101 Years
101 Culverts

A look at C&O Canal Culverts
to welcome the 2nd century
of the National Park Service

A project by Steve Dean
Find your park

Like many people, I found my park on the C&O Canal National Historical Park. I first visited the C&O Canal in 1991 to continue the national park experience after a hiking trip to Yosemite in 1990. I soon became fascinated with the nature and history of the park, and the endless opportunities for hiking, photography and exploration it offered. I purchased a copy of Thomas Hahn’s *Towpath Guide to the C&O Canal* at the Great Falls Visitor Center, and embarked on a trek on the C&O Canal that will no doubt last the rest of my life.

On one of my early walks I took a side trip, on a whim, to see where a well-used trail went. I soon found myself along a creek, and when I turned around to head back to the towpath saw something that fascinated me — a stone culvert. I was along Muddy Branch, near Pennyfield, and the culvert was Culvert 30. I consulted my *Towpath Guide*, and found that there were around 160 culverts. In my 26th year on the canal, I am still exploring and photographing culverts on my canal walks.

*Cover image – Culvert 140 upstream arch face and barrel, February 5, 2017*  
*Culvert 30 Downstream Arch, Mile 20.01, Muddy Run. 2012*
Culverts are essential to the survival of the C&O Canal towpath and prism. They carry streams and creeks under the canal. If the culverts collapse or are blocked, they can allow erosion or canal wash-outs. Culverts also carry roads for pedestrians and vehicles under the canal, and were valuable to ensure access to riverside farm land and communities, the river itself, ferries, and bridges during the canal operating era.

A few culverts have been replaced with modern concrete structures or metal pipes, but most appear as they did in the canal operating era. Several have been restored by the National Park Service over the years. The Park Service maintenance staff and engineers monitor the conditions of the culverts, sometimes with the help of volunteers, and keep the culverts clear and free of brush and trees. Many park visitors do not even realize the culverts are there or have ever seen them.

Visiting culverts takes a bit of care. Steep slopes require caution to descend to the culverts. Brush, insects, and snakes abound during the warmer months; briars are present year-round. Selected resources about culverts are listed at the end of this report.

Photographs of 101 culverts were used for this project. The culverts in this selection are not in any specific order nor were they selected for any one particular reason. I hope this project provides an appreciation of these beautiful structures as well as an awareness of the work that the National Park Service does and the effort it takes to keep the park open for all to appreciate.
Culvert 173

Mile 121.57, 8-foot span, completed 1836. Also known as Barnetts Ditch Run Culvert, this culvert is located below Hancock. It carries an active stream under the canal. Downstream arch – November 14, 2015
Culvert 223

Mile 170.84, 10-foot span, completed 1849. The Kellys Road Culvert provided access to farm land along the river during the canal operating area. Like many Western Maryland culverts the barrel is brick-lined; the bricks can be seen in this view of the downstream arch. Bricks were used because the shortage of good quality stones. Downstream arch – November 12, 2015 ©
Culvert 14
Mile 10.02, 4-foot span, completed 1830. This stream culvert features a downstream arch made of Seneca sandstone. It is in the Carderock area. Downstream arch – January 21, 2017
Culvert 186

Mile 126.86, 4-foot span, completed 1838. The culvert carries a light stream under the canal, and is just below Round Top Cement Mill. The foundation of the culvert rests on exposed rock plate. The upstream side of the culvert features a cut-out to the right of the arch that was once a waste weir at some point. Upstream arch – November 13, 2015
Culvert 129

Mile 100.23, 6-foot span, completed 1834. A lazy stream flows through this culvert. It is the first culvert above the canal town of Williamsport. The downstream arch features the original stones, but the upstream arch collapsed and was rebuilt in concrete. Downstream arch – October 16, 2015
Culvert 79

