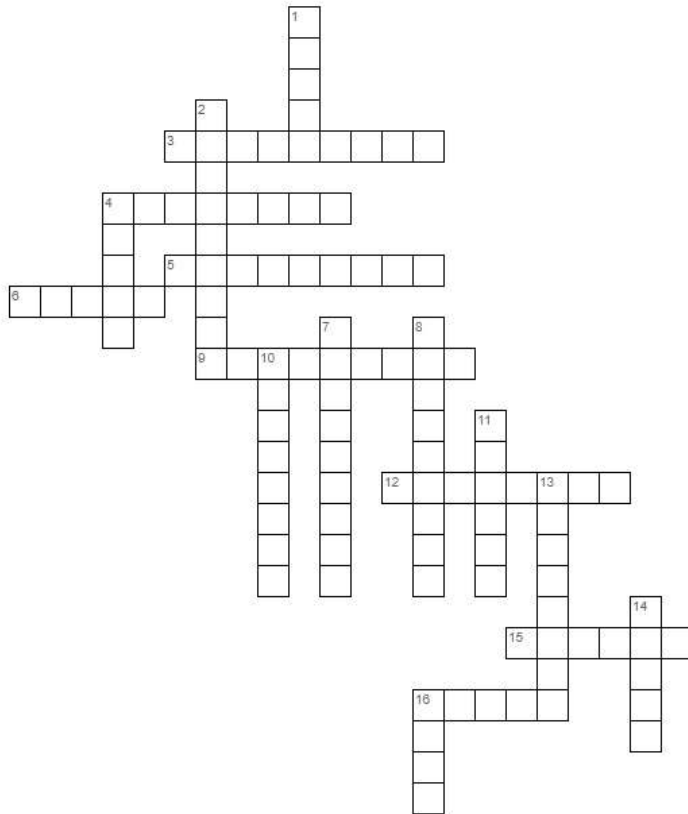


River Derwent Valley Geocross V81

Bridges over the River Derwent - Stepping Stones

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To solve this crossword puzzle you need to visit the 6 locations of the main feature in the following photographs.

You will need the what3words app (W3W) on your GPS device. Using your GPS device held over the main feature you then get the what3words address. You will probably have to move around to find the W3W square containing the 'word' provided.

Save all the words and eventually fit the words to the crossword grid.

There are just three crossword clues. Find these words first, then fit all the other words to the grid. There may be more than one solution. One word may appear twice, you only need it once for the crossword.

Clues

7 DOWN puzzled

8 DOWN day before

14 DOWN flat

The GPS on mobile phones can be imprecise. This can mean that multiple devices very close to each other might show different 3 word addresses, not because the 3 word

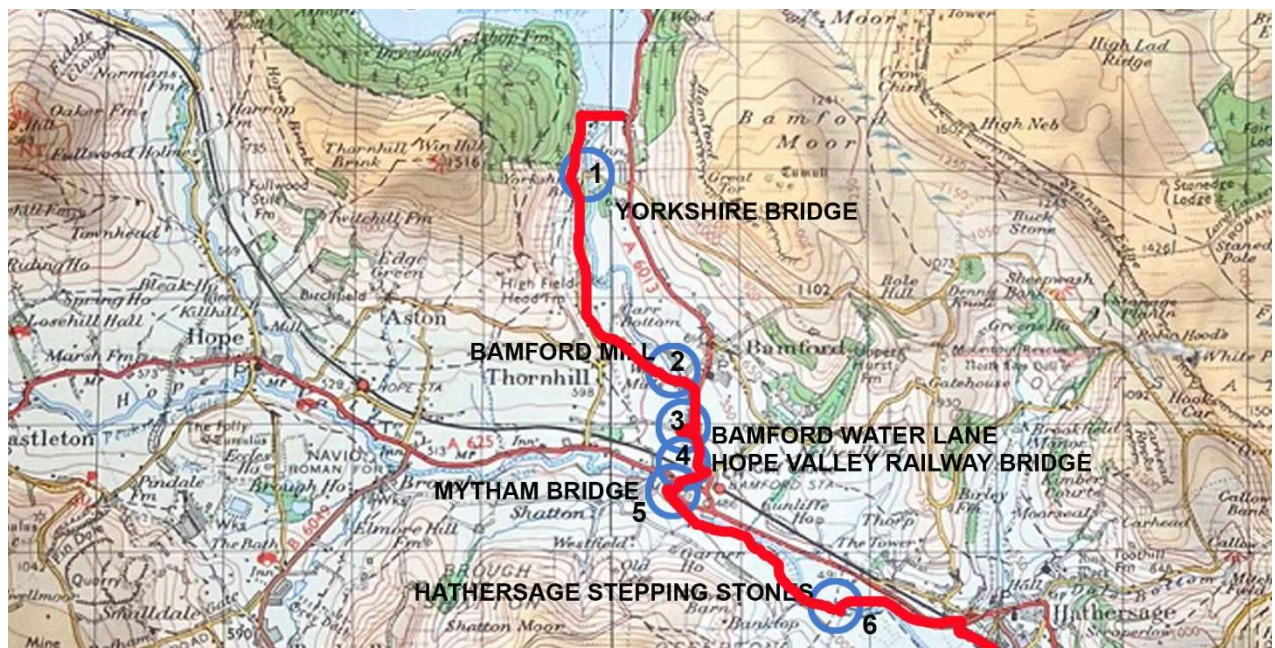
addresses of your actual location is different but because the devices each think they are in slightly different places. Each location is a grid square 3x3 metres.

