

THE LEICESTERSHIRE LIN: A RIVER THROUGH TIME

Ernest Miller and Anthony Squires

The River Lin rises at Ulverscroft in the uplands of Charnwood Forest and follows a U-shaped course before emptying into the River Soar at Quorn (Quorndon). This distance is only a little over 17km and nowhere could the Lin be regarded as more than a modest brook. The purpose of this paper is to examine the many different ways the river has been harnessed to serve the needs and demands of generations of local people through almost a thousand years. In addition the writers hope that their researches and fieldwork may point the way to other local studies along similar lines.

INTRODUCTION

Along its natural course the river seldom encounters a feature which interrupts its slow, steady and even sluggish flow. Only in Bradgate Park and at a few other places does the surface break into ripples and the speed quicken (Fig. 1).

At different places along its length the Lin is known by at least four local names. These vary according to whom one speaks and which maps are used. For present purposes, from its source to Ulverscroft mill it is the Ulverscroft brook. From there to the dam of Cropston Reservoir it is the River Lin. Thereafter, as far as the dam of Swithland Reservoir it is the Bybrook and on the final leg of its journey to the Soar it is the Buddon brook. Although we employ these names the term 'River Lin' recognises the water course in its entirety.

In the cause of brevity, we have confined ourselves to dealing with only the historical and archaeological sites and features and have excluded any consideration of such factors as water temperature, clarity and pollution. Also, we have reluctantly avoided any consideration of the rich flora and fauna we have observed: a point which is taken up briefly in the postscript.

FROM SOURCE TO ULVERSCROFT MILL

Origins of the Lin

At the head of the Ulverscroft valley several small streams and ditches come together to form three separate channels (Fig. 2). These converge at a point (SK 495132) 163m above sea level which can be considered as the source of the River Lin (2a). Until it reaches Ulverscroft mill it is known locally as the Ulverscroft brook (Woodward, S. 2000).

The first of these channels (2b) can be traced to the west side of the valley where it connects to an ancient ditch known as the Conduit. This at one time drained the high ground to the west which today is partly covered by Poultony Wood.

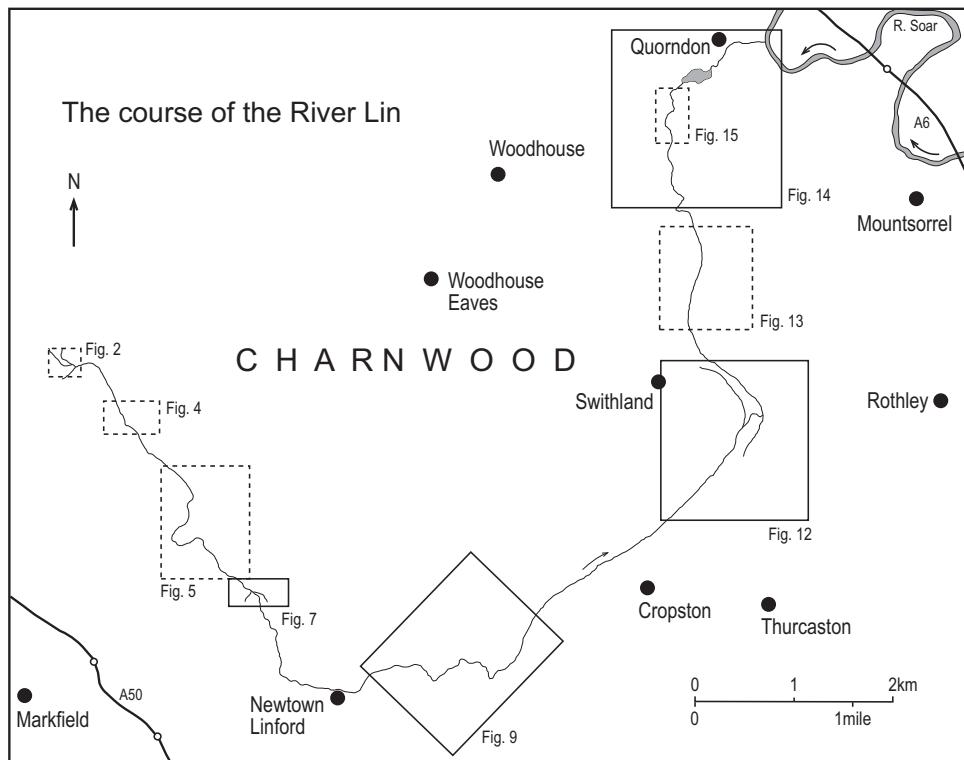


Fig. 1. The course of the River Lin.

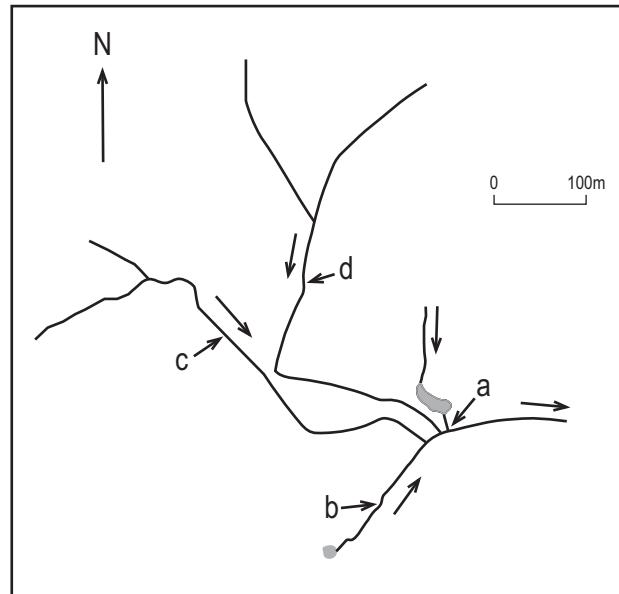


Fig. 2. The origins of the Lin.



Fig. 3a. Channel, stone lined and fitted with a metal grill.



Fig. 3b. Channel lined with forest stone.

A modern adaptation of the conduit leads across fields called Conduit Lees to the Ulverscroft brook at (2b). The other two main channels, (2c) and (2d), lead from the head of the valley and are more substantial. Each has been excavated at an unknown date along part of its length to the depth of 1.3m and a width of 0.95m. The banks of both sections have been lined with Charnwood Forest stone (Fig. 3a and Fig. 3b). In addition one of the channels has been fitted with a metal grill (Fig. 3a). The metal work and the bricks in the bed of the stream would indicate a late nineteenth or early twentieth century date. Suggested uses for this curious structure include sheep wash, fish trap and crayfish trap. The land between the two channels is simply called 'the Pingle', 'a small piece of land' (Field 1972, 168); other local field names are equally unhelpful. The true purpose of what represented a considerable expenditure in terms of time and labour remains a mystery. However, our best suggestion is some form of eel trap.

Lord Stamford's pond

At a point some 300m down stream from the source of the Lin and concealed in the wooded valley are considerable earthworks that occupy both sides of the stream. These are difficult to understand but they may have once formed a dam. In the same wet woodland and some 100m further down the valley is a channel approximately 50m long, 3m wide and of unknown depth. It runs north/south and parallels the brook which is to the west. Freshwater from the brook is diverted into it via a pipe and leaves by a conduit which empties into the large pond down

stream. The purpose of this linear water feature is unknown but may have been a place where fish were bred for release into the pond.

