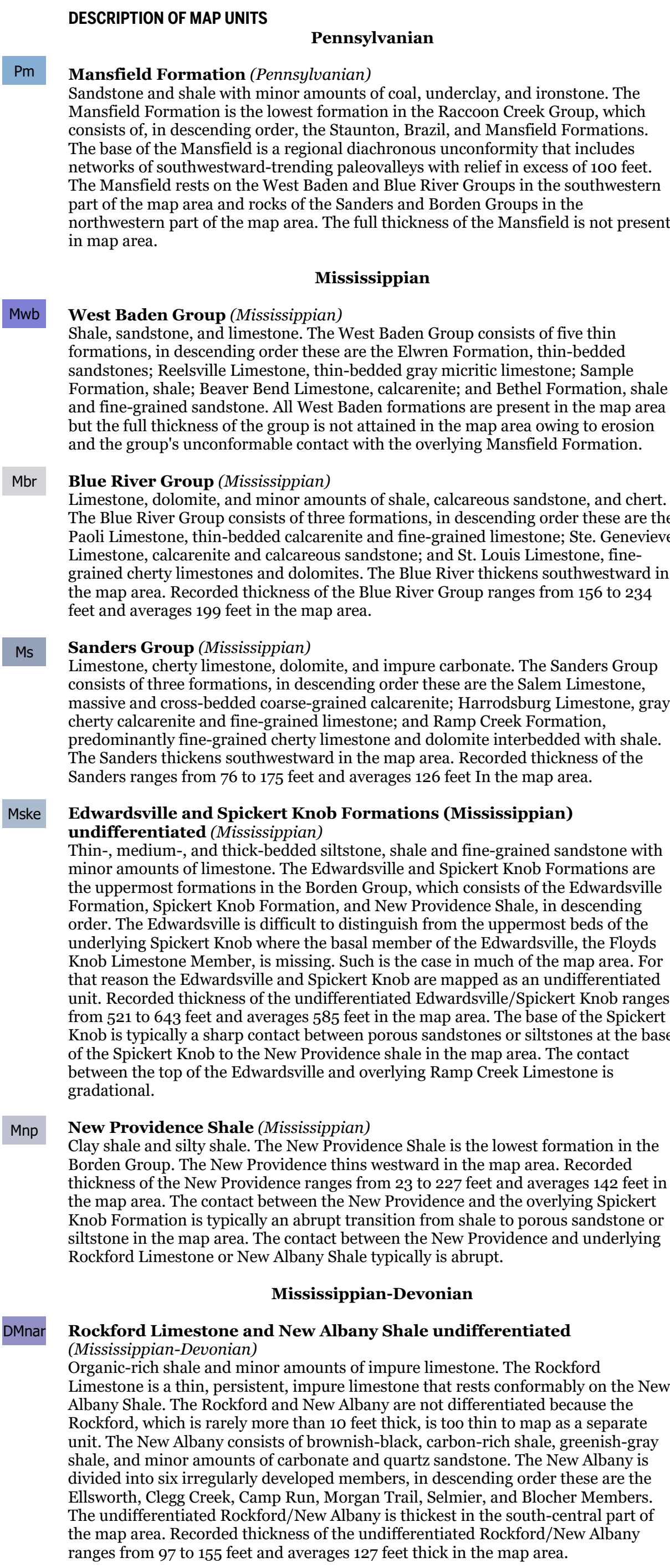


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**Muscatatuck Group (Devonian)**  
Limestone and dolomite. The Muscatatuck Group consists of two formations; these are, in descending order, the North Vernon Limestone and Jeffersonville Limestone. Muscatatuck formations were not mapped because they are thin and not well documented in the map area. Drillers' logs, especially of drillers' logs in the western part of the map area, indicate that the "Common" or "Columbian" Limestone<sup>1</sup> and do not differentiate units within the Muscatatuck. The contact between the Muscatatuck and overlying New Albany Shale is an abrupt and possibly unconformable transition from limestone to black, organic-rich shale. (Dresde and Schuchman, 1984) However, it is noted that this well documented in drilling records in the map area. The contact between the Muscatatuck and underlying Silurian rocks is a diachronous regional unconformity. The Muscatatuck rests on the Wabash Formation throughout the map area. The Muscatatuck thickness southward in the West Virginia. Recorded thickness of the Muscatatuck ranges from 86 to 125 feet and averages 115 feet thick in the map area.

**Sw** **Wabash Formation (*Silurian*)**  
Limestone, dolomite, and argillaceous or silty dolomite. The Wabash Formation is subdivided into two irregularly developed named members; these are, in descending order, Liston Creek Limestone and Mississineewa Shale Members. The upper contact of the Wabash Formation is a regional unconformity between Devonian and Silurian rocks. The Wabash Formation is present in the Rockport Region. The thickness of the Wabash Formation ranges from 16 to 210 feet and averages 89 feet in the map area. The contact between the Wabash Formation and underlying Pleasant Mills Formation is conformable and gradational. The gradation from the Mississineewa Shale Member of the Wabash Formation to the Louisville Limestone Member of the Pleasant Mills Formation is generally an interval of several feet. Wabash boundaries are extrapolations where reef facies replace the above-mentioned members.

**Pleasant Mills Formation (*Silurian*)**  
Dolomite, limestone, and argillaceous dolomite. The Pleasant Mills Formation was proposed by Drost and Shaver (1982, p. 11–17) to include, in descending order, the Pleasant Mills Limestone, Pleasant Mills Dolomite, and Pleasant Mills Argillaceous Dolomite. It is rarely possible to differentiate the Linbierd Dolomite and underlying Salomine Dolomite carbonates in the map area. The lithologic change that marks the base of the Waldron Shale Member of the Pleasant Mills Formation is distinct and is consistently noted in the field. The geologic record from the upper and lower contacts of the Pleasant Mills Formation is herein restricted to the rocks from the top of the Louisville Limestone Member to the base of the Waldron Shale Member and the Pleasant Mills Argillaceous Dolomite. The Pleasant Mills Formation, as defined, is conformable. The Pleasant Mills thickness northward in the map area. Recorded thickness of the Pleasant Mills ranges from 28 to 88 feet and averages 53 feet in the map area. The Pleasant Mills boundaries are extrapolations where rock exposures lack the above-mentioned members.

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