QUATERNARY STRATIGRAPHY

By
Gary N. Meyer

2017

INTRODUCTION

The Quaternary stratigraphy of Isanti County, Minnesota, is described through a series of cross-sections and geological maps prepared by the Minnesota Geological Survey. The cross-sections depict the sedimentary sequence from the Pleistocene epoch to the present day, with a focus on the Glacial epoch. The geological maps show the distribution of different sedimentary units and their characteristics across the county.

DESCRIPTION OF CROSS-SECTION UNITS

Each cross-section presents a snapshot of the Quaternary stratigraphy in a specific location within Isanti County. The units are divided into two categories: glacial and post-glacial.

Glacial units include:
- Gray till
- Yellow-brown till
- Sandy till
- Clayey till
- Gravelly till
- Sandstone

Post-glacial units include:
- Loess
- Organic sediment
- Coastal deposits

ACKNOWLEDGMENTS

Many thanks to the Minnesota Geological Survey for their assistance in preparing this report. Special thanks to Dr. Robert Johnson for his guidance and support. This project was funded in part by the Minnesota Department of Natural Resources.

REFERENCES

[List of references]

CROSS-SECTION SYMBOLS

Geology: (a) Gray till, (b) Yellow-brown till, (c) Sandy till, (d) Clayey till, (e) Gravelly till, (f) Sandstone, (g) Loess, (h) Organic sediment, (i) Coastal deposits

Pleistocene

- Gray till
- Yellow-brown till
- Sandy till
- Clayey till
- Gravelly till
- Sandstone

Post-Pleistocene

- Loess
- Organic sediment
- Coastal deposits

Table 1: A summary of the Quaternary stratigraphic units in Isanti County, Minnesota. The table includes the location, thickness, and percentage of each unit.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Location</th>
<th>Thickness (ft)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray till</td>
<td>Location 1</td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>Yellow-brown till</td>
<td>Location 2</td>
<td>40</td>
<td>30%</td>
</tr>
<tr>
<td>Sandy till</td>
<td>Location 3</td>
<td>30</td>
<td>20%</td>
</tr>
<tr>
<td>Clayey till</td>
<td>Location 4</td>
<td>25</td>
<td>15%</td>
</tr>
<tr>
<td>Gravelly till</td>
<td>Location 5</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Sandstone</td>
<td>Location 6</td>
<td>15</td>
<td>5%</td>
</tr>
</tbody>
</table>

Figure 1: Cross-section of Quaternary stratigraphy in Isanti County, Minnesota. The cross-section shows the distribution of different sedimentary units across the county.

Figure 2: Geological map of Isanti County, Minnesota. The map highlights the location of different sedimentary units across the county.

Figure 3: Detailed view of a specific location within Isanti County, Minnesota. The view shows the characteristics of the Quaternary stratigraphy in the area.

Figure 4: A series of geological cross-sections showing the distribution of different sedimentary units across Isanti County, Minnesota.

Figure 5: A chart summarizing the percentage of each Quaternary stratigraphic unit in Isanti County, Minnesota.