George Harry Grey, 7th Earl of Stamford and Warrington, purchased the Ulverscroft estate for £37,000 in 1847. In 1861 he created a substantial body of water for sporting purposes (Fig. 4). This, 'Lord Stamford's Pond' (SK 499128) (4a), is sited to the north-west of the Priory ruins. Water from the brook and the linear feature still supply the pond, the surface area of which has increased in recent years. At the same time at no point does the depth exceed 2m.

The choice of this site is of considerable interest since it would appear there are many other suitable places which might have been considered. Bell's map of the manor of Ulverscroft 1796 (Bell 1796) names a small close immediately below the present dam as 'mill close'. Again, a charter of 1274 records that William Lord Ferrers of Groby granted to Ulverscroft Priory, founded before 1153 (VCH Leics. II, 19–20), 'five acres of land lying next to the close of the watermill of the said lord lying towards Bastard Leys' (Nichols 1804, 1086). It would appear that Lord Stamford created his pond by enlarging the dam (4b) holding back the water which supplied the then long-defunct Priory mill. Today few visible traces of the mill (4c) remain since the site is under water. It is interesting to note that the construction of the conduit (4d), mentioned above (Fig. 2b) as one of the three channels at the origin of the Lin, once carried water along the entire perimeter of the present Poultney Wood and was engineered to carry water to the Priory's mill pond. The Conduit is referred to in a list of field names of 1553 and must therefore have been medieval in origin (ROLLR DE 311/33/2).

Ulverscroft Priory

Ulverscroft (SK501127) (Fig. 4), an Augustinian house, was founded as noted, in the mid twelfth century, probably by Robert le Bossu (1104–16), 2nd Earl of Leicester. The number of canons at any one time was small and between three and 10. In 1536, when it was at first spared dissolution, in addition to the prior, there were eight canons and a corrodinary, 20 yeoman servants, 14 children for the chapel and three women for the dairy.

Aston (2000, 24) has suggested, not unreasonably, that the prime consideration when choosing and laying out a monastic site was an ample supply of water from a well or wells for drinking and from a stream for cleansing. At Ulverscroft the latter, at first glance, should be the adjacent brook, but this was not the case. Apart from the mill, mentioned above, no part of the monastic site drew its water from this source. This is because the buildings occupy a position some 10m above the flow of water which is to the west. They are skilfully positioned on one of the very few patches of glacial gravel in a valley of otherwise cold and wet soils. Under these circumstances, a normal arrangement would be to dig a channel to lead water from a point further upstream; but no such channel has been found.

The water supply for Ulverscroft Priory is therefore derived from different sources. The prime one appears to be springs to the north east of the priory where

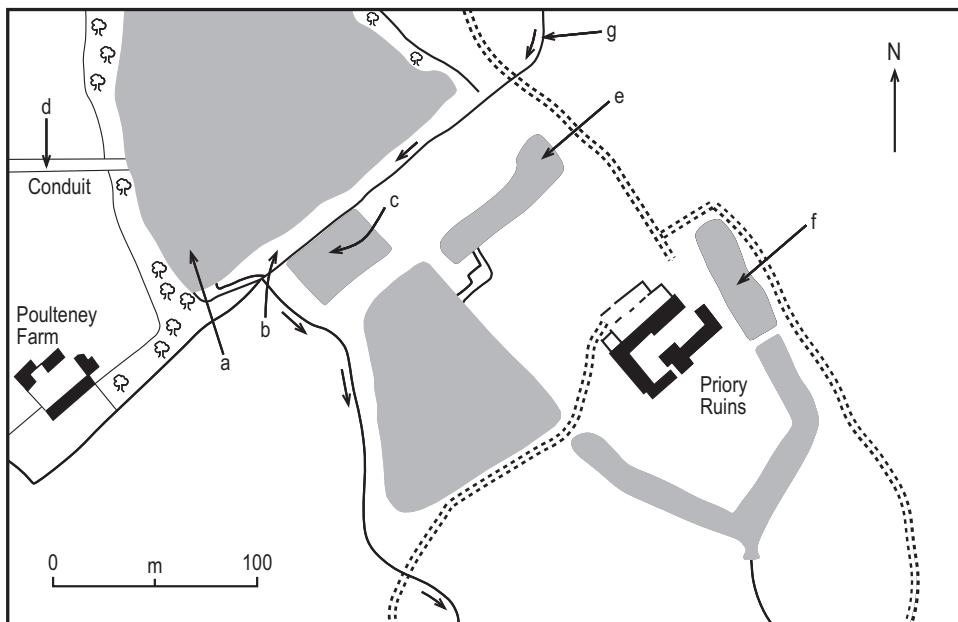


Fig. 4. Ulverscroft Priory and Lord Stamford's pond.

water issues and drains from the outcrops of the soils of the pre-Cambrian rocks of the Black Hill/Green Hill area. The flow of water is effectively blocked where it meets a belt of clay. Thereafter it drains along the line of what appears to be an elongated field boundary ditch running north east to south west. The supposed ditch is in fact, a leat, which has been engineered to lead water to the north-east corner of the priory site (4g). Here there is a sluice governing two outflows: one leading to the former priory fishponds (4e), the other to the priory moat (4f).

Several major considerations now arise. First the flow along the leat becomes a torrent in winter but declines to a mere trickle in summer. Second it is difficult to determine how the water was led from the sluice (4g) to former buildings which stood on the flat ground on the south east side of the present ruins. These included the garderobes which required cleansing throughout the year. Finally, the water-filled U-shaped moat would appear to block the flow from the drains which carried the waste away, presumably to the Ulverscroft brook at a point further down the valley. No well sites have been located. The writers wonder if the provision of an adequate water supply, as much as religious and political considerations, was a factor limiting the growth of the priory. Research on the matter continues.

Priory Lane to Polly Botts Lane

Some 460m south of the priory the brook flows under Priory Lane (SK503123) (Fig. 5a), and into a meadow marked on Bell's map as Nowel Meadow (5b). Its

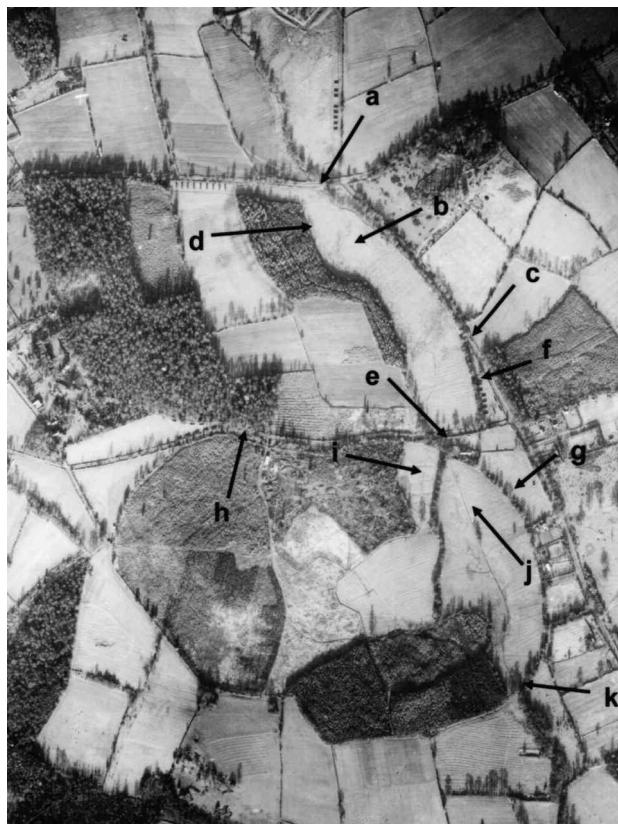


Fig. 5. Priory Lane to Polly Botts Lane. North is at the top of the view.
(RAF air photograph 541/221 sheet 4113 8 December 1948. Reproduced with the permission of the Record Office for Leicestershire, Leicester and Rutland.)

natural line here is first across the meadow from the north east to Nowel Spring Wood, then along the eastern edge of the wood (5d) and south to cross Polly Botts Lane at the lowest point of the valley (5e) (SK 505118).

