

Title: Friendship Mound

Location: Exposure in south end of Friendship Mound at north end of Friendship in the SW $\frac{1}{4}$ , NW $\frac{1}{4}$ , Sec. 5, T.17N., R.6E., Adams County (Adams 15-minute topographic quadrangle, 1961).



Author: M. E. Ostrom (modified from Twenhofel et. al, 1935)

Description: The relationships of the Mt. Simon, Eau Claire, and Wonewoc formation are shown. The Eau Claire Formation is thin or absent. Asthara (1969) showed the Mt. Simon Formation to contain significantly more feldspar than the Galesville Formation here as elsewhere.

Description follows:

CAMBRIAN SYSTEM  
Tunnel City Group

Lone Rock Formation

Mazomanie Member (+71.0')

141.7' - 212.7'	+71.0'	Sandstone, yellow gray to light brown, coarse to medium-grained, well-sorted, cross-bedded, friable, abundant borings.
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34.0' Covered.

Wonewoc Formation

Ironton Member (18.7')

141.7'	1.0'	Sandstone, brown, medium and coarse-grained, micaceous, appears reworked. Fossils present (trilobites and hyolithes).
136.2' - 140.7'	4.5'	Sandstone, light gray, coarse-grained, unbedded, burrows in lower part and glauconitic in upper part. Abundant Cenoraspis (trilobites) in middle portion.
130.0' - 136.2'	6.2'	Sandstone, light gray, mostly coarse-grained, poorly sorted, abundant burrows in upper 1.5'. Has symmetrical ripple marks.
122.0' - 130.0'	7.0'	Sandstone, light gray, coarse-grained, poorly sorted, steeply cross-bedded, silty laminae and pebbles of siltstone.

Galesville Member (52.0')

88.0' - 123.0'	35.0'	Sandstone, grayish white, medium-grained, mostly well-sorted, thick-bedded, cross-bedded. Symmetrical ripple marks in upper 15'.
71.0' 88.0'	17.0'	Sandstone, light gray, coarse and medium-grained, poorly sorted, silty.

Mt. Simon Formation (71.0')

70.5' 71.0'	0.5'	Sandstone, reddish brown, fine-grained, silty, some coarse grains, irregular thickness, limonite-cemented. May be Eau Claire Formation.
70.5'	70.5'	Sandstone, white to yellow brown, mostly coarse-grained, thick-bedded, massive appearance.

BASE OF EXPOSURE

Significance: This exposure illustrates thinning onto the Wisconsin arch. One can also examine the different directions of sediment transport between the Mt. Simon and Galesville.

What has happened to the Eau Claire Formation? How can you distinguish the Mt. Simon from the Galesville? What is the significance of cross-bedding? of ripple marks?

References: Raasch, 1935; Twenhofel et al, 1935; Ostrom, 1970.