Living with a Trespasser: riparian names and medieval settlement on the River Trent floodplain

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The Trent is England's third longest river. Its propensity to flood has long been recognised. Indeed it is this distinguishing trait that appears to have given the river its name. In this paper, we examine how this mercurial and potentially dangerous river was understood and how its floodplain was settled in the middle ages. Drawing on toponomastic and palaeoecological evidence we examine the relationship between archaeologically attested medieval riparian settlements and the river; how the names given to these places served to highlight the hydrological characteristics of the river along its whole course; and how individual communities bestowed an array of minor names to parts of their fields and meadows to create detailed maps of the Trent's floodplain environment. These themes are examined against the twin backgrounds of climate and anthropogenic landscape change which ensured that England's floodplains were some of the most dynamic, and thus complex, spaces in which medieval people chose to live.

The 'trespasser'

The first secure reference to the Trent, *Treenta/Treanta*, is found in the Bede's *Historia ecclesiastica gentis Anglorum* completed *c.* 731 AD (Colgrave 1993). It is proposed, however, that the *Trisantona* mentioned in Tacitus' *Annales* must refer to the river and point to its earlier British name-form (Damon 2012). While a firm etymology remains beyond reach, there is a general consensus that the Trent indicates a river prone to flooding and has been interpreted variously to mean 'trespasser', 'great wanderer', or 'great flooder' (e.g. Ekwall 1928; Watts 2004).

The Trent still floods regularly. Inscribed on Trent Bridge in Nottingham are marks indicating high-water levels since 1852. The present bridge was completed in 1871; those flood marks pre-dating its construction were transferred from its medieval predecessor built in the mid-twelfth century. To counter this flood threat, the river has been significantly re-engineered. Since the seventeenth century, the course of the river has been altered; many of

its natural shoals removed; locks and weirs installed; and hundreds of kilometres of earth embankments raised in an attempt to restrict the river within its banks.

Any consideration of the medieval Trent must begin, then, by acknowledging that it is not the same river we see today. It no longer flows precisely along the same course; and the amount of water it carries has been greatly reduced by siphoning water to canals or extracting it for agricultural, industrial, and domestic uses. Recent studies at Torksey, where the Viking army over-wintered in 872-3AD, suggest that river levels are now between 1-2m below those in the early medieval period (Hadley, Richards 2016). There are nevertheless aspects of the modern Trent that our medieval antecedents would continue to recognise. The river still rises on Biddulph Moor at 270m OD, before flowing nearly 280km to the River Humber at Trent Falls. And it still drains, together with its tributaries, an area of approximately 10,500 km^2 (equivalent to half the size of Wales).

But beyond the river's physical character, what would catch the eye of medieval inhabitants of the Trent valley is that the settlements along its banks still carry the names they originally bestowed upon them. This article focuses on these names and how they assist in understanding the medieval settlement of the Trent floodplain. Drawing on palaeoecological and toponymic evidence, and to a more limited extent archaeological material, it will be suggested that these names offer unique insights into how medieval communities mapped the Trent's watery environment; how they dealt with waterlogged or flood-prone ground; and how, by so doing, they succeeded in living with the trespasser.

Environmental context

The Trent varies considerably in character throughout its course (Fig. 1). In its initial stages (*c.* 60km) downstream to its confluence with the Blithe, the valley is narrow and typical of a high-energy upland river (Howard, Macklin 1999). Here isolated peat deposits occur within the limited floodplain together with coarse-grained sediments in braided, anastomosing and meandering channels alongside fine-grained overbank deposits (Challis 2004). Downstream from the Blithe, as the river's gradient flattens, the floodplain broadens and river's channel sinuosity increases as it is joined by the Tame and Meese at Alrewas Fig. 2). In these middle reaches (over a distance of *c*. 130km), a complex riverine stratigraphy has been laid down (Brown *et alii* 2001) consisting of coarse-grained deposits in former channels and fine-grained overbank sediments deposited during avulsion events (Baker 2004; Challis 2004). The river changes character for a third time just below Newark. Here, *c.* 90km from its

mouth, the river becomes tidal. From this point the river acts as a low-energy and perimarine system, its extensive floodplain characterized by subtle topography and thick deposits of interbanded sand and silt, peat and marine clay (Challis 2001).

If the Trent's basic hydrological properties have remained a historical constant, there is good evidence that the river has always been prone to shift its behaviour characterized by periods of relative passivity followed by periods of extreme activity. The medieval period emerges as a particularly dynamic time for the river. In the vicinity of Hemington and Church Wilne, for instance, the river's principal channel migrated quickly and over considerable distances across its floodplain over just a few centuries (Brown *et alii* 2001). The principal cause of the river's hyper-sensitivity here, and at this period, was climate change. It is in this reach that four of the Trent's major tributaries join the main river in quick succession. Two of these, the rivers Dove and Derwent, drain the greater part of the Trent's upland catchment (Brown *et alii* 2013). Any increase in the amount of water falling in the upper reaches of these rivers, as well as in the Trent's own headwaters, is thus most acutely felt where these flows come together on the middle Trent. Reconstructed climate models point forcefully towards the early medieval period as wet.

From *c.* 700AD Britain experienced a period of extended climatic change likely linked to increased solar activity and raised sea surface temperatures (Brown 1998; Mann *et alii* 1999; Dark 2000). Warmer conditions led to an intensification of rainfall that continued through to the eleventh century resulting in an increase in localised and regional flooding (Brown 1998). Alongside higher precipitation, shifts in the Atlantic storm track resulting from the complex interplay of the North Atlantic Oscillation and the Atlantic Multidecadal Oscillation created strong thermal gradients between the Arctic and latitudes 50-60 degrees north that increased the frequency of extreme weather events (Lamb 1995; Van Vliet *et alii* 2014). The direct effects of storms were felt most dramatically around coastal and low-lying tidal areas where coastal flooding and marine incursions became far more common-place. But inland, cyclonic storms brought periods of intense rainfall and flash flooding within floodplains.

Within the Trent Valley, the impact of this climatic variability can be demonstrated in a few places. Hemington in the middle reaches of the Trent provides the best evidence (Brown 1998). Here the historic morphology of the river channel has been reconstructed using archaeological, sedimentological and a range of dating evidence (Brown *et alii* 2001; Brown 2009). By the tenth century the multi-channel river had decreased in sinuosity and the

presence of slightly later fish weirs and a mill indicate physical interventions designed both to change and harness the natural power of the river. Many of these structures, however, were destroyed by later medieval floods and covered by alluvial deposits (Ripper, Cooper 2009). The medieval bridge at Hemington was enlarged and improved three times across the eleventh to fifteenth centuries, leading to the suggestion that the Trent's channel flow increased significantly during this period (Brown *et alii* 2001). But flood events had likely been occurring throughout the early medieval period similar to the first recorded flood on the Trent which had been responsible for the loss of Hemington's mill dam in 1140 (Clay, Salisbury 1990). The identification of coleopteran species associated with higher energy plunge pools, scour holes and barren sand and gravel banks, also suggests that the first bridge at Hemington had been undermined by flooding (Brown *et alii* 2001).

Downstream at Colwick, the Trent had adopted a well-established course by the Roman period. Indicative of increased instability and river dynamism in the early medieval period, it migrated northwards creating two large meanders by the ninth century. Later, in the thirteenth and fourteenth centuries, further division and channel morphological change has been identified around Colwick Hall (Salisbury *et alii* 1984). In the lower reaches of the Trent at Mattersey a radiocarbon date of cal.AD430-690 obtained from a peat deposit within the uppermost fill of a Romano-British boundary ditch points towards increased waterlogging of the surrounding landscape at this time (Howard 1996). Contemporaneously rising sea levels and marine transgression events were also affecting many low-lying estuarine and tidal areas (Van de Noort, Ellis 1998). This further encouraged inland flooding and settlement abandonment as at Waterton (Van de Noort *et alii* 1998).

If climate change was a major determinant of the Trent's fluctuating behaviour during the middle ages, the ease or otherwise by which water was able to pass through its system, a factor fundamental in determining its propensity to flood or change course, was also affected by anthropogenic landscape change. By the fifth century AD, the Trent valley had long been settled, much of its natural woodland cleared, and its floodplain and valley sides converted to meadow, pasture, and arable (Green 1991; Greig 1999; Howard *et alii* 1999; Pearson *et alii* 1999; Greig 2004; Scaife 1999). In the upper Trent catchment, a pollen sequence from Stafford appears to show a gradual increase of oak, birch, and ash woodland from the Romano-British period up to the mid-sixth century AD, indicative of reduced human activity (Greig 1999). But the presence of disturbed ground macrofossils such as knotgrass, sheep's sorrel, dock and nettle infer continued, localised arable cultivation (Pearson *et alii* 1999).