However, this natural line has been abandoned and the flow now follows a new cut which begins immediately after (5a). This clings to the western side of Ulverscroft Lane for about 400m after which it moves south westwards (5c) from the lane and follows the 150-m contour to approach Polly Botts Lane. Here it turns a right angle and flows down hill to the west to join the natural line of the brook (5e).

The purpose of the new cut was to transform part of Nowel Spring Meadow into a water meadow. In its simplest form this involves deliberately flooding – also known as floating – under controlled conditions an area of low lying land which naturally drained to a stream. Water was delivered by a specially cut channel, ‘the carrier’, to the top of the slope. From here it ran down hill by way of specially

constructed ridges which at first sight look like ridge and furrow. These are known as the 'bedworks'. Along the top of each ridge was a channel into which water flowed from the carrier. Eventually the water overflowed, covering the ridges and running down to the base of the furrows. Here drains returned the water to the brook at the bottom. The whole procedure was carefully controlled by a man operating one or more sluices.

The principle behind such a scheme, which was often costly to set up and operate, was that in late winter the slowly moving water protected the grass from frost. At the same time it deposited a layer of silt which added nutrients to the soil. Since grass will grow at temperatures above 5°C, a crop in early spring afforded grazing animals an important 'early bite' which they would otherwise lack. In this way more animals could be brought through the winter and the fattening season extended. Such water meadows are known from few sites within Leicestershire. The man best known for such agricultural improvements was Robert Bakewell (1725–95) from Dishley near Loughborough as one element in his pioneering programme of agriculture improvement. However, we have no evidence that Bakewell had any hand in this development on Charnwood Forest. It is more likely that the floating at Nowel Meadow was the work of George Harry Grey the 6th Earl of Stamford (1765–84). The meadow has certainly not been floated in living memory and may have been in operation for only a short time after its creation.

The Ulverscroft Lane watercress bed

Shortly after the brook begins to follow the 150-m contour and leaves the side of the Ulverscroft Lane (Fig. 5c) it skirts the western edge of a small flat water-covered area (SK458119) (Fig. 6). This is rectangular in shape and some 5m long and 2m wide. It is constructed of local stone and has raised sides with a stone outlet (weir) which maintains the water at a depth of 5cm. It is supplied by a reliable spring which issues forth at a temperature of 11.4°C which is more or less constant throughout the year. At this point several small channels run beneath Ulverscroft Lane and any one of these may carry spring water from higher up the valley.

The structure has been identified as a watercress bed and probably dates from the late nineteenth or early twentieth century. The commercial cultivation of watercress was introduced into England in the early nineteenth century and enjoyed early success. The crop requires clear, clean, free-flowing water, preferably from a spring with a temperature of at least 10°C. One problem of producing watercress is the possible contamination by liver fluke in water from pastures grazed by sheep and the onward transmission to humans on the leaves of the plant. However, the spring water flowing directly from the hillside at Ulverscroft ensures this does not take place. Although the bed is in poor condition and has not been used for many years, it fulfils all the requirements for successful cultivation. It was last used by the tenant farmer at Ulverscroft Priory during the twentieth century.



Fig. 6. The watercress bed on Ulverscroft Lane.

Lea Field

The brook passes under Polly Botts Lane via several large pipes set in a concrete bridge constructed in the 1930s (Fig. 5e). Thereafter, it flows southwards into a large enclosure which it divides into two unequal parts. This is the feature known as Lea Field which occupies some 106 acres and was an early enclosure from Charnwood Forest. It is surrounded by a fine assart bank and was first mentioned in 1287 when it was described as 'a piece of meadow called Ley Field worth 40 shillings yearly' and was surrounded by 'waste' (Crocker 1981, 96). The bank is still extant, in particular behind the properties on Ulverscroft Lane (SK 458116) (5g) and alongside Polly Botts Lane (5h). Today, much of the area west of the brook and within the assart is occupied by woodland known appropriately as Lea Wood.

Within approximately 50m of the northern boundary fence along Polly Botts Lane and on the western side of the brook is a moated site (SK505116) (5i). This measures approximately 50 × 100m and shows several subdivisions. Although no longer retaining water, it is clear that the brook fed at least some of the complex of

channels which were first mapped by the Groby Archaeological Society in 1988. There is no evidence of buildings within the moat but it is typical of many thirteenth-century moats established for the use of park keepers or, in this case, those employed to manage the husbandry within an assart which was probably held in demesne.

Within the Lea enclosure the original course of the brook was again (Fig. 5e) interrupted when a new cut was constructed. At the point of entry to the enclosure a sluice (SK 456117) diverted the water flow along this artificial channel (5j) which rejoins the main brook at a point on the southern boundary of the enclosure (5k). The purpose was to flood part of the meadow. This was achieved by closing the sluice so that the flow was diverted along the channel. The water backed up and eventually overflowed down the slope to rejoin the brook at the bottom. In this meadow there is no evidence of the kind of bedworks found in Nowel Meadow nor drains to direct the flow of water. The writers have calculated that this diversion of flow would have flooded all the meadow between the brook and the new cut, over an area of approximately 2.5 hectares. The surviving brickwork of the sluice suggests a nineteenth century date and this scheme may have been contemporary with that in Nowel Meadow.

To the east of the new cut the ground rises and here, away from any possible flood, natural or contrived, is an extensive area of ridge and furrow which indicates another use to which the land of the assart has been put.

Barne Leys moated site

One hundred metres downstream of the Lea enclosure and still in Ulverscroft parish, the brook serves another moated site (SK 508111), which on Bell's map of 1796 is referred to as 'Barne Leys'. This isolated feature, approximately 50 by 70m clearly cuts through an area of ridge and furrow. The remaining earthworks of the other three sides of the moat are to the west of the brook which flows from north to south along the eastern channel. The site has been recorded by Hartley but has not been investigated (Hartley 1989, 25). It is possible it never contained buildings; its function is unknown.

The Ulverscroft Mill

A little further downstream from Barne Leys is Ulverscroft Mill, situated in the parish of Ulverscroft but partly enclosed by the boundary of neighbouring Newtown Linford parish (Fig. 7). The mill ceased operating in the 1940s and even at that time it was working only one day a week. By the late twentieth century the building was in a poor state of repair (Fig. 8). In recent years the roof has been replaced and, although still without windows and doors, the process of decay has been slowed.

