## The Nailbourne

"It [Bridge parish] is situated about two miles and an half eastward of Canterbury, on the high Dover road, formerly the Roman Watling-street way, which appears high and entire almost throughout it; in the valley on this road stands the village of Bridge, with the church and vicarage in it, a low moist situation, the bourn or stream of the Little Stour crossing it under a stone bridge, built a few years ago by the contributios of the neighbouring gentlemen."

So wrote Hasted at the end of the eighteenth century.

Here are some more quotations:

About Bekesbourne in the 1790s: "There is a Rivulet runs by the Palace and near the Vicarage called the Little Stour, said to have been formerly navigable to the Archbishop's Palace, but I give little credit to it, it being too shallow for the smallest Craft, nor is there the least appearance of its ever having been choked up. 'At times, but this very uncertain, the Nailborn as it is called, i.e. a flood comes down from the Springs near Elham, about 8 miles distant South, with great rapidity' and continues for a month or six weeks, swelling our little River, but without any inconvenience attending it, except now and then overflowing our low pastures, if that be any."

Also in the 1790s, Edward Hasted: "The village [Bekesbourne], with the church, is situated in the valley among the meadows, on the bank of the Lesser Stour river, which runs through the parish, and abounds with good trout." And again Hasted, this time about Bishopsbourne: "In this beautiful valley, in which the Lesser Stour rises, and through which the Nailbourne at times runs, is the village of Bourne-street....On the opposite side of the church westward, stands the ornament of this parish, the noble mansion of Bourne-place,...with its paddocks, grounds, and plantations, reaching up to the downs, having the bourn, which is the source of the Lesser Stour, which rises here in the front of it, directing its course from hence to Bridge, and so on by Littlebourn, Tekham and Wickham, till it joins the Greater Stour river. This valley, from the source of the bourn upwards, is dry, except after great rains, or thaws of snow, when the springs of the Nailbourn occasionally overflow at Liminge and Elham, and directing their course through this parish descend into the head of the bourn, and blend their waters with it."

<sup>&</sup>lt;sup>1</sup> Hasted, L., The History and Topographical Survey of the County of Kent, 2nd edition, vol 1X, p.287, 1800.

<sup>&</sup>lt;sup>2</sup> The Rev Robert Phillips, Vicar of Bekesbourne 1784 - 97. Quoted in John Purchese, *Off the Record*, Bekesbourne PCC, 1980

<sup>3</sup> Hasted: ibid, p.267

<sup>&</sup>lt;sup>4</sup> E Hasted: op. cit (re Bishopsbourne) p.349

In 1769, the map surveyed by Andrews and Drury and published in 1769, marks "Stour Head" at Bishopsbourne and above Bishopsbourne writes along the river "under the earth and only appears at flood".

In 1719: "The Lesser, or Eastern Stoure, rises at Lyminge, and flowing directly to Eleham, and thence to Wigmere, goes on between Kingston and Berham to Bishopsbourn; and taking in a small rill, which comes from Hautsbourn; this Bourne proceeds on to Bridge, and from thence to Patricksbourn and Bekesbourn; and after that, crossing the Road between Canterbury and Sandwich, it runs between Littlebourne and Ickham, to Wickham-Brewx...."

In the 1660s about Bridge Place: "......well-kept pleasure grounds with fruit trees, well watered by a fast flowing, fresh sparkling stream of wonderfully clear sweet water. This splits up into several branches and rivulets, also some fish ponds, in which a certain kind of fish called trout is bred......."

A "nailbourne" is, by definition, an intermittent stream; one that dries up or runs underground from time to time. There are others besides our's: one at Petham for example. Our's rises from chalk aquifers in the Lyminge / Elham area. It is fed from springs above and in the lake at Bourne Park. Below us it is supplemented from the spings at Well (in the pond by the Well chapel, which very seldom dries up completely) and lower still from the Wingham river.

One theory is that in prehistoric times the tidal estuary of the Little Stour came as high as Bridge. The rivers and the Wantsum channel gradually silted up.<sup>7</sup>

The 1870s first edition of the 1/2500 scale Ordnance Survey map covering Bridge calls the river Little Stour as high as Bridge. (nowadays, certainly from 1950, the OS maps call it the Nailbourne as far down as Littlebourne).