In order to help you ensure that you obtain the correct three word (W3W) address, the first word in the W3W is provided as a clue. You may need to walk around the main feature into different 3 x 3 metre grid squares to find the correct W3W address.

E.g. Let's assume that you are at a location given by the W3W address thick.verge.commented and you are told the first word of the W3W address is the word "thick". You now know you have found the right one.

Location	OS grid reference	W3W		
		First word	Second word	Third word
1	Yorkshire Bridge	workouts		
2	Bamford Mill	mothering		
3	Bamford Water Lane	files		
4	Hope Valley Railway Bridge	cornfield		
5	Mytham Bridge	times		
6	Hathersage Stepping Stones	duties		

Each of the locations can be found on the route below. The locations are listed in order and sufficient background is included to help you triangulate your position to identify the location



However, as background information, this prologue summarises what has happened to the River Derwent upstream of the Derwent Reservoirs.

The Derbyshire River Derwent was originally 67 miles long.

The map is a topographic representation of the Swain's Greafe area in Derbyshire, England. It features a network of blue lines representing the River Derwent and its tributaries, including the River Eder. The terrain is depicted with brown contour lines indicating elevation. Key geographical features labeled include Swain's Greafe, the source of the River Derwent, and various stone outcrops such as Barrow Stones, Grimthorpe Stones, and White Stones. The map also shows the surrounding hills, including Bleaklow Hill and Round Hill, and the nearby village of Bleaklow. A scale bar at the bottom right indicates a distance of 1000 feet.



The Derwent is by far Derbyshire's most important river and it drains 1200 square kilometres, half the area of Derbyshire.

Not many people know that the true source is actually in Yorkshire!

The first six miles of the River Derwent is actually the county boundary between South Yorkshire and Derbyshire. So half the river bed is in each county.

The Derbyshire River Derwent begins on Bleaklow Moor, north-west of Grinah Stones. It tumbles quickly down for 9 miles to enter the Howden Reservoir below the rebuilt Derwent Village Packhorse bridge at Slippery Stones.

There are no bridges over the upper River Derwent until the bridge at Slippery Stones is reached.



Historically the first all year round bridging point of the Derwent River was at Derwent Village. In 1672 the first stone packhorse bridge was built by monks from Abbey Farm, replacing a wooden bridge and seasonal ford. The River Derwent was prone to rapid rises in water level, causing problems to packhorse trade between Glossop and Sheffield.

This bridge is the original stone built one which stood in Derwent Village. It is a Grade II Listed Ancient Monument and was taken down carefully stone by stone before the Ladybower Reservoir was completed. The 'drowned' village is now beneath the water of the Ladybower Reservoir.