Mile 51.09, 10-foot span, completed 1833. Also known as the Sugartree Branch Culvert, it located in Landers, just below the beautifully restored Catoctin Aqueduct. It faces a culvert under the very busy CSX railway. Downstream arch – December 12, 2015
Mile 135.71, 10-foot span, completed 1838. This is a fine example of a culvert on a timber foundation. The long-term integrity of the timbers is evident by the continued survival of the wing walls. A large sink hole is in the prism over the culvert, but the barrel is intact. The culvert is located in Pearre and an active stream flows through it. Downstream arch – November 12, 2015
Culvert 108
Mile 74.04, 6-foot span, completed 1833. This well-preserved culvert is only 100 feet above Lock 39. It is typically dry. Upstream arch – January 14, 2017
Culvert 239

Mile 180.10, 8-foot span, completed 1840. Ground water flows from under the nearby CSX rail yard through this culvert. The upstream end is blocked off by the rail yard fill. This culvert is adjacent to the Evitts Creek Hiker-Biker Overnight Camp. Downstream arch – November 11, 2015
Culvert 142

Mile 110.42, 12-foot span, completed 1837. Visitors to McCoys Ferry pass through this road culvert. It is the uppermost of three road culverts in a two-mile span; two are still in use. Upstream arch – February 7, 2016
Culvert 47
Mile 34.01, 6-foot span, completed 1832. A stream flows through this culvert located near Whites Ferry. The downstream arch features designs cut into the keystone and ring stones. Downstream arch – February 20, 2016
Culvert 12

Mile 8.93, 12-foot span, completed 1831. Rock Run flows through this culvert. Much of the volume of Rock Run was diverted to a nearby modern culvert when the Capital Beltway was built in the 1960s. It is near Lock 11. Several buttresses provide support for the culvert wall. Downstream arch – January 21, 2017 ☺
Culvert 174

Mile 122.11, 6-foot span, completed 1838. In addition to local streams, a waste weir immediately over the upstream arch drained directly into the culvert inflow. There are several berm-side weirs in Western Maryland. It is located two miles below Hancock. Upstream arch – November 16, 2016
Dam 6 Culvert

Mile 134.06, 10-foot span, completed 1839. This isn’t the typical culvert—rather than carry water under the canal, it carried water impounded by Dam 6 into the canal feeder channel. It runs in parallel to the towpath along the Dam 6 inlet lock. The downstream arch is open; the upstream arch is filled in. Downstream arch – November 9, 2015
Culvert 179

Mile 123.95, 12-foot span, completed 1838. This road culvert played a significant role in the history of Hancock. It provided access to the Potomac River for a ford and later a bridge to Virginia, now West Virginia. Downstream arch – November 10, 2015
Culvert 69

Mile 41.97, 20-foot span, completed 1832. This culvert carries the Little Monocacy River under the canal, just below the Monocacy River Aqueduct. It was sabotaged by the Confederates during the Civil War to halt canal operations. It was also heavily damaged by Hurricane Agnes in 1972 and rebuilt in the mid-1970s. Downstream arch – January 17, 2015
Culvert 104

Mile 70.78, 6-foot span, completed 1833. This culvert is in the Millers Sawmill area, between Antietam and Shepherdstown, and is under a basin that once served the area. There is an active flow of water through the culvert. Downstream arch – January 16, 2016 ☺
Culvert 116
Mile 81.62, 10-foot span, completed 1834. Marsh Run flows through this impressive culvert. It is located in Taylors Landing and the area was also known as Middlekauff’s Basin during the canal operating era. Downstream arch – January 17, 2016
Culvert 65

Mile 39.63, 12-foot span, completed 1832. This is a very interesting culvert. It is skewed – built at a diagonal angle under the canal instead of a right angle, and rifled – the barrel stonework is layered in a sloping manner due to the nature of the skewed arch. The culvert is just above Lock 26, near the Dickerson Conservation Area river access. Upstream arch – January 28, 2012 ©
Culvert 197

