

# A SURVEY OF EARTHWORKS AT HERIOT'S WOOD, STANMORE, MIDDLESEX

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## SUMMARY

*The purpose of this article is to report on a survey of earthworks in Heriot's Wood, Stanmore, whose function was uncertain and which had not previously been fully recorded. The measured survey, in tandem with historical and documentary research, suggests that the earthworks were part of a medieval deer park boundary, which lay within the grounds of the estate of Bentley Priory. These earthworks are put into context through a discussion of the history and functions of medieval deer parks.*

## INTRODUCTION AND PROJECT BACKGROUND

The Harrow Archaeological Survey Project was established in 1985 to undertake measured and geophysical surveys of previously unrecorded and poorly understood earthworks within the London Borough of Harrow. There was initially no brief to excavate. The project was supervised by Chris Watkins and latterly by the late Chris Currie (Borrill 2010, 145). Watkins wrote a series of five interim reports on the sites surveyed between June and September 1985. These unpublished reports were lodged at the Harrow Planning Department and are listed in the bibliography.

The project commenced with two resistivity surveys. The first was carried out in June 1985 at the medieval moated site of Headstone Manor, which was described as a 'well-built site' in 1397 (Baker *et al* 1971, 203–11). A number of features of probable medieval and post-medieval date were detected in

fields to the north of the moat at Headstone Manor, including a possible ditch. Resistivity work on the moated island itself indicated the presence of further, probably structural, features likely to be of a similar date range, next to the extant building (Watkins 1985a).

A second resistivity survey was carried out in July and August at Grim's Dyke on Harrow Weald Common in a search for the Iron Age and late/post-Roman Grim's Ditch (Watkins 1985b). This survey proved negative, as the area had been subject to extensive gravel quarrying in antiquity.

Two earthen mounds were surveyed at Stanmore Common in August 1985. One was a pillow mound (Coney Warren) and the second a Bronze Age bowl barrow (Watkins 1985c). A survey of earthworks at Lower Priory Farm, probably a continuation of those features recorded at Heriot's Wood, took place between August and September (Watkins 1985e). A measured survey also took place in September at Harrow-on-the-Hill of a series of terraces thought to be of medieval date (Watkins 1985d).

This present paper provides information about the survey undertaken at Heriot's Wood, Stanmore, Middlesex (TQ 1604 9280), between September and October 1985.

## PURPOSE AND METHOD OF SURVEY

The site is situated on natural clays and gravels to the north of Masefield Avenue and to the west of Aylmer Drive. The earthworks consisted of a linear interrupted sequence of

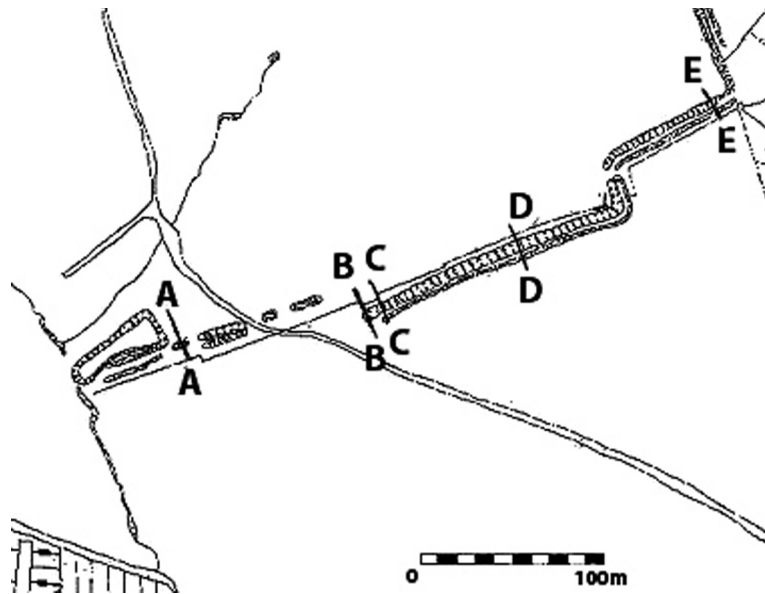


Fig 1. Plan of the east-west section of the earthworks (north is to the top of the image)

banks and ditches (Fig 1). A large bank was present on the north side, while a ditch and sometimes a counterscarp bank were to be found on the south side (see Fig 2). In areas where the earthwork was not present it may have been deliberately levelled or eroded in antiquity.

