

# A Medieval Hydraulic Landscape in Branscombe

A Talk in Branscombe Village Hall by John Torrance, 27.3.2017



Branscombe Village Hall stands beside a system of waterways constructed in the Middle Ages. The story begins with the stream that runs past outside, which drains the central or northern valley, the biggest of Branscombe's three valleys, and it's the biggest of Branscombe's three streams.

There's another little stream that you cross on the way to the old Bakery, over the road. It took awhile before I wondered why there are *two* streams here when there's only *one* higher up the valley. It must have divided, but streams don't divide naturally. So somebody must have divided it.

In fact, the only thing about these two streams that isn't artificial is the water. Everything else is the result of hydraulic engineering in the past. Which raises three questions: 1. What was done? 2. Why was it done? 3. When was it done?

This is a bit of Alexander Law's map of Branscombe in 1793. It shows what was done and why, and to some extent when.

I've turned all the maps in this presentation upside down, with south at the top, because if you imagine you're sitting in Branscombe Village Hall, (its site is marked with a star) and facing south it is easier to visualize the landscape outside, to the south, if it's towards the top of the map.

Watercourses are highlighted in blue. The artificial division of the stream shows in the lower right corner, The main stream was channelled off at 90 degrees, then taken round another 90-degree bend, and down through orchards to the road.

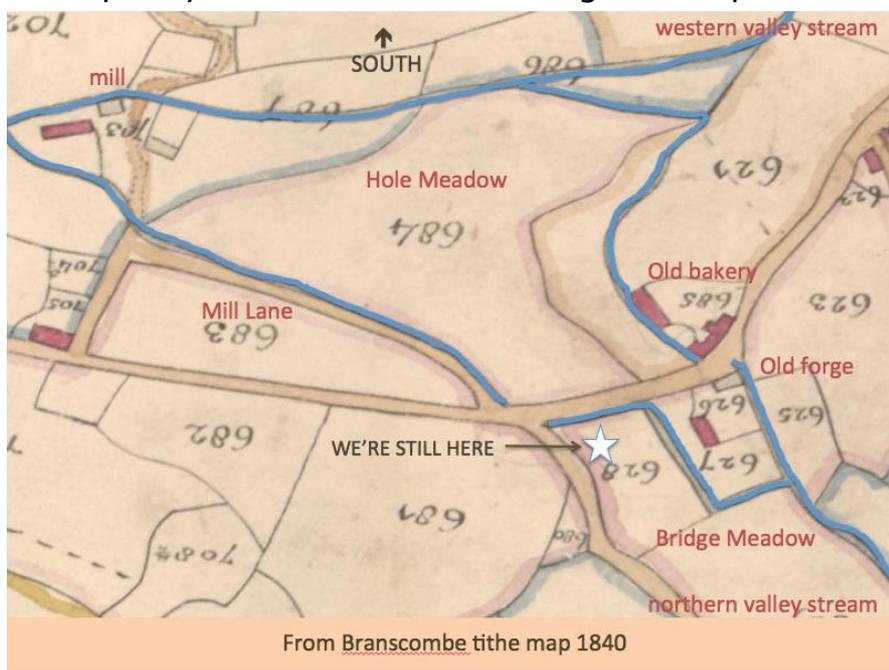
Nowadays the stream goes under the road, but then it ran on the north side of it, with a ford for carts and animals and a footbridge for pedestrians at the crossroads. Then it ran along beside Mill Lane to the mill.

The other branch ran, as it does now, along the bottom of the hill on the right, past the Old Forge, under the road, past the Old Bakery and through the orchard. At the end of the orchard it made a sharp bend east, ran along the edge of a field and joined the stream coming down the western valley from the Fountain Head Inn. The two streams combined went on to turn the millwheel.

So this branch of the stream was a mill leat, and I shall call it the leat from now on. Through the orchard and round the field you can still see where it was banked up to stop the water flowing away downhill.

This tells us *what* was done and *why*. The stream was divided to make a leat to get more water to the mill. As for *when*, we know it was done before 1793.