Mile 132.40, 4-foot span, completed 1838. This small stream through the culvert is typically dry. It features a long wing wall on the downstream arch right side, and parapet coping stones that are visible along the towpath. Downstream arch – October 21, 2011
Culvert 15

Mile 10.42, 12-foot span, completed 1830. This culvert is located at Carderock. A modern culvert was built just below this culvert in the 1960s and provides access to the canal. Downstream arch – January 21, 2017
Culvert 134
Mile 102.00, 6-foot span, completed 1834. The downstream arch, mounted on timber, has progressively degraded in recent years. This culvert is a possible candidate for a future restoration project. A small stream flows through the culvert. Downstream arch – October 16, 2015 😊
Culvert 221

Mile 169.17, 6-foot span, completed 1849. This is the Pigmans Run culvert, and the upstream arch adjoins a culvert under the Western Maryland Railway. It is brick-lined with a beautiful sandstone arch and face, and features numerous mason marks. It is at the lower end of the Pigmans Ferry Hiker-Biker Overnight Camp.

Downstream arch – November 17, 2016 ☺
Culvert 103
Mile 70.38, 4-foot span, completed 1833. This culvert is located above the Antietam Creek Aqueduct. It has an active stream flow and is clear. A revetment above the upstream parapet adds to an interesting view of the moss-covered stone work. Upstream arch – January 16, 2016
Culvert 42

Mile 29.86, 12-foot span, completed 1832. Located near Edwards Ferry, Chisel and Cabin branches combine and flow through this culvert. The red lines across the face of the culvert reveal recent high water levels. Downstream arch – March 12, 2016
Culvert 51
Mile 35.47, 10-foot span, completed 1832. This culvert is at Whites Ferry and is a bit of a mystery. The upstream and downstream arches are separate and the prism is open between them. The barrel between the two arches was possibly wood, but no portion remains. Downstream arch – April 12, 2014
Culvert 82
Mile 52.51, 16-foot span, completed 1833. The beautiful downstream arch is all that remains of this culvert. The prism and upstream parts have collapsed and efforts to restore it with concrete were not successful. Downstream arch – December 1, 2012
Culvert 122

Mile 95.66, 6-foot span, completed 1834. An active stream flows through this culvert. It appears to be in good condition. Downstream arch – February 4, 2017
Culvert 141

Mile 110.10, 4-foot span, completed 1837. A busy stream flows through this culvert, located at the lower end of the McCoys Ferry campground. It is very similar to Culvert 144. Downstream arch – June 21, 2013 ©
Culvert 185

Mile 126.42, 10-foot span, completed 1837. The upstream arch includes water channels built into the wing walls, apparently for run-off. Upstream arch – November 13, 2015
**Culvert 9**

Mile 8.40, 4-foot span, completed 1830. This culvert is on a busy part of the canal near Lock 8. The downstream arch is somewhat obscured by brush. Downstream arch – January 21, 2017
Culvert 68

Mile 41.34, 6-foot span, completed 1831. This culvert is under a watered section of the canal below Lock 27. An active stream flows through it. Downstream arch – January 17, 2015
Culvert 136

Mile 105.80, 24-foot span, completed 1834. This impressive culvert is below Dam 5 and carries the Little Conococheague Creek under the canal. It is skewed at an angle across the canal. Run-off from a June 2014 storm washed out the towpath embankment behind the right wing wall and left the wall free-standing. Downstream arch – June 7, 2015 (above) and February 7, 2016 (right)
Culvert 200

Mile 135.10, 10-foot span, completed 1837. This large culvert was originally built over a timber frame but collapsed. It was rebuilt by the NPS in the 1970s. The above-grade outflow creates an impressive waterfall effect. Downstream arch – November 13, 2015
Culvert 237

Mile 179.31, 5-foot span, completed 1849. A waste weir drains into the inflow of the culvert on the berm side. The culvert drains above ground level on the downstream side. Downstream arch – November 11, 2015
Culvert 120

