

= Plunketts Creek Bridge No. 3 =

Plunketts Creek Bridge No. 3 was a rubble masonry stone arch bridge over Plunketts Creek in Plunketts Creek Township , Lycoming County in the U.S. state of Pennsylvania . It was built between 1840 and 1875 , probably closer to 1840 , when the road along the creek between the unincorporated villages of Barbours and Proctor was constructed . Going upstream from the mouth , the bridge was the third to cross the creek , hence its name .

The bridge was 75 feet (23 m) long , with an arch that spanned 44 feet (13 m) , a deck 18 feet 8 inches (5 @. @ 69 m) wide , and a roadway width of 15 feet 3 inches (4 @. @ 65 m) . It carried a single lane of traffic . In the 19th century , the bridge and its road were used by the lumber , leather , and coal industries active along the creek . By the early 20th century , these industries had almost entirely left , and the villages declined . The area the bridge served reverted mostly to second growth forest and it was used to access Pennsylvania State Game Lands and a state pheasant farm .

Plunketts Creek Bridge No. 3 was considered " significant as an intact example of mid @-@ 19th century stone arch bridge construction " , and was added to the National Register of Historic Places (NRHP) on June 22 , 1988 . Although it was repaired after a major flood in 1918 , a record flood on January 21 , 1996 , severely damaged the bridge , and it was demolished in March 1996 . Before the 1996 flood about 450 vehicles crossed it each day . Later that year , a replacement bridge was built and the old stone structure was documented by the Historic American Engineering Record . It was removed from the NRHP on July 22 , 2002 .

= = History = =

= = = Early inhabitants and name = = =

Plunketts Creek is in the West Branch Susquehanna River drainage basin , the earliest recorded inhabitants of which were the Susquehannocks . Their numbers were greatly reduced by disease and warfare with the Five Nations of the Iroquois , and by 1675 they had died out , moved away , or been assimilated into other tribes . The West Branch Susquehanna River valley was subsequently under the nominal control of the Iroquois , who invited displaced tribes , including the Lenape (Delaware) and Shawnee to live in the lands vacated by the Susquehannocks . The French and Indian War (1754 ? 1763) led to the migration of many Native Americans westward to the Ohio River basin . On November 5 , 1768 , the British acquired the New Purchase from the Iroquois in the Treaty of Fort Stanwix , including what is now Plunketts Creek . The first settlement along the creek by European colonists took place between 1770 and 1776 .

Plunketts Creek is named for Colonel William Plunkett , a physician , who was the first president judge of Northumberland County after it was formed in 1772 . During conflicts with Native Americans , he treated wounded settlers and fought the natives . Plunkett led a Pennsylvania expedition in the Pennamite @-@ Yankee War to forcibly remove settlers from Connecticut , who had claimed and settled on lands in the Wyoming Valley also claimed by Pennsylvania . For his services , Plunkett was granted six tracts of land that totaled 1 @, @ 978 acres (800 ha) on November 14 , 1776 , although the land was not actually surveyed until September 1783 . Plunkett 's land included the creek 's mouth , so Plunketts Creek was given his name . He died in 1791 , aged about 100 , and was buried in Northumberland without a grave marker or monument (except for the creek that bears his name) .

Lycoming County was formed from Northumberland County in 1795 . When Plunketts Creek Township was formed in Lycoming County in 1838 , the original name proposed was " Plunkett Township " , but Plunkett 's lack of active support for the American Revolution some years earlier had led some to believe his loyalty lay with the British Empire . The lingering suspicion of his loyalist sympathies led to the proposed name being rejected . Naming the township for the creek rather than its namesake was seen as an acceptable compromise .

== Villages and road ==

In 1832 , John Barbour built a sawmill on Loyalsock Creek near the mouth of Plunketts Creek . This developed into the village of Barbours Mills , today known as Barbours . In the 19th century , Barbours had several blacksmiths , a temperance hotel , post office , many sawmills , a school , store and wagon maker . In 1840 , a road was built north from Barbours along Plunketts Creek , crossing it several times . This is the earliest possible date for construction of the bridge , but the surviving county road docket on the construction mentions neither bridges nor fords for crossing the creek .

The bridge is at the mouth of Coal Mine Hollow , and the road it was on was used by the lumber and coal industries that were active in Plunketts Creek Township during the 19th and early 20th centuries . Creeks in the township supplied water power to 14 mills in 1861 , and by 1876 there were 19 sawmills , a shingle mill , a woolen factory , and a tannery . By the latter half of the 19th century , these industries supported the inhabitants of two villages in Plunketts Creek Township .