The earthworks measured some 385m west to east. The best-preserved section of bank and ditch commenced 150m from the western end. It extended for 155m in a west to east direction and then turned at a right angle to the north for 40m. It then turned a further right angle and proceeded to the eastern boundary fence 80m distant. It continued in an interrupted fashion 400m to the north-east (not illus) to connect with a series of earthworks that were surveyed at Lower Priory Farm (Watkins 1985e).

There were no known recorded transects of these earthworks and it was considered appropriate that this should be remedied. A base line with an offset was laid out along the length of the earthwork. Survey work commenced at the western extent and a series of grid pegs were inserted at 10m intervals initially, later being reduced to 5m intervals to facilitate greater accuracy in the better-preserved sections. A total of 48 transects was taken across the earthwork at

right angles using a theodolite and staff. Five of these transects are shown in Fig 2. The transects show a bank standing up to 1.5m in height and 5m wide in some places (Section A-A), with a pronounced ditch up to 3m wide on the south side. There are also faint traces of a counterscarp bank on the south side in Sections C-C and D-D. These profiles are consistent with the boundary of a deer park, which may have been surmounted by a timber palisade, and further suggest that the enclosed deer park was on the northern side. The earthworks surveyed at Lower Priory Farm (Watkins 1985e) are almost certainly a continuation of the boundary defining the eastern side of the park.

The land of Heriot's Wood formerly lay within the grounds of Bentley Priory and a short history of this estate follows in order to demonstrate its antiquity.

#### **A DESCRIPTION OF BENTLEY PRIORY, MIDDLESEX**

The word Bentley is thought to derive from the Anglo-Saxon word *beonet*, a place covered or overgrown by coarse grass and *leah*, a piece of cleared ground on the uplands (Ekwall 1960, 38).

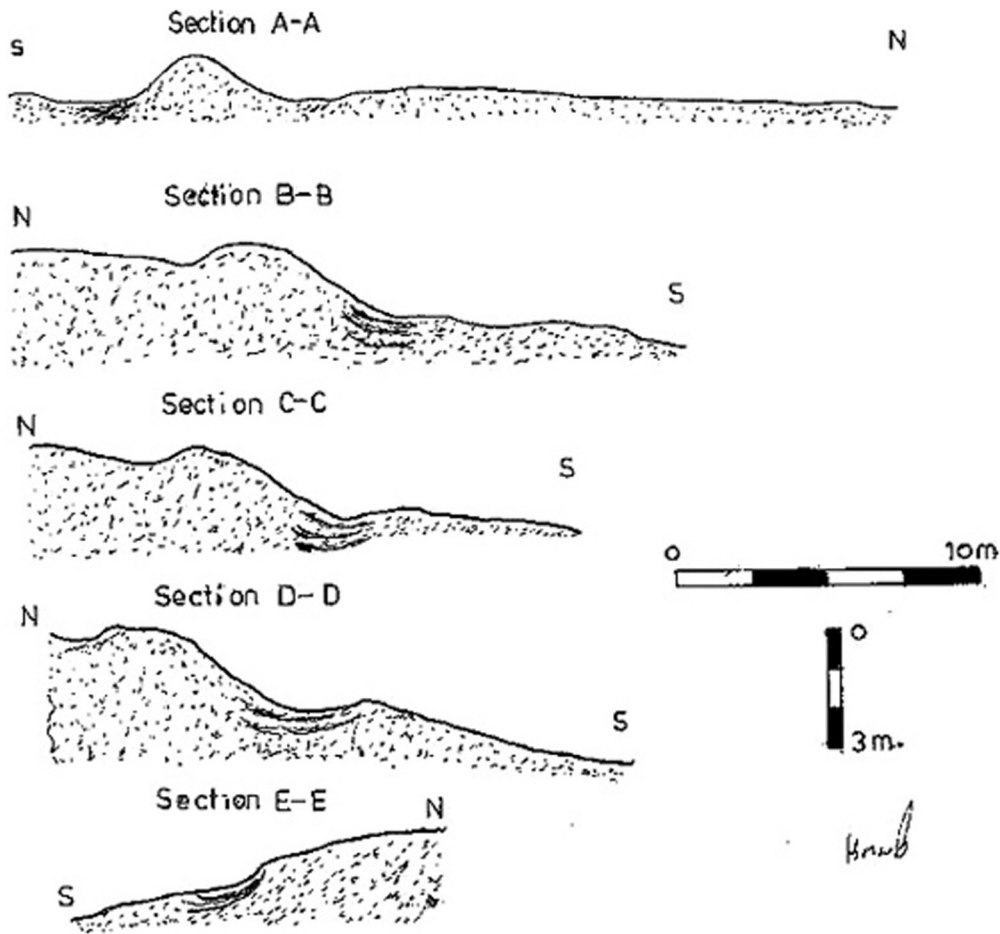


Fig 2. Transects across the earthworks

The early history of Bentley Priory is unclear; at Domesday the manor of Harrow was held by the Archbishop of Canterbury and it is possible that the priory was founded during the late 12th or early 13th century. The present-day mansion, which dates from the late 1700s, is believed to occupy the site of the priory (Baker *et al* 1971, 211-18).

