

= Forksville Covered Bridge =

The Forksville Covered Bridge is a Burr arch truss covered bridge over Loyalsock Creek in the borough of Forksville , Sullivan County , in the U.S. state of Pennsylvania . It was built in 1850 and is 152 feet 11 inches (46 @. @ 61 m) in length . The bridge was placed on the National Register of Historic Places in 1980 . The Forksville bridge is named for the borough it is in , which in turn is named for its location at the confluence or " forks " of the Little Loyalsock and Loyalsock Creeks .

Pennsylvania had the first covered bridge in the United States and the most such bridges in both the 19th and 21st centuries . They were a transition between stone and metal bridges , with the roof and sides protecting the wooden structure from weather . The Forksville bridge is a Burr arch truss type , with a load @-@ bearing arch sandwiching multiple vertical king posts , for strength and rigidity . The building of the Forksville bridge was supervised by the 18 @-@ year @-@ old Sadler Rogers , who used his hand @-@ carved model of the structure . It served as the site of a stream gauge from 1908 to 1913 and is still an official Pennsylvania state highway bridge . The United States Department of Transportation Federal Highway Administration uses it as the model of a covered bridge " classic gable roof " , and it serves as the logo of a Pennsylvania insurance company .

The bridge was restored in 1970 and 2004 and is still in use , with average daily traffic of 224 vehicles in 2009 . Despite the restorations , as of 2009 the bridge structure 's sufficiency rating on the National Bridge Inventory was only 17 @. @ 7 percent and its condition was deemed " basically intolerable requiring high priority of corrective action " . It is one of three remaining covered bridges in Sullivan County , and according to Susan M. Zacher 's The Covered Bridges of Pennsylvania : A Guide , its location " over the rocky Loyalsock Creek " is " one of the most attractive settings in the state . "

= = Overview = =

The covered bridge is in the borough of Forksville on Bridge Street , a spur of State Route 4012 , just west of Pennsylvania Route 154 . It is about 0 @. @ 2 miles (300 m) south of Pennsylvania Route 87 and 2 @. @ 0 miles (3 km) north of Worlds End State Park on PA 154 . Forksville Covered Bridge is its official name on the National Register of Historic Places (NRHP) . Sullivan County is located in north central Pennsylvania , about 123 miles (198 km) northwest of Philadelphia and 195 miles (314 km) east @-@ northeast of Pittsburgh .

The bridge is just upstream of the confluence of the Little Loyalsock and Loyalsock Creeks . This was known as the " forks of the Loyalsock " and gave Forks Township its name when the township was incorporated in 1833 , while still part of Lycoming County . Sullivan County was formed from part of Lycoming County on March 14 , 1847 , and the bridge was built in 1850 . The name of the bridge comes from the community of Forksville , which is on land first settled in 1794 , was laid out as a village in 1854 , and was incorporated as a borough from part of Forks Township on December 22 , 1880 .

= = History = =

= = = Background = = =

The first covered bridge in the United States was built in 1800 over the Schuylkill River in Philadelphia , Pennsylvania . According to Zacher , the first covered bridges of the Burr arch truss design were also built in the state . Pennsylvania is estimated to have once had at least 1 @, @ 500 covered bridges and is believed to have had the most in the country between 1830 and 1875 . In 2001 , Pennsylvania had more surviving historic covered bridges than any other state , with 221 remaining in 40 of its 67 counties .

Covered bridges were a transition between stone and metal bridges , the latter made of cast @-@

iron or steel . In 19th @-@ century Pennsylvania , lumber was an abundant resource for bridge construction , but did not last long when exposed to the elements . The roof and enclosed sides of covered bridges protected the structural elements , allowing some of these bridges to survive for well over a century . A Burr arch truss consists of a load @-@ bearing arch sandwiching multiple king posts , resulting in stronger and more rigid structure than one made of either element alone .

= = = Construction and description = = =

Although there were 30 covered bridges in Sullivan County in 1890 , only five were left by 1954 , and as of 2011 only three remain : Forksville , Hillsgrove , and Sonestown . All three are Burr arch truss covered bridges and were built in 1850 . The Forksville Covered Bridge was built for Sullivan County by Sadler Rogers (or Rodgers) , a native of Forksville who was only 18 at the time . He hand @-@ carved a model of the bridge before work began and used it to supervise construction . Rogers built the Forksville and Hillsgrove bridges across Loyalsock Creek , with the latter about 5 miles (8 @. @ 0 km) downstream of the former . Although most sources do not list the builder of the Sonestown bridge , a 1997 newspaper article on the remaining Sullivan County covered bridges reported that Rodgers had designed it too .

The Forksville Covered Bridge was added to the NRHP on July 24 , 1980 , in a Multiple Property Submission of seven Covered Bridges of Bradford , Sullivan and Lycoming Counties . The 2009 National Bridge Inventory (NBI) lists the covered bridge as 152 feet 11 inches (46 @. @ 6 m) long , with a roadway 12 feet 2 inches (3 @. @ 7 m) wide , and a maximum load of 3 @. @ 0 short tons (2 @. @ 7 metric tons) . According to the NRHP , the bridge 's " road surface width " is 15 feet (4 @. @ 6 m) , which is only sufficient for a single lane of traffic . As of 2011 , each portal has a small sign reading " 1850 Sadler Rogers " at the top , above a sign with the posted clearance height of 8 @. @ 0 feet (2 @. @ 4 m) , and a " No Trucks Allowed " sign hanging below these .

