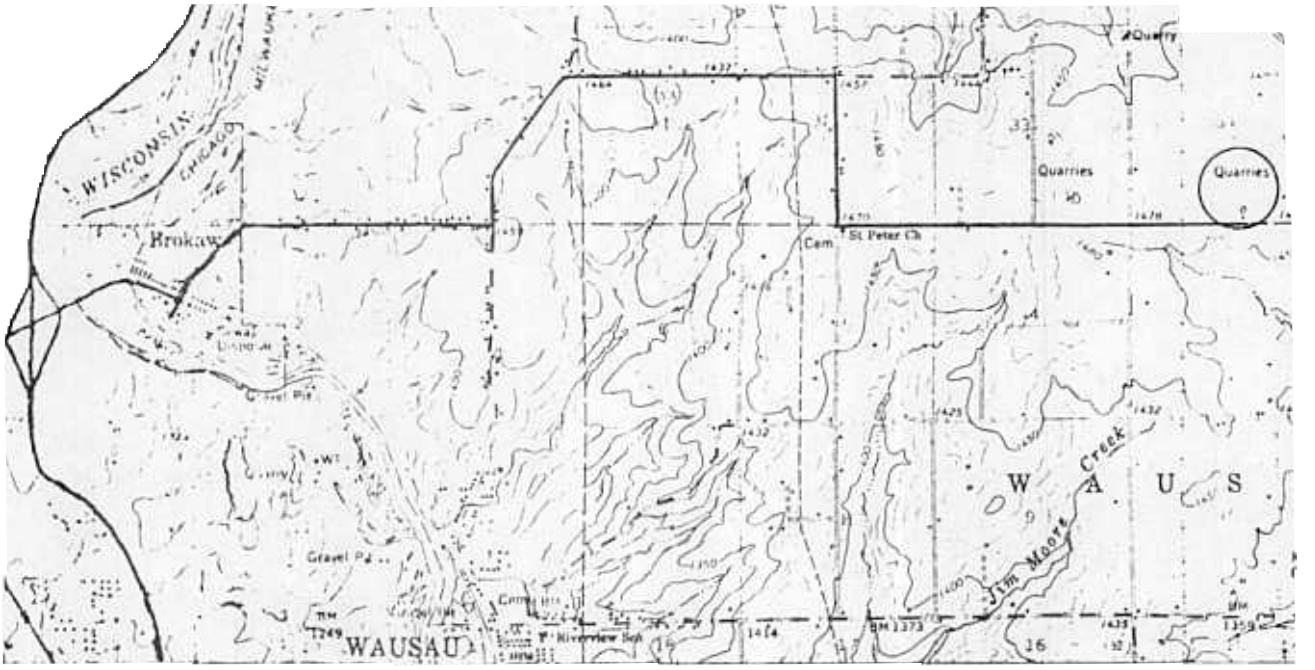
Title: Central Wisconsin Batholith

Location: Granite Quarry, SW¼, SW¼, SE¼, Sec. 34, T.30N., R.7E
Marathon County, Merrill 15 Minute Quad.