Let's quickly follow the leat on through to the present. Here it shows on the tithe

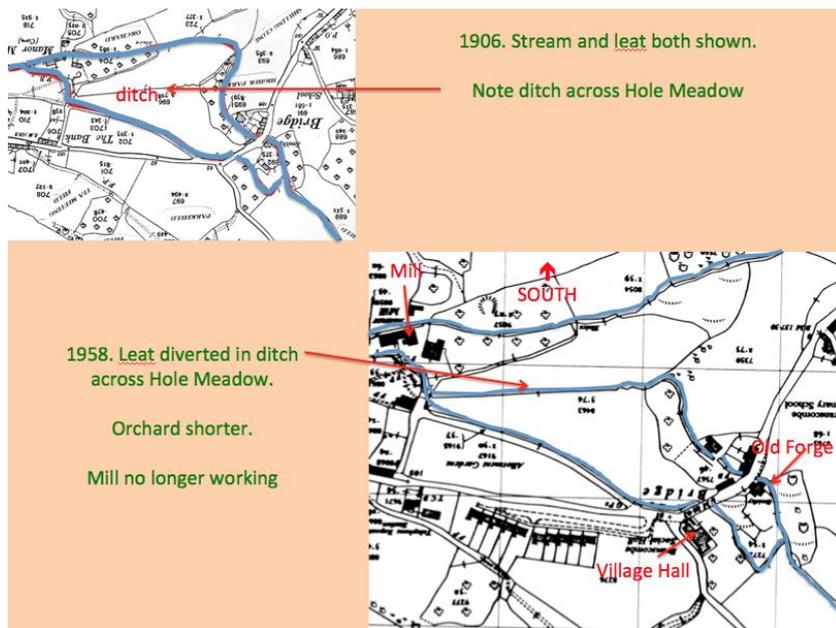


Map of 1840. The only change is that the stream went under the road instead of making a ford.

The land north of the road belonged to Bridge Farm, and what is now the cricket field behind

the Village Hall was called Bridge Meadow. The large field south of the road was called Hole Meadow. I'll stick with these old names.

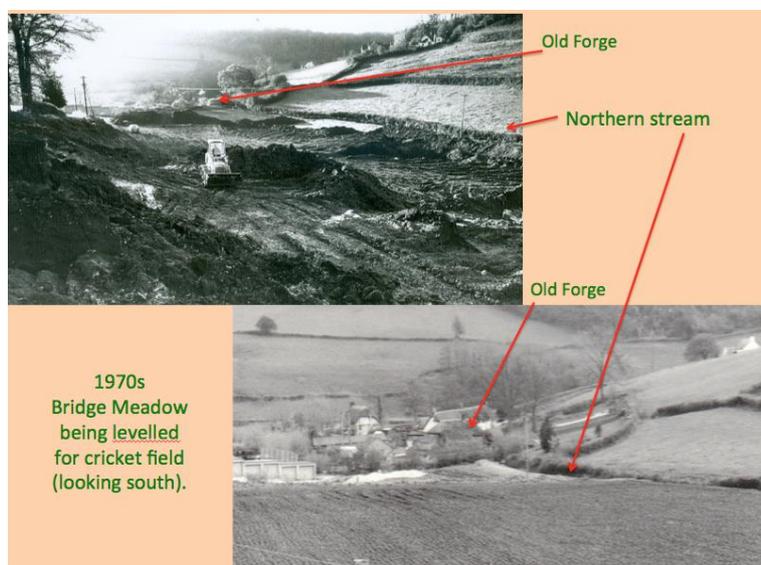
The stream was divided in such a way that it drained a rectangle of land that contained Bridge farmhouse and the Old Forge. In 1840 the old farmhouse was let to the blacksmith.



By 1906 the stream had been culverted under the road, as it is now. Note the ditch through Hole Meadow, because by 1958 the leat had been diverted into this ditch, and the orchard was shorter. This is how it is now. This was done after flour milling ended in the 1940s. The millwheel is now driven

(occasionally) only by the western stream.

The village hall can be seen, but Bridge farmhouse has gone. Now let's follow the leat on the ground:



Here's Bridge Meadow being levelled to make the cricket field in the 1970s, looking south. The straight line of the northern stream is on the right.