From Slippery Stones south, the next 8 miles of the River Derwent are now 'missing' as the river disappears as its water enters three reservoirs in turn, the Howden, Derwent and Ladybower Reservoirs.

Eventually, when the reservoirs have taken all the water they need, 8 miles later, all surplus water overflows into the famous Ladybower 'Plugholes' and emerges in the original bed of the Derwent River just north of Yorkshire Bridge. Here it is reborn as the River Derwent and the best is yet to come.



The Derwent Valley Water Board was enabled by an Act of Parliament in 1899 and Howden and Derwent Reservoirs were completed by 1912. Water from these two reservoirs began to supply the cities of Sheffield, Nottingham Derby and Leicester. A decision to build the third reservoir, Ladybower, was delayed until 1924 when increasing demand made it necessary, and it was completed in 1945.

At any time a maximum total of 46 billion litres (46,440,000 cubic metres) of water which previously had flowed down the River Derwent, is held back in these three reservoirs.

Treated water travels by a mainly buried pipeline parallel to the River Derwent. This is the 45 kilometre Derwent Valley Aqueduct. The River Derwent also indirectly delivers water to Carsington Reservoir with water taken from the river at the Ambergate Pumping Station in times of high flow.

From its junction with the River Trent at Derwent Mouth, the River Derwent has completed its journey. From here its water is carried to the Humber Estuary by the River Trent.

In my opinion the water of the River Derwent has had the best deal. It has spent its few hours of glory passing through the magnificent scenery of the Derwent Valley of Derbyshire.

The map shows the 15 bridging points between the Ladybower Reservoir and Chatsworth Park. This includes a railway bridge and two sets of stepping stones.



From the Ladybower Dam a long distance footpath follows the gently descending valley of the River Derwent for 50 miles (80km) to its junction with the River Trent at 'Derwent Mouth'

The Derwent Valley Heritage Way is said to cover '55 miles of magnificent valley scenery' starting from the Heatherdene car park at Bamford by the Ladybower dam. This longer measurement may be true as the river has many meanders south of Matlock.

One of the delights of the Derwent Valley are the many fine stone bridges which cross the river. Eleven of them are Scheduled Ancient Monuments.

Sadly most of them are over 300 years old and are having a hard time trying to meet the standards expected in the 21st Century. Health and Safety, and Highways laws have

required many modifications to these bridges, not least for pedestrians, who are discouraged from walking down the Kings Highway.

In addition there are the continuing struggles with one of the Five Elements, (commonly named as Earth, Water, Wind, Fire and Air). The one most feared in Derbyshire valleys has always been 'Water' because it brought destruction every year.

Bridges have been mankind's response to try to tame Water, but not always successfully.

Sturdy Gritstone Bridges are the essential elements of the Derbyshire River Derwent. Before the stone bridges were built the river could only be forded in a small number of locations, and many of these became impassable in winter and spring floods. Wooden bridges were often swept away by these floods and even today the stepping stones are frequently re-arranged by the furious river..

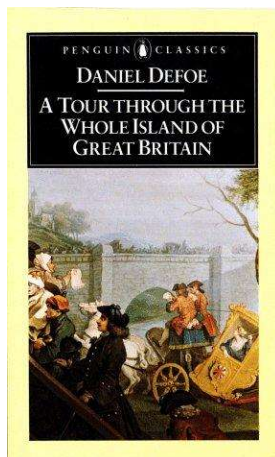
Daniel Defoe was an early novelist and journalist who visited many English counties in the 1720s in order to produce his book '*A Tour of England and Wales*'.

Beginning his tour at Derby, he had to abandon part of his plans due to spring flooding 'the river drowning the low-grounds by a sudden shower'. In his age travel was very much at the whim of the weather.

He referred to the River Derwent in 1726 as a '*fury of a river*'.

He also said that '*The River Derwent is a frightful creature when the hills load her current with water*'.

The Penguin Classics edition of his book features a bridge and fording scene.