In 1868 the village of Proctorville was founded as a company town for Thomas E. Proctor 's tannery , which was completed in 1873 . Proctor , as it is now known , is 1 @. @ 66 miles (2 @. @ 67 km) north of Barbours along Plunketts Creek , and the main road to it crossed the bridge . The bark from eastern hemlock trees was used in the tanning process , and the village originally sat in the midst of vast forests of hemlock . The tannery employed " several hundred " workers at wages between 50 cents and \$ 1 @. @ 75 a day . These employees lived in 120 company houses , which each cost \$ 2 a month to rent . In 1892 , Proctor had a barber shop , two blacksmiths , cigar stand , Independent Order of Odd Fellows hall , leather shop , news stand , a post office (established in 1885) , a two @- @ room school , two stores , and a wagon shop .

The road between Barbours and Proctor crosses Plunketts Creek four times and the four bridges are numbered in order , starting from the southernmost in Barbours near the mouth and going upstream . While evidence such as maps indicates that the third bridge was constructed close to 1840 , the first definitive proof of its existence is a survey to relocate the road between the second and third bridges in 1875 . The first bridge over Plunketts Creek was replaced with a covered bridge in 1880 , and the second bridge was replaced in 1886 . That same year , the road between the second and third bridges was moved again , returning to its original position on the west side of the creek .

Finished sole leather was hauled over the bridge by horse @- @ drawn wagon south about 8 miles (13 km) to Little Bear Creek , where it was exchanged for " green " hides and other supplies brought north from Montoursville . These were then hauled north across the bridge into Proctor . The hides , which were tanned to make leather , came from the United States , and as far away as Mexico , Argentina , and China . Hemlock bark , used in the tanning process , was hauled to the tannery from up to 8 miles (13 km) away in both summer and winter , using wagons and sleds . The lumber boom on Plunketts Creek ended when the virgin timber ran out . By 1898 , the old growth hemlock was exhausted and the Proctor tannery , then owned by the Elk Tanning Company , was closed and dismantled .

== 20th century ==

Small @- @ scale lumbering continued in the watershed in the 20th century , but the last logs were floated under the bridge down Plunketts Creek to Loyalsock Creek in 1905 . In 1918 , a flood on the creek damaged the road for 100 feet (30 m) on both sides of the bridge , and caused " settling and cracking of the bridge itself " . The bridge had needed repairs and reconstruction . In 1931 , the Commonwealth of Pennsylvania passed legislation that gave the state responsibility for the costs of road and bridge maintenance for many highways belonging to local municipalities . This took effect in 1932 , relieving Plunketts Creek Township and Lycoming County of the responsibility .

Without timber and the tannery , the populations of Proctor and Barbours declined , as did traffic on the road and bridges between them . The Barbours post office closed in the 1930s and the Proctor

post office closed on July 1 , 1953 . Both villages also lost their schools and almost all of their businesses . Proctor celebrated its centennial in 1968 , and a 1970 newspaper article on its 39th annual " Proctor Homecoming " reunion called it a " near @-@ deserted old tannery town " . In the 1980s , the last store in Barbours closed , and the former hotel (which had become a hunting club) was torn down to make way for a new bridge across Loyalsock Creek .

Plunketts Creek has been a place for lumber and tourism since its villages were founded , and as industry declined , nature recovered . Second growth forests have since covered most of the clear @-@ cut land . Pennsylvania 's state legislature authorized the acquisition of abandoned and clear @-@ cut land for Pennsylvania State Game Lands in 1919 , and the Pennsylvania Game Commission (PGC) acquired property along Plunketts Creek for State Game Lands Number 134 between 1937 and 1945 . The main entrance to State Game Lands 134 is just north of the bridge site , on the east side of the creek .

The PGC established the Northcentral State Game Farm in 1945 on part of State Game Lands 134 to raise wild turkey . The farm was converted to ringneck pheasant production in 1981 , and , as of 2007 , it was one of four Pennsylvania state game farms that produced about 200 @,@ 000 pheasants each year for release on land open to public hunting . The Northcentral State Game Farm is chiefly in the Plunketts Creek valley , just south of Proctor and north of the bridge . The opening weekend of the trout season brings more people into the village of Barbours at the mouth of Plunketts Creek than any other time of the year .

On June 22 , 1988 , the bridge was added to the National Register of Historic Places (NRHP) , as part of the Multiple Property Submission (MPS) of Highway Bridges Owned by the Commonwealth of Pennsylvania , Department of Transportation , TR . The MPS included 135 bridges owned by the Pennsylvania Department of Transportation (PennDOT) , 58 of which were of the stone arch type . While the individual NRHP form for the bridge cites a 1932 inspection report (the year that the state took over its maintenance) , the MPS form mistakenly gives the bridge 's date of construction as 1932 .

