

98 Bloomfield-Nulhegan River Bridge

Town of Bloomfield, Essex County, Vermont

The Bloomfield-Nulhegan River Bridge can be found on Route 102 in Bloomfield Village, Vermont. As its name suggests, the bridge spans the Nulhegan River, a tributary of the Connecticut River. The Nulhegan River basin is home to a remote boreal forest, which provides high-quality habitat to interesting wildlife, including the illusive moose.

Built in 1937, the Bloomfield-Nulhegan River Bridge is a great example of a steel Pratt through-truss bridge. A Pratt truss consists of vertical members in compression and diagonals in tension, all of which are arranged in a series of right triangles with level top chords (the top of the bridge span). The bridge is considered a through-truss because the truss members are located both above and below the road deck, and vehicles drive through the box formed by the truss members. The total length of the Bloomfield-Nulhegan River Bridge is 133.9 feet, with a deck width of 24.3 feet.

After the catastrophic flood of 1927, Vermont state engineers preferred to use the Pratt truss design when confronted with the monumental task of rebuilding the 1,200 bridges destroyed by the flood waters. The Pratt truss is a fairly light bridge design, while having great strength, a combination that was perfect for Vermont and the rebuilding effort. Technological advances at the time, including rolled I-beams and hydraulic riveting machines, allowed construction crews to piece the bridge together entirely on site leading to quick and efficient bridge construction. Earlier truss bridges were put together at the factory, and then shipped to the construction site and installed.



The Bloomfield-Nulhegan River Bridge is also important because its design represents the transition from locally constructed, owned and maintained bridges prior to the flood of 1927, to Vermont's governmental body standardizing the transportation industry after the flood. The State of Vermont sought to rebuild bridges and roads as quickly and efficiently as possible, and to do so, they used the Pratt truss bridge design. As a result, the Bloomfield-Nulhegan River Bridge is representative of and belongs to a cohort of similarly designed bridges located throughout Vermont that were built in the years following the Flood of 1927.

The Bloomfield-Nulhegan River Bridge was added to the National Register of Historic Places in 1991.

Sources:

"Bloomfield-Nulhegan River Route 102 Bridge." *Bridgehunter.com: Historic Bridges of the United States*. Accessed 19 June 2013 from <http://bridgehunter.com/vt/essex/200271000905032/>

National Register of Historic Places. Bloomfield-Nulhegan River Route 102 Bridge. Town of Bloomfield. Essex County, Vermont. Reference # 91001605. <http://www.crjc.org/heritage/V25-14.htm>

"Truss Bridge Types in Bradford County, Pennsylvania." Bradford County's Truss Bridges. Pennsylvania Department of Transportation. Accessed 29 March 2013 from <http://www.skellyloy.com/bctb/index.htm>