My own view, for what it's worth, is that the river bed was regularly dry above Bishopsbourne in the past but that the river never or very seldom dried up completely below Bishopsbourne until well into this century. I have spoken to an old gentleman who, in his schooldays in the 20s, used to catch trout at the bridge in School Lane, Bekesbourne, and was late for school. Even 30 years ago, when we first moved to Bridge, it used to flow more often through Bridge than it does now. It was, I think, the occasional flood coming down from the upper reaches in the Elham valley which were supposed (on what evidence I don't know) to take place every seven years and then to signify some national disaster.

<sup>&</sup>lt;sup>5</sup> Harris J: History of Kent, 1719

<sup>&</sup>lt;sup>6</sup> Quoted by John Williamson in *On the Nail*, April 1993 from *The Journal of William Schellink's Travels in England 1661 - 1663*, about the grounds of Bridge Place.

<sup>&</sup>lt;sup>7</sup> Walker, *The Lost Wantsum Channel*, Archaeologia Cantiana 1927; see notes attached.

Notes on *The Lost Wantsum Channel* by Geo. P. Walker, Archaeologia Cantiana, XXXIX, 1927, p.91 ff.

Mr Walker's theory is that in pre-historic times (unspecified) the southern end of the channel was open between Ebbsfleet (Pegwell Bay) and the site of Walmer. By Roman times (and during the Roman period), the Stonor bank had already been formed, creating a breakwater to provide a sheltered harbour at Richborough, then still an island. At the north end the coast extended outwards to form a promontory on which Reculver was built. Sand was deposited on the south of the channel forming the site of Sandwich. During the Saxon period the channel silted gradually; the rival towns of Stonor and Sandwich grew at the southern end (Stonor) first from the VI century, the site of Canute's invasion early in the VII cent.) but Sandwich being on the mainland secured pre-eminence. Richborough was wholly silted up. On the coast beach material continually drifted northward straightening the coastline. The harbour of Sandwich was still open for sea-going vessels until the end of the XV century but the mouth of the channel moved further north until the Silting became such that the channel was no longer open and the Stour went rount a hairpin bend to come into Pegwell Bay, Sandwich now being some two miles inland. At the north end of the Wantsum various sea walls, as shown on the maps, were constructed (the Sarre wall across the channel, and Chambers wall on the north west of Thanet and lastly, at the end of the XVIII century, along the north

coastline joining Reculver to Thanet).

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<sup>&</sup>lt;sup>1</sup> "Stonor was badly damaged by the Danes in 990, rebuilt by William the Conqueror in 1069 and finally wiped out by the French in 1385"

From: john@blackvanilla.org.uk <john@blackvanilla.org.uk>

Date: Sep 17, 2020 8:14:13 PM

Subject: The Nailbourne

Dear Maurice,

Jill Thomas posted the following on Facebook today and if you haven't seen it before I thought it might interest you. I hoped you might have have some comments on it.

## John

"I am busy sorting out my archives and I thought some of you might be interested in my take on the Nailbourne. This is a long article but I hope it will interest some of you.

I wrote it in 2009.

## Bekesbourne Topography and the Nailbourne

The ancient parish of Bekesbourne stretches from the south-eastern outskirts of Canterbury diagonally across the Nailbourne valley to the Adisham Kent Downs in the south. This strip of land across a valley is a typical form for a medieval chalk land settlement which includes the all-important source of water at the bottom of the valley and a variety of agricultural land: grazing meadows on the alluvium soils of the valley floor; arable on the slopes above the floodplain; and woodlands on the steeper slopes: all essential for a small, self-sufficient, rural community.

In Bekesbourne the uplands to the north of the valley have a mixed geology over the chalk dominated by Thanet Beds of sandstone and grey marl overlain by a silty drift of Head Brick earth. The soils are deep, well-drained loams which are ideal for fruit growing and there are orchards and fields of soft fruit including strawberries and blackcurrants. The uplands to the south of the valley are chalk lands with thinner soils which are nowadays used primarily for arable crops.

Bekesbourne is bounded on its western side by the North Downs Way which connects Canterburyto Dover and it shares this boundary with the ancient parish of Patrixbourne. Indeed the parish boundary runs down the centre of The Street and all the houses on the eastern side are in the civil and ecclesiastical parish of Bekesbourne.

Since 1861 the railway has run like a spine through the centre of Bekesbourne crossing the valley on a high, densely-vegetated, embankment which is pierced in two places by tall brick arches to enable the passage of the valley road between Bridge and Littlebourne; and a culvert for the Nailbourne with a farm track/footpath above. The parishes of Adisham, Ickham and Well, and Littlebourne adjoin Bekesbourne around its southern and eastern sides.

