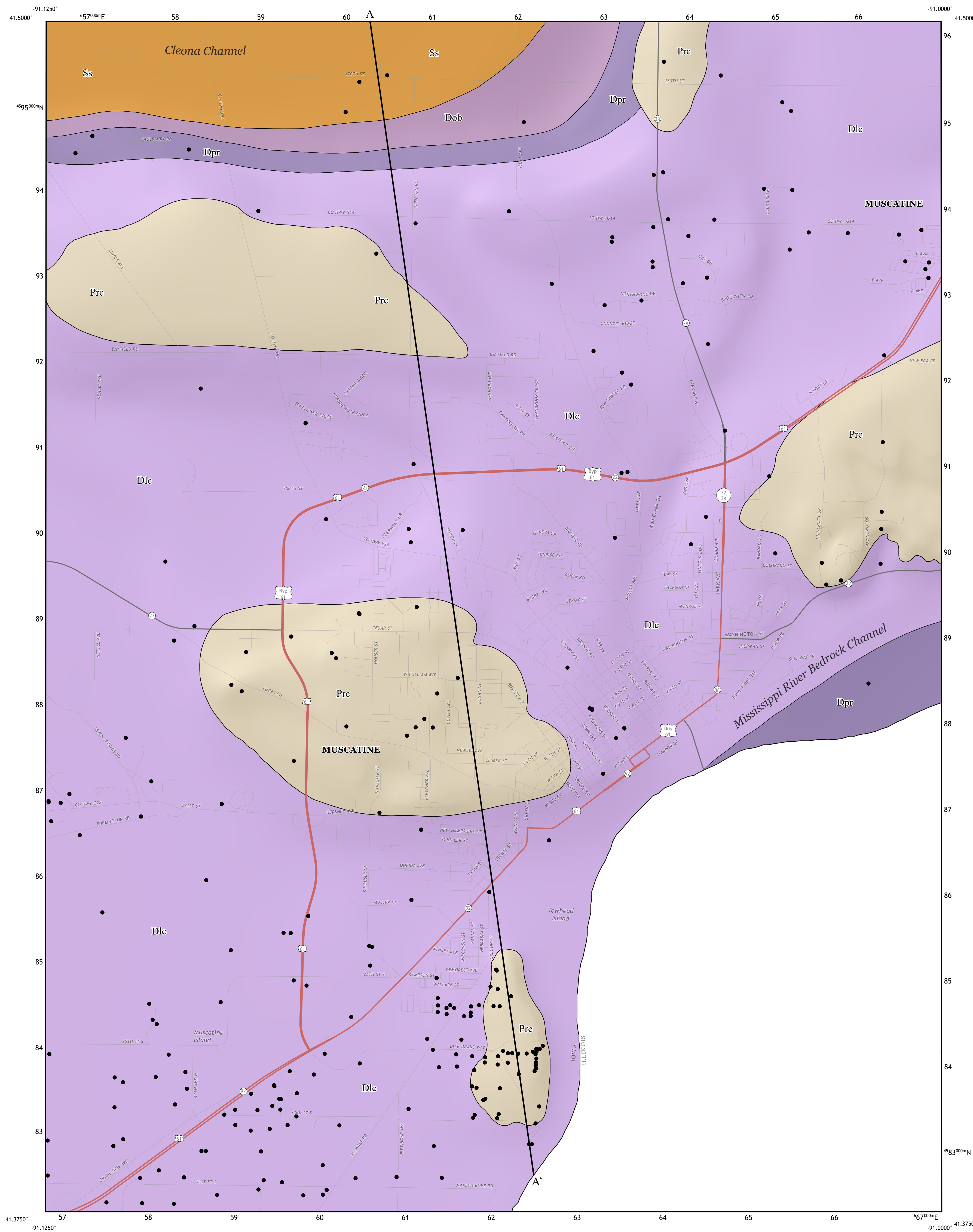


# BEDROCK GEOLOGIC MAP OF THE MUSCATINE 7.5' QUADRANGLE, MUSCATINE COUNTY, IOWA AND ROCK ISLAND COUNTY, ILLINOIS

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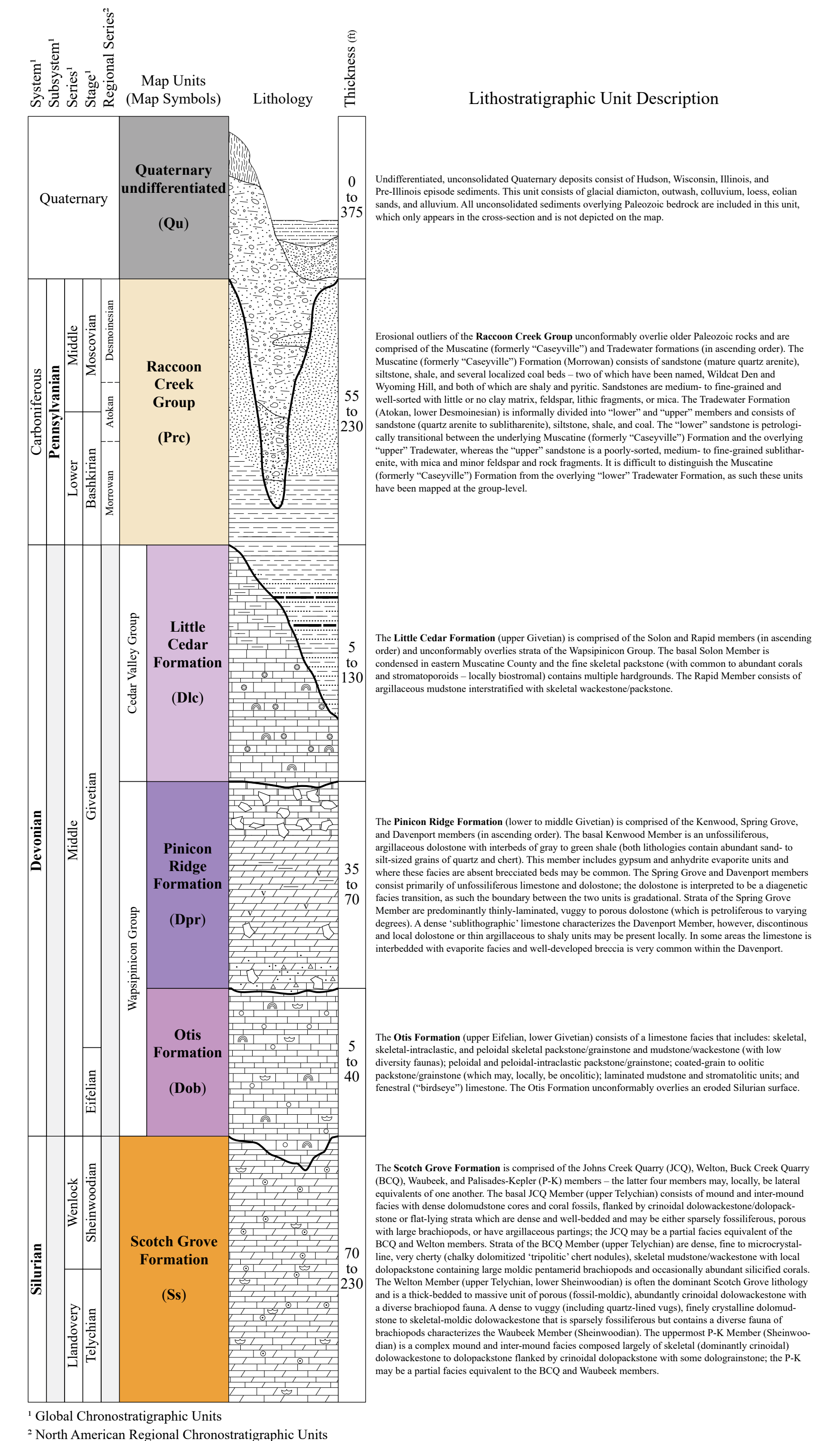
## INTRODUCTION

The Muscatine Quadrangle in Muscatine County, Iowa, and Rock Island County, Illinois, is located within the Southern Iowa Drift Plain (SIDP) and Mississippi Valley Alluvial Plain (MVAP) landform regions. The SIDP is an area with a topography defined by loess-mantled uplands and slopes, whereas the MVAP is a low-relief floodplain consisting of sediment deposited by the Mississippi River. The top of the till package of the SIDP in this map area is Illinoian-age diamicton of the Glasford Formation. Glacial till is largely missing in the MVAP due to the development of the Mississippi River Bedrock Channel throughout the Quaternary. There are no bedrock exposures in the map area due to burial by Quaternary materials.