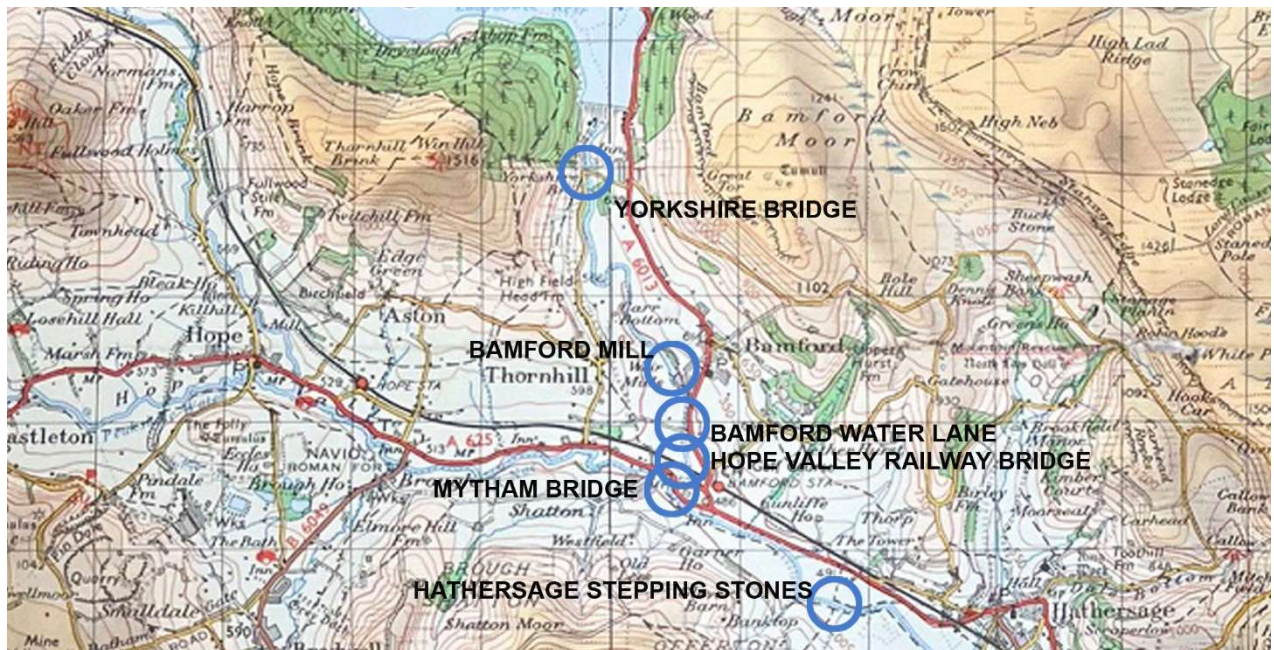
I have split this narrative of the first fifteen Derwent Valley River Crossings into three themes:-

River Derwent Valley Geocross V81 Stepping Stones

River Derwent Valley Geocross V82 Corn Mill Villages

River Derwent Valley Geocross V83 Grand Designs

STEPPING STONES



Yorkshire Bridge

OS ref SK 19792 84967

W3W workouts.highlight.perplexed

Once the River Derwent emerges from its visit to the Ladybower Reservoir plughole and is re-born as a river, it passes under Yorkshire Bridge, which curiously is in Derbyshire. This packhorse bridge is a tall double arch and wide enough for 'two carts' to pass. But not wide enough for two cars and a pedestrian to pass safely in 2024.

The original Yorkshire Bridge at the foot of Lydgate Lane was built from wood and needed frequent repairs.

In 1693 masons built a gritstone three arch bridge at a cost of £130. A particular feature is that the upstream walls curve outward and end in sturdy square stone pillars for strength.

Three arches mean that two supporting pillars have to be built within the river bed and protected by massive masonry. They also create potential for blockage by large branches or whole trees swept downstream by floods.

River bridges are attacked aggressively by the river in flood, often carrying rocks and trees. The attack is mainly on the upstream part of the bridge structure. The masons of all the River Derwent bridges have all had to solve this problem, with varying degrees of success.

The present Yorkshire Bridge has been remodelled since, probably in the early 1900s and now has two arches and just one support pillar.



Notably this stone bridge has at least five metres clearance above the river in normal flow. The masons have clearly taken account of periodic flash flooding of the River Derwent.