Indeed, in other areas of the Penk Valley (Bartley, Morgan 1990; Greig 2006) there are signs that a largely open landscape was maintained throughout the mid-sixth to mid-ninth centuries AD. The palaeoenvironmental evidence shows a dominance of herbaceous species alongside evidence of arable cultivation and managed grasslands as a result of animal grazing. Localised variations in land-use suggest continuity of agrarian practices in some places, and development and adaption in others, likely driven by broader climatic change. By *c.* 850AD there are clear signs of agricultural intensification. Cereal pollen and disturbed ground species illustrate an increase in arable cultivation alongside managed wetland and scrub woodland habitats (Greig 1999).

In the Middle Trent Valley at Bulcote Farm, the landscape between the mid-third to mid-sixth centuries AD was largely open with very little woodland. The presence of herbaceous species such as ribwort plantain, dock, and dandelion demonstrate meadow and managed grasslands were prevalent alongside some arable cultivation. A range of other environmental indicators—including ostracods, insect remains, mites and, snails—suggests that the site contained marshy, wet grassland close by to a slow-moving large body of water (Haverlock *et alii* 2002). Elsewhere, two pollen sequences extracted at Barton-in-Fabis offer further insights. The first shows that between the late-fourth century and mid-seventh century AD the landscape was predominantly grassland, alongside localised oak-hazel woodland and low levels of alder scrub in wetter areas. Herbaceous species—including ribwort plantain, mugwort, fat hen, and knotgrass—indicate grassland managed by grazing. But the presence of bulrush, pondweed, and spike-rush plant macrofossils, water beetles, freshwater bivalves, and numerous mites shows that more permanently wet soils and standing water were also a major feature of this landscape (Haverlock *et alii* 2002). The second sequence, dated to cal.AD420–600, reveals an open landscape with a high percentage of sedge vegetation, a clear indicator of wetland conditions. This is further supported by the presence of bulrush and pondweed plant macrofossils, water beetles, bulrush and mites. In the wider landscape ribwort plantain, dandelions and buttercups point to meadowland and managed grassland intersected, as indicated by tree pollens, by areas of alder and hazel scrub woodland (Haverlock *et alii* 2002).

The general environmental picture that emerges from the palaeoecological record, then, is one of fundamental and wholesale change across the medieval period. Higher rainfall, elevated occurrences of extreme weather events, allied with deforestation and the extension of arable farming, which destabilized the valley sides and promoted increased levels of soil

erosion, all impacted on the character of the Trent itself. By the eighth century, the river might have begun to be confined within established channels, but increased flow rates meant that the river was constantly moving laterally across its ever widening floodplain. Major flood events also prompted the river to alter course dramatically on occasions. The establishment of permanent early medieval settlements along the Trent, thus coincided with one of its most active phases, one in which it lived up to its reputation as a frequent trespasser.

Water-names and riparian settlement

In 1012 King Æthelred granted away one and a half hides at Wetmore near Burton-on-Trent (S930). The charter described the boundaries of the estate:

> First from (the) Trent where the thieves hang in the middle of barley ford's island;…straight on to the tumulus/mound outside/except five lands/strips on this side from the lands to the watercourse/ditch;…to the boundary thorn upward (the upper part);…to one/single acre;…to the hedge;…into the brook; along (the) brook so that (it) should come to the ditch/dyke at Eanswith's clearing/wood; north along (the) ditch so that (it) should come to Ceolwulf's calf's? croft; to the […] that runs from Eanswith's clearing/wood along (the) street to the stump;…to the ditch; along (the) ditch so that to (the) street that runs by water-meadow brooks; from the street to the ditch;…straight on to the watercourse that runs by cheese/gravel spring hill; and hunger hill along (the) watercourse straight on to the elder tree(s) that stand(s) on Wetmore's boundary and Stretton's;…to the ford; along (the) watercourse that runs from the ford to (the) Trent; up along (the) Trent so that (it) should come where the thieves hang.

Wetmore's named boundary features offer reassuring substantiation for the early medieval environment of the Trent floodplain reconstructed from the palaeoecological record. More than this, in a cultural context where physical maps played little or no part, these took on greater meaning and significance. Pragmatically, they allowed people to orientate themselves within this wet space. But arguably more importantly, they provided a means of preserving and communicating knowledge about the place, a role crucial within the changing environs of floodplains.

The Wetmore charter reveals that even the smallest feature within the Trent floodplain once carried a recognisable descriptor if not formal name. Most of these names are now lost. Anglo-Saxon boundary descriptions survive for only two other Trent-side estates—Darlestone and Fiskerton (S602; S659)—although, as will be seen in the case-studies that follow, some early names may have survived to be recorded in later medieval sources. What have survived, however, are the major-names given to the main settlements and land units that became respectively established and formalized during the course of the early medieval period. Many, like Wetmore itself, from OE *wiht* 'bend, curve' and *mere* 'pond', giving the sense 'pool by the river bend' (Horovitz 2005), provided a vivid description of their watery setting for the Anglo-Saxons who encountered them.

Fifty-four major-names can confidently be said to make direct or indirect reference to water or wet ground along the whole course of the Trent (Fig. 3). These comprise names taking water-related generics—such as OE *wella* 'spring, stream' found in Cromwell or OE *fleot* 'estuary, tidal reach' in Adlingfleet—or those where the local presence of water or moisture is indicated in their qualifier—for example OE *salh* 'willow, sallow' in Sawley or ON *star* 'sedge' in Staythorpe. Contained in these figures are place-names derived from or which contain folk-names which themselves reference water. These include the territory of the Ridware, Brit *ritu 'ford' and OE *ware* 'dweller' hence 'people who lived by the ford' (Horovitz 2005); Meering, OE *mere* 'pond' plus *ingas* 'people of' giving '[settlement of the] dwellers by the mere' (Gover *et alii* 1940); and Burringham, 'village, estate of the Burningas, the stream-dwellers' (Watts 2004).

In addition to these, three other names have cautiously been included. These are Beeston and Besthorpe which both contain OE *beos* 'bent-grass'; and Grassthorpe from OE *gærs* 'grass'. Neither of these elements is traditionally considered indicative of wet landscapes. But all three held large areas of floodplain raising the possibility that these two elements refer perhaps to rich meadowland (Fig. 4). Today Bent-grass (*Agrostis stolonifera*) flourishes in grasslands, meadow, wetlands and in riparian zones.

Together water-names comprise approximately 25% of all the Trent's major place-names. But establishing their true number is hampered by the linguistic uncertainty that surrounds place-name that now appear in the form X + ham. Ten riparian settlements along the Trent belong to this group. These may derive either from OE *hām* simply signifying 'settlement' or OE *hamm* 'land hemmed in by water or marsh; wet land hemmed in by higher ground; river-

meadow; cultivated plot on the edge of woodland or moor' (Gelling, Cole 2000). Without indicative runs of early spellings, it is formally impossible to differentiate between the two and in the absence of positive evidence for *hamm*, the toponomast's default to *hām.* Thus, Muskham is conventionally etymologized as 'Musca's homestead' (Watts 2004).

When examined topographically, however, some of the Trent's ham-names occupy locations which strongly imply that their names must have originated in *hamm.* Muskham is a case in point (Fig. 5). Now divided into North and South, the Muskhams sit on a slightly raised gravel terrace within the Trent floodplain. Placed against modern flood-risk maps, the village and its core lands can be seen to be hemmed in by water even when the river is in the mildest flood. When not, these areas tend to remain wet if not waterlogged. This may well have been their natural state for much of the year in the early medieval period, when the Trent flowed higher than today and the land had yet to benefit from efficient under-field drainage. Hoveringham (Fig. 6) and Flintham (see below) may be other examples. Taking such observations into account it is probable that more than 1:4 place-names along the Trent were originally designed to convey information about water.

That modern flood-risk maps reveal the extent of the Trent floodplain at the time of settlement foundation seems proven by the location of early medieval churches. Attested pre-Conquest foundations in Nottinghamshire include Rolleston, Shelford and Averham (Fig. 7; Everson, Stocker 2016). All three stand within metres of their respective floodplains suggesting that these sites were only chosen only after the maximum flood range of the river had been firmly established. Such maps also help to re-envisage the topography of the Trent's 'islands' such as Torksey (OE *ēg*) where early medieval activity covers, but does not extend beyond, the dry island (Hadley, Richards 2016). This is true also of Holme and Holme Pierrepont which derive from ON *–holmr* which when mapped clearly indicate that along the Trent this terms was being used in its sense 'raised ground surrounded by marsh' (Fig. 8; Gelling, Cole 2000).

Terms such as *hamm*, *ēg*, and *holmr* reveal just how important exploiting the subtle topography of the Trent floodplain was for those who sought to establish their settlements beyond the trespasser's reach. In other places, however, the very real threat of flooding was also broadcast through names. Alrewas, from OE *alor* 'alder' and OE **waesse*, is glossed as 'alluvial land that floods and drains rapidly' (Gelling, Cole 2000). It stands a few kilometres downstream of the Trent's confluence with the Blithe, and immediately upstream of the point

where the Tame and Mease meet the main river. Behind Averham, close to the natural tidal reach of the Trent, lies the unique place-name element OE *ēagor* glossed as '[settlement] at the floods' (Gover *et alii* 1940). Here the Trent now divides to run along both edges of its extensive floodplain, in part the legacy of the artificial widening of its northern channel during the thirteenth century.