= = = Flood and destruction = = =

In January 1996 , there was major flooding throughout Pennsylvania . The 1995 ? 1996 early winter was unusually cold , and considerable ice buildup formed in local streams . A major blizzard on January 6 ? 8 produced up to 40 inches (100 cm) of snow , which was followed on January 19 ? 21 by more than 3 inches (76 mm) of rain with temperatures as high as 62 ° F (17 ° C) and winds up to 38 miles per hour (61 km / h) . The rain and snowmelt caused flooding throughout Pennsylvania and ice jams made this worse on many streams . Elsewhere in Lycoming County , flooding on Lycoming Creek in and near Williamsport killed six people and caused millions of dollars in damage .

On Plunketts Creek , ice jams led to record flooding , which caused irreparable major damage to the mid @-@ 19th century stone arch bridge . Downstream in Barbours , the waters were 4 feet (1 @.@ 2 m) deep in what was then called the village 's " worst flood in history " . Plunketts Creek Bridge No. 3 was one of two destroyed in Lycoming County , and on January 31 a photograph of the damaged bridge was featured on the front page of the Williamsport Sun @-@ Gazette with the caption " This old stone arch bridge over Plunketts Creek must be replaced . " In neighboring Sullivan County , the Sonestown Covered Bridge , also on the NRHP , was so damaged by the flood that it remained closed for repairs until late December 1996 . Throughout Pennsylvania , these floods led to 20 deaths and 69 municipal- or state @-@ owned bridges being either " destroyed or closed until inspections could verify their safety " .

When it became clear that the bridge could not be repaired , PennDOT awarded an emergency contract for a temporary bridge before the end of January , citing " emergency vehicles that can no longer travel directly from Barbours " to Proctor and beyond . The temporary bridge cost \$ 87 @,@ 000 and was 24 feet (7 @.@ 3 m) wide . The photographs for the bridge 's inclusion in the Historic American Engineering Record (HAER) were taken in January , and the HAER " documentation package was prepared as mitigation for the emergency demolition " of the bridge , which was

collapsed in March . The permanent replacement bridge was completed in 1996 , and the old bridge was removed from the NRHP on July 22 , 2002 .

= = Description and construction = =

Plunketts Creek Bridge No. 3 was a rubble masonry stone arch bridge , oriented roughly east ? west over Plunketts Creek . Its overall length was 75 feet (23 m) and its single semi @-@ circular arch spanned 44 feet (13 m) . The bridge deck width was 18 feet 8 inches (5 @.@ 69 m) , and its roadway was 15 feet 3 inches (4 @.@ 65 m) wide , which could accommodate only a single lane of traffic . Just before the flood that led to the bridge 's destruction , about 450 vehicles crossed the bridge daily . The outside corners of the wing walls were 25 feet (7 @.@ 6 m) apart , which combined with the overall length of 75 feet (23 m) led to a total area of 1 @,@ 875 square feet (174 @.@ 2 m2) being listed on the NRHP .

The bridge rested on abutments which had been jacketed with concrete after its original construction . The arch was supported by voussoirs made of " irregular rubble stone " , without a keystone . There was also no stone giving the date or other construction information . The approaches were flanked by wing walls constructed of riprap stones , and the spandrel walls were topped by parapets made of " rough , crenellated stones " . The bridge 's road deck rested directly on the top of its arch . This led to a " narrow wall at the arch crown " and a " protruding rock parapet " atop this spandrel wall on either side . Most stone arch bridges have solid parapets without decoration ; this bridge 's parapet crenellation was an ornamental feature . The parapet construction and appearance made the bridge unique among the 58 Pennsylvania stone arch bridges with which it was nominated for the NRHP .

Pennsylvania has a long history of stone arch bridges , including the oldest such bridge in use in the United States , the 1697 Frankford Avenue Bridge over Pennypack Creek in Philadelphia . Such bridges typically used local stone , with three types of finishing possible . Rubble or third @-@ class masonry construction used stones just as they came from the quarry ; squared @-@ stone or second @-@ class masonry used stones that had been roughly dressed and squared ; and ashlar or first @-@ class masonry used stones which had been finely dressed and carefully squared . Rubble masonry was the quickest and cheapest for construction , and had the largest tolerances . Many of the oldest stone bridges in Pennsylvania were built using rubble masonry techniques .

Stone bridge construction started with the excavation of foundations for the abutments . Then a temporary structure known as a center or centering would be built of wood or iron . This structure supported the stone arch during construction . Once the stone arch was built , the spandrel walls and wing walls could be added . Then the road bed was built , with fill (loose stones or dirt) added to support it as needed . Wall and arch stones were generally set in place dry to ensure a good fit , then set in mortar . Once the bridge was complete and the mortar had properly hardened , the center was gradually lowered and then removed . In March 1996 , after standing for between 156 and 121 years , the arch of Bridge No. 3 finally collapsed .

= = Note = =