It is recorded that in 1543 Cranmer gave to the King, in exchange for other lands, the priory of Bentley, with all lands and tenements in Harrow and Stanmore, 'being parcel of the possessions of St George's Priory at Canterbury'. Henry VIII granted it to Harry Needham and William Sacheverel, who sold it to Elizabeth Cole. A century later Bentley Priory belonged to the Coghill

family. It then passed to a Mr William Waller, and thence to a Mr Tuberly, who sold it in 1788 to the first Marquis Abercorn.

This nobleman made many additions to the mansion erected by its previous owner and transformed it, as Lysons notes in 1795, into a house 'in which convenience is united with magnificence in a manner rarely to be met with'. In the latter part of the 19th century the estate came into the hands of a railway engineer, Sir John Kelk, who built a spacious conservatory and a clock tower. Bentley Priory was latterly used as a hotel (1882-1907) and a girl's school (1908-24).

In 1926 the estate was split into two lots and in 1927 the Priory itself and 40 acres were sold to the Air Ministry. The remainder

of the estate, about 240 acres, was sold to a syndicate and divided into plots for building purposes. Middlesex County Council bought 90 acres, including the farm in front of the Priory, which has formed part of the green belt ever since. Bentley Priory became the headquarters of Lord Dowding, head of Fighter Command during the Battle of Britain in 1940.

Bentley Priory was sold by the Ministry of Defence in 2008. The mansion was to be converted into luxury apartments, and the officers' mess developed into an education and heritage centre by the Battle of Britain Trust to commemorate those who fought and died in the battle. However, these plans were put on hold by the recession of 2008–9.

The earthworks in Heriot's Wood lie within the grounds of Bentley Priory Estate; cartographic evidence suggests that it is unlikely that the earthworks formed the boundary of the estate itself, and it is suggested here that they formed part of an enclosure for an ancient deer park. Indeed in the schedule for the sale of Bentley Priory in 1895 approximately 54 acres were given over to a deer park.

### MEDIEVAL DEER PARKS

The classic meaning of park in England and Wales is an enclosure for semi-wild animals. The most common beast was the fallow deer, which was reintroduced to England c.1100 by the Normans who may have obtained them from Sicily (Rackham 2003, 25). Roe and red deer were also often present in parks. The basic requirements for keeping deer in parks were shelter, fodder and drinking water. Deer park construction was very expensive and required careful planning. Thus the imparked landscape was tailored to accommodate the breeding and hunting of deer by utilising existing woodland and topography (Pluskowski in Liddiard 2007, 64). Essentially a deer park was a specialist farm producing venison and was a high status activity.

Deer parks are known to pre-date the Norman Conquest, as they are mentioned in several Saxon documents where they are referred to as '*derhaye*' or '*deer-hay*'; another name which appears in Saxon charters is '*haga*'. It is likely that a *haga* was a type of

pale, which consisted of an earthen bank along which a timber palisade or hedge was laid (Hooke 2001, 157). Deer hunting also took place in Anglo-Saxon England; King Alfred held a royal manor near Guildford in c.AD 880 and the West Saxon kings kept a hunting lodge at Old Windsor (Richardson in Liddiard 2007, 33).

There are 37 deer parks recorded as *parcus* (park) or *haia* (hay) in the Domesday Book, but Liddiard considers this to be an underestimation (Liddiard 2003, 7). Of these 9 were owned by the king, 5 were held by bishops or monastic houses, and 23 belonged to the Norman aristocracy. Deer parks certainly proliferated after the Norman Conquest, probably because of the reintroduction of fallow deer into England.

There were many parks in England by the 12th century and c.1300 they may have been more prominent in the English landscape than at any later period, with approximately one park to every four parishes (Richardson in Liddiard 2007, 47). There were an estimated 3,200 parks in England by 1300 and they may have covered 2% of England's land surface (Rackham 2000, 123). At that date one quarter of the woodland of England was within parks. There is a good record of parks in the 13th century because they required permission in the form of a licence to impark. Parks are best represented in well-wooded areas such as the counties of Worcestershire and Staffordshire, and are conversely scarce in counties like Lincolnshire and Cambridge (*ibid*, 123). The county with most parks was Hertfordshire with 90. There were also 70 royal forests in medieval England (Birrell 1992, 113). After 1350, there was a decline in park creation, largely caused by the Black Death (Rotherham in Liddiard 2007, 84).

