Shaded Relief of North Dakota
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North Dakota Geological Survey, January 1995

This shaded relief map is a model of North Dakota's surface topography, which was created by using digital elevation model (DEM) data. A DEM is a grid of elevation data, typically from a digital orthophoto mosaic (DOM) or a digital terrain model (DTM). The DEM is based on elevations defined by a number of points, called a bathymetric grid. The DEM data is a representation of the Earth's surface, and it is the basis for generating the shaded relief map. The shaded relief map is a perspective view of the terrain, which shows the topography of the surface in three dimensions. Areas of steep terrain, such as the Badlands of the west-central part of the state, show a mottled texture of gray shades ranging from light gray to dark shades, representing small and steep features. The shaded relief map is useful for identifying the general features of the terrain, such as the location of ridges, valleys, and other topographic features. The map also shows the location of the state's major rivers and lakes, which are important for understanding the regional hydrology.