That Alrewas and Averham appear to have acted as sentinel names, respectively marking the beginning and end of the Trent's long, flood-active, middle reach, is intriguing. It raises the possibility that the Trent's riparian settlement-names functioned not just at a local scale but were conceived collectively as a means of mapping the changing characteristics of the river along its entire course. Of course, local names which took account of the specific characteristics of short stretches of the river and its floodplain would, by default, build into a larger picture of the river-system. Thus, a traveller making their way upstream would note that *fleot*- and *hyth*-names were restricted to the tidal river and that the appearance of *hamm*s and *holmr*s marked the transition into its middle reaches (Fig. 3). But the name that best reflects that the Anglo-Saxons were able to conceptualize the whole river from mouth to headwaters is Trentham. This is the only major place-name which incorporates the name of the river along the whole of its length. It is also one of only two estates which originally straddled the river (the other East and West Stockwith). Trentham stands immediately downstream of where the three principal streams draining the Trent headwaters join to form a single channel. At this point the river may have been small (around 4% of its final flow) but it was here that it became a recognisable river. Trentham, it might be suggested, marked what the Anglo-Saxons considered to be the river's head. Certainly riparian place-names upstream of Trentham suggest that the river quickly lost its identity within a universally wet landscape—Clayton, OE *claeg* 'clay'; Fenton Vivian and Culvert, OE *fenn* 'fen'; Horton, OE *horu* 'mud, dirt'.

Flintham: a late Anglo-Saxon view of a riverine environment

If settlement names provide us with a means of mapping the medieval landscape at the macro level, looking in detail at local landscapes can help to reveal how intricately the fields, meadows, pastures and woodland were understood by the medieval husbandmen who named them (Jones, Semple 2012). Considering their great potential to offer a more nuanced understanding of the late Anglo-Saxon landscape, field-names remain an underused resource

(although see Semple 1998, Kilby 2010, Gardiner 2012, Gregory 2015, Mileson 2016). They offer up an array of information, encompassing physical topography, alongside social, cultural, symbolic and ideological concepts. Those resulting from a description of the attendant topography form by far the most numerous of those that survive in the medieval written record. These names often endure over hundreds of years from at least the late Anglo-Saxon period through to the thirteenth and fourteenth centuries and beyond (Jones 2016).

The medieval records of Flintham collectively reveal almost 200 field-names, written down between *c.* 1175 and *c.* 1450 (Manuscript sources; Holdsworth 1974; Foulds 1994). Of these, the great majority are topographical, revealing the subtleness with which Flintham's residents delineated what was clearly a very watery environment, not just as it lay alongside the Trent, but across its entire extent. But is it possible to determine anything of the late Anglo-Saxon landscape through the use of material written down from the twelfth century onwards? It has been suggested that topographical settlement names may have been introduced at an early stage in the Anglo-Saxon naming process, and that earlier British settlement names were principally topographical (Cox 1976; Gelling 1978; Gelling 1993, Gelling, Cole 2000). It may then follow that many minor topographical landscape names are also early, having been transmitted orally from generation to generation, before being written down in the post-Conquest period.

Flintham has been glossed as probably 'Flinta's homestead' (Gover *et alii* 1940). This proposed etymology provides no sign that the settlement was located close to the Trent, and within the catchment of the Devon and Smite. This might suggest that these rivers were of secondary interest at the point at which it was named. And yet, within the corpus of extant field-names, a large quantity relay information about water in the landscape either directly or indirectly. Using landscape surveys undertaken in Flintham between *c.*1450-1759, it is possible to locate a number of these named furlongs, either by tracing their placement within the open-field system, or through determining their abutment onto located furlongs. Whilst several of them are in the vicinity of the Trent and its associated water-meadows, a large quantity can be found forming a semi-circle around the settlement, to the north, east, and south-east (Table 1 and Fig. 9).

In some instances there may be several possible explanations for specific field-names. The group of names in ON *holmr* are a case in point, since these might mean 'an island, an inland promontory, raised ground in marsh, or a river-meadow' (Gelling, Cole 2000). It is often the

case that fields named *-holm* are found alongside rivers in the English landscape, suggesting that a common definition would be 'river meadow' —indeed, Field (1972) suggests 'piece of riverside land; a water-meadow' in the context of field-names. In Flintham, however, all of these furlongs lie in the south-eastern area of the parish, at some distance from the Trent, close to Car Dyke. An 1842 map shows the extent of land affected by the flooding of the Devon and Smite in various Nottinghamshire parishes, including Flintham (Nottinghamshire Archives, XW3L). When this map is overlaid

Definition	Name	Location	Definition	Name	Location
ON bekkr			**ON holmr**		
A stream, a beck.	le becke, becfurlong, cresbek, scheysbec/scaytbek	Nether Field	An island, an inland promontory, raised ground in marsh, a river-meadow.	barligholm, greneholme, claxholm, le holms	Nether Field
OE brycg			**OE hrēod**		
A bridge; a causeway.	claxbrige	Nether Field	A reed, a rush; a reed-bed.	ridspire	Nether Field
	langbrige	Nether Field			
OE byht			**ON kjarr / ME ker**		
A bend, a curve (in a river or street); a bight.	bithe	Cliff Meadow	A marsh; marshland overgrown with brushwood.	kerfurlong, kersike, le ker	Cliff Meadow
OE clif			**OE mersc**		
An escarpment, a hill-slope; a river-bank.	la clive	Cliff Meadow	A marsh.	brademers, brademersikes	Broad Marsh Field
	cliffeld	Cliff Field			
OE cressa			**OE mōr / ON mór**		
Common watercress	cresbek, cresbecforlang	Nether Field	A marsh, barren upland.	la mor	Broad Marsh Field
OE dīc / ON dik			**OE secg**		
A ditch, usually an excavated trench, either defensive or for drainage of water.	dykefourlong	Broad Marsh Field	Sedge, a reed, a rush.	segfurlang	Nether Field
	barundic	Cliff Field			
ON eng			**OE swin**		
A meadow, pasture.	litleng	Nether Field	A creek, a channel; or OE swin, a swine.	le swynholes	Cliff Field
OE flēot			**OE sīc / ON sik**		
An estuary, an inlet of the sea, a small stream.	le flet, flitker	Cliff Meadow*	A small stream; or ON *sik* ditch, trench.	le sik, sikfurlong, gallesic	Broad Marsh Field
OE ford			**OE wella**		
A ford.	heselford langforth	Cliff Field Nether Field*	A spring, a stream.	lithwelle	Broad Marsh Field
ME galle			**OE wēt**		
A barren or unfertile place in a field; a spongy place.	galle, gallebroth, gallesic, gallethorn, overgalle, myddelgalle, nethergalle, gallemer	Broad Marsh Field	Wet, damp.	wetfures	Broad Marsh Field

Table 1: Located watery names at Flintham. Note: asterisked names have been located through the assessment of abutments in medieval charters, rather than direct from a later survey.

on to the field map of Flintham, it is possible to see that one of the dry areas, surrounded by floodwaters, is medieval *greneholme* (Fig. 10) . It seems extremely likely, then, that the Flintham *-holm* names must represent either 'an island', or 'raised ground in a marsh'. This is supported by a charter in the Welbeck Cartulary, in which *greneholmeheued* abuts on marshland (BL MS Harley 3640). It is tempting to speculate that the other prominent dry area shown on the map might be *claxholme*, since its qualifying element could be **clæcc*, 'hill-top, hillock' (Parsons 2004). The map also shows that *le holmes* was situated in a part of the landscape that was prone to flooding, and the names selected suggest that *barligholm*, very slightly further west, was probably also surrounded by wet, marshy ground. Modern soil mapping identifies this area as 'loamy and clayey floodplain soils with naturally high groundwater', designating it as 'naturally wet' (Cranfield Soil and Agrifood Institute). Assessing the adjacent furlongs that can be positively located, the flora indicated by *segfurlong* (sedge), *radegres* ('red grass'), *ridspire* (reed/sedge) and *cresbecforlang* (watercress) further emphasise the wet nature of this part of Flintham (Gover *et alii* 1940; Smith 1956). Cole (2015) has also suggested that *-eng* may be considered wet, and *litleng* is also in the same field, in addition to the assuredly wet becks and ford (Cole 2015).

Modern Broad Marsh Field, to the north-east, also contains some interesting medieval topographical furlongs, not least *brademers*, from which it took its later name. While the 1842 map shows that part of this field was sometimes under floodwater, it is not possible to identify which medieval furlongs would have been affected. Nevertheless, the modern soil map suggests that in this area of the parish, after heavy rainfall —especially in winter— the ground would become waterlogged. The name *brademers* seems to indicate a large area of wet, boggy ground. If the wet nature of this landscape extends beyond the broad marsh, the various names in *galle-* are also potentially interesting. *Galle* is another element whose meaning is dependent upon landscape context. Here, it might more readily refer to 'a spongy place' rather than one that is 'barren or unfertile'. The names *wetfures* 'wet furrows', *le syke* and *sikforlong* further emphasise the prevalence of water in this part of Flintham.