The photograph below shows where the northern stream divides behind the National Trust office, which was put here in the 1980s. It runs into this picture from the right and turns 90 degrees towards us, over a little weir.

The leat runs off under a wooden sluice in the background, above the weir, towards the Forge. The weir was there to raise the stream bed (on the right, beside the meadow) high enough to start the leat flowing down towards the mill.



Here the leat comes out by the Old Forge and flows under the road, painted in about 1860 by Peter Orlando Hitchinson of Sidmouth. Bridge farmhouse is behind.



Here's the leat flowing towards the Old Bakery on the other side of the road in the 1900s.



Orchard beyond.

This is the diverted leat now, running in the ditch



through Hole Meadow towards the mill. The church is in the background.



This is the western stream on the far side of Hole Meadow. Before the leat was diverted it joined the western stream near here. The bank on the left is artificial, to stop the water running downhill into Hole Meadow, so the western stream was also a leat at this point.



Here the leat comes out of the trees, with the mill straight ahead. Martin Watts, who restored the mill with volunteers in the 1990s, took these pictures with me recently.

These are Martin's pictures from the restoration of the mill:



It's an overshot mill, the wheel is fed with water from the top. So a leat was necessary, to bring water in at that level.

An undershot wheel standing in a stream, which turns the wheel from below, is less efficient than an overshot wheel, where the weight of water adds to the rate of flow and drives the wheel faster.

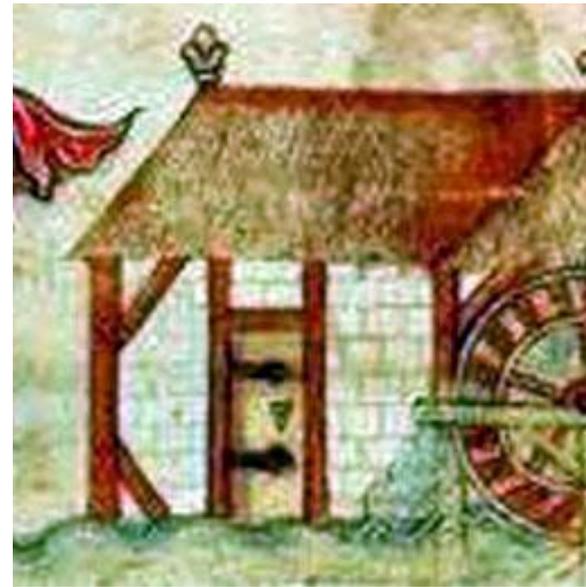
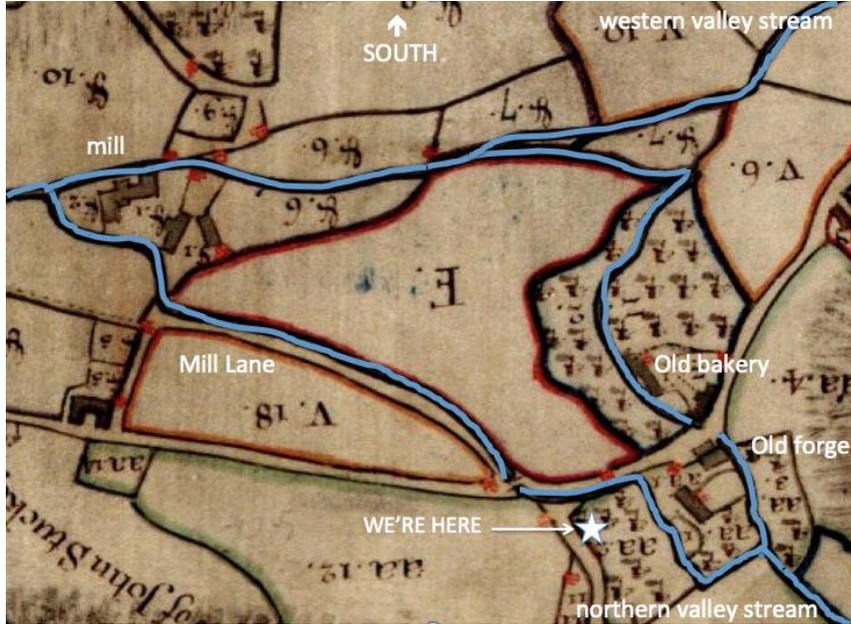
During restoration, Martin found signs that there had once been two wheels in line. This may have been why the leat was made, to combine two streams to get more water to drive two wheels.