Although the western boundary of Bekesbourne with Patrixbourne seems to have held true for all recorded time, the southern and eastern boundaries have changed a number of times to align with new landscape features. For instance, the eastern boundary with the parish of Ickham and Well nowadays runs along the line of the railway from Bramling corner to the intersection with the Nailbourne whereas it once followed the bridle path known as Aerodome Road and went down the edge of the Garrington field along a fine stand of boundary elm trees.

The southern boundary with Adisham has also moved back and forwards so that at times the windmill (which sat on the ridge until it burned down in 1933) was in the parish of Bekesbourne and at other times in Adisham. Currently (2020) both Windmill Cottage

and the adjacent property, Chota, on the south side of Bramling Road are in the civil parish of Adisham.

The boundary with Littlebourne has also flexed, most recently in 1998 when it was pushed east to move Lackenden cottages on Bekesbourne Lane and the car park of Howlett's Wild Animal Parkinto the parish of Bekesbourne.

The rivulet, known as the Nailbourne, which flows through the centre of Bekesbourne to join the Little Stour a little way downstream from its spring source at Well Chapel, is a winter bourne, an intermittent stream which flows only when the groundwater levels are high enough. Legend suggests that the stream will flow every seven years, but flow is more sporadic than that and depends on enough winter rainfall to replenish the chalk aquifers and thereby the source springs.

The river wasn't always intermittent and it wasn't always called the Nailbourne. When our Anglo-Saxon ancestors lived in the valley it was almost certainly a permanent watercourse at least as far as the Bourne Park springs and it would have been an important source of water and food such as fish and aquatic greenery.

Until at least 1899 the watercourse was mapped as the Little Stour implying that it was more or less a permanent watercourse. It seems to have acquired the name Nailbourne only in the 20th century corresponding to the time when the chalk aquifer began to be tapped to provide an organised supply of water for Margate and districts. The pumping station on the Wingham Road was commissioned in 1905 and the 1910 sale details for Cobham Court in School Lane say that it has water supplied by the Margate Corporation's main which was by then under the road from Adisham. The water is drawn through adits, long tunnels through the chalk, which extend radially from the pumping centre: one reaches northwards almost to Bramling corner – at the boundary of Bekesbourne with the parishes of Adisham and Ickham and Well.

It is hard to believe that the valley could have been cut by the current, most-times, dry or gently-flowing stream and indeed much of the erosion took place during and after the last glaciation which ended circa 10,000 years ago. Sea levels were then about 60m lower than they are now and the Channel separating England from the Continent did not exist: it came into being circa 7-8000 years ago at the time of the first marine transgression of post-glacial times. [A marine transgression is a geologic event during which sea level rises relative to the land and the shoreline moves towards higher ground, resulting in flooding. Transgressions can be caused either by the land sinking or the ocean basins filling with water or decreasing in capacity.]

Although the ice sheets of the last glaciation did not reach as far as Kent, the land was frozen and the meltwaters would have carried much debris to hasten the erosion. Many of the dry valleys in the Kent Downs stem from this period. The cutting of the Nailbourne valley took place in several distinct phases during standstills between falls in sea level. This explains the river terraces discernible in Bekesbourne: at least three are evident around the church and further down the valley at Garrington it is possible to pick out five levels on the southern slope of the valley.

The dogleg bend that the watercourse makes at Bridge is probably due to warping of East Kent towards the North Sea which caused the water to turn gradually north-eastwards from its original more northerly line. Professor Alice Coleman (King's College London) determined that the Great Stour migrated similarly eastwards and compares the bend in the Nailbourne at Bridge to a similar bend on the Great Stour at Chilham.

It is said that the watercourse was once navigable upstream as far as Bekesbourne. Philipot wrote in the mid 1600s that in the reign of Edward III (1327-1377) 'there was a small navigation out of the River Stour up to this place'. Over the years the truth of this has intrigued many people - including the river Nile explorer Dr Charles Tilstone Beke, one-time resident of the Old Palace, who corresponded with the Ordnance Survey on the matter in 1870.

Perhaps some of the most illuminating investigative work is that by George Meyer who wrote in 1927 about the early water mills in East Kent in relation to rainfall. He suggested that, although at the time of the Domesday survey (1086) there was enough flow in the upper stretches of the Little Stour to power water mills at Bekesbourne, Patrixbourne, Bishopsbourne and Barham, there was a sudden reduction in river flow in the district about 1275 corresponding with a reduction in rainfall Europewide.

