This map of bedrock topography shows the elevations of the top surface of the ancient consolidated rock that lies beneath the land surface. In areas of little or no glaciation, such as the northwest part of the county, the bedrock topography closely mimics the surface topography. In the central and eastern portions of the county, the bedrock surface has been eroded by glacial ice, resulting in some muting of the topography. Although the surface topography may have some gentle slopes, the bedrock surface may have much steeper slopes. In the same area where the surface topography may have gentle slopes, the bedrock surface may be deeply incised and have steep slopes. The blanket of glacial drift obscures surface expression of the bedrock. This map was created to assist in determining the thickness of Quaternary deposits. The difference between the bedrock elevation and the surface elevation is the thickness of the unconsolidated Quaternary deposits. See "Thickness of Quaternary Deposits of Carroll County, Illinois" by C. McGarry (ISGS OFS 1997-13c) for more details.

Data used to create this map were compiled from ISGS well logs, Illinois Department of Transportation borings, United States Department of Agriculture soil survey maps, United States Geological Survey topographic quadrangle maps, field observations, and exploratory drilling conducted specifically for the Carroll County project. See "Locations of Data Points of Carroll County, Illinois" by C. McGarry (ISGS OFS 1997-13h) for more details.

Shaded Relief of the Bedrock Surface of Carroll County, Illinois

This map was created to assist in determining the thickness of Quaternary deposits. The difference between the bedrock elevation and the surface elevation is the thickness of the unconsolidated Quaternary deposits. The shaded relief map depicts an artificially illuminated bedrock surface. For this map, the simulated light source used to shade the surface is from an azimuth of 315 degrees (northwest) and an inclination of 45 degrees, similar to summer afternoon sunlight. Shades of gray are used to show the orientation and local variation in topography. Landforms in the direction of the illumination source (northwest) are depicted with a lighter gray than those facing southeast (away from the illumination source). Steep slopes are depicted as white or black. Landform shading may also be influenced by the shadows of nearby landforms of higher elevation. This is how the bedrock surface would appear if all unconsolidated Quaternary deposits were removed. The more rugged bedrock topography of the unglaciated northern and western portions of the county contrast dramatically with the flat, glaciated area in the southern and eastern part of the county.