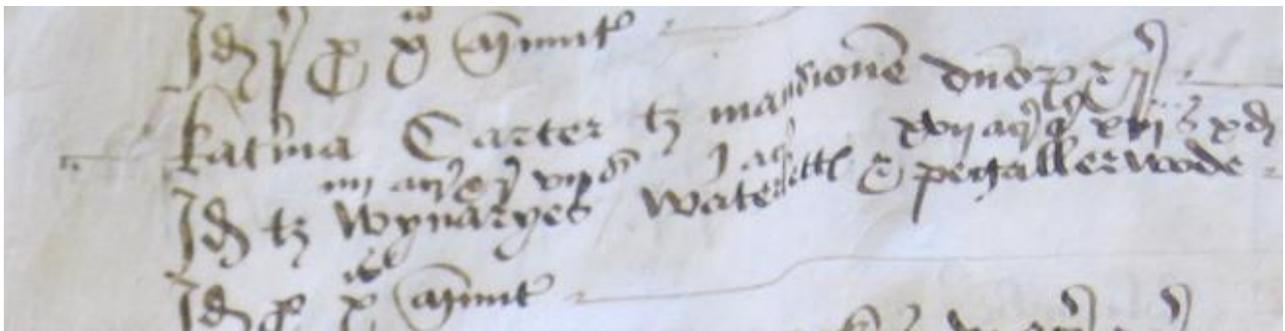
The mill was built back into the hillside to allow the leat to run along a contour, higher than the stream. It runs just above the 25m contour line (in RED), quite a feat of surveying without modern instruments.

So the leat was made when the first overshot mill was put on this site.

The present mill was rebuilt in 1865 after a fire. Could the first overshot mill on this site have been medieval? There were overshot mills in the Middle Ages — here is a medieval picture of one:



And here is evidence that there was an overshot mill here in 1506: a rental list of Branscombe manor, from the Cathedral Archives (the Dean and Chapter of Exeter Cathedral, that is to say the senior canons, were lords of the manor):



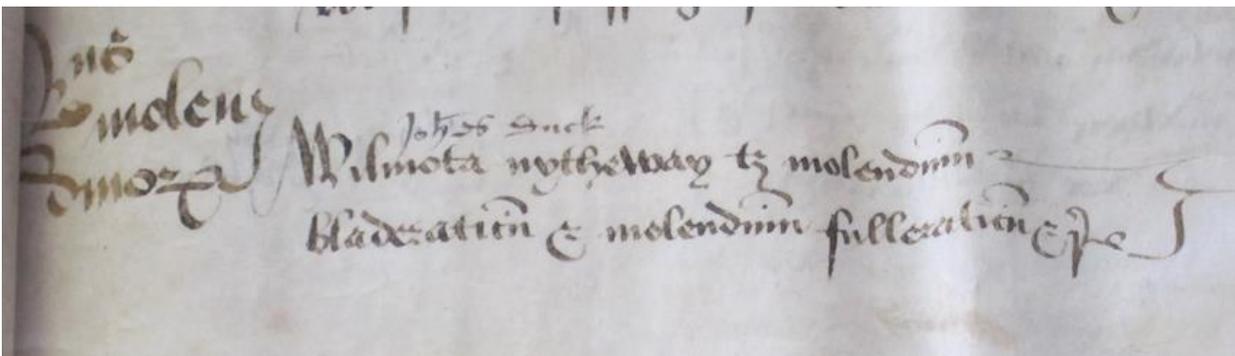
This shows Katherine Carter as tenant (*Katerina Carter tenet*) of Church Living Farm (*mansione dominorum*). It's called that because previously it had been the manor house used by the canons. The fields leased with it included Waterlette — water leat — it's the orchard south of the road on the map below.

So the leat was there in 1506, and probably therefore in the 1400s.



