

Three-fork
River.

Lakes S.E. of
Eagle Lake.

Huronian rocks
of Eagle Lake.

Laurentian
gneiss of
Vermilion and
Bell's Lakes.

In regard to the exploration from Wabigoon Lake by way of Eagle, Vermilion and Bell's Lakes to Lake of the Woods, the rocks will be mentioned in the order in which they were examined. Around Wabigoon Lake, green dioritic and chloritic schists prevail. I was shewn a small specimen of native copper in quartz, said to have been broken from a vein on an island in this lake. In the southern bay of the lake and along the Three-fork River, as far as the second small lake on its course, a massive, grey diorite appears to be the only rock. From this lake a portage, three quarters of a mile long, leads south-westward to a larger one, the waters of which eventually find their way into Eagle Lake. The northwest side of this lake is occupied with Laurentian gneiss.

Lying to the south-east of Eagle Lake, proper, are two straggling sheets of water connected with each other by tortuous narrows, five or six miles long. The second and larger of these was called, for convenience, Hugh Osbourne's Lake. It is separated from the south-eastern bay of Eagle Lake by narrows only a few yards wide, and here the Huronian schists re-appear; the two straggling lakes mentioned being surrounded by hills of gneiss. Three miles north of the narrows by which we entered Eagle Lake, another narrow place was passed. Here the rock is a light-grey calcareous mica-schist on edge, and running S. 30° W. Along the south-east side of the lake, dark-grey diorites, for the most part of massive character, predominate, except in the last four miles before reaching the south-western extremity, where they are replaced by a grey syenitic granite of medium texture. At a mile and a-half north of the south-eastern extremity, a light-grey, slaty felsite was met with in a vertical attitude and striking S. 35° W. A narrow passage connects the western arm of Eagle Lake with the south-west end of Vermilion Lake. The rock at this place is a grey mica-schist full of iron pyrites. The ground is covered with red ochre resulting from the decomposition of the pyrites by bush fires and the action of the weather. The schists contain numerous short veins of red and white quartz (also holding iron pyrites), following the strike, which runs S. 45° W.

Passing into Vermilion Lake through the passage already mentioned, at half a mile north of the western arm of Eagle Lake, Laurentian gneiss was again encountered and was the only rock met with along the route followed, until reaching the portage on Berry River, about a mile east of the head of Long Bay at the eastern extremity of the northern part of the Lake of the Woods. Here again schists and calcareous, light-grey micaceous quartzites were found, striking west, which proved to be connected with the large Huronian basin of this lake.

The gneiss all along the above route is of the ordinary greyish and reddish varieties, and requires no special description. The country visible from this chain of lakes on either side is mostly rocky and barren and nearly all the timber has been burnt off.