



Historic Bridge Foundation Facebook Archives

Did You Know: Bedstead Truss Bridges

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Did You Know...

... that bedstead truss bridges are a variation of metal truss bridge that are quite rare today? Typically small, short-span pony truss bridges located in the rural, agricultural Midwest, bedstead truss bridges may be easy to overlook. They are distinguished by vertical end posts, which extend below the lower chord of the truss to also function as bents (supports). These supporting "legs" were an economical way to reduce the amount of traditional stone or concrete substructure required for a crossing. A problem with this design is that the legs were not as strong as concrete or stone, and tended to be vulnerable to damage during flood events. As a result, many of these bridges were destroyed. Also, surviving examples may be altered, with their original legs cut off and replaced with new bents or encased within a concrete substructure that resembles a more traditional full-size abutment.

One of the oldest bedstead truss bridges known to survive was built in 1879 and has been relocated and preserved over the Central Canal in Indianapolis. However, many surviving bedstead truss bridges are abandoned, or remain in use in rural agricultural settings where their future may be uncertain. Most bedstead truss bridges date from 1890 to 1910. Older examples do exist, but stand out as particularly rare and significant. Because of the years when most bedstead truss bridges were built, most have pinned connections and follow the Pratt truss configuration, both of which were common in this period.



214 – Many surviving bedstead truss bridges face an uncertain future. This bridge on CR-214 in Saline County, Missouri was demolished in 2009.



1250 – This old and impressive bedstead truss bridge was built in 1885 by the Smith Bridge Company of Toledo, Ohio. Located in Iroquois County on CR-1250, it has been closed and abandoned.



Lycreek 1 and 2 – Built in 1879 by the Wrought Iron Bridge Company of Canton, Ohio, this impressive bedstead truss bridge was relocated and preserved on a trail system in Indianapolis. It is one of the oldest known surviving bedstead truss bridges in the country.



Kellogg – Built in 1915 and relocated and preserved for pedestrian use in 2005, this bedstead truss bridge is on the grounds of the Oklahoma Department of Transportation in Tulsa.



christiantr138_6202 – Located on TR-138 in Christian County, Illinois, this bedstead truss bridge appears to have had its legs cut off and replaced with timber piles. Today abandoned with the approaches missing, even the "new" timber piles are in poor condition. If left in its current condition, this bridge will eventually collapse.



christiantr258_5446 - Located on TR-138 in Christian County, Illinois, this bedstead truss bridge was built in 1898. It received a new timber deck ca. 2016, and remains open to light vehicular traffic. It is a good example of a bedstead truss bridge where the legs have been encased in a newer concrete abutment.



phalenparktruss3976 - Built in 1906 by the St. Paul Foundry Company of St. Paul, Minnesota, this bridge in Phalen Park, St. Paul, MN is an unusually ornamental bedstead truss with a curved lower chord.

Carrying CR-76 Over Long Branch Creek in Monroe County, Missouri, this ca. 1910 bedstead truss bridge is uncommon both for its use of riveted connections and for its Warren truss configuration. Most bedstead truss bridges were built during the period when pin-connections and Pratt trusses were more common.