Down at the edge of the Trent, water-names abound. In the most north-westerly corner of the parish, in Cliff Meadow, the soil is described as 'free-draining floodplain', with a habitat of 'grassland; wet carr woodlands in old river meanders' (Cranfield Soil and Agrifood Institute).

Medieval *kerfurlong*, meaning a furlong characterised by or close to 'a marsh, especially one overgrown with brushwood' cannot be precisely located, but may have been in Cliff Meadow, where there is still adjacent woodland today (Field 1972; Gelling, Cole 2000). This brings us to two interesting names containing OE *flēot* 'an estuary, an inlet of the sea, a small stream': *le flet* and *flitker*. These cannot be located, but there is a possibility that *flitker* might be adjacent to *kerfurlong*. Cole (1997) suggests that where *flēot* occurs in low-lying wet ground, as here, that this may be a reference to flooding – specifically 'shallow water coming and going rapidly', and so there is a possibility that the Flintham *flēots* refer to short-lived flood events.

Looking at Flintham's fields from an Anglo-Saxon and later medieval perspective prompts reconsideration of the landscape. The field-names reveal that the soils within a considerable portion of upper Flintham were wet. As late as 1842, modern maps pinpointed what medieval field-names charted without the aid of cartography. Mapping the wetter areas using medieval field-names, it is possible to see that the settlement core of the village was formerly much more surrounded by water than it may initially seem by glancing at a modern map. Might this allow us also to reconsider the settlement-name itself? As Gelling and Cole (2000) warn, without the support of early place-name spellings, any hypothesis must remain an intriguing possibility. Nevertheless, the introduction of the field-names as an integral part of the landscape evidence raised the possibility that Flinta's *hām* was in fact his *hamm*, and thus belong to the larger group of settlement names proposed above. If nothing else, the field-name evidence certainly suggests that in the late Anglo-Saxon period, Flintham might have been described as 'land hemmed in by water or marsh'—in this case, both.

Watery field-names in Averham and Kelham

The parishes of Averham and Kelham (Fig. 11), immediately to the east of the Trent, present a rather different opportunity for field-name analysis. Their settlement-names point clearly to a watery landscape, and the riverside position of the parishes confirms that the role of water in the locality is likely to have been significant. This should be reflected in the topographical nomenclature. Medieval field-names for Averham and Kelham are preserved in the charters of Rufford Abbey (Holdsworth 1974), and in documents held at the Nottinghamshire Archives. Due to patterns of land ownership, the two parishes are frequently treated as a single unit. Unlike Flintham, very few of these names survive long enough to appear on

estate or tithe maps, and the documents in which they are preserved rarely provide extensive information which could be used to locate the fields in question. This case-study, then, addresses the question of what information can be gleaned about the role of water in the landscape without the benefit of cartography.

Assessing the significance of a particular kind of landscape feature or characteristic cannot be demonstrated purely on the basis of the number of references to that feature. Place-names, whether those of major settlements or of minor landscape features, were originally coined as descriptive labels, serving the purpose of identifying a given place between members of a community. In areas where a particular feature or resource was ubiquitous, marking that feature in a name would be entirely useless to name-users. In these kinds of locations, names are far more precise, describing subtle differences in the natural or manmade world which use specific terminology to convey this local knowledge (Gelling, Cole 2000). In a search for water in the field-names of two riverine parishes, therefore, it is this variety of vocabulary and precise description of the landscape which must be identified.

Like Flintham, there are OE *flēot* 'stream' names here: *Caldflete* dates from the mid-thirteenth century. In this case it is combined with OE *cald* as a specifier, usually meaning 'cold', but sometimes associated with clay soil (MED), which would be appropriate to the landscape here. If *flēot* is interpreted as an indication of 'shallow water coming and going rapidly', as suggested for the Flintham examples, then the nature of the soil might give further information about short-lived flood events, perhaps warning of the tendency for the soil to prevent quick drainage of the water which might more usually be expected of a *flēot*. The word is sometimes also used of land which adjoins such a stream, and the name may be used interchangeably between the watercourse and the neighbouring field. The OE word *sīc* (or ON *sík*) exhibits similarly flexible meaning: usually it refers to land by a stream (Field 1972), but *sykettu'*—recorded *c*. 1240-50—is clearly described as a watercourse in the charter.

OE *clif* is frequently (although not exclusively) associated with the banks of watercourses, especially in field-names. *Routheclive* is a thirteenth-century example in this area which may refer to land by a stream. There are a number of Ratcliffe names which are recorded in the eighteenth and nineteenth centuries, and which may be modern reflexes of the medieval name (Holdsworth 1974).There is a single example of Averham Water in 1505: this may be a stream or a standing body of water (OED sense II 10 a). The same document refers to a

water-course called a *goore*, in this case specifying a channel of water. This is an unusual word that may have two meanings: either 'dung, filth; mud, mire' (MED); or the Lincolnshire dialect word *gore*, meaning 'a cut in a bank' (EDD, sense 4). The first sense would indicate a slow-flowing, clogged stream, while the second would demonstrate intentional management of water.

Another term which indicates water management is dike, from OE *dīc* or ON *dík*—the two are difficult to distinguish in late medieval sources (Rye 2016). Strictly the word is defined as 'embankment', but it is also used to mean a deliberately cut or managed stream. Here we have a *grimisdic* attested 1260. The first element appears to be a personal name, but this is a recurring name-type (Stenton 1941; Gelling 1961) so may have a more connotative meaning. There is also a thirteenth-century furlong name *dikfurlang'*. This may be locating the furlong in relation to *grimisdic*, or to a different watercourse. These dike names indicate managed water channels at Kelham. Management of water is, however, also represented by the presence of two water mills, referred to as Kellome mills in 1506. Kelham bridge, *pons de Kelham*, is first referenced in 1225 with frequent subsequent references. In this case access across the water was not only of local significance, but of national importance, providing a way to traverse the river on the way to and from Newark-on-Trent.

Averham and Kelham contain several early names in ON *holmr*. *Fortholum*, recorded in the mid-thirteenth century, may also contain OE *ford* 'river- or stream-crossing', or perhaps OE *fore* 'in front of, before', indicating its location in relation to another feature. The name *fortholummemere*, from the same approximate date, is derived from the pre-existing name, and is described as being within Kelham meadow. It is difficult to know whether *holmr* here has the sense of 'island of dry land' or of 'waterlogged meadow', and either seems contextually possible. Another thirteenth-century *holmr* is *Podholum*, which contains OE *padde* 'toad', thereby creating a doubly watery compound.

ON *eng* is relatively common in this part of Nottinghamshire, and often has a sense of 'riverside meadow'. *Aldeng'* is recorded in the early thirteenth century and described as being next to the Trent, confirming the definition of *eng* in a local context. It continues to be attested through the fourteenth century, and the combination with OE *ald* 'old' might suggest a cultural association with longevity and historicity of the piece of land. *Neuheng*, also attested in the early thirteenth century, appears to be named in opposition. The *prest enge*, *c.* 1250-57, indicates ownership by the priest, and is one of the few medieval names which

survives into the nineteenth century (Priest Ings, 1844). Multiple contemporaneous names containing *eng* indicate the large areas of ground in these parishes which were waterlogged and best suited to pastoral rather than arable use.

ME *flashe*, 'a watery or marshy place', appears in the fourteenth-century furlong-name *flasshefurlong*. This name itself may be derived from an original name 'Flashe', which does occur in the area but is not attested until 1589 (le Flashe). This adds weight to the suggestion that many field-names significantly predate their earliest surviving attestation; if *flasshefurlong* is named from le Flashe, the name must have existed for at least two centuries before the charter recording it. The longevity of this name is confirmed by the existence of Flash Close and Little Flash Closes in the eighteenth century (Fig. 12).

Beside *fortholummemere*, there is only one name in this area which includes *mere*, but it is a name attested nine times in the medieval period, beginning perhaps as early as 1176 with *merfurlang'* which unfortunately cannot be precisely located. There is always a difficulty distinguishing OE *mere* 'pool or wetland' from *ge-mǣre* 'boundary' in place-names (Smith 1956; Gelling, Cole 2000). The examples of *mere*-names in Field's *Dictionary of English Field-Names* (1972) are glossed as containing *ge-mǣre*. But it is unclear whether this derivation was based on compelling evidence in each case, or whether the boundary term was simply considered more likely. In the context of a frequently-flooded area, it is not difficult to imagine that one part of an open field might be more prone to becoming waterlogged than the rest, perhaps even forming a temporary shallow pool. Such knowledge would, of course, be imperative in managing arable farming on such ground. While this name, then, is not certain to indicate water, it remains an intriguing possibility.

