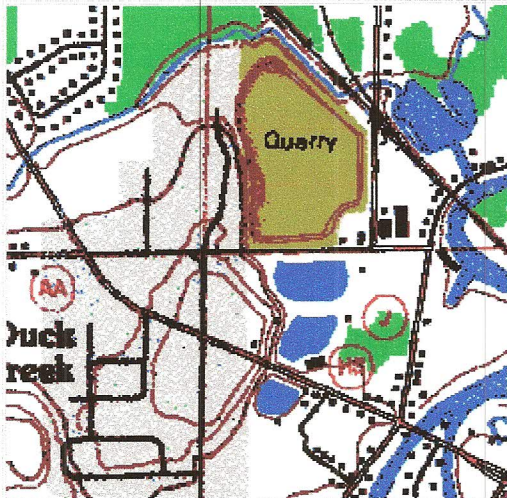
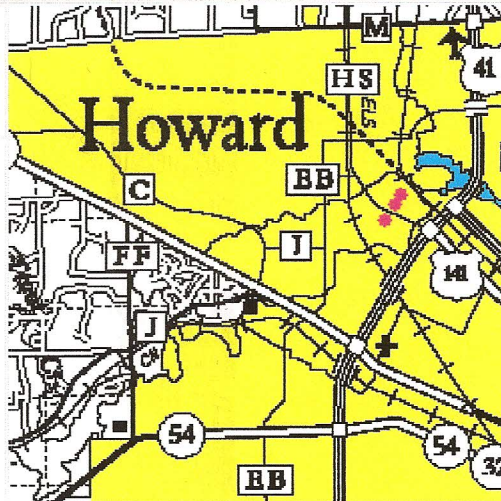
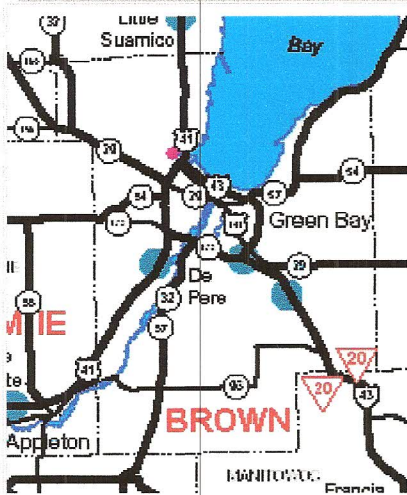


Duck Creek Quarries



A chain of four quarries exposes Sinnipee Group rocks (Platteville-Galena). There are numerous outcrops and quarries on the west shore of Green Bay, which is actually a drift-mantled dip slope dipping into the bay. Only the northernmost quarry was recently active: the other three are flooded. The northern quarry is now inactive and is also filling.

Panoramas of the North Quarry

A view of the active quarry from the south, May 1, 1999.



A year later, April 30, 2000, significant changes are visible.



Two years later, April, 2002, the quarry has been fenced off and pumping has been abandoned.

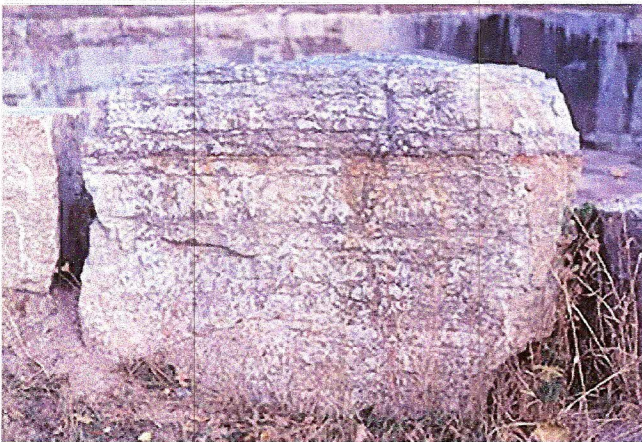




This exposure of Ordovician-age bedrock is the Galena dolomite. We do not enter the Duck Creek Quarry, but observe from a vantage point on the edge.



Water seeping out of the rocks shows the movement of groundwater in the area. Note that many seeps originate about 5 meters below the lip of the quarry at the base of one particularly thick layer. The quarry would fill with water if it were not pumped. A pipe runs up the right side of the quarry to carry pumped water.



Iron staining on the side of this dolostone block is due to the oxidation of iron sulfides. These blocks have weathered visibly since I first saw them in 1976; oxidation has become more apparent and fossils easier to see. Geologic changes can occur even in a human lifetime.



A nice example of microclimate. Dandelions are growing on the sunny south slope of the berm but not the shadier north slope.

FLOODING OF THE NORTH QUARRY



Left, a view from the east. The first three pictures were taken April 16, 2002.

Below, two views from the north. The beds on the south wall of the quarry show an obvious arch.

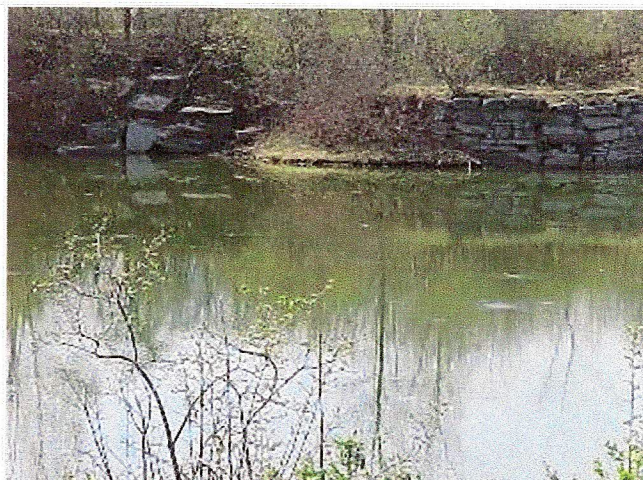


View from the south, April 6, 2002. The strike of the gently dipping layers is marked by the water line.

Quarry South of County J



If not for pumping, the quarry north of the road would look like this one south of the road. This quarry was used for disposing of cedar bark from a fence-post industry, and tannic acid from the bark soon colored local wells like weak tea, harmless but annoying. Still, it's a potent illustration of why quarries can't be simply filled in with refuse. In quiet places on the water, patches of bubbles can be seen caused by methane gas rising to the surface from the decaying cedar bark (below).



Quarry North of Velp Avenue



A restaurant has turned this quarry into a landscaped pond.



Quarry South of Velp Avenue



This quarry is surrounded by development and few outcrops are visible.