

## Barteau Bridge

In 2004, just in time for its 100 year anniversary, the Barteau Bridge over the Shioc River, near Shiocton, Wisconsin, was rehabilitated by the Outagamie County Highway Department. The original bridge construction was started in 1905 and was completed in 1906 at a total cost of \$7,633. The bridge consists of a low arch limestone masonry structure approximately 160 feet in length. For most of the life of the bridge it carried STH 187 traffic over the Shioc River, however, in 1981 a new bridge was constructed just downstream and the Barteau Bridge has been closed to traffic ever since. Today it is open to pedestrians for access to the river. In 2002, the National Historical Society concluded some rather significant findings in a report of this and similar bridges in Wisconsin. Of particular interest is that according to WDOT records from 1986, 33 extant stone arch "country" bridges of this type existed in Wisconsin, of which, 9 were in Outagamie County. The majority of these bridges were single span, with the Barteau Bridge being the only 4-span bridge in this category. The report went on to say that since 1986 a number of the bridges seem to have been lost, as only ruins were found when trying to locate those closest to the Barteau Bridge.



In 2000 a report identified some issues with settlement of one of the piers and tipping of portions of the stone railings. The report concluded that the pilings had likely deteriorated to an extent that they could no longer carry the dead-load of the structure. It was concluded that if the gravel above the piers was removed, a significant reduction in loading could be realized on the abutments and piers, likely resulting in preserving the structure, indefinitely. However, if nothing were done, it was concluded that these trends would likely continue ultimately resulting in the demise of the bridge. In conjunction with some local interest groups, the Outagamie County Highway Department successfully obtained a state grant and was able to tackle the needed repairs. The deck and the gravel above the piers were removed, and repairs were made to the tipped railings. Crews then installed large blocks of Styrofoam to recreate the original subgrade elevation and eventually paved over the Styrofoam to form a new deck. Based on the significant amount of large blocks of Styrofoam placed below the deck of the bridge, don't be too surprised if you're driving through Shiocton sometime in the future and you see a stone bridge float by.