Mile 93.02, 8-foot span, completed 1834. A sink hole over the upstream arch is compromising the integrity of the barrel. The wing wall on the upstream arch was solid in 2013, bulging in 2015, and in December 2016 it was noted that it had collapsed. Upstream arch – October 15, 2015
**Culvert 46 ½**

Mile 33.68, 3-foot span, completed 1831. This is the lower of two box culverts on the canal. It is a square culvert and is located below Whites Ferry. Downstream arch – February 24, 2012
Culvert 175

Mile 122.49, 4-foot span, completed 1836. This is one of two original box culverts on the canal. The culvert is rectangular in shape at 4 foot by 3 foot. It is located in Hancock, just below the Bowles House. Downstream arch – November 14, 2015
Culvert 60
Mile 38.17, 4-foot span, completed 1833. This small active culvert is between Whites Ferry and Lock 26. A long embankment wall is below it. Downstream arch – January 7, 2012
Culvert 240
Mile 181.20, 10-foot span, completed 1848. With the loss of Culvert 241 to bridge construction, this is the uppermost historic culvert. It was originally a road culvert, but the upstream end is now closed off. A steady stream of drainage and ground water flows from the culvert. Downstream arch – November 11, 2015 ©
Culvert 93

Mile 58.19, 20-foot span, completed 1832. The Israel Creek Culvert features an impressive elliptical arch. It is located in Weverton, just above Lock 31. Upstream arch – February 27, 2016 ©
Culvert 37
Mile 23.92, 10-foot span, completed 1832. Beaver Dam Creek flows through this culvert. The embankment is washed out over the upstream arch, but the arch and wing walls are intact. Downstream arch – February 18, 2012
Culvert 192
Mile 130.03, 10-foot span, completed 1838. This culvert is just above Lock 53. An active stream flows over a rocky bed to enter the culvert. Timbers that formed part of the culvert foundation have washed out of the culvert and are visible in the outflow channel. Upstream arch – November 9, 2015
Culvert 216

Mile 165.45, 6-foot span, completed 1849. The culvert is brick-lined. The downstream arch is in good condition but the upstream arch is failing, with a large sink-hole directly over it and falling wing walls. C&O Canal Association member Gene Long recalls using this culvert to go to school when he lived at nearby Lock 68. Downstream arch – November 17, 2016 ☺
Culvert 71
Mile 44.04, 16-foot span, completed 1832. Tuscarora Creek flows through this impressive culvert. The upstream arch is gone, leaving an exposed section of the intact barrel. Downstream arch – December 12, 2015
Culvert 126
Mile 96.97, 4-foot span, completed 1834. An active stream flows through this culvert. Most of the culvert, except the upstream arch, was washed out and was rebuilt in the 1970s. Upstream arch – March 4, 2016
Culvert 97

Mile 64.99, 8-foot span, completed 1833. This is the upper of two culverts in the Dargan Bend area. The downstream arch has completely collapsed and part of the towpath fell with it. The National Park Service has stabilized the area. Upstream arch – October 10, 2015
Culvert 217

Mile 166.10, 20-foot span, completed 1849. The Seven Springs Run culvert was originally planned as a two arch culvert. It was originally brick-lined, but on close inspection appears to be reinforced with concrete and corrugated metal. The run is quite active and cattle are often seen drinking out of it on nearby farm land. Downstream arch – November 17, 2016 😊
Culvert 135

Mile 102.65, 6-foot span, completed 1834. This culvert features prominent 90 degree wing walls. It is located just under 3 miles above Williamsport. The outflow feeds directly into the river. Upstream arch – January 26, 2017
Culvert 140
Mile 109.90, 10-foot span, completed 1837. This is the middle of three road culverts in the Four Locks to Mc-Coys Ferry area. It once provided access to a community across the river. It is a fine example of C&O Canal culvert construction. Upstream arch – November 13, 2016 😊❤️
Culvert 72
Mile 47.75, 16-foot span, completed 1831. This culvert is very near the Calico Rocks Hiker-Biker Overnight Camp and faces a culvert under the nearby CSX rail line. Downstream arch – December 12, 2015
Culvert 139