Perhaps the most telling word in Philipot's account is the description of the navigation to Bekesbourne as 'small'. The stream may have had enough power in the 11th century to work a water mill, especially if dammed to create a mill head, but at Bekesbourne the river was unlikely ever to have been deep. The 14th century navigation was probably a shallow tidal waterway across marshy

land: only small, flat-bottomed, boats would have been able to pass.

Over the years the wetlands at Bekesbourne have ebbed and flowed depending on both sea levels and the level of the groundwater (itself dependent on rainfall). Work, by Briquet, Devoy and others suggests a series of marine transgressions on the Kentish coastline which would have increased the width and depth of the inland wet areas for long periods. Lamberts identifies three periods of marine transgressive activity in the last 2000 years. The first lasting from circa 250-600AD may explain the comparative absence of Roman remains in Bekesbourne. Even if not actually waterlogged the wetlands would have been sickly places to live, rife with mosquitoes and with marsh ague (malaria) common place. Lamberts' second and third transgressions are dated as circa 800-900AD and 1250-1550AD - this latter period would tie in with Philipot's report of a small navigation circa 1350 AD.

The area around Well Chapel where the Little Stour rises and the land beyond it through the meadows of Lower Garrington towards Littlebourne is wet pasture which is criss-crossed by drains and dykes to take the water away. The name Lackenden which is given to the homes on Bekesbourne Lane just north of Well Chapel possibly derives from the old English words 'lacu' or 'laec' which seem to have been used for the type of slow-moving stream which characterised areas of poor drainage or bog; the suffix 'den' meant grazing ground within a woodland. The low-lying meadows are sometimes referred to as Garrington marshes and the terrain there is unusual enough to be designated a local wildlife site by the Kent Wildlife Trust. The wetlands that remain now must have been much more extensive when the sea level was higher and it possibly reached all the way up to Bekesbourne.

The Nailbourne clearly flowed well enough through medieval and early Georgian times to necessitate a brick bridge known as the Parson's Bridge to enable the archbishops and others living at the Palace to reach the church with dry feet. The current bridge dates from 1776: it replaced an earlier bridge noted as very dilapidated in a survey in 1647.

In late Georgian times the Little Stour in Bekesbourne was said 'to abound with fine trout'. One lady writing from the village in 1805 spoke of her great pleasure in watching 'the elegance of the queenly fish on sunny summer days'.

However, Beke wrote in his journal of 1870 that the stream had by then the nature of the winter bourne and records of the Nailbourne collated by Snell in 1937 give details of how the flow varied intermittently between 1908 to 1936. The elders of the village say that there were plenty of fish in the Nailbourne in Bekesbourne in the first half of the 20th century. Villagers affirm that the bourne was deeper then and there are tales of children swimming or wading under the bridges which nowadays have only minimal clearance.

When unusually high levels of winter rainfall raise the groundwater levels the Nailbourne inundates the floodplain. In the winter of 2000/2001 the meadows became lakes for six months and village children were able to punt on the waters. There was a similar event in 1960/1 when several acres of Parsonage Farm and the playing fields of Bekesbourne Primary School were underwater. A report by the Engineer to the Kent River Board circulated in 1962 recorded that it was the first such extensive flooding since 1921 suggesting a forty year interval between groundwater flood events. However, Snell reports that 1916, 1928 and 1936 were also wet years.

In Bekesbourne although the meadows were flooded in 1960, 2001 and 2014 no houses were flooded - it seems that our ancestors had a good understanding of the nature of the river and built above the floodplain. The same was not true for nearby Patrixbourne where several low-lying homes in the vicinity of the church were flooded on each occasion - a bypass channel was created in 2001 to alleviate the problems there should the river flood again.

One difficulty of the 2000-2001 flood was that the valley had been laid with a sewer in the 1970s and the high groundwater levels overwhelmed the sewerage system and caused back siphonage of sewage in homes in some of the upstream villages of Bishopsbourne, Bridge and Patrixbourne. To alleviate this filtered but otherwise untreated sewage was pumped into the watercourse to the dismay of the villagers - whose feelings ran from 'anger and disgust to sad acceptance.' When it happened again twice in the following decade and a fourth time in 2013 the community called the sewage undertaker, Southern Water, to account and insisted that the leaky sewer was repaired. Since then there has been much work and many improvements.

The converse of the wet times are dry times and pressures from water extraction mean that not only has the reach of the Little Stour from Bourne Park through Bekesbourne to Well Chapel become a winter bourne running only when the Bourne Park springs

are in evidence but that the 'permanent' stretch from Well Chapel onwards can occasionally dry out between Littlebourne and Wickhambreaux - it did so notably in 1949 and again in 1992. Jill Thomas 2009"