In the Greater London area there were several deer parks, a number of which still survive today: Richmond Park with its origins in the 13th century; Greenwich Park enclosed in 1433; Beddington, Sutton in existence by 1492; Hampton Court or Home Park and Bushy Park, which were established from 1529; St James's Park, which was established in 1531; Hyde Park originally enclosed by Henry VIII (1509–47) and Nonsuch which has been lost (Rackham 2001, 162); Green Park, the smallest royal park, which was stocked with deer by Charles II (1630–85);

and finally Syon Park, which was landscaped by Capability Brown in 1760.

The most common boundary was the park pale, a special palisade of cleft oak stakes, whose maintenance was expensive in labour and in high quality timber (Rackham 2001, 153). A similar boundary could have been used on top of the bank at Heriot's Wood and would have served the dual purpose of keeping the deer in, whilst also keeping out any predatory animals.

In areas where stone building materials were readily available, an alternative to the park pale might be a masonry wall such as those found in the great East Midland parks of Barnsdale, Burley and Burghley. Deer leaps were normally present at intervals along the park pale whereby movement of the deer in and out of the park could be controlled. Deer leaps were also known as a *salatorium* or *saltory*, which means a pit fall. Some parks had several gates and entrances; a 'great gate' is described at 'Rigge park', King's Somborne, Hampshire in 1250. Bridges or wicker gates might also have been present. Later parks had elaborate entrances, such as the gates at Clarendon House, Wiltshire, owned by Henry VII (1485–1509), which were crenellated (Mileson in Liddiard 2007, 16).

Early medieval parks have a compact outline with rounded corners. Later medieval parks were often small or awkwardly shaped, perhaps because of difficulties in acquiring land; consequently there were parks of 30 acres or less (Rackham 2001, 153). On the basis of the surviving evidence, Heriot's Wood could be assigned to the former category; however it is uncertain from this survey whether it was a compartmented or un-compartmented park (Rackham 2003, 64). The average park was around 100 acres in size (Rotherham in Liddiard 2007, 80). Some parks were extensive: for example Woodstock, Oxfordshire, had a perimeter of 7 miles in the time of Henry I (1100–35) and in the mid-13th century one of Earl Warenne's Yorkshire parks is said to have had a circuit of five leagues (Mileson in Liddiard 2007, 15). The larger the park, the less boundary it has in relation to its area and the cheaper it is to fence per acre enclosed. Fencing was expensive. 'Short' fencing cost the Duchy of Cornwall one and a half pennies to tuppence

per perch to erect in the mid-15th century. In 1323 it cost 18 shillings to construct a new deer leap in Rossendale, which may have been up to 20 feet long (Birrell 1992, 120). The Bishop of Winchester spent at least £100 on his deer parks in 1332–3, though £30 of that was on hunting expenses, and the Duchy of Cornwall spent £20 on its six Cornish parks in the 14th to 15th century (*ibid.*, 119). There is even a rare reference to a hunt on 31 October 1302 at Huntingdon Castle Park, Herefordshire (Mileson in Liddiard 2007, 11).

Park ownership was restricted and it is unlikely that more than 20% of gentry families owned a park by the late 13th century, a situation that did not alter for two centuries (Liddiard 2007, 3).

The creation of parks indicates a considerable degree of social control and authority by their owners; parks are a sign of wealth and status, linked to royalty through the granting of a regal licence to impark. Regular involvement in hunting, a traditional aristocratic activity, was a way of demonstrating the possession of leisure time (Mileson in Liddiard 2007, 14–16). Hunting rights could be granted as gifts; for example, Henry III gave instruction to the Constable of Dover that the visiting noble Gaucher de Chatillon should be allowed to hunt in the King's park at Eltham (Creighton 2002, 190). The King owned the largest number of parks. The Earls of Lancashire had several dozen parks by the 13th century and at this time Arundel and Norfolk had 15 to 20. Richer bishoprics such as Winchester, Canterbury and Durham had approximately 20, and monastic houses like Bury St Edmunds had several (Mileson in Liddiard 2007, 20). The great magnates owned a disproportionate number of parks. For example, in Staffordshire where 70 parks are known by 1350, 43% were owned by only five leading landowners (*ibid.*, 21). Generally a deer park was a rich man's privilege but a valuable one since it kept him in fresh meat over the winter, and a 'not quite so rich man's' status symbol (Rackham 2001, 153).

