PHYSIOGRAPHY OF THE KANKAKEE REGION.

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The Kankakee region has often been called a "basin" and its sandy plains have been considered lacustrine deposits of a shallow glacial lake. It is well recognized that the drainage area of the Kankakee River includes a belt of outwash plain along the Valparaiso moraine and that its principal tributary—the Yellow River—flows through morainic country. It is also well known that the characteristic topography and soil features of the Kankakee, which are marshes and sand dunes, extend beyond the actual Kankakee drainage basin into parts of Pulaski, Jasper and White counties. The extensive sandy flats apparently vary little in elevation. In both flats and dunes the original water-laid sands seem to have been reworked by wind to the uniform fine sand texture.

Through the courtesy of Director Lieber of the Indiana Conservation Department and Mr. Denzil Dogget, Assistant State Engineer, we can consult certain unpublished data from the Kankakee Ground Water Investigations. Figure 1 is based on seven lines of levels the engineers

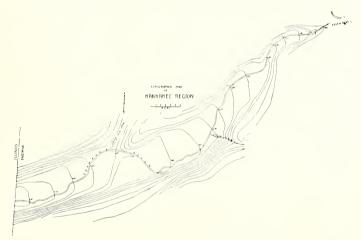


Fig. 1-Topographic map of Kankakee region in Indiana. Contour interval five feet.

have run across the Kankakee River region, approximatly at right angles to its course. This gives a rough topographic map of the general features with all the detail due to sand dunes eliminated. This topographic sketch shows a flattish valley floor along the Kankakee River with a slope of about one foot per mile downstream. The outside bends of the river channel touch the borders of this flattish valley floor as stream courses normally do. Although the eye finds little resemblance to valley

[&]quot;Proc. Ind. Acad. Sci., vol. 37, 1927 (1928)."

walls or uplands along the Kankakee Valley, the elevations as drawn on this topographic sketch show distinct rises on each side. The engineer's profiles of each line look like cross-sections of a stream valley rather than of a portion of a lake plain. This valley has a width of about five miles at the state line, widening a little near old English Lake and narrowing to two or three miles near South Bend. It looks like the natural continuation of the St. Joseph River drainageway previous to the formation of its present deep outlet to the northwest.

The soil survey map of Porter County shows sandy lands which are continuous from the well-defined Glenwood beach, extending through a gap in the moraine at Valparaiso, with a broad channel leading from that point south to the Kankakee. This appears to be an outlet of glacial Lake Chicago when it stood about 80 feet above the present level of Lake Michigan. The Continental Divide passes through a muck area in this channel.

Perhaps some of the present lake-like plains were formed by sands drifting over higher till plains to form the dune-locked marshes. At some places along the southern border of the Kankakee region the "till uplands" appear to be lower lying than nearby "lake flats" which are enclosed by dunes rather than beaches.