Behind the mill building there is a mill pond, now dry (Fig. 7b), which has a direct connection to the brook. Adjacent to the pond are two brick pillars (Fig. 7d), one each side of the stream and built into each of these is a channel,

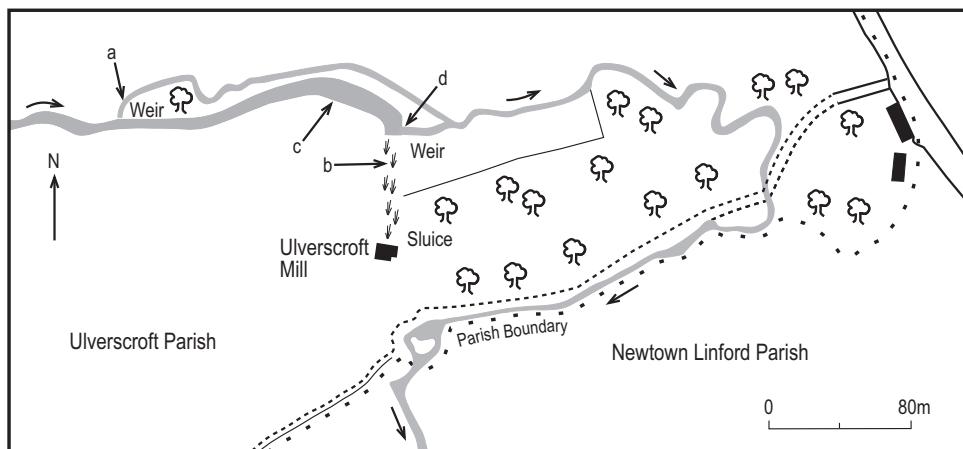


Fig. 7. Ulverscroft Mill.



Fig. 8. Ulverscroft Mill 2004.

approximately one brick deep. This arrangement allowed large baulks of timber to be slotted in, to dam the flow. The depth of the water could be adjusted by the use of more or less timber. Beneath this dam, the bed of the brook has been lined with brick to prevent scouring when the water overflowed. The water level rose behind the dam and backed up along the brook (7c), thus filling the mill pond. Both sides

of the main course of the brook have been embanked, allowing an increased volume of water for the mill. At the end of the embanked section of the brook an overflow channel (7a) was cut and fitted with a weir. This ensured that, however strong the stream's flow, any possibility of flooding and damage to the mill was prevented.

In the area between the Priory Mill and the Ulverscroft Mill several small watercourses join the brook, augmenting the flow and allowing the milling to take place as frequently as possible. From work carried out by the Civil Engineering department of Loughborough University it was calculated that the mill pond held approximately 660 cu metres of water and could be filled in 1 to 2 hours. The overshot wheel, which was some 3.05m in diameter and 1.3m wide, was capable of developing 3KW of energy, more than enough for milling to take place (Bahaire 2000).

Mid-sixteenth century field names such as 'Mill Hill' and 'The Dams' indicate that the mill was present at the close of the middle ages (ROLLR DE 311/33/2). It is interesting to speculate whether the monks of Ulverscroft abandoned the mill near the priory, noted above (Fig. 4c), and re-established milling at this location. Unfortunately, documentary support for this idea is absent.

ULVERSCROFT MILL TO CROPSTON RESERVOIR

From Ulverscroft Mill the stream, now known as the River Lin, flows southwards to the village of Newtown Linford – 'the new hamlet by the ford where the lime-trees grow' (Cox 1971, 387). This originated as an outlier in the waste of Groby manor and is first heard of in 1288 as paying rents derived from the results of assarting. It is contemporary with Lea Field, just described, and other similar ventures in reclaiming the waste of Charnwood (Crocker 1981, 40–4).

Newtown Linford shows clear signs of a planned village. The basic pattern is readily discernible today but exactly when it was laid out is less clear. It was either the work of the Ferrers, lords of Groby, in the thirteenth century or that of Thomas Grey (1451–1501), first marquess of Dorset, in *c.* 1490 when he enlarged his park of Bradgate (Squires and Humphrey 1986, 90–105). Consideration of the topographical detail of the village need not concern us here and it is sufficient to say that the site of the venture was as good a choice for settlement as pioneers were likely to find in the inhospitable environment of thirteenth-century Charnwood Forest. The Lin, which crosses the present road at SK 521098, then, as now, provided a reliable supply of water all year round.

Bradgate Park

Beyond the church at Newtown the Lin flows into Bradgate Park where it has been adapted to the use of generations of the Grey family, the park's lordly owners (Fig. 9). For the first few hundred yards in the park the stream feeds a series of four irregularly shaped ponds (9a), the largest of which is approximately 80m in length and 30m wide. These ponds are not marked on Kiddiar's detailed map of the park

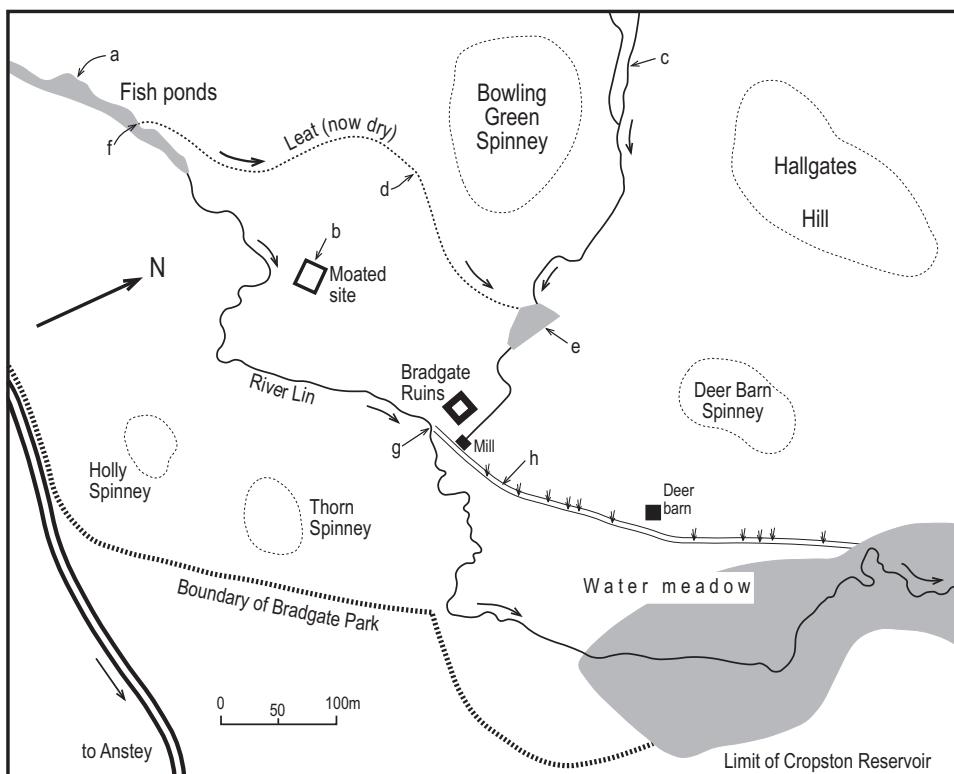


Fig. 9. The Lin through Bradgate Park.

1746 (Envile Hall Archives) and they are also absent from that of 1774 (ROLLR DG20/19a/42/1).

However, in 1833 a sum of £50 18s. 0d. was paid for the making of five fish weirs in the park (Envile Hall Archives). These are shown on a map of 1859 (ROLLR DG20/19a/42/3). It marks the pools which had been created and there is no doubt they were intended as fish ponds. Later, when the 7th Earl of Stamford sold part of Bradgate Park for the construction of Cropston Reservoir (opened 1870), these pools were adapted to function as silt traps. Their efficiency in catching material washed down in times of flood by the Lin has been such that, when the reservoir was drained in 1988, features of the former landscape, almost free of mud, could be clearly seen. These included the bank and ditch of the ancient park pale and the winding former course of the Lin.