Mile 108.74, 12-foot span, completed 1838. This is the lower of three road culverts in the Four Locks to McCoys Ferry area. It provides visitor access to the towpath, picnic area and boat ramp. Upstream arch – January 27, 2017 😊
Culvert 231
Mile 173.78, 12-foot span, completed 1848. This culvert carries Colliers Run under the canal. The barrel is brick-lined and nearly 85,000 bricks were used in its construction. Upstream arch – November 11, 2015 🌟
Culvert 183

Mile 125.11, 4-foot span, completed 1837. This small culvert is about a mile above Hancock. A flowing stream passes through it. A local road passes over it on the berm. Upstream arch – November 13, 2015
Culvert 30

Mile 20.01, 16-foot span, completed 1830. Muddy Branch flows through this large culvert in the Pennyfield area. It is a popular river access point for canoeists and kayakers. Upstream arch – May 27, 2011
Culvert 118 ½
Mile 89.21, 4-foot span, completed 1835. This active stream culvert is the first culvert above Big Slackwater. The stream flows from nearby farm land and an old mill wheel is visible upstream from the culvert. Downstream arch – December 16, 2016
Culvert 222

Mile 170.37, 6-foot span, completed 1849. This is a small brick-lined stream culvert that is partially silted in. A sink hole over the downstream arch is compromising the integrity of the barrel at a rapid rate, and dirt is falling into the culvert. The NPS is monitoring and repairing the culvert as needed. The upstream arch adjoins a culvert under the Western Maryland Railway. Downstream arch – November 11, 2015 ☺
Culvert 17
Mile 11.76, 8-foot span, completed 1830. This well-constructed culvert is made of granite and rests on a timber foundation. It carries a moderately active stream under a very active part of the canal near Marsden Tract. Downstream arch – January 21, 2017
Culvert 194
Mile 131.24, 4-foot span, completed 1838. A stream typically flows through this culvert. Deneen Road crosses the upstream arch of the culvert. Downstream arch – November 9, 2015
Culvert 73
Mile 48.01, 6-foot span, completed 1830. The upstream arch faces a culvert under the CSX railroad and is partially collapsed, but functional. Downstream arch – December 12, 2015
Culvert 124
Mile 96.72, 4-foot span, completed 1833. With a 6-foot abutment and a 2-foot rise, this is a tall culvert. The upstream arch is not as high. Downstream arch – October 19, 2012
Culvert 84

Mile 53.59, 10-foot span, completed 1833. This culvert is known as the Tobacco House Branch Culvert and likely served as a road culvert during the canal operating era. Downstream arch – February 27, 2016
Culvert 150

Mile 114.43, 12-foot span, completed 1837. Both the downstream and upstream arches of this impressive road culvert are in good condition. Water drainage from the Ernstville area often flows through the culvert. Downstream arch – November 12, 2014 😊
Culvert 172

Mile 121.19, 6-foot span, completed 1836. This small culvert has an active stream and is in an attractive setting a half mile above Little Pool. Downstream arch – November 14, 2015
Culvert 49
Mile 34.82, 10-foot span, completed 1831. This culvert features the most elaborate arch stone work on the canal. It is silted in now, but it may have served as a road culvert for access to Whites Ferry before a crossover bridge was built. Downstream arch – February 24, 2012
Culvert 144