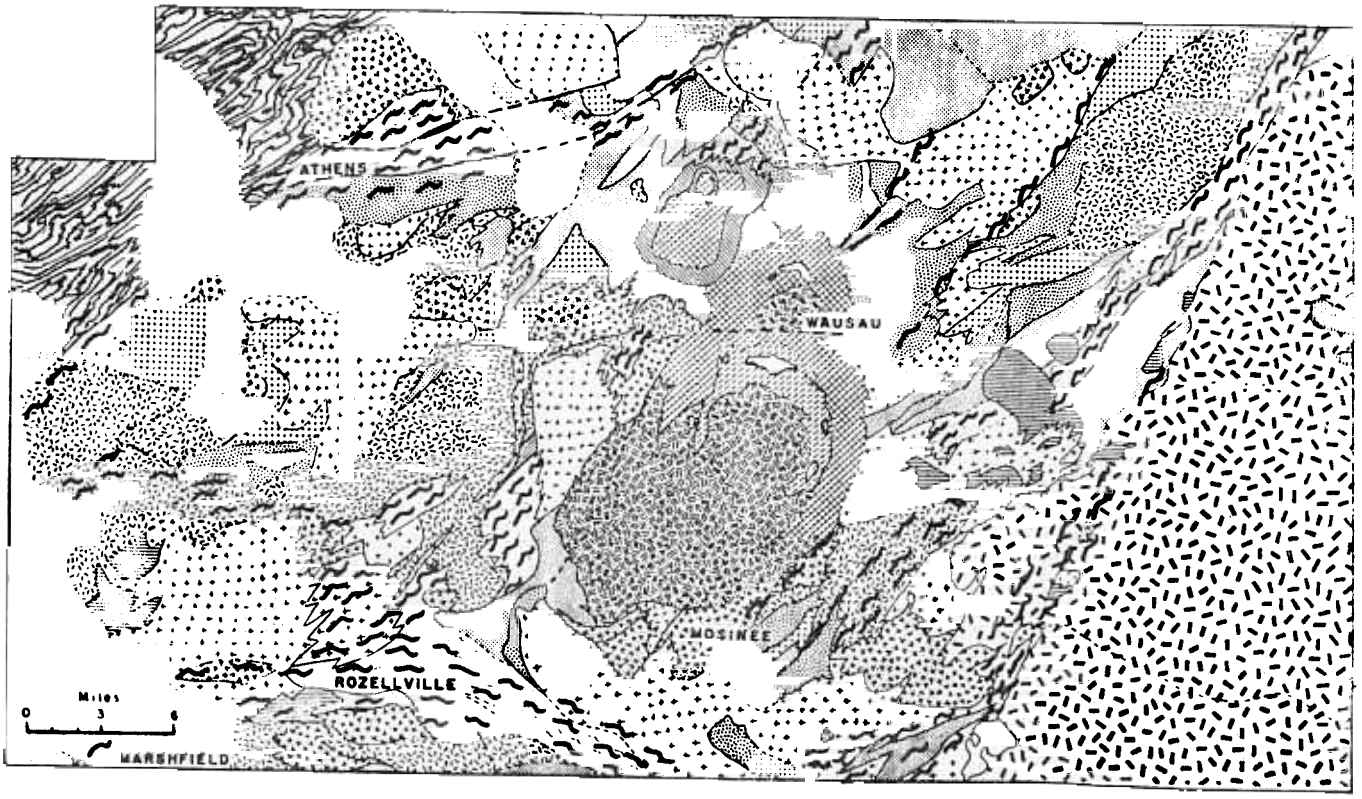
Author: Gene L. LaBerge

Description: The red granite is a homogeneous, non-porphyritic medium grained rock composed mainly of quartz and microcline with lesser amounts of oligoclase and biotite. The red coloration is due to inclusions of fine hematite in the feldspars. The intrusion has two "lobes" -- one east and one west of the Wisconsin River, with a narrow neck connecting the two. The lobe west of the Wisconsin River has a partial rim of quartz monzonite (Myers, 1973), and thus shows compositional zoning. The intrusion occurs approximately along the contact between basaltic on the north and rhyolitic rocks on the south. Basaltic inclusions are relatively common in the granite, and along its northern margin the assimilation of basaltic wallrock has produced an inclusion-rich gray quartz diorite. Contact metamorphism of the basalts and rhyolites is visible near the intrusion.

This rock has been designated the Wisconsin "State Stone" and is quarried in at least four quarries north of Wausau by the Coldsprings (Minn.) Granite Company and Anderson Brothers and Johnson (of Wausau). Quarrying is limited in many areas by the presence of shear zones that cut the granite and render it unusable for quarry stone.

Significance: The granite quarried here is part of the Central Wisconsin Batholith (LaBerge & Myers, 1976). The batholith is comprised of numerous relatively small granitic plutons intruded into a dominantly volcanic sequence about 1850 million years ago. Both the intrusions and the volcanics are part of the Animikie Basin, formed between 2000 and 1800 million years ago (refer to Geological Map of Marathon Co.). The granitic rocks were formed during the Penokean Orogeny that affected most of the Precambrian rocks in Wisconsin south of the Gogebic Range. Broad

zones of cataclastic rock have been formed along numerous shear zones that cut both the volcanic and plutonic rocks in Marathon Co. These shear zones are a characteristic feature of the geology of central Wisconsin. The granitic rocks of the batholith extend from the Michigan border westward across much of Wisconsin. Here the plutons intrude Middle Precambrian volcanic rocks, but in the Eau Claire area they intrude Early Precambrian gneisses.



EXPLANATION

Paleozoic sandstone and Quaternary alluvium and glacial till

LATE PRECAMBRIAN

Nepheline Syenite

Syenite

Quartz Syenite

Ninemile Granite

Wolf River Batholith

MIDDLE PRECAMBRIAN

Quartzite

Mylonitic Rocks

Metagabbro

Granite

Quartz Monzonite

Diorite -- Quartz Diorite

EARLY PRECAMBRIAN

Gneiss

Ultramafic Rocks

Volcanogenic Sediments

Felsic Volcanics

Intermediate Volcanics

Mafic Volcanics

Anorthosite

References:

LaBerge, G. L. and Myers, P. E., 1976, The Central Wisconsin Batholith, 22nd Annual Institute on Lake Superior Geology, St. Paul, Minn.

Myers, P. E., in LaBerge, G. L. and Myers, P. E., 1973, Progress Report on Reconnaissance Study of Precambrian Geology of Marathon Co.