The park at Bradgate is first heard of in 1241 when it was in the hands of the Ferrers (Hastings MSS I, 23). Later Thomas Grey of Groby (1451–1501) inherited the manor and massively expanded the park, as already noted. The banks and ditches of the moated site of the lodge of generations of the early park keepers still form a prominent landmark (Fig. 9b). The moat (SK 531311) is rectangular and measures approximately 50m by 45m. It was fed by a leat leading from the Lin, the



Fig. 10. The leat from the River Lin to Bradgate House.

origin of which is still evident today. In wet weather the moat still carries water but this is now derived from drainage from the surrounding slopes.

The marquess built himself a truly magnificent mansion (now a ruin), in keeping with what had been a very rapid rise to wealth and status (Squires 2002, 18–21) (Fig. 11). The house (11c) and formal gardens (11d) were sited on a purpose-built platform some 10m above, but close to the Lin (11f). Drinking water was obtained from rivulets supplied by springs on the northern slopes (Fig. 9c) and not from the river. However, for the smooth functioning of a house of such advanced design a very considerable supply of water from the river was required. This was achieved by leading water along a skilfully engineered open conduit (Figs. 9d, 10 and 11a) a little over 800m long which delivered the flow to a large pond (Figs. 9e and 11b) to the north of the house. In order to produce the necessary head of water to feed this leat, a dam across the Lin was constructed. This was sited at the second fish pond/silt trap (9f) near a prominent granite outcrop known locally as the 'Wishing Stone'. It must be pointed out that there is no documentary record of any description which refers to this supposed dam or the considerable lake that must have been formed behind it. However, if water from the Lin was led from another place we have found no evidence to suggest where this may have been.

The importance of a good water supply to a large Tudor house and the feat of engineering involved at Bradgate should not be understated. During his visit here in 1539, John Leyland was moved to make particular mention of this 'good and

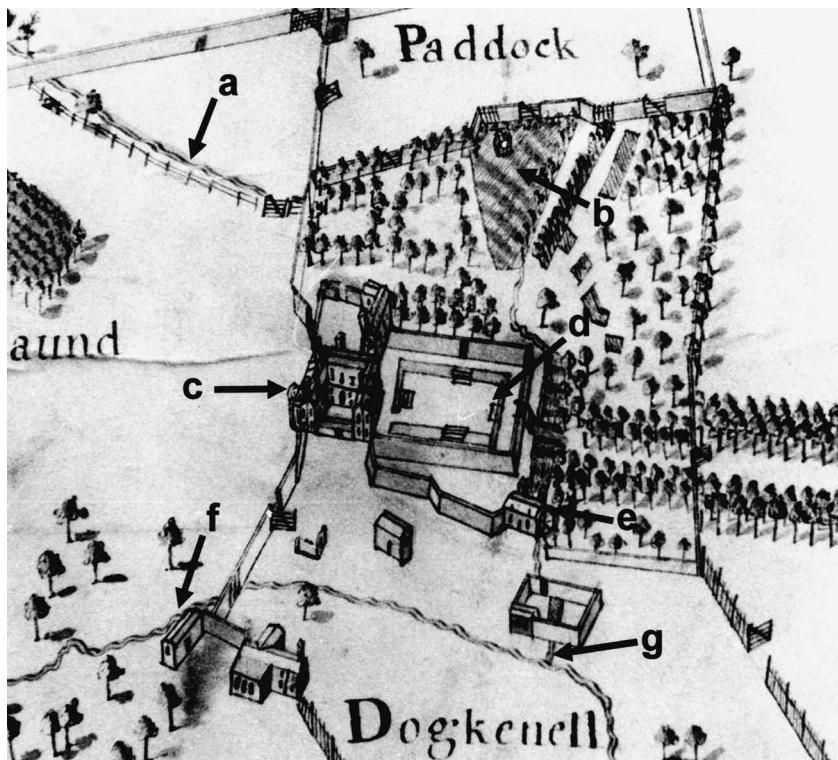


Fig. 11. The Mill at Bradgate House.

vigorous water supply [which] has been channelled through the lodge [mansion] by master brook (seemingly against the gradient) to run a mill nearby' (Chandler 1995, 280). Bradgate was built on a new site and did not involve the re-modelling of an ancient pile, as was the case with the construction of the majority of Tudor houses (Howard 1987, 17). Further, it was unconnected with a monastic site where generations of monks may have been responsible for moving water around, as we have seen at Ulverscroft. In addition, seldom do surviving building accounts for Tudor houses mention any more than 'trenching' by labourers in connection with water supply. Clearly, the water works at Bradgate must be considered outstanding for their time.

The mill referred to by Leyland was located east of the formal gardens (Fig. 11e). It appears to have an undershot wheel which was operated when water was released from the pond (11b). This could have taken place for only for a few hours at a time and at infrequent intervals judging the maximum capacity of the pond. Doubtless the production of the mill met the needs of the noble household; villagers were required to take their corn to be ground at the same lord's other mill at Ulverscroft. A short tail race returned water from the mill back to the Lin (11g). The first named miller is known from 1540 and the final lease expired in 1784 (Envile Hall Archives).

From the site of the supposed dam and downstream to a point directly south of the ruins the river makes a sharp turn to the south (9g). Here is the site of the former sluice which once diverted the flow of the Lin eastwards along a broad leat. The purpose was to operate the two parts of a floating meadow which were probably the work of the 7th Earl of Stamford (1765–1845). Kiddiar's map does not show them but they appear on the map of 1859 which regrettably lacks a reference book (ROLLR DG20/ma/42/3). This leat, or carrier, ran from the sluice for approximately 420m. When it was full the water ran down the slope to rejoin the river. Here there were no ridged bedworks as were noted at Nowel Meadow; water ran down the slope in a continuous trickle. To facilitate this, rocks and anthills were removed, hollows filled, bracken grubbed up and the gradient refined to ensure the slow and even flow of water.

Records for the construction and operation of the meadow begin in 1821 when a little over £104 was paid out. Expenditure of a like nature continued on a regular basis for the following 17 years, resulting in a total of £888 14s. 11d. Of this, £493 was accounted for in the years 1836 and 1837 alone; this total may indicate the construction of an extension to the area already being floated (Envile Hall Archives).

Since the mansion was a ruin by the early eighteenth century and there were no stables present when the floating was in operation, the contribution to the fertility of the meadow must have been derived mostly if not entirely from the silt content of the water. Whether or not the productivity of the meadow at Bradgate met expectations is unknown; but Stamford's bold venture like that of his father (the 6th Earl) at Nowel Meadow can be regarded as typical of those landowners wishing to augment supplies of forage. At Bradgate this meant providing fodder to help the deer and domestic stock which was grazed under licence, through the winter months.

Any thoughts Lord Stamford may have had of continuing or more likely reviving the operation of the meadows were abandoned when he agreed to the construction of Cropston Reservoir. This huge project of its time involved the construction of a dam 700m long which gave rise to a lake with a surface area of some 106 hectares, a capacity of 2,200 million litres, and a maximum depth of 12m. The purpose was to pump water to Leicester which in the mid-nineteenth century had a shocking record of disease and early mortality. The water behind the dam rose to cover part of the floating meadow and also some of the houses of the villagers of Bradgate which relied on the Lin for their water supply. This settlement had been depopulated by Thomas Grey when he expanded the park almost four centuries earlier. In passing, one may note a number of aspects of the legacy of the damming of the Lin and the formation of the Reservoir. First, there remain today the waterworks which were built in high Victorian splendour with little regard for cost. Second has been the (incidental) creation of a wildlife area, now a Site of Special Scientific Interest. This, linked to the great enhancement of the aesthetics of the area, has brought much pleasure to the very many visitors to the park over the years.