Mile 110.83, 6-foot span, completed 1838. A 15-foot high parapet and wide wing walls are the dominant features of this impressive culvert. An active stream flows through it. Downstream arch – March 4, 2016
Culvert 91
Mile 57.01, 12-foot span, completed 1832. Much of the Knoxville Branch culvert is silted in, and like many culverts, it is larger than it looks. It has also been referred to as the Pains Branch and was related to an iron furnace that was in the area. Downstream arch – January 4, 2013
Culvert 38
Mile 26.77, 12-foot span, completed 1832. Horsepen Branch flows through this culvert. A large hole exists in the prism over the barrel. The upstream arch is intact but the wing walls have partially fallen. Downstream arch – January 7, 2012
Culvert 228

Mile 172.10, 12-foot span, completed 1849. Referred to as Brice Hollow, it served as a road culvert during the canal operating era. It is another brick lined culvert, and over 95,000 bricks are used in the barrel. The upstream arch adjoins a Western Maryland Railway culvert. Downstream arch – November 11, 2015 ☺
Culvert 83
Mile 53.17, 4-foot span, completed 1832. This small culvert is one of several below Brunswick and carries a moderately active drainage flow. Downstream arch – February 27, 2016
Culvert 149

Mile 114.21, 6-foot span, completed 1837. This is the first culvert above Big Pool. It carries an active flow of water from nearby farm lands. The stone culvert pavement is well defined in the downstream arch. Downstream arch – November 11, 2014
Culvert 202

Mile 136.01, 6-foot span, completed 1849. This culvert is in the Pearre area and features a wooden culvert pavement. It is in good condition. Downstream arch – November 14, 2016 ©
Culvert 143
Mile 110.45, 6-foot span, completed 1837. Green Spring Run steadily flows through this culvert. It is located just above the McCoy’s Ferry access Culvert 142. Downstream arch – June 21, 2012 ☺
Culvert 184

Mile 125.27, 8-foot span, completed 1837. At one time this was known as Brents Road Culvert. A local road crosses the berm of the culvert. Downstream arch – November 13, 2015
Culvert 105

Mile 71.55, 4-foot span, completed 1833. This culvert is about a mile below Lock 38 and is largely silted in. A trickle of water from nearby fields typically flows through. Canal Road crosses the upstream arch of the culvert. Downstream arch – January 16, 2016
Culvert 100

Mile 67.07, 8-foot span, completed 1833. This culvert is built over a timber foundation and has an active stream flow, except during very dry periods. Since 2011 the downstream arch has progressively collapsed, with first the upstream wing wall, then the downstream wing wall. The arch has started to fail and the culvert could ultimately collapse. Downstream arch – January 16, 2016 ☺
Culvert 114
Mile 79.98, 4-foot span, completed 1833. Roses Culvert rests on a limestone base and is located a half-mile above Lock 40. It is occasionally watered. Downstream arch – March 4, 2016
Culvert 48

Mile 34.50, 4-foot span, completed 1831. The downstream arch has partially collapsed. The upstream arch features decorative etching, showing the pride in their workmanship of the canal builders. Upstream arch – January 18, 2013
Culvert 234
Mile 175.35, 6-foot span, completed 1840. This culvert carries an active stream with an impressive inflow over a rocky stream bed. The culvert is at the edge of the Irons Mountain Hiker-Biker Overnight Camp. Upstream arch – November 11, 2015
Culvert 96

Mile 64.68, 8-foot span, completed 1833. This culvert is the lower of two in the Dargan Bend area, and carries Sawmill Branch under the canal. Downstream arch – October 10, 2015
Culvert 74

Mile 48.16, 4-foot span, completed 1832. This small culvert is just below the Point of Rocks pivot bridge and has an active water flow. Downstream arch – December 12, 2015
Culvert 25
Mile 17.74, 20-foot span, completed 1830. The Watts Branch flows through this culvert. It features etchings on many of the spandrel stones. Downstream arch – March 23, 2012
Culvert 151

Mile 114.83, 6 foot span, completed 1837. This is one of several impressive culverts in the Ernstville area. A light stream generally flows through it. Sink holes exist over the culvert, though the barrel appears to be intact.

