes, viz., (1) undrained, and (2) broken.

The undrained areas are muskeg underlain by boulder-clay which appears above the general level as ridges.

In the broken hill country we have a different condition, especially along the northern face, or 'shield,' of the Swan hills. Here is a large area much broken by cross-ridges and deep ravines, but covered to a considerable depth with a top layer of fine clay loam mixed with stones. Owing to the latter, and to the rough nature of the country, this region is unsuitable for agriculture, but it is one of the best locations for timber growth that could be found. Indeed, it was once covered with the finest stand of spruce and lodgepole pine in the north country.

The subsoil here is boulder-clay. In less favoured regions in the interior, and on the southern side, the boulder clay reaches the surface.

CLIMATE.

The climate of this country has been a subject of much controversy. Some claim for it all the possibilities of the wheat belt to the south, others say that it is impossible to grow anything. In the appendix are given results of observations taken from June 3, when the work of the party commenced, until September 24. After the latter date the party moved into the Swan hills. Later than this, variations in elevations, &c., need so many corrections that the data are of little use. Frosts occurred nearly every night in the Swan hills and snow fell frequently. Frosts recorded in July seem to have been of local occurrence. The party was then located in the neighbourhood of Muskeg creek on the north shore of the lake at the east end of Martin mountain. Different inquiries at Swan River settlement seem to confirm the statement that no frost occurred there in July.

As regards crops, I do not think wheat will do well around the lake except, possibly, at the west end. Last summer, even the oats were badly frozen in the Swan river valley, although they are said to do well most years.

There is a great future for the country in hay crops and stock raising.

FOREST GROWTH.

The forest areas of the lands examined may be divided in a general way into eight classes:—

1. Muskeg.
2. Poplar.
3. Cottonwood Flats.
4. Jack Pine.
5. Lodgepole Pine.
6. Summit-Plateau.
7. Height-of-Land.
8. Spruce.

MUSKEG.

This type is omnipresent. It develops in three ways, viz.:

1. Marginal areas to river systems, as in the case of the Lesser Slave and the Saulteux rivers, where the muskeg extends back from the shores for a distance of from three to five miles.

2. Undrained height-of-land areas. Here muskeg occurs surrounding numerous gravel or boulder-clay ridges or islets.

3. On summit of plateau. Here the muskeg is associated with areas of lodgepole pine, black spruce and fir. Muskeg up here is very wet, either it is composed almost entirely of very scattered tamarack, or is bare open tundra of moss or reedy grasses.