CROPSTON RESERVOIR TO SWITHLAND RESERVOIR

The Lin issues from the waterworks of Cropston Reservoir (SK 553114) as the Bybrook and reaches the tail end of Swithland Reservoir after only about 2km (Fig. 12). Air photographs and field survey indicate that it originally ran along the valley bottom (12b and 12c) and through the woodland at (12d). It continued under the later embanked South Drive until reaching the corner of the field (12e).

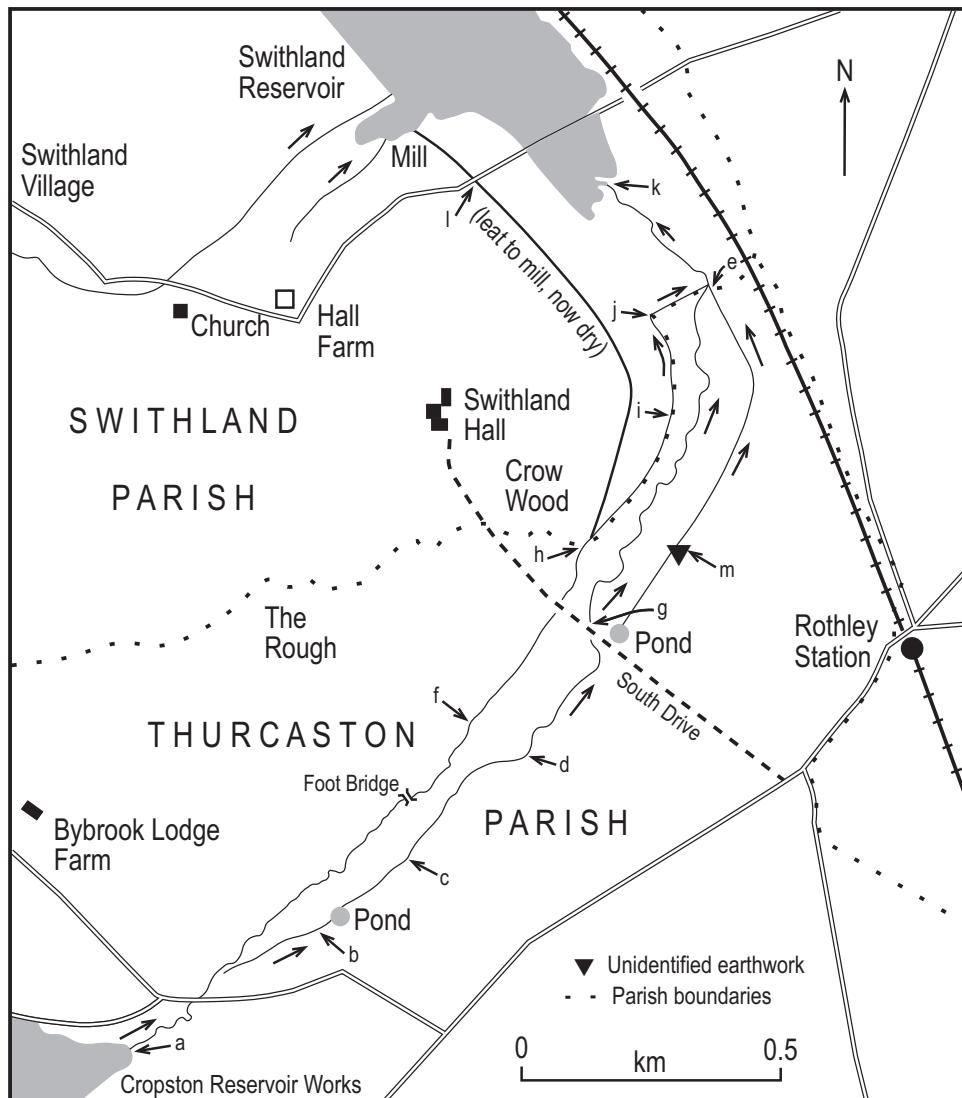


Fig. 12. Cropston Reservoir to Swithland Reservoir.

However, this natural course has been abandoned and has been replaced by a new cut. This begins at (12a) and runs along to (12f) and (12h), in effect almost parallel to the old course. It proceeds along past (12i) to (12j) where it makes a right angle turn to the east, to join the abandoned course (12e). It reaches the tail of Swithland Reservoir at about (12k). A further modification begins at (12h) where a man made channel leads north and west, almost following the 60m contour but gently dropping en route to (12l). Here it is found to be crossed by the modern road and it reaches the mill pond of Swithland Mill. Clearly this channel was designed for the benefit of the mill and the flow along it was regulated by a sluice at or about (12h).

The purpose of the right angled bend at (12j), which appears to be unnecessary in purely topographical terms, remains a mystery, but it is curious that the parish boundary follows the line of this new cut from (12h) to (12e).

The entire length of the new cut, i.e. from (12a) to (12l) and from (12a) to (12e) was made primarily to supply water to Swithland Mill (SK 559132). However, from (12a) to the footbridge the cut is noticeably wider, deeper and straighter than the course downstream, which over time has developed meanders. This modification as far as the footbridge was probably the work of the water board engineers who built Cropston Reservoir and who sought to improve the flow away from the dam.

There is some documentary evidence to suggest when the new cut may have been made. A partition of the manor of Swithland in 1424 (ROLLR 5D33/172) mentions a 'mill dam' and contemporary and later field names identify this as the site of the present but now defunct Swithland mill. The same document also mentions a close called Wharley's Red meadow, i.e. 'reedy meadow', at 'le Oldbroke next Bybroke' as probably that field extending between (12g) and (12e). If the term 'by' means 'two' 'near' or 'at the side of' the [old] brook, the cut and the mill must have been extant by 1424.

A third feature of interest is the course of a ditch which begins at the second pond (by South Drive) and along which water flows today in wet weather as far as (12e). Here it joins the new cut just described. Along its whole length this ditch, which has no bends or turns, is sheltered by a spinney. The source of the flowing water appears to be natural drainage from the surrounding hillside to the south east. However, the straightness indicates this feature is man made. Further, there is an unidentified earthwork at (12m) which extends from the spinney out into the field to the south east. The relationship between the line of the ditch, the earthwork, the original course of the stream and the new cut remains a mystery.

SWITHLAND RESERVOIR TO THE RIVER SOAR

This fourth and final section follows the former course of the river from the tail end of Swithland Reservoir to the River Soar, a total of about a little over 2.5km (1.6 miles).

Swithland Reservoir

Swithland Reservoir was completed in 1894. The circumstances surrounding the scheme were broadly similar to those at Cropston. In 1976 the draining of the reservoir and the year of a great drought more or less removed the water. Revealed was a landscape which had not been visible in living memory and for which few documentary references, other than a collection of field names, have been found.



Fig. 13. Swithland Reservoir 1976.

(Photograph reproduced by permission of the Unit for Landscape Modelling. Copyright reserved Cambridge Collection of Air Photographs.)