Downstream arch – November 11, 2014
Culvert 195
Mile 131.99, 4-foot span, completed 1836. The downstream arch collapsed and was rebuilt. An interesting feature of this small stream culvert is the downward slope of the barrel at the initial inflow on the berm. Upstream arch – November 9, 2015
Culvert 111
Mile 76.65, 8-foot span, completed 1833. This culvert is located at Snyders Landing. The stream flows downhill over a rocky bed into the culvert. Upstream arch – March 4, 2016
Culvert 63
Mile 38.72, 8-foot arch, completed 1832. This culvert is below Lock 26 and has seen an increased silt level in recent years, but water still flows. Downstream arch – January 28, 2012
Culvert 215
Mile 161.82, 16-foot span, completed 1849. Big Run Culvert features exposed brick arch. The culvert is near Lock 67. Downstream arch and wing wall detail – January 27, 2017 ©
Mile 80.55, 6-foot span, completed 1833. The culvert is near Taylors Landing and known as Mondell due to its proximity to the road of the same name. Water rushing down a limestone course on the inflow makes impressive sights and sounds. Upstream arch – January 19, 2013 😊
Culvert 88
Mile 55.45, 8-foot span, completed 1832. This is the first of several culverts above Brunswick. It faces an area that is very active with Brunswick railroad operations. Downstream arch – January 4, 2013
Culvert 152

Mile 115.02, 4-foot span, completed 1837. This culvert is partially filled in. It is generally dry. Upstream arch – November 11, 2014
Culvert 145
Mile 111.38, 6-foot span, completed 1838. The inflow of this culvert is in a pit and faces another culvert under an old road that parallels the berm. Upstream arch – November 16, 2016
Culvert 92
Mile 57.37, 6-foot span, completed 1832. An active stream flows through this partially silted culvert below Weverton. Downstream arch – January 4, 2013
Culvert 193

Mile 130.72, 10-foot span, completed 1838. Deneen Road culvert is in an area known as Cohill Station. The disused pipe served as a water uptake for nearby apple orchards; the pumping station is near the culvert upstream arch. Barrel view from downstream arch – November 9, 2015 ©
Culvert 236

Mile 179.10, 4-foot span, completed 1840. Old concrete repairs are quite evident in this culvert. It carries a light flow of water and drains into a stream that flows across scenic Western Maryland farm land. Downstream arch – November 11, 2015
Culvert 89
Mile 56.01, 8-foot span, completed 1833. This well preserved arch near Brunswick features red sandstone ringstones.
Downstream arch – February 27, 2016
**Culvert 147**

Mile 112.05, 4-foot span, completed 1838. Water typically flows through this culvert, though large sink holes in the canal prism over it are a concern. The upstream arch faces a culvert under an old road that parallels the canal below Fort Frederick. Downstream arch – November 13, 2012
Culvert 182
Mile 124.38, 36-foot span, completed 1837. Little Tonoloway Creek passes through this culvert located at the upper end of the town of Hancock. It is the longest culvert on the C&O Canal and it is sometimes called “the culvert that wanted to be an aqueduct.” It is indeed a culvert because, unlike culverts, aqueducts are free-standing structures. Downstream arch – November 10, 2013 ☺
Culvert 50
Mile 50.03, 4-foot span, completed 1832. This culvert is located near Whites Ferry. It carries an active stream that drains nearby farm land. Downstream arch – February 24, 2012
Culvert 160

Mile 116.76, 6-foot span, completed 1837. This culvert is partially silted but is intact. The drop before the inflow may have helped trap sediment. Upstream arch – November 13, 2016
Culvert 206
Mile 146.92, 12-foot span, completed 1849. This brick culvert drains a valley known as Devil’s Alley. It was also used as a road culvert for nearby farm land during the canal operating era. Downstream arch – September 7, 2016 ☺
Culvert 188

Mile 128.57, 4-foot span, completed 1837. A debris trap was built to protect the inflow of the culvert. Foundations of buildings are located just above the in-flow stream. Upstream arch – November 18, 2016
Culvert 140

I never met a canal culvert I didn’t like. I spend anywhere from 15 minutes to a couple hours photographing each one and just appreciating the design, labor and pride that went into them. I’m quite happy to spend a day – or even a week – walking the canal visiting culverts and lugging camera gear up and down slopes to the culverts. Most of these trips are spent during what I call “Culvert Season” – usually October through April.

