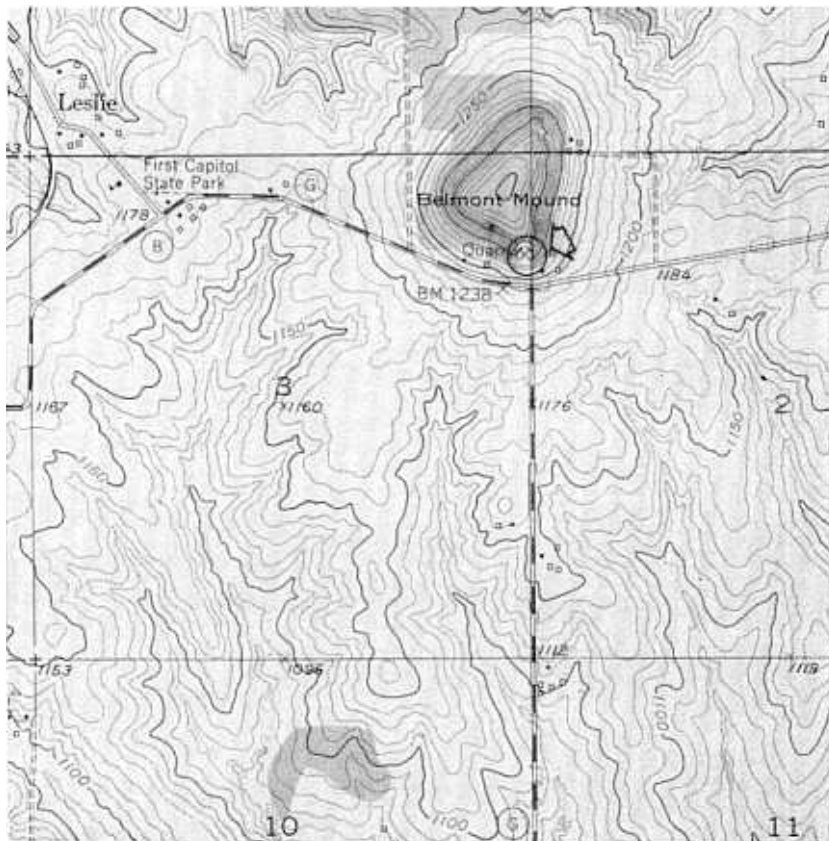


Title: Belmont Mound

Location: Abandoned quarry in south end of Belmont Mound located north of the City of Belmont on County Trunk Highway "G" in the SE $\frac{1}{4}$, NE $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 3, T.3N., R.1E., Lafayette County (Mifflin 7.5-minute topographic quadrangle, 1952).



Author: M. E. Ostrom (modified from Agnew et. al., 1956)

Description: In southwest Wisconsin Silurian rocks are found only in the "mounds" and at the southern edge of the mining district. According to Agnew et. al. (1956), "The Silurian rocks in the district are mainly yellowish-buff, medium- to coarse-grained, "sugary" dolomite, in part vuggy.... The basal 20 feet of strata is argillaceous dolomite." In the district this is overlain in succession by about 65 feet of cherty dolomite, 20 feet of non-cherty strata, and 90 feet of cherty dolomite with Pentamerus, a large brachiopod, at its top. At this location both galena and sphalerite crystals have been observed in the dolomite.

The Silurian is underlain by Upper Ordovician Maquoketa Shale which is in this area everywhere covered. The contact between the two is believed to be unconformable. The basal argillaceous silty zone of the Silurian appears to thicken and thin inversely with the thickness of the underlying Maquoketa.

Silurian rocks will also be observed at the Blue Mounds Stop. At that

location an interesting effect of rock alteration has caused the complete sequence of Silurian dolomite to be silicified. This is attributed to leaching and weathering of a dolomite that contained siliceous fossil shells.

Significance: Mounds of Silurian are peculiar to this district. In addition, this is one of the few locations in southwest Wisconsin where the Silurian dolomite can be observed.

What is the significance of the Silurian mounds? Why is the Maquoketa Shale concealed in this area? What is the implication of finding sphalerite and galena in the Silurian dolomites? Do you believe it possible for there to be an erosional unconformity between the Maquoketa Shale and Silurian Dolomite? Explain your conclusion.

References: Agnew et. al., 1956.