PARENT MATERIALS OF PIKE COUNTY, INDIANA SOILS[1]

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Pike County, Indiana, is located near the southwestern corner of the state, and it forms a part of the physiographic unit known as the Wabash Lowland Region[2].

The topography of Pike County is quiet variable. The flattish valley of the White River extends along the northern side of the county. At its fartherest point the stream is about three miles from the southern walls of the valley. Along

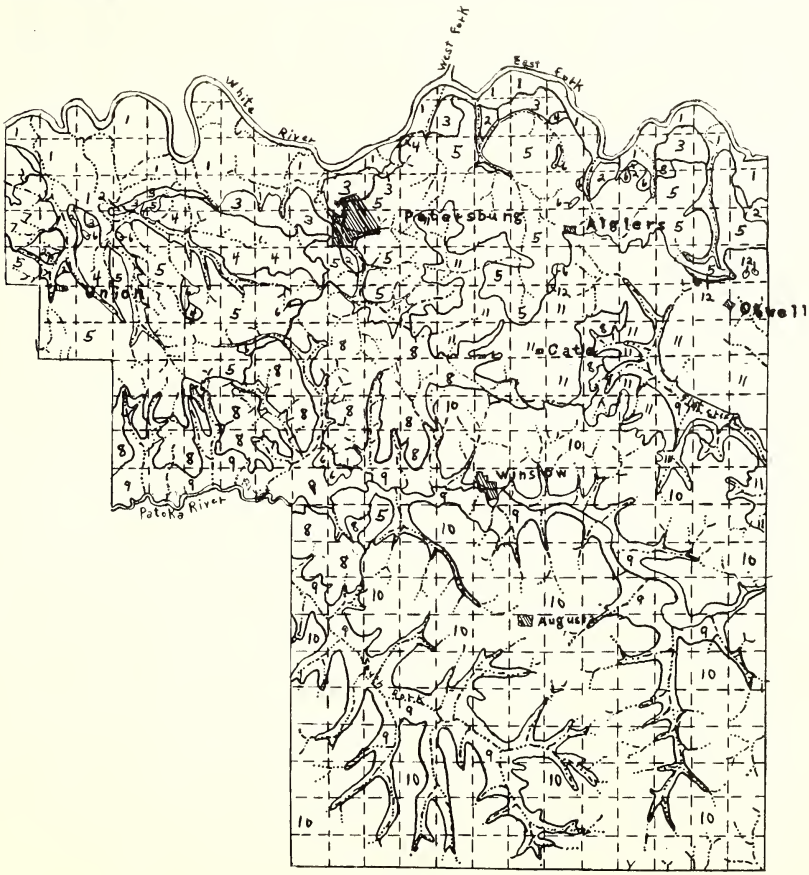

Fig. 1

Proc. Ind. Acad. Sci. 40: 235-236. (1930) 1931.

[1]During the course of the soil survey of Pike County in 1929 numerous observations were made along roads cuts and by deep borings of the parent materials of the different soils types. The accompanying map is my interpretation as a member of this party, of which H. P. Ulrich, of Purdue University, was in charge, of the observations of the entire party. The boundaries are approximate boundaries showing as much details as possible on the scale used.

[2]Based on Clyde A. Malotts "Physiographic Map of Indiana."

this wall of the valley there is an irregular belt of the old sand dunes which are now securely anchored by vegetation. In the northeastern part of the county around Otwell and Cato there is a large lake plain which is level and poorly drained. The western part of the county is undulating or slightly rolling. The southern part of the county is characterized by rolling uplands and poorly drained bottoms and terraces.

Legend:

1. Stratified deposits of calcareous material of recent origin forming the first and second bottoms of the White River. These deposits range from clays to sands.

2. Blackwater deposits of heavy silty clay or clay. Calcareous concretions are commonly found at the depths of three feet or more. These deposits are slightly elevated above the first and second bottoms and were probably formed during the early Wisconsin period of glaciation.

3. Dune like deposits of yellow to grayish yellow fine sand occupying the southern bluffs of the White River. These deposits are calcareous below four feet and contain carbonate concretions. This material represents Late Wisconsin and recent windblow deposits.

4. Light reddish yellow to grayish yellow smooth silt or very fine sand with a few dark yellowish brown concretions, and with some thin gray streaks along drainage lines.

This material has vesicular structure and stands in perpendicular banks. It is calcareous at depths ranging from thirty to sixty inches and overlies Illinoian drift at about eight feet. This material may represent a loessial stage following the early Wisconsin Glaciation.

5. Reddish yellow non-calcareous soft silt with fine yellowish gray streaks along drainage lines. This material lies over Illinoian drift at about eight feet, and is Iowan Loess.

6. Iowan Loess over roughly stratified and highly weathered deposits of non-calcareous sand and gravel in the Illinoian drift.

7. Iowan Loess over a highly weathered deposit of non-calcareous sand. This deposit is located in the northwestern part of the county along the Gibson County line and may represent an extinct glacial lake

8. Iowan Loess over thinly bedded Pennsylvanian sandstone and shale.

9. Highly acid bottom deposits derived from sandstone and shale.

10. Thinly bedded Pennsylvanian sandstone and shale.

11. Glacial Lake Patoka Sedements.

12. Silt over highly weathered deposit of gritty sandy clay. This is probably a beach line of the extinct Glacial Lake Patoka.