### Park management

Venison, although a highly prized meat, was not as a rule produced for the market, being mainly kept for the household. However,



it is recorded that it was on sale in public cookshops in 12th-century London and that by the 13th century there was a burgeoning trade in poaching for black market trading (Birrell 1992, 114). There are records of the processing of deer carcasses and prime joints, particularly haunches, at Launceston and Okehampton Castles (Creighton 2002, 19). Similarly, there are accounts of deer butchering at Hen Domen and the animal bone assemblage at Barnard Castle, County Durham, suggests the processing of deer on a quasi-industrial scale (*ibid.*, 20). The Castle Acre, Norfolk, bone assemblage indicates that the remains of fallow deer were widely used in a small-scale bone and antler working industry.

A further expense incurred by deer park owners was the employment of a Larderer to butcher and salt the meat on a seasonal basis and pack it into barrels for winter storage. The ability to supply venison from one's personal preserves was another visible sign of social aspirations, leadership and connections (Milesen in Liddiard 2007, 17).

The numbers of deer within parks varied. It is recorded that the Duchy of Cornwall had 887 deer in six parks in 1337 and the Bishop of Durham 540 deer in his four main parks in 1457 (*ibid.*, 124).

Deer parks were often used for multiple purposes: woodland and trees were common as well as parkland combinations of grassland and scattered, often pollarded, trees. There were also frequent launds, or treeless areas, within parks. Some included pasture for cattle and sheep and sometimes even arable, meadow and common grazing land. Deer were, therefore, not always the predominant objective of park management in practice that they were in theory. Some parks had income from woodland, others such as Elmsett, earned more proportionally from agistment (the letting of grazing by the year to outside farmers).

Other animals such as sheep, cattle and horses were frequently kept within deer parks. Wild and tame swine could also be present (Rackham 2000, 37). During winter, livestock were excluded from parks to preserve what little fodder there was for deer (Pluskowski in Liddiard 2007, 67). Some deer parks had rabbit warrens; the rabbits were kept for their meat and fur. In

addition there were habitats for wild species of bird such as swans, herons, pheasants and partridges. Some industrial activities have also been recorded: iron working is documented in Yorkshire at Erringden Park, and at Old and New Parks at Wakefield and Roundhay Park, near Leeds (Moorhouse in Liddiard 2007, 123). There is also evidence for quarrying in parks: in 1400–1 gravel was extracted at Bishop's Waltham and potter's clay at Farnham, Hampshire (Pluskowski in Liddiard 2007, 66). Sources of drinking water were important, and artificial ponds were sometimes provided as at Hambledon Park where a water trough was provided for game in 1271–2. Some parks such as Bishop's Waltham had fishponds for breeding stockfish (*ibid.*, 65).

The park lodge was the economic and administrative hub of the park and was normally situated at the highest point of the park, as at Altofts, Yorkshire. There are records at Roundhay Park, near Leeds, for roof repairs to the lodge in 1384–5 and for the construction of a three-bay lodge in 1442–3 (Moorhouse in Liddiard 2007, 107; 110). There were also other features that could be found within deer parks, including undefined structures for sheltering deer (*ibid.*, 113), kennels for hunting dogs (*ibid.*, 115–17), and hunting stands and towers which were built to view the hunt (*ibid.*, 118). Deer houses are documented at Merden Park in Hampshire where they had thatched roofs (Pluskowski in Liddiard 2007, 65).

Deer, however, even in small numbers, such as those that roam a section of the deer park today at Heriot's Wood, are not necessarily compatible with woodland management, because they eat young underwood and seedling trees. In time every owner of a woodland deer park would have been faced with three options for its future.

Firstly, they could give up deer and allow the park to continue as coppice wood. Secondly, they could give up the underwood and retain only scattered long-lived trees, pollards and big timber whilst still keeping some deer (Rackham 2001, 157). For example, at Elmsett Park, Long Melford, the park had diverged from the main stream of woodland management before 1386. In the 14th to 15th centuries the economic focus shifted from deer to livestock as at Stanhope

Park in Weardale, County Durham. From the early 14th century Mere Park in Wiltshire was mainly used by the Earl of Cornwall to enclose horses (Pluskowski in Liddiard 2007, 67). A third solution to the dilemma was to combine deer and wood by dividing the park into compartments, some of which were grassland and some woodland. Barnsdale Park, Rutland, shows a typical arrangement of woods around a central clearing.

It has been estimated that there are now c.100 active deer parks remaining in Britain (Rackham 2000, 128). One example that survives in good working order is at Moccas in Herefordshire, where fallow deer, cattle and sheep share grassland beneath ash and oak trees.