The covered bridge rests on the original stone abutments , which have since been reinforced with concrete . The bridge deck , which is now supported by steel beams , is made of " very narrow crosswise planks " . Wheel guards on the deck separate the roadway from the pedestrian walkways on either side and protect the sides , which are covered with vertical planks almost to the eaves . The bridge has long , narrow windows with wooden shutters : the south side has four windows , and the north side has three . An opening between the eaves and the siding runs the length of the bridge on both sides . The bridge is supported by a Burr arch truss of 16 panels , with wooden beams . The gable roof is sheet metal and is used as the model illustration of a " classic gable roof " for a covered bridge by the U.S. Department of Transportation Federal Highway Administration 's Turner @-@ Fairbank Highway Research Center .

= = = Restoration and use = = =

In the 19th century the Forksville Covered Bridge survived major floods on March 1 , 1865 , and June 1 , 1889 , that destroyed other bridges in the West Branch Susquehanna River valley . Between about 1870 and 1890 , logging in the Loyalsock Creek watershed produced lumber rafts that floated beneath the bridge . These rafts , each containing 5 @, @ 000 ? 30 @, @ 000 board feet (12 ? 70 m3) of lumber , were carried down the Loyalsock to its mouth at Montoursville , and some continued on the West Branch Susquehanna River beyond . The rafts ended when the eastern hemlock were all clearcut .

From 1908 to 1913 , there was a stream gauge on the bridge . Twice a day , the creek height was read on a chain 21 @. @ 88 feet (6 @. @ 67 m) long on the bridge 's upstream side , and discharge measurements were taken on the downstream side . At the time it served as a " single span , wooden , covered highway bridge " . The bridge survived another major flood on November 16 , 1926 , when a dam broke upstream but was " badly damaged " by an ice jam on January 23 , 1959 , in a flood that left blocks of ice weighing up to 500 pounds (230 kg) in the streets of Forksville .

The Forksville Covered Bridge was restored in 1970 with what the NRHP nomination form describes as " all kinds of odd repairs " . The restoration work was completed by T. Corbin Lewis of

Hillsgrove Township , a retired electrical contractor , whose low bid of \$ 48 @, @ 000 was accepted over a Baltimore , Maryland , firm 's \$ 185 @, @ 000 bid . The restoration was supervised by the Pennsylvania Department of Transportation (PennDOT) , which owns and maintains the bridge . The repair involved minor work on the " steel floor beams and stringers " , which had been added years before . An entirely new wooden deck was installed , with wheel guards (wooden curbs) to channel vehicle traffic to the center and to protect the pedestrian walkways on the sides . Windows were cut in the bridge 's sides for the first time , and steel girders were " added to support the bridge 's understructure . "

Attitudes towards covered bridges in Sullivan County changed considerably in the last half of the 20th century . Two of the five bridges remaining in 1954 were razed by 1970 , when PennDOT considered tearing down the Forksville bridge too . It was renovated rather than razed because of its historic nature and appeal to tourists . The Forksville Covered Bridge was added to the NRHP in 1980 , and the Pennsylvania Historical and Museum Commission now forbids the destruction of any covered bridge on the NRHP in the state and has to approve any renovation work .

The NBI says the bridge was " reconstructed " in 2004 but does not give further details . The entire bridge has been reinforced with steel girders , including vertical beams . In 2006 the red bridge was repainted , which took about three weeks .

The bridge 's condition was described as " good " in the 1980 NRHP form , Zacher 's 1994 book , and the Evans ' 2001 book . However , the 2009 Federal Highway Administration National Bridge Inventory found the sufficiency rating of the bridge structure to be 17 @. @ 7 percent . It found that the bridge 's foundations were " determined to be stable for calculated scour conditions " but that the railing " does not meet currently acceptable standards " . Its overall condition was deemed " basically intolerable requiring high priority of corrective action " ; the 2006 NBI estimated the cost to improve the bridge at \$ 463 @, @ 000 .

Today the Forksville Covered Bridge is heavily used , as it is the most direct and shortest route from PA 154 , at the eastern end , to Forksville and its general store , which are at the western end . In 2000 , Forksville had 147 residents . The posted speed limit is 15 miles per hour (24 km / h) , and its average daily traffic was 224 vehicles in 2009 . The bridge is used as the logo of the Farmers & Mechanics Mutual Insurance Company , which was founded in Sullivan County in 1877 .

In addition to its utility , the bridge is appreciated for its history and beauty . In 1970 a long @-@ time Forksville resident spoke of the bridge 's connection to the past : " When you stand quiet on the bridge and the woods are still , you can almost hear the horses clomping over the wooden deck as they did in years gone by ; you can almost see the youngsters who climbed the rafters of the bridge to ' skinny @-@ dip ' in the creek below " . Zacher 's 1994 *The Covered Bridges of Pennsylvania : A Guide* describes the bridge 's location " over the rocky Loyalsock Creek " as " one of the most attractive settings in the state . "

= = Bridge data = =

The following table is a comparison of published measurements of length , width and load recorded by four different sources using different methods , as well as the name cited for the bridge and its builder . The NBI measures bridge length between the " backwalls of abutments " or pavement grooves and the roadway width as " the most restrictive minimum distance between curbs or rails " . The NRHP form was prepared by the Pennsylvania Historical and Museum Commission (PHMC) , which surveyed county engineers , historical and covered bridge societies , and others for all the covered bridges in the commonwealth . The Evans visited every covered bridge in Pennsylvania in 2001 and measured each bridge 's length (portal to portal) and width (at the portal) for their book . The data in Zacher 's book was based on a 1991 survey of all covered bridges in Pennsylvania by the PHMC and PennDOT , aided by local government and private agencies . The article uses primarily the NBI and NRHP data , as they are national programs .

= = Note = =