The final clue as to the presence of water or waterlogged ground is flora which thrives in such habitats. Reeds, rushes or reed-beds (OE *hrēod*) may be found in *redegate* and *redelandes*, each recorded in the thirteenth century. It is also possible that OE *read* 'red' is present, indicating the colour of the soil, and both are represented in field-names elsewhere (Field 1972). Willow trees are frequently indicative of water, and there are two OE words referring to them which are found in Averham and Kelham: *salh* and *wilig*. *Sallingsike* (*c.* 1215 onwards) indicates willows next to a stream (OE *sīc*/ON *sík*); *willpebusche* (*c.* 1190 onwards) indicating a thicket of willow trees (McSparran 2013), which name is also found in *schortwylibusc* (1250-57). *Wilig* also appears in *wylhal* (thirteenth century), probably combined with OE *halh*, which either means 'nook or corner of land', sometimes such a nook

in the bend of a river or stream, or 'low-lying land by a river' (Smith 1956). The name *willehalhevedland* (mid-thirteenth century) appears to derive from *wylhal*.

Even without the kind of precise cartography and geographical data which is frequently available to landscape archaeologists and toponymists, a great deal can nevertheless be said about the place of water in the perceptions of the medieval inhabitants of Averham and Kelham. Although not every name discussed can be confidently attributed to a watery derivation, there is a sufficiently broad range of vocabulary to indicate an intimate and nuanced knowledge of the landscape on the part of those giving and using the field-names in these parishes. Rather than water simply being marked in the landscape, these names describe the type of water, its flow, and the effect it has on the ground. The semantic specificity of the terminology deployed is striking. There can be little doubt that the Trent and its treacherous waters loomed large in local people's understanding of their landscape, and that careful management of its effects, both positive and negative, were crucial to effective subsistence farming.

Conclusion

As today, in the eighth and ninth centuries AD, when the location of riparian settlements on the Trent floodplain began to be fixed, few living beside the river would have been aware of the grave environmental warning communicated by the river's name. Language change meant that its once transparent meaning, 'the trespasser', had been rendered opaque if not entirely lost. In this respect, the act of settlement naming along the Trent attained a greater importance for OE speakers than along those rivers the Anglo-Saxons named (or renamed) themselves. Elsewhere they were able to communicate, for instance, the river Erewash's growing propensity to flood across the early medieval period through the name they gave to this watercourse (OE *irre* 'wandering' + *wisce* 'stream' later (*ge*)*wæsc* 'a washing, a flood'). In contrast, mapping the behaviour and hydrological characteristics of the Trent, so critical to building sustainable and resilient communities beside it, relied on communicating this ecological knowledge through the names of the settlements they founded at its edge not through the river-name itself.

Archaeological prospection in floodplains is notoriously difficult to undertake. This is particularly the case along the Trent where its tendency to flood has buried archaeological material under metres of alluvium. Other than in rare places such as Catholme near Alrewas, where a sixth to ninth-century settlement was located on one of the Trent's gravel terraces

(Buteux, Chapman 2009) or Torksey, material evidence for early medieval activity is almost entirely lacking beyond existing settlement sites. Place-names, along with palaeoecological data, help to fill this evidential gap. They help not just to reconstruct the physical landscape of the Trent at the moment of its settlement and territorial formalization, but provide windows on how the river was understood by those who settled on the floodplain, how its natural challenges were overcome or negated, and how its rich resources were exploited. What emerges from the few early medieval sources to survive, and to a greater degree from the abundant quality of written records that survive from the late twelfth century, is that the Trent floodplain was carefully read and described in the finest detail. This vital information was passed on from generation to generation through names. Through these, the riparian communities alongside the Trent preserved a vital mnemonic system for the communication of ecological knowledge that allowed them to work with the natural rhythms of the river and navigate through its ever-changing landscape. Early medieval communities respected the trespasser but were not fearful of it even during a period when changes in climate and human-led change to the landscape combined to ensure that the medieval centuries were some of the most hydrologically dynamic in the river's history.

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Abbreviations

Brit. – Brittonic

EDD – English Dialect Dictionary

ME – Middle English

MED – Middle English Dictionary

OE – Old English

OED – Oxford English Dictionary

ON – Old Norse

S – Sawyer

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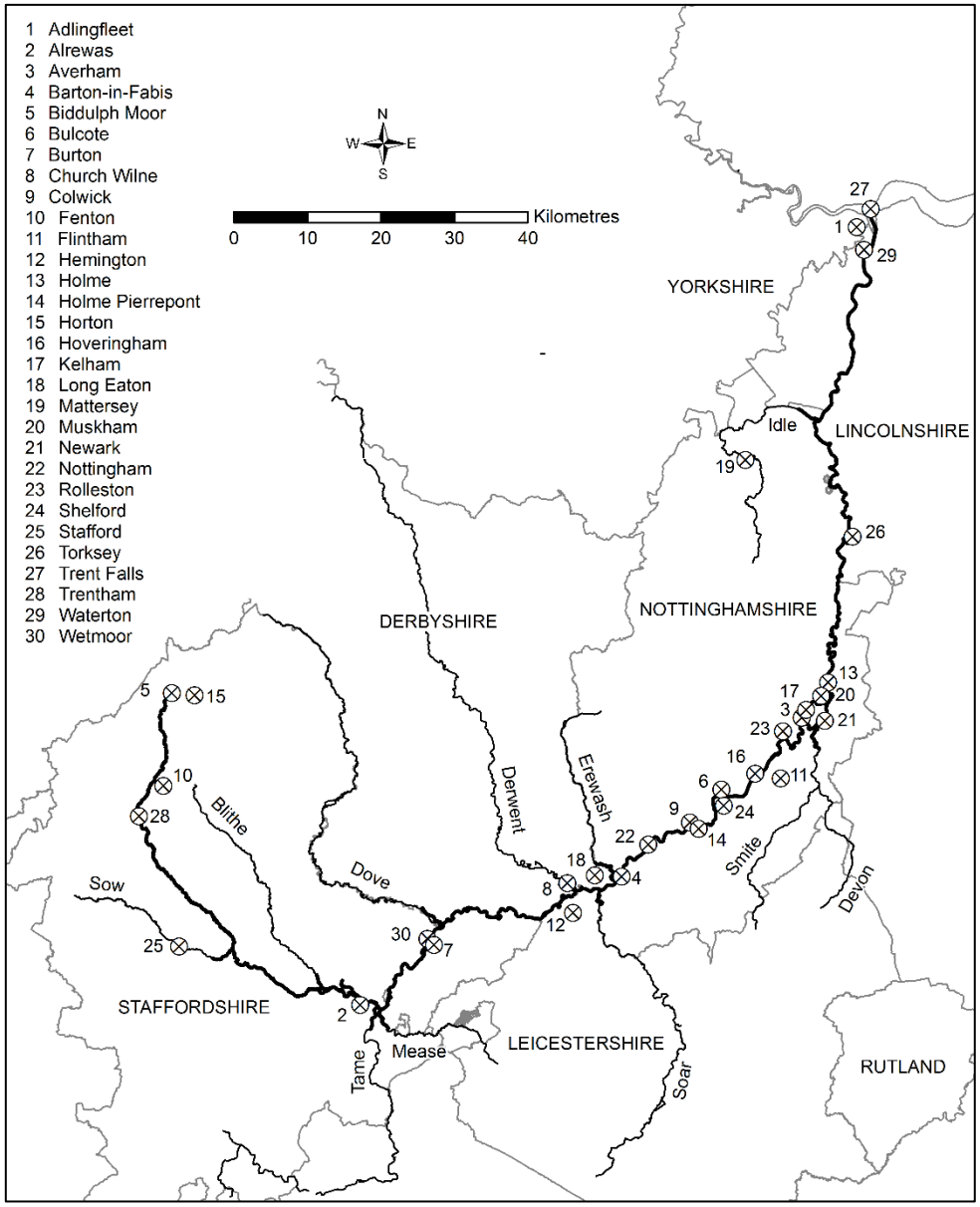

Fig. 1: Location of the principal places and rivers mentioned in the text.