Of course I have several favorites, and these are culverts I visit often. My absolute favorite, though, is Culvert 140. This is where I truly found my park and I visit it often. A beautiful example of culvert design, it is located just below McCoys Ferry, and is the middle of a series of three road culverts located in the space of just over 1½ miles. Unlike its sister road culverts 139 and 142, Culvert 140 is no longer used for traffic. It was originally built to provide access to a community in Virginia (now West Virginia) known as Georgetown. A facing road culvert was not built under the Western Maryland Railway when it came through in the early 1900s, so presumably the residents of Georgetown were out of luck. In all actuality, nearby Culvert 142 is only a half mile away and may well have met the access needs of Georgetown. Happily for canal culvert fans, the additional culvert 140 was built for some long forgotten reason.

Culvert 140 is worth looking at. With its 10 foot span and 5 foot rise, it is a large scale version of so many of the smaller 4 and 6 foot span culverts commonly seen along the canal. It has withstood the test of time and, with the exception of the downstream arch right wing wall, is in outstanding condition. As with any spot on the canal, it is easy to pause and ponder the history of the canal and the people who lived on it.
**A few notes:**

If you are interested in culverts, keep in mind that getting to culverts isn’t for everyone. There are a number of safety factors to consider. Due care needs to be taken, not only for your safety, but to protect the structure and the terrain around it. Dress appropriately, use care going up and down steep banks, respect the flora and fauna in the area, and let others know where you are going. Ticks, insects, poison ivy and snakes can be encountered in the warmer months when the dense foliage is encountered. Additionally, culverts are best viewed in the cooler months, when the growth does not obstruct views of the culverts.

Don’t walk or stand on the top of culvert wing walls or parapets, or take any other action that might loosen or damage the stonework. Don’t walk along the edge of steep banks along creeks or ravines, as they can give out easily. The National Park Service prefers that people do not enter culverts. Respect all fences and No Trespassing signs; in many cases private property borders the berm of the canal. Become familiar with National Park Service rules, and do not enter any sites marked with Area Closed signs or other warnings.

Visit www.nps.gov/choh/index.htm for up-to-date information about park closures or safety issues. Report emergencies or safety issues to (866) 677-6677.

Feel free to contact me at **cando.culverts@comcast.net** if you have questions about this presentation, culverts, visiting them, or photographing them.

This presentation was prepared using Adobe InDesign CC and Adobe Photoshop CC. All culvert images by Steve Dean using Canon cameras and lenses.

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## Listing of Featured Culverts

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References:

There are a number of books about the C&O Canal, but I find these to be most useful for my culvert activities. They were consulted in preparation of this project.


**Pocket Guide to the Chesapeake and Ohio Canal National Historical Park (2016)** – Gary Petrichick, edited by Steve Dean (C&O Canal Association) – Handy pocket guide that lists mileages and access points for culverts and other canal features. Available at www.candocanal.org/store.html and C&O Canal National Historical Park visitor centers.

**On-line Culvert Photos** – Photos and videos of these and other C&O Canal culverts are available on-line. The link is www.flickr.com/photos/steve-1828/collections/72157639962266376/. Each culvert is listed by album. Contact Steve at cando.culverts@comcast.net to inquire about hi-res or alternate images.
In closing —

Thanks to the National Park Service staff and volunteers who preserve, operate and protect the C&O Canal!