[FLLS] PALÆOZOIC OUTLIERS IN THE OTTAWA RIVER BASIN 14B

the underlying Laurentian limestone and associated gneiss. These outliers are small in extent covering only a few hundred square yards.

With the exception of a narrow fringe of fossiliferons strata of Calciferous and Chazy age along the shore of Coulonge Lake, which is an expansion of the Ottawa above the village of Fort Coulonge, and well seen at Sèche Point, as well as at the point above, no other deposits of sedimentary fossiliferous rocks were observed in this area. The Potsdam sandstones have evidently not been deposited along these upper stretches of the river basin, as the Calciferous and Chazy rest directly upon the crystalline rocks.

The largest area of the Palwozoic strata in this direction is presumably that which occupies the greater part of Allumette Island and extends eastward across the channel of the Ottawa, comprising a very considerable portion of the township of Westmeath. The formations here represented are the Calciferous, on the west end of the island, Chazy and Black River, the latter of which has been particularly studied at Paquette's Rapids near the junction of the south or Penel roke channel with that which continues down the north side of the island. The fossils occur in the usual dark-grayish limestone and are frequently silicified, causing them to stand out distinctly from the weathered or water worn surface of the containing rocks. The Chazy is represented by the lower greenishgray shales and sandy beds and by the upper or limestone formations, the upper beds presenting the same nodular character as seen on the lower Ottawa.

The western edge of this outlier shows a very narrow margin of Calciferous on the shore about four miles above the town of Pembroke, while the Chazy portion is represented in the town itself and for several miles to the southeast. The Westmeath area, which is the eastward extension of that on the island, shows but tew outcrops of solid rock, the country being generally low and drift covered, but large masses of the characteristic Chazy and Black River limestone are seen at several points indicating the existence of the basin over a considerable area. The elevation of the Allumette Lake is about 370 feet above sea level which would be about the same as for the Chazy and Black River ridge at Sand Point near Arnprior.

Another area of considerable size, but apparently separated from that just described, is seen to the south of the lower end of Muskrat Lake in the townships of Stafford and Bromley. The outlier embraces nearly twenty square miles and consists of the Chazy and Black River formations only, in so far as can be determined, the latter being particularly well exposed. Like other Paleozoic outcrops in this basin, the strata lie in a nearly or quite horizontal attitude, the inclinations observed being only from 1° to 3°, the principal area rising in a somewhat bold escarpment from the valley of the Muskrat River to a height of seventy-five or

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