

Great unconformity.
 Keweenawna.....Olivine diabase: quartz diabase.
Intrusive contact.
 Huronian.....Cobalt series, Gowganda formation

Great unconformity.
 Quartz diabase.
Intrusive contact.
 Bacholithic intrusives, granite, and syenite.

Intrusive contact.
 Kiak series, conglomerate, arkose, slate.

Unconformity.
 Keewatin (?).....Rhyolite, andesite, basalt, tuffs, peridotite.

KEEWATIN (?).

DISTRIBUTION.

The rocks grouped under this head are chiefly volcanics and include basalts, andesites, and rhyolite with their associated tuffs. A number of small bodies of peridotite or pyroxenite, intrusive into the lavas, are also grouped, somewhat improperly, with the lavas. The volcanics underlie about half of Matachewan area, with their greatest development in its northern half. They occupy the greater part of Alma, Baden, and Argyle townships, and large parts of Cairo, Powell, Bannockburn, Montrose, and Hincks townships.

At least five peridotite masses occur around the northern end of Lloyd lake, in Midlothian township. Others are found in the vicinity of Rahn lake, in Bannockburn township. One or two were seen in the south end of Argyle township, near mile $3\frac{1}{2}$ of the Bannockburn-Argyle line, and another in Powell township on the west shore of lake Mistinikon, a short distance north of the boundary of the Cobalt series. Burrows, in his report, mentions another on Whiskeyjack creek, one mile north of Fox rapids on Montreal river. This was not seen by the writer.

Rhyolite is found mainly in Midlothian, Montrose, and Bannockburn townships. In Midlothian township practically all the basement volcanics consist of rhyolite. A little of the southwest corner of Montrose township is underlain by rhyolite which is also found north of Boyer lake in the eastern part of the township. The rhyolite of Bannockburn township is part of the same mass. Small amounts also occur on the east shore of Mistinikon lake north of the boundary of the Cobalt series east of Bell island.

Rhyolite breccias and cherts, or cherty tuffs associated with rhyolite flows, are particularly numerous in the rhyolite area in Midlothian township. They are not prominent in Montrose township. Two considerable