Fig. 2: The Trent and its floodplain at Alrewas (Staffordshire)

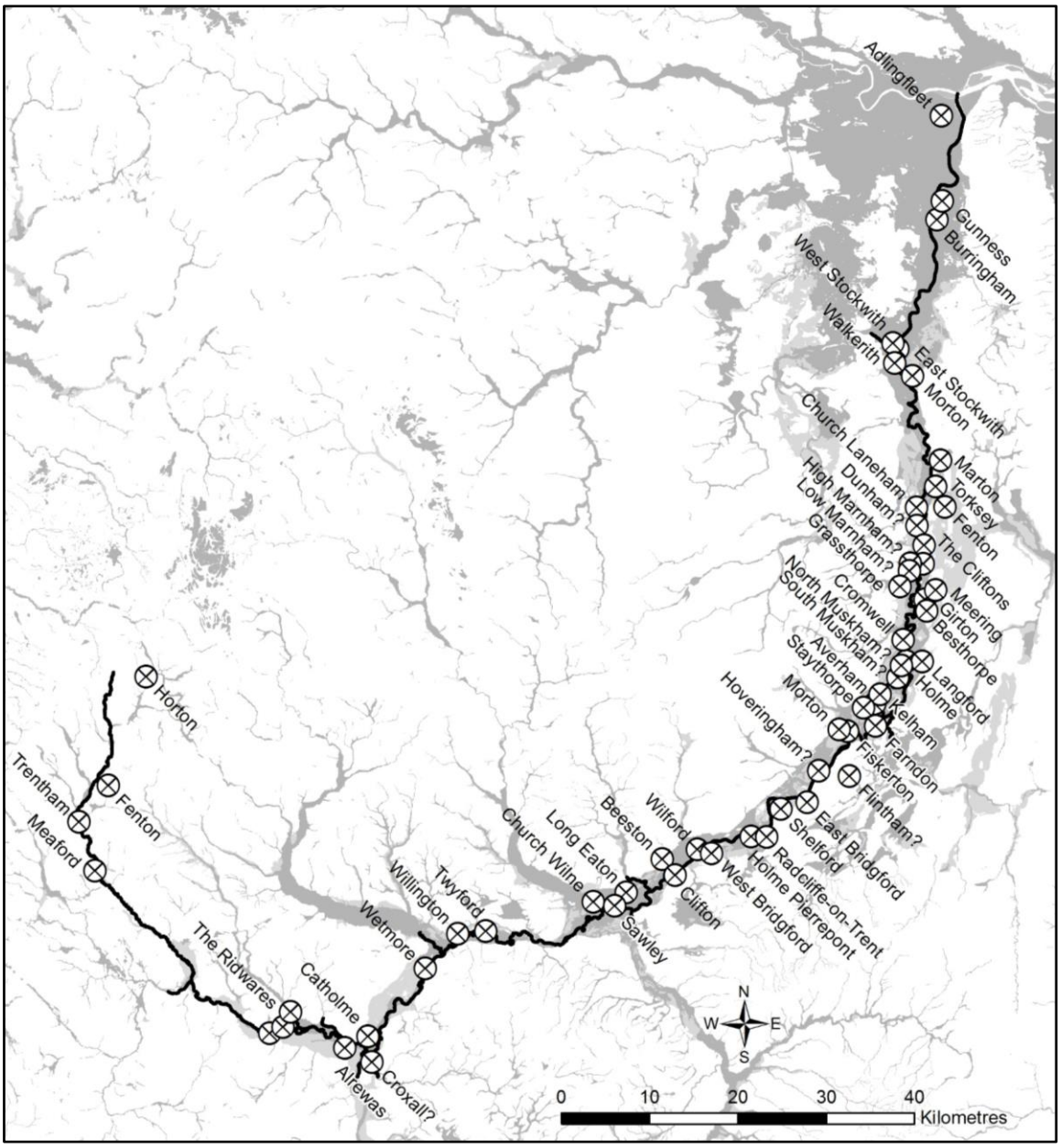

Fig. 3: Location of water-names along the Trent

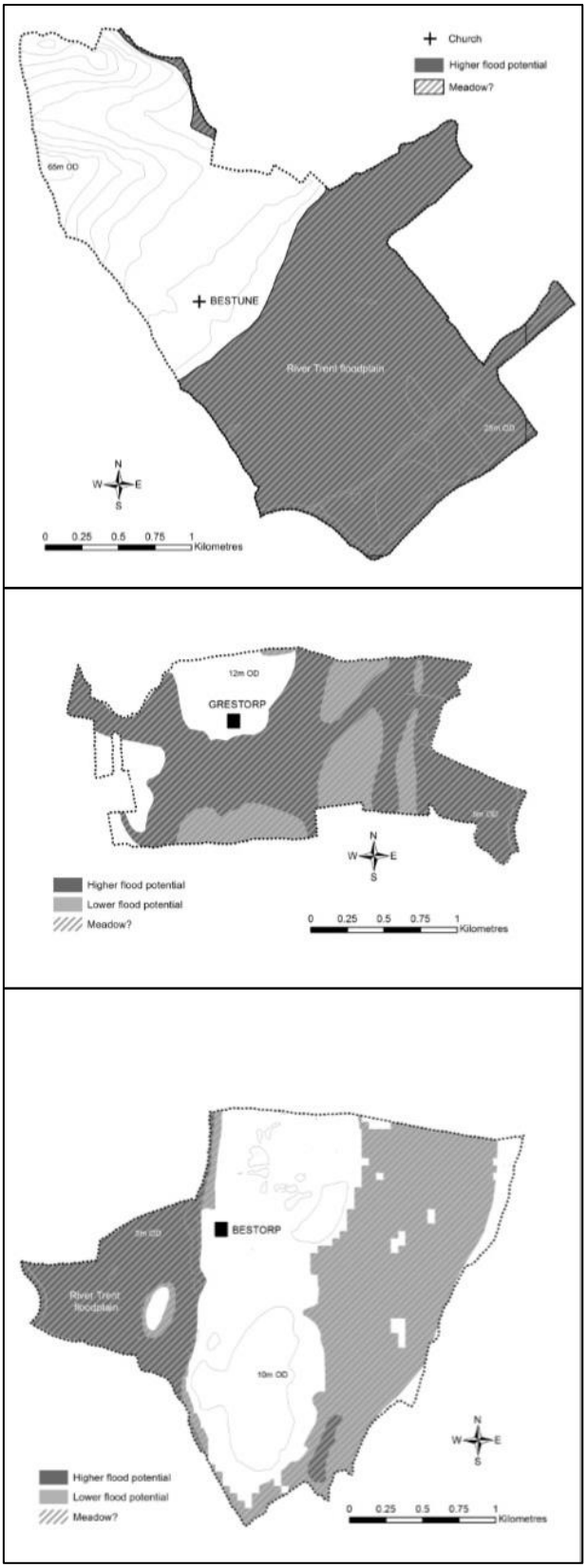

Fig. 4: The extent of possible meadow in Beeston, Grassthorpe, and Besthorpe (Nottinghamshire)

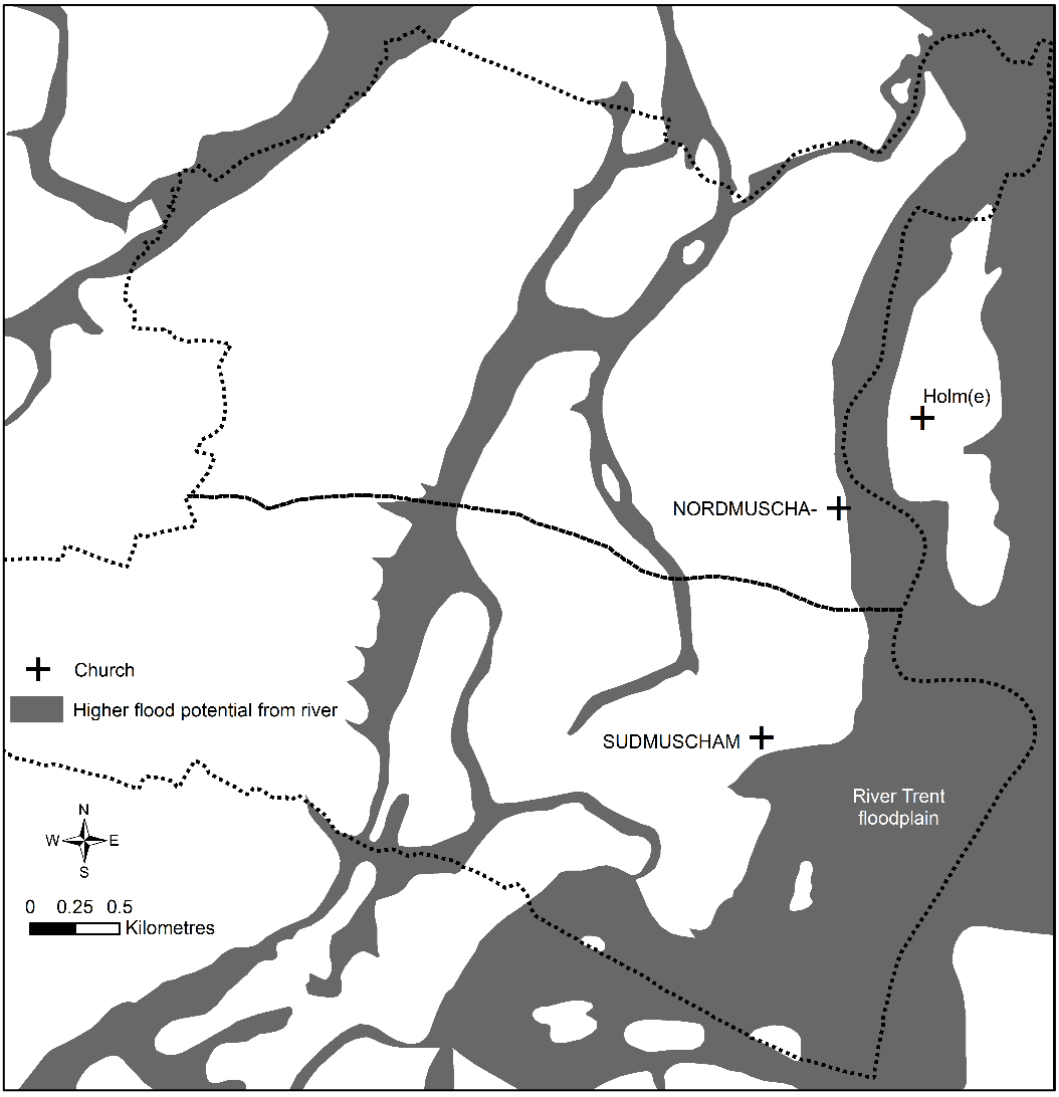

Fig. 5: The Muskhams (Nottinghamshire): a *hamm* estate hemmed in by water or marsh?