It is a great pity that this, and almost all the other fine stone bridges over the Derbyshire River Derwent, are obscured by unmanaged trees growing too close to these largely Grade II (and finer) Listed Historic Monuments.

Bamford Mill Weir

OS ref SK 20454 83346

W3W mothering.level.yesterday

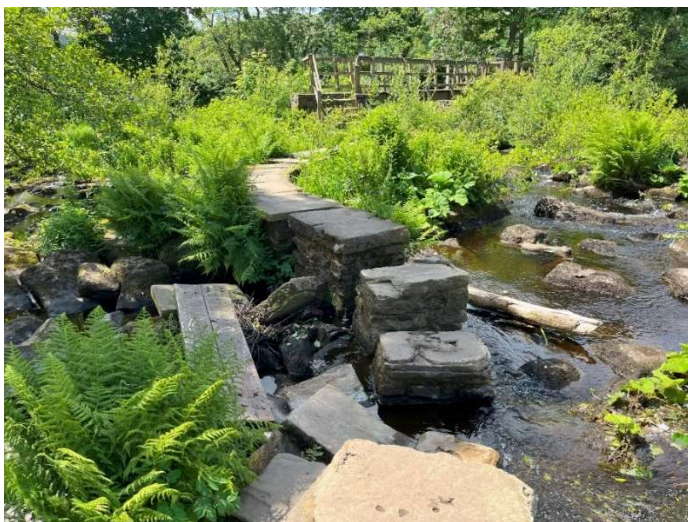
Two kilometres south is Bamford Weir, where the entire river is dammed behind a well built weir. There has been a weir here since 1782, long before the reservoirs were constructed between 1900 – 1945.

The river water can be released into Bamford Mill as required, and all surplus water spills over the weir to continue down its ancient riverbed.

Bamford Mill was built in 1782 as a four storey corn mill requiring only a small millstream..

It then became a large cotton mill employing 130 people, requiring much more water. The lake held back by the weir is 70 metres wide.

It closed in the 1990s and was converted into housing. The river water is no longer used to power the mill, although the sluice mechanisms are all in place.





A crossing point has been established here since 1782, now comprising a number of lightweight timber bridges on stone pillars, and a short section of 'stepping stone' planks supported by brick built pillars. The section of 'stepping stone' crossing is very short and it is said to be the easiest stepping stone crossing in Derbyshire.

In June 2024 the stepping stones were officially closed due to damage over the winter but the notices didn't stop several people and their agile dogs. This lightweight crossing is cheap and cheerful, and intended to fail under high flows. It can be regularly repaired at low cost.

Bamford Water Lane Bridge

OS ref SK 20549 82928

W3W files.breakaway.spouting

This is a simple steel and concrete girder bridge spanning the river, giving access to the Recreation Ground today.

But from 1899 to 1973 it was much more important as the road leading to the offices of the Derwent Valley Water Board. Hence the name Water Lane.





This building was used as offices for the Derwent Valley Water Board and served from 1899 to 1945 during the reservoir construction period. It remained in DVWB ownership until the end of all works in 1976. By this time the Derwent Valley Project had cost £2 million.

The building was put up for sale in 2024 with a price tag of £1.9 million. Not much short of the total Ladbower Reservoir cost of £2 million.

Hope Valley Railway Bridge

OS ref SK 20584 82624

W3W cornfield.disbelief.cured

The Hope Valley railway crosses the River Derwent, and Severn Trent Water have taken advantage of this crossing by adding several sewage pipe bridges alongside and underneath.

The underside of this railway line bridge is not elegant but pigeons don't seem to mind.