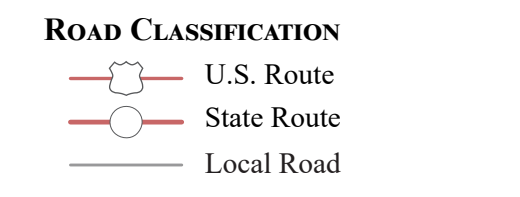
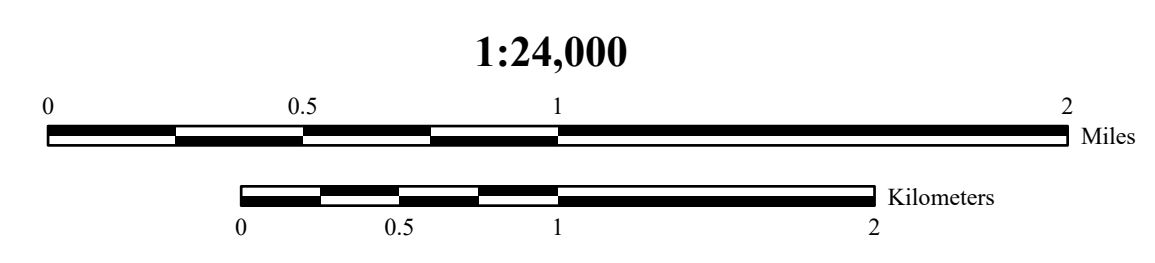
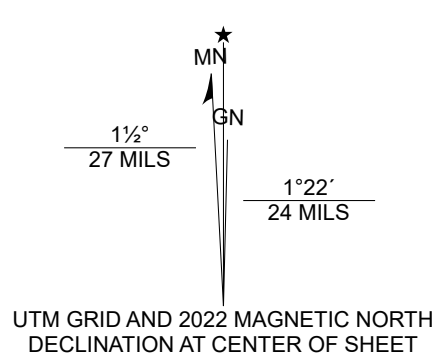
The bedrock surface of the Muscatine Quadrangle is dominated by Middle Devonian strata of the Wapsipicon and Cedar Valley groups which are unconformably overlain by erosional outliers of the Lower and Middle Pennsylvanian Racoon Creek Group (Muscatine [formerly "Caseyville"] and Tradewater formations). In the northwest corner of the quadrangle the Silurian Scotch Grove Formation is exposed at the bedrock surface. Erosion during the Quaternary has exposed Devonian units within the Mississippi River Bedrock Channel, however both Devonian and Pennsylvanian strata outcrop along its bluffs just beyond the mapping area.