The same document (below) shows Wilmota Nytheway as tenant of the corn mill (*molendinum bladeraticum*, from *bladum*, wheat, think of French *blé*) — and also of a fulling mill (*fulleraticum* — terrible dog-Latin!) She was also tenant of Mill Farm. Katherine Carter and Wilmota Nytheway were widows, who by the

custom of the manor kept their husband's holding so long as they didn't remarry.



By 1529 there was a new miller, John Duck —his name was written above hers.

So there *were* once two millwheels in line, as Martin Watts suspected.

What was a fulling mill? The waterwheel, instead of turning a millstone, was geared to lift and drop heavy wooden hammers called 'stocks' on to wet bales of newly woven woollen cloth. This process was called fulling, or tucking. It felted and shrank the cloth into a smooth fabric suitable for making clothes.

A fulling mill in Branscombe means that spinning and weaving were cottage industries, spinning for women, weaving for men, long before lacemaking began.



The English economy in the Middle Ages was based on sheep. Woollen cloth was the chief export, and Devon was one of the chief cloth-making counties.

The fulling mill was invented in the 1100s. It allowed the industry to expand into small towns and villages.

So Branscombe, with its connection to Exeter Cathedral, became part of the Exeter woollen trade, at least by the 1400s. And evidence from the 1300s suggests that much of the higher ground between Cox's Corner and Weston, now full of pigs, was then full of sheep.

Even in 1863 an advert for Cox's farm claimed that it was 'considered one of the best and healthiest sheep farms in the County of Devon'.

So the division of the stream, the leat, and an overshot mill built into the hillside all go back to the 1400s.

Do they go back further? Medieval documents tells us that:

There was already a mill in 1248, when the miller was banished for murder. There were two mills in 1281, in 1307 and in 1339. One of these was the lords' corn-mill for which tenants had to fetch millstones when needed, and where they had to take their grain to be ground. It lay within the home farm, probably more or less where Manor Mill is now.

We don't know where the other mill was. It could have been a fulling mill, and the two mills could have been together — or not.

Were these older mills overshot or undershot? The short answer is that we can't be sure. The long answer is very boring because it turns on the meaning of an obscure Latin word in one document of 1339. So let's forget that, but let's suppose they *might* have been undershot, and guess where they might have been.



Contours suggest that the original course of the western stream, before it was made into a leat, ran down through Hole Meadow, where the diverted leat runs now — the ditch might have been its bed — and joined the northern stream, coming along Mill Lane, near the mill site.

The ideal place for an undershot mill would have been below their confluence, to obtain the power of both streams.



And here we are, just in front of Manor Mill. We might imagine (1) that where the footbridge crosses towards the farm, could be the narrow millrace needed for an undershot wheel. And (2) seeing this pile of flints that the farmer removes periodically from the stream, we might think a dam would have been needed to keep the millrace open. (3) We might wonder if these boulders on the bank came from the foundations of a dam, and (4) if the widening of the stream at the ford might be the remains of a millpond behind the dam.

A lease of the mill in 1869 required the tenant to take care of the millpond. Was that just a lawyer's phrase, ticking all boxes, or is it a clue? In the Middle Ages the canons had a fishpond somewhere near here, and perhaps fishpond and mill-pond were one.

So we can't be sure whether the 2 overshot mills and the leat that were here in 1506 had been here since, say, the 1200s, or whether they were the result of replacing 2 undershot mills in the 1400s.

I favour the 1400s. The East Devon cloth industry revived in the 1400s after declining in the late 1300s. This involved a change from making coarse broadcloth to making kersey cloth, which was lighter and smoother, and a profitable export. The Dean and Chapter might have wanted to cash in by investing in a better fulling-mill at Branscombe.

But when did fulling come to an end?

The answer has been in full sight on Alexander Law's map of 1793 with which we began.

It shows *two* mills, whose overshot wheels would have been in line. But by 1793 the fulling mill would have gone out of use, because the 1700s saw the

extinction of the Devon cloth industry, due, in the end, to coal-fired factory production in the north.

By 1840 the fulling mill had been demolished and the whole complex had been rebuilt by Abel and John Brown, who took the lease in 1810. Unfortunately for the Brown family, it never recovered from the financial outlay involved.

