

deflection of the Oswegatchie, Grasse, Raquette and St Regis from their normal northwest courses to a northeast direction, so that they flow parallel to the St Lawrence for many miles before emptying into it, is an interesting feature which has not yet been explained, though probably not difficult of explanation when the ground is thoroughly studied. The Oswegatchie emerges on the Precambrian rocks of the Frontenac axis, and its behavior is obviously controlled by the topography, as it takes a subsequent course parallel to the ridges. But the other three streams make their bend on the northern Paleozoic plain, and the cause can hardly be a structural one. It must be sought in the Pleistocene features of the region, either this portion of the plain having a general slope to the northeast, owing to unevenness of glacial deposits, or else morainic or beach ridges being the deflecting cause.

The streams of the eastern Adirondacks mostly rise in the neighborhood of the high peaks. The Hudson and Ausable have their head waters in the high passes of that district. The Schroon and Sacandaga head in the ridges east of the main axis. The Saranac, on the north, heads in the Lake belt and is the only one of the principal streams to cross the main axis of elevation, both of its branches so doing. That portion of it which lies west of the axis is separated from the present Raquette and St Regis systems by the most trivial of glacial divides, and undoubtedly drained to the westward formerly. The date of capture by the Saranac is not known. The easterly flowing Adirondack streams have an advantage over those flowing west, owing to their steeper slope, and tend therefore to extend their head waters westward, causing the divide to migrate in that direction, away from the main axis. That the capture occurred in preglacial times seems very probable.

Farther south, in eastern Hamilton county, the main axis is crossed by two broad valleys, one running east from Long lake and the other from Raquette lake. These are however located on weak Grenville belts, on which it was easy for streams, flowing eastward from the main axis, to push their divides westward