Introduction to the Surficial Geology of Cass County, Iowa

Cass County lies within the Southern Iowa Drift Plain (Navas and Kohrt, 2000), landform region of Iowa. Surficial materials consist of a mix of eolian deposits, glacial deposits, glacial outwash, and alluvial deposits. Multiple periods of glacialization and associated erosion have led to the landscape we see today. Generally speaking, the area can be divided into four distinct sub-regions. The Southern Iowa Drift Plain, the Rockwell Subbasin, the Cedar Subbasin, and the Mesozoic Era region. The Southern Iowa Drift Plain is adjacent to the central part of the state and is an area of both older and younger Quaternary deposits. The Rockwell Subbasin is a generally flat region that is characterized by a mixture of younger and older materials. The Cedar Subbasin is a region of older materials that is characterized by a mix of alluvial and eolian deposits. The Mesozoic Era region is a region of older materials that is characterized by a mix of alluvial and eolian deposits.

Limited areas of fine eolian sand may be present near major river drainageways.


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