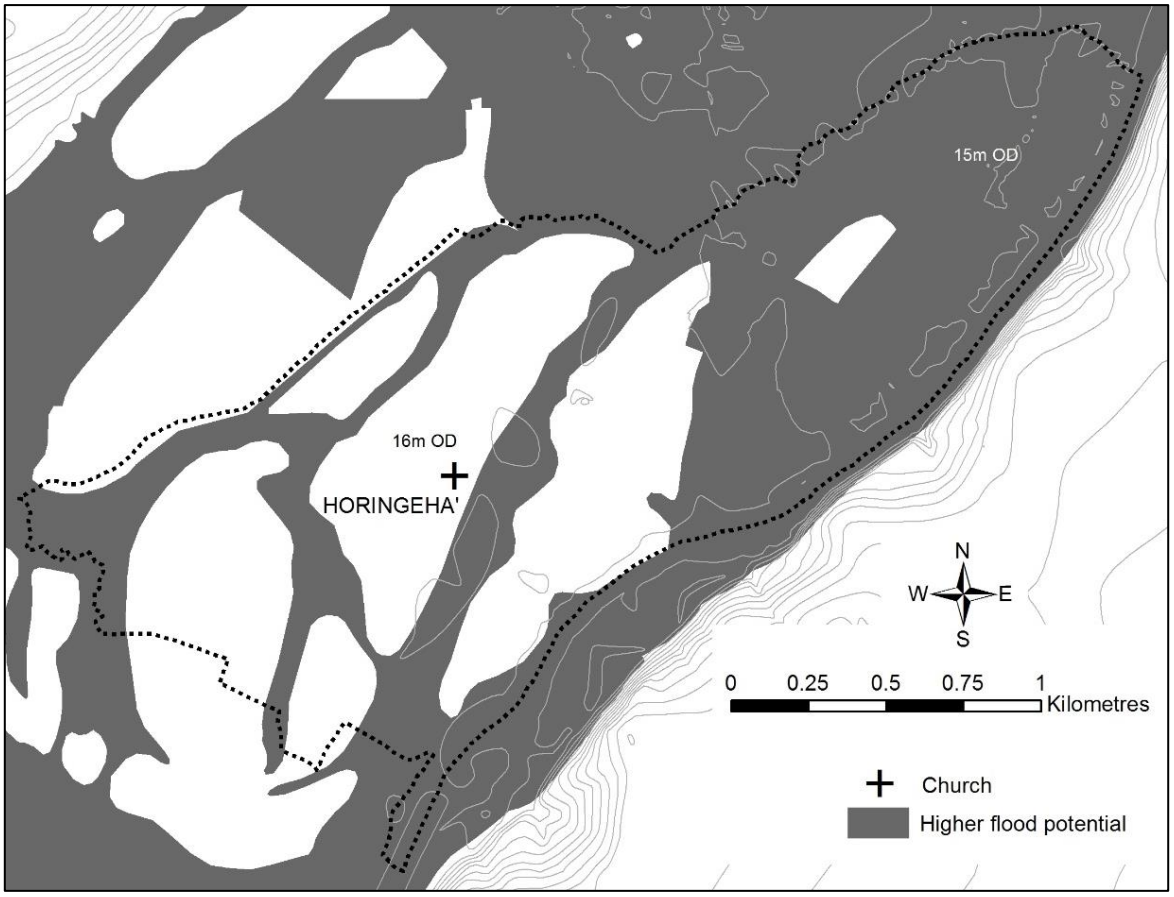

Fig. 6: Hoveringham (Nottinghamshire): a *hamm*-name?

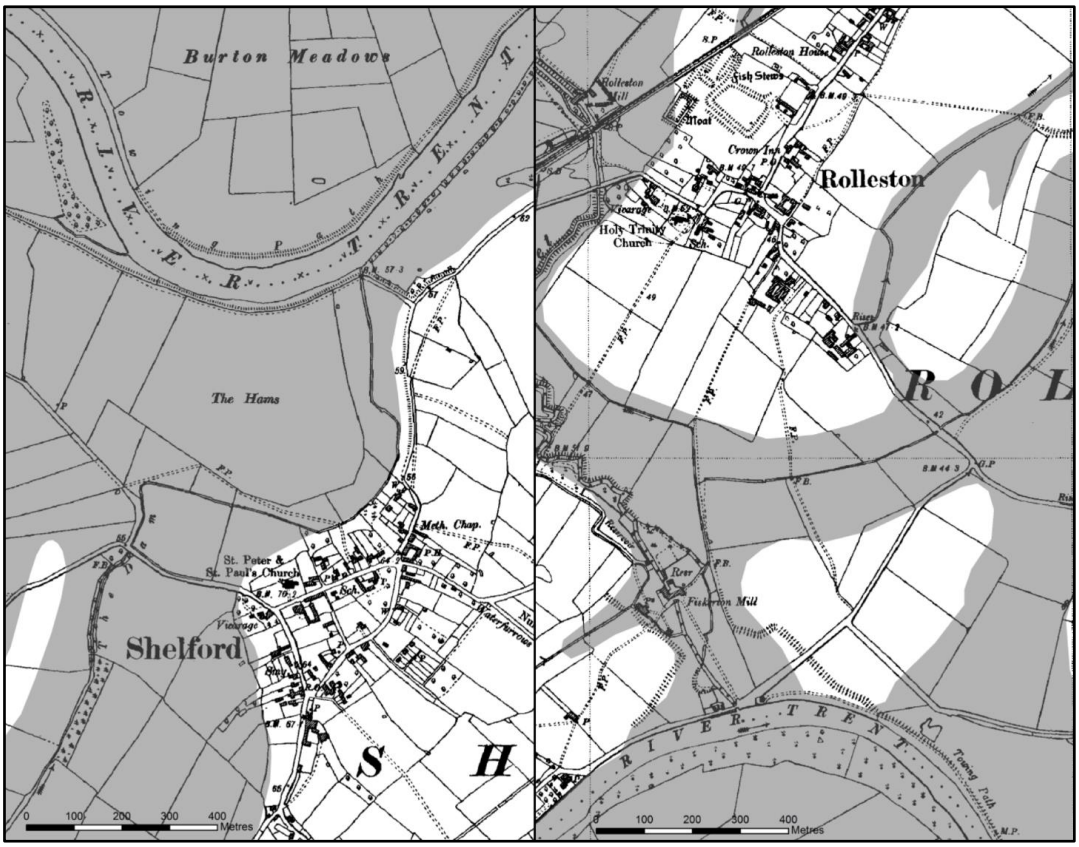

Fig. 7: The spatial relationship between pre-Conquest churches and the Trent floodplain

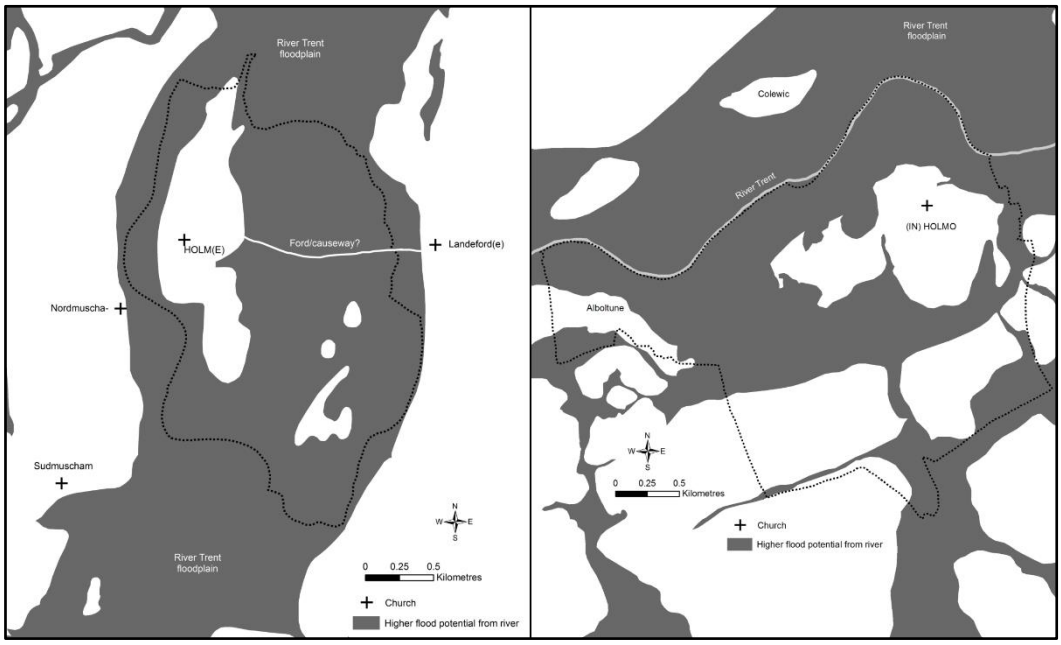

Fig. 8: *holmr*s ‘land hemmed in by water or marsh’ revealed: Holme and Holme Pierrepont (Nottinghamshire)