The following account refers to the air photograph (Fig. 13) which was taken in 1976. The view is looking south from above the dam which is off scene bottom edge. A similar view, but looking in the opposite direction, has also been published (Squires and Humphrey 1986, 43).

At (13a) is the point of entry of the Bybrook to what forms the tail of the reservoir and (13b) marks the site of the partially submerged Swithland mill. At (13c) beneath the viaduct of the nineteenth-century Great Central Railway (13e) and also at (13d) are low walls. These were put in place at the time the reservoir was built to ensure water was present for sporting purposes in times of drought or in the event the reservoir was drained. The original course of the river is indicated at (13f) and (13g). It was crossed by the Park Ford (13i), which had a bridge in 1894. Former fields or field boundaries shown of the first edition of the Six Inch Ordnance Survey Map are indicated at (13k), (13l) and (13n). An earlier enclosure known as Carr Close is at (13m).

Interest in this amazing view must surely focus on what appears to be a moated site (13o), two fish ponds (13p) and an extended site at (13r). One wonders if part or the entire site once extended into Carr Close at (13m). The exit channel for the water at (13q) is obvious but how it was led in is less clear. Other possible early features and some more recent ones have been tentatively identified but are not listed since they have no obvious direct connection to the stream.

The lower one third of the area of the view, i.e. below the park pale (Fig. 13h), once formed the southern portion of the Park of Barrow which was created before the year 1135 (Squires and Humphrey 1986, 68). The park was effectively broken up into four parts around 1273 when its owner, Roger de Somery, died leaving four daughters. At least one of the four parts continued to function as a deer park but by the early fourteenth century all the deer were gone.

Interpreting moated sites can be difficult, particularly so in this case when the documentary evidence is minimal and the opportunities for observations in the field let alone archaeological survey are particularly unlikely. The location within the park of Barrow suggests the site of a park keeper's lodge. Its position on the boundary of the parish of Woodhouse Eaves suggests a connection with assarting from the waste. If we consider the size – it occupies approximately half the area of the later 1.6 hectares field – there are suggestions of something much grander. Did the site undergo re-development before being deserted? We may never know.

SWITHLAND RESERVOIR TO CHAVENEY'S MILL

The creation of Swithland Reservoir severely modified the volume and velocity of the stream leaving it which is the Buddon Brook. On this short and final section to its confluence with the Soar, a distance of about 2km, it has been harnessed to serve three important functions (Fig. 14).

The first of these concerns yet another moated site which covers a smaller area than the one below the water of Swithland Reservoir (SK 556158). The moat itself (15a) is sub-rectangular, measures approximately 80m by 65m and encloses about half a hectare. It lies partially in a pronounced bend in the brook at (15b) and was

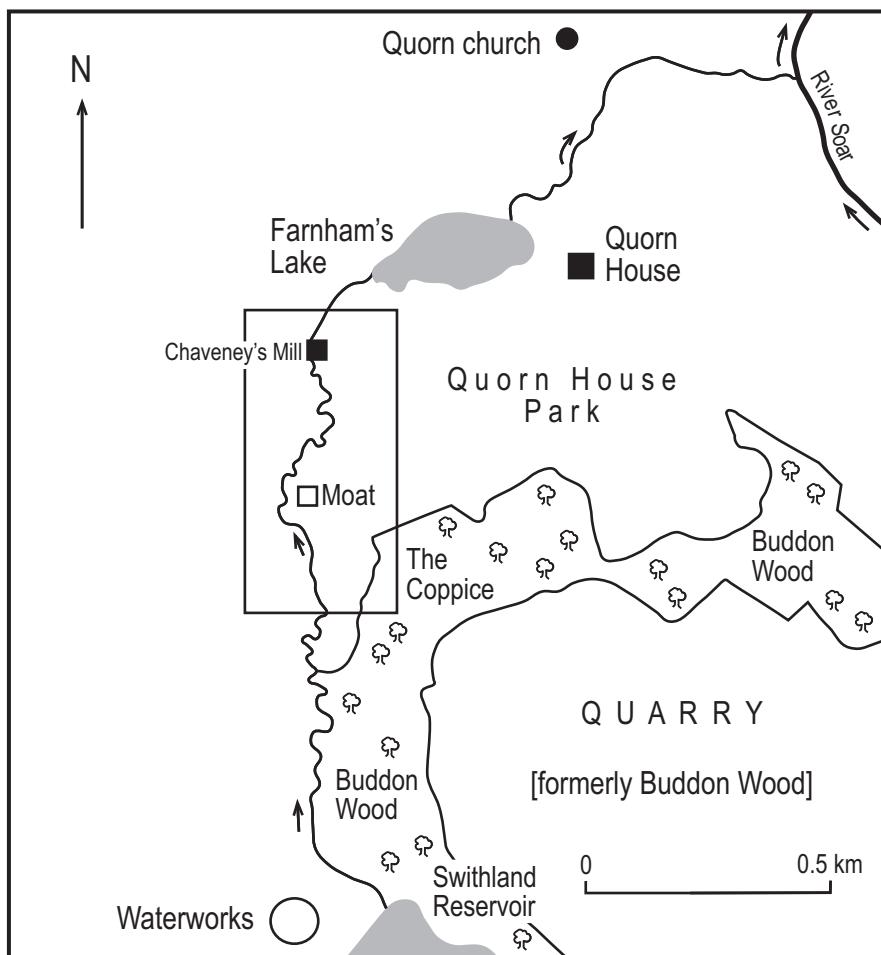


Fig. 14. The Buddon Brook from Swithland Reservoir to the River Soar.

fed from sluice (15c), remnant stone-works of which remain to this day. Water was drained either from a minor channel (15d) or a larger and somewhat earlier one at (15e). The site is very low-lying and in wet weather the moat still holds water, now mostly derived from natural seepage. It is also set at the northern end of a series of channels and embankments, as at (15f) and (15g). These are readily located but their layout is not easy to interpret. This moat may have enclosed the dwelling of a park keeper, but it is not possible to say if it was from this site that the early park was administered or simply a portion after the break-up. The large area contained within the moat would suggest it supported fairly high status manorial dwelling. Opportunities for a proper archaeological investigation would appear a little brighter here.

The second site along the Buddon Brook lies to the north of the moat and is known as Chaveney's Mill (SK 557159) (Fig. 15). In the middle ages there were three water mills within the bounds of what is now the civil parish. One was at the site of Chaveney's Mill. The second, known as the 'Little', 'Middle' or 'Old' mill was located in the present Quorn Park. The third was the 'Lower' mill which stood at a place near the confluence of the Buddon Brook and the River Soar and for this reason no account will be given here. Early records for the water mills of Quorndon are plentiful but confusing. The following is the best interpretation of these at present.

Chaveney's Mill is sited to the east of a bend in the brook, water from which was delivered along an open leat (15i). This originated at a point now lost under the water works of Swithland Reservoir and ran to a mill pond at (15k). Along much of its length it remains embanked and at (15j) there is an overflow. This is constructed mostly of local granite and partly of blue engineering bricks and appears to be of recent reconstruction of an older feature. The entire course of the leat carefully respects the brow of a slope (15h), which falls from east to west. When the water in the pond reached its destination the surface of the water in the mill pond would have been some 8m above the surface of the stream.

It is not known when the mill ceased operating. Ashton (1977, 114) suggests the late nineteenth century. The survey of 1883 for the first edition of the Ordnance Survey shows water in the mill pond. The edition of 1903 suggests water was present but that of 1938 marks it as dry. It has recently been filled in to make a car park.