Further detail about the bedrock elevation and quaternary thickness in the Muscatine Quadrangle can be found on the accompanying map (Open File Map OFM-22-5). An in-depth summation of the data resources and mapping methods utilized, as well as a more detailed account of the stratigraphy of the Muscatine Quadrangle, is included in the associated Summary Report.

## STRATIGRAPHIC COLUMN



This map from the Iowa Geological Survey (IGS) Muscatine 7.5' Quadrangle map, published by the USGS in 2018. Bedrock features were revised and corrected for this map. The map was prepared using the Iowa Geological Survey's (IGS) 2D/3D geologic data system based on Universal Transverse Mercator (UTM) Zone 18N, datum NAD83.



ADJOINING QUADRANGLES		
1	2	3
4	5	
6	7	8

1 Atalissa, IA  
2 Wilton, IA  
3 Durant, IA  
4 Muscatine NW, IA  
5 Illinois City, IA-IL  
6 Letts, IA-IL  
7 Blanchard Island, IA-IL  
8 Eliza, IL

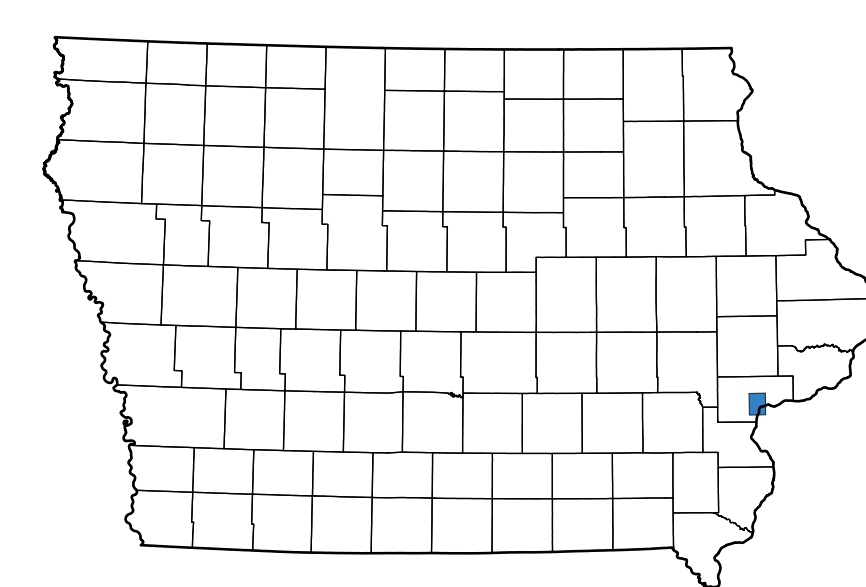
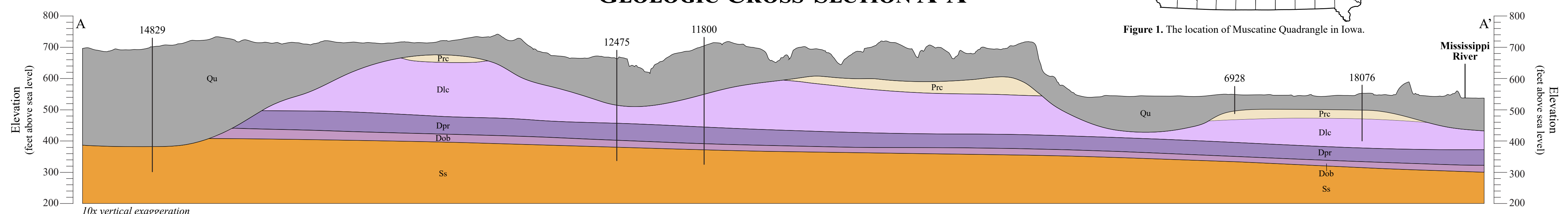


Figure 1. The location of Muscatine Quadrangle in Iowa.

## GEOLOGIC CROSS-SECTION A-A'



## ACKNOWLEDGEMENTS

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