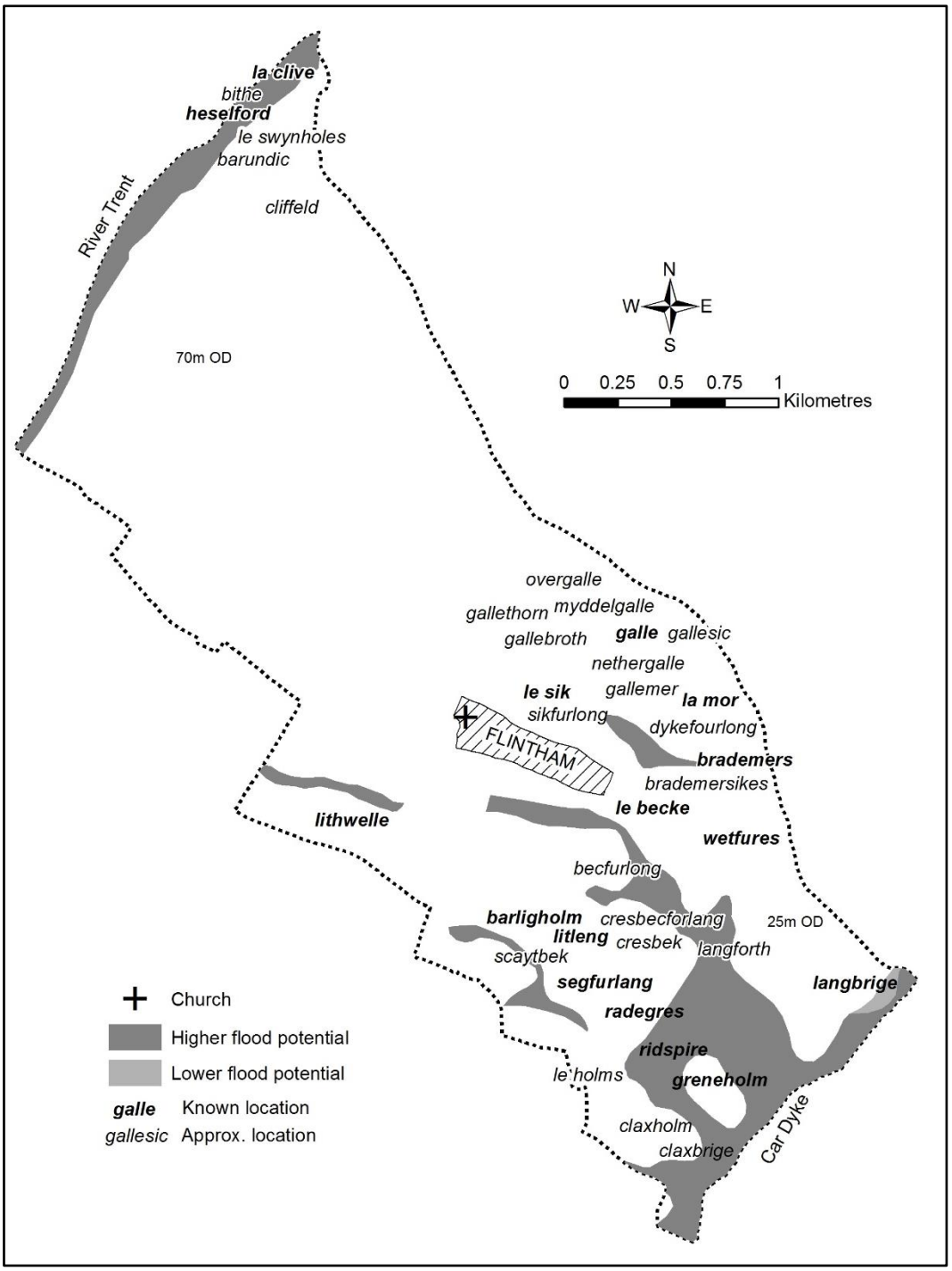

Fig. 9: Field-names indicating wet ground in Flintham (Nottinghamshire)

Fig. 10: The Flintham landscape. Left, the subtle topography of a *holm* in the vicinity of *greneholm* and *claxholm* in the south of the parish. Right, the flood-prone Trent-side meadow in the north-east of the parish.

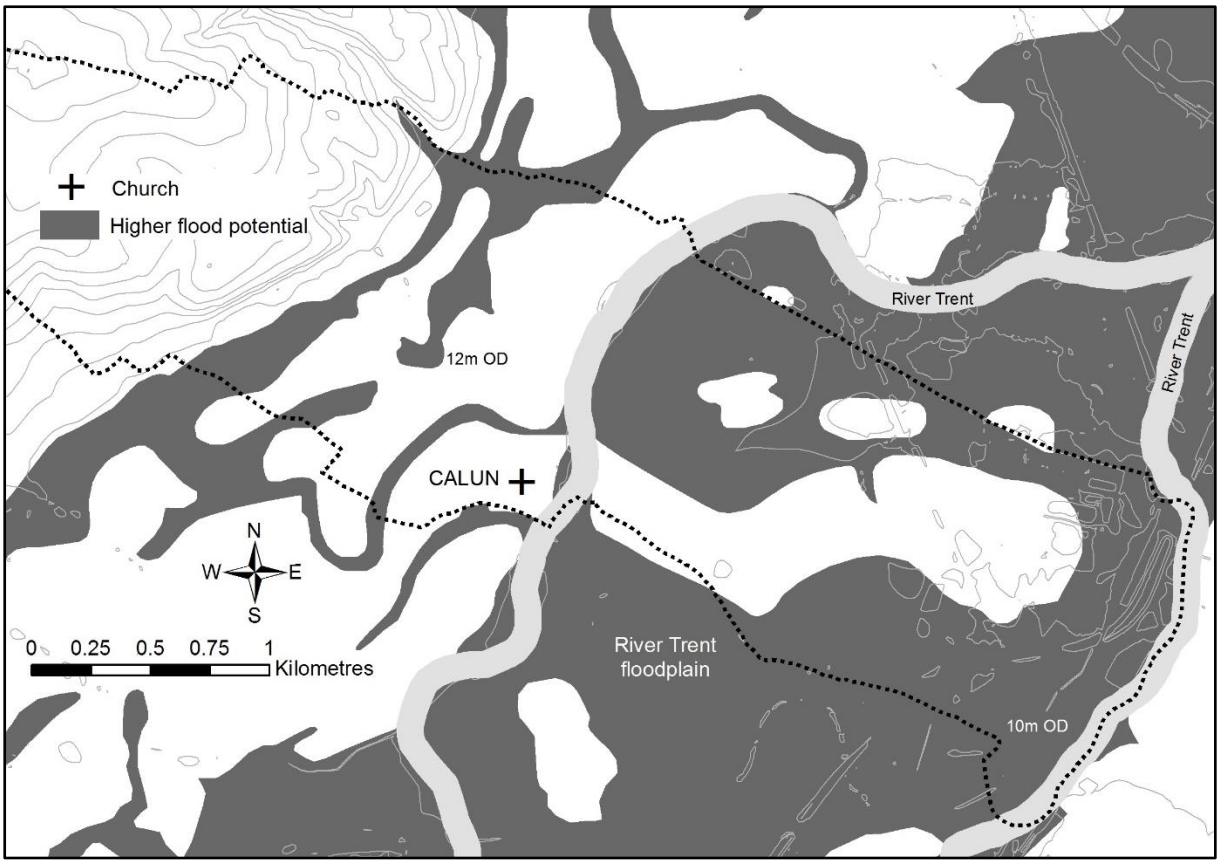

Fig. 11: The dominance of water within the parish of Kelham (Nottinghamshire). The 'ridges' or 'keels' alluded to in the name may be the gravel terraces within the floodplain on which the settlement sits, the smaller of which resemble upturned boats.

Fig. 12: Left, herringbone masonry at Averham church (Nottinghamshire). Recent dendrochronological dating indicates a construction date *c.* 1000AD. Right, view over Trent floodplain towards Flash Farm and Frog Abbey Wood, Averham.