CHAVENEY'S MILL TO THE RIVER SOAR

The final place of interest along the Buddon Brook before it meets the River Soar concerns the former water mill the – 'old mill' or 'middle mill' – which was located south of Meeting Street in Quorndon and is at a place which is now within Quorn Park (Fig. 14) (SK 560162). In 1820 the present Hall was built by Edward Farnham a wealthy local squire and landowner. At the same time he laid out a new park. This involved the repair and enlargement of the mill dam which flooded the mill site and created a large lake, known as Farnham's Lake. Field survey shows that at times of very low water some earthworks and channels are exposed but these are difficult to interpret with confidence.

One can confidently identify this ancient mill site with that called 'le middelmilne' together with the mill pond and all its appurtenances granted by Hugh Despenser to Robert Farnham in 1280 (Farnham 1912, 54). Sometime later it went out of operation and had certainly been abandoned by the seventeenth century.

The final and unremarkable section of the Lin leads from Farnham's Lake in Quorn Park through the village of Quorndon to the River Soar (SK 566165).

In the course of its 17km this modest brook has been modified or harnessed at one time or another over the centuries to serve six water mills, five moated sites and three water meadows. In addition it has fed three lakes, two reservoirs, at

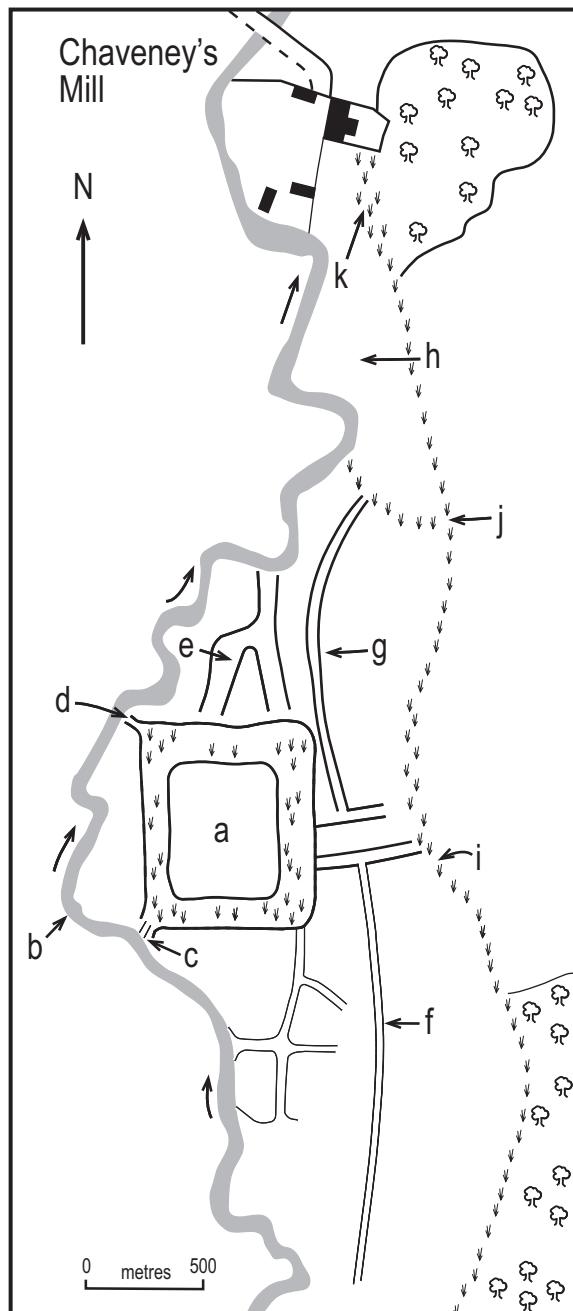


Fig. 15. Moated site and Chaveney's Mill at Quorn.

least two sets of fish ponds and drained one watercress bed. It was adapted to supply one Tudor mansion (Bradgate) and provide water for three villages along its route. The writers can only wonder what other features they fear they may have overlooked and which remain to be identified.

POSTSCRIPT

A brief mention was made in the introduction of the rich flora and fauna directly associated with the water of the Lin. This wealth and diversity also extends to the river's banks and their immediate areas. On the most barren of landscapes the presence of water almost invariably provides the best, even the only place where forms of wildlife can be found. The modifications to the flow of the Lin, just described, have greatly enhanced the variety and abundance of both flora and fauna. Two outstanding examples are the reservoirs at Cropston and Swithland which are both Sites of Special Scientific Interest (Crocker, J. (ed.) 1981, 102). A report on the Lin's present natural history would, in our opinion, prove to be well worthwhile.

ACKNOWLEDGEMENTS

The writers wish to thank Stephen Woodward for drawing their attention to the feature described in the section 'Origin of the Lin' and for allowing the use of his illustrations. Our thanks also to the Record Office for Leicestershire, Leicester and Rutland for allowing us to reproduce Air Photograph 1 (reference 541/212 number 4113) and to the Unit for Landscape Modelling of Cambridge University for Air Photograph 2 (reference BYM66). Fred Hartley allowed us to draw on his surveys of several sites and the work on the Swithland area by the late Ronald Gardner, which is in the ROLLR, must also be recognised.

BIBLIOGRAPHY

Ashton, N., 1977 *Leicestershire Water-Mills*, Sycamore Press, Wymondham (Leics.).

Aston, M., 2000 *Monasteries in the Landscape*, Tempus.

Bahaire, S., 2000 *Efficiency of a Local Watermill*, Loughborough University Civil Engineering, Student Project.

Bell, L., 1796 A map of the Manor of Ulverscroft in the County of Leicester, ROLLR DE3/48/Na/340/1.

Chandler, J., 1995 John Lelands Itinerary, *Travels through Tudor England*, Sutton Publishing.

Cox, B., 1971 *The Place Names of Leicestershire*, Unpublished PhD thesis, Nottingham University.

Crocker, J. (ed.), 1981 *Charnwood Forest, A Changing Landscape*, Loughborough Naturalists Club, Sycamore Press.

Farnham, G. F., 1912 *Quorndon Records*, Mitchell Hughes and Clarke, London.

Field, J., 1972 *English Field Names*, David and Charles, Newton Abbot.

Hartley, R. F., 1989 *The Medieval Earthworks of Central Leicestershire*, Leicestershire Museums Arts and Record Service.

H.M.S.O., 1928 *Report on the Manuscripts of the late Reginald Rawdon Hastings*, vol. 1.

Hoskins, W. G. (ed.), 1954 *The Victoria History of the County of Leicester*, Vol. 2, Oxford University Press.

Howard, M., 1987 *The Early Tudor Country House: Architecture and Politics 1490–1550*, George Philips.

Kiddiar, N., 1746 A Map of Bradgate Park, Enville Hall Archives, Staffordshire.

Nichols, J., 1804 *The History and Antiquities of the County of Leicester*, vol. 3 part 2, S & R Publishers, reprint 1971.

Squires, A. E. and Humphrey, W., 1986 *The Medieval Parks of Charnwood Forest*, Sycamore Press, Wymondham (Leics.).

Squires, A., 2002 *The Greys, A Long and Nobel Line*, Silk Press, Hale, Cheshire.

Woodward, S., 2000 *Some Water Management Features in the Ulverscroft Valley*, Unpublished report.