

quadrangle from the east is less pronounced than in the central part of the State. Both of these facts have led to the obscuration of the stratigraphy of the region.

The rocks of Buffalo abound in fossils often of the most interesting character. These have been cited here under their respective formation names, but for fuller accounts of the species with analytic illustrations the student must refer to the volumes of the *Palaeontology of New York*.

In the preparation of this map the territory has been carefully resurveyed by D. Dana Luther, field assistant on the geologist's staff. In this work he has had the assistance of Prof. Irving P. Bishop of Buffalo, who several years ago at the solicitation of the State Paleontologist prepared a map of the quadrangle giving the boundary lines of the formations with their broader and earlier value. Much previous work has been done in the same field. Professor Bishop prepared and published in the 15th Annual Report of the State Geologist a special account with a map of the structural and economic geology of Erie county, at a date when a detailed topographic map was not available. In 1901 Prof. A. W. Grabau prepared and published a map and descriptive account of the northern part of this region in State Museum bulletin 45, *A Guide to the Geology and Paleontology of Niagara Falls and Vicinity*, but it has been possible since then to trace the stratigraphic boundaries in much more refinement of detail. The reader may find it desirable to refer to both of these publications; the latter especially for a summary account of the fossils in the northern formations of the region. Professor Grabau has also published in the 16th Annual Report of the State Geologist and as a bulletin of the Buffalo Society of Natural Sciences, volume 6, a full descriptive account of the formations and fossils in the rocks exposed at Eighteen Mile creek, and Professor Bishop has supplemented his original report on Erie county with more recent notes on the gas wells and production of the region, in the 17th and 19th reports of the State Geologist.

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