Mytham Bridge

OS ref SK 20474 82522

W3W times.fuse.emails

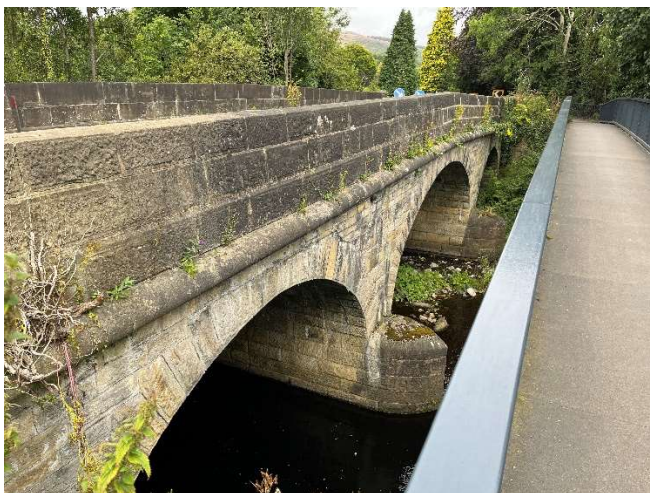
The Mytham three arch stone bridge stands at a particularly challenging junction of two rivers, several roads, a railway and a Garden Centre. It is frequently under repair.

Most of the repairs are not needed due to river damage. These stone arches are 300 years old and have withstood many floods.

The damage to Mytham Bridge is mainly caused by heavy lorries. The frequent collisions with the parapet walls sometimes collapse the stonework into the river.

This bridge was never intended to cope with the volume of traffic it now carries. A purpose built steel footbridge crosses the river a few metres upstream as the old bridge is too narrow for footpaths. Some lorries need the full width of the road to cross the bridge.

A glance to the OS map explains why this is such a problematic pinch-point which has not yet been solved by highway engineers. The River Derwent takes a zigzag course, first west then a sharp bend to the east. The roads and railways converge at this point and chaos ensues.





Immediately upstream from the bridge is an old stepping stone crossing of about 25 rocks, but it appears to have been wrecked and never repaired.



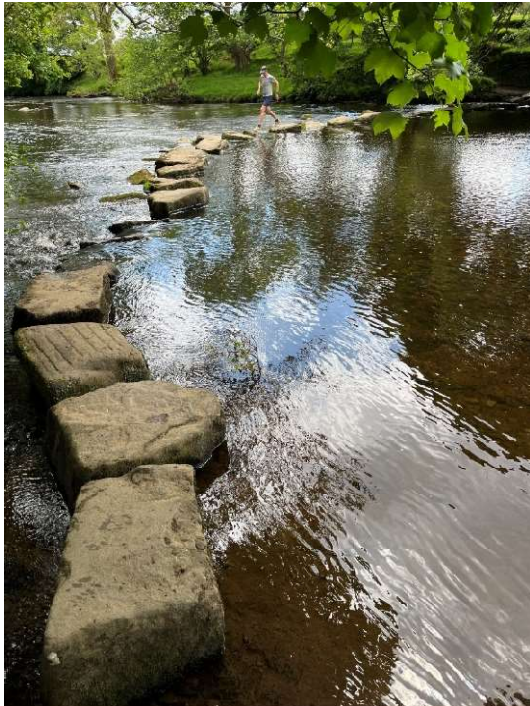
Hathersage Stepping Stones

OS ref SK 21710 81543

W3W duties.crinkled.quote

Many people are familiar with the ancient stepping stones near Hathersage. At this point the river is 25 metres wide with steep banks on either side. There are other famous stepping stones in Derbyshire but these are by far the best.

They are also the last of three stepping stones over the River Derwent. Downstream the river received more tributaries and gets increasingly deep, too deep for stepping stones..



The stepping stones comprise about 30 massive stone blocks placed on the river bed. It times of high flow the stepping stones disappear beneath the river. At this point the River Derwent is 25 metres wide, and wading across would be dangerous.

The river is managed for fishing and the landowner takes little interest in the stability of riverside trees. Inevitably when the river level rises it scours around the roots of trees which weaken and eventually fall into the river..

The river picks up fallen trees and carries them downstream, often colliding and jamming at the stepping stones. More debris builds up behind and often causes some of the stones to shift and become unusable. In June 2024 they were officially closed and dangerous but a local fellrunner was able to nimbly leap over a few toppled stones with no trouble.

There have been stepping stones here for at least 1000 years. Historically there was a short section of wooden bridge on the right bank. This might have been where Robin Hood fought Little John with quarterstaffs sometime around 1180.

The River Derwent next flows past a succession of corn mills and villages as it heads south to Matlock, where it will carry out its most famous task, launching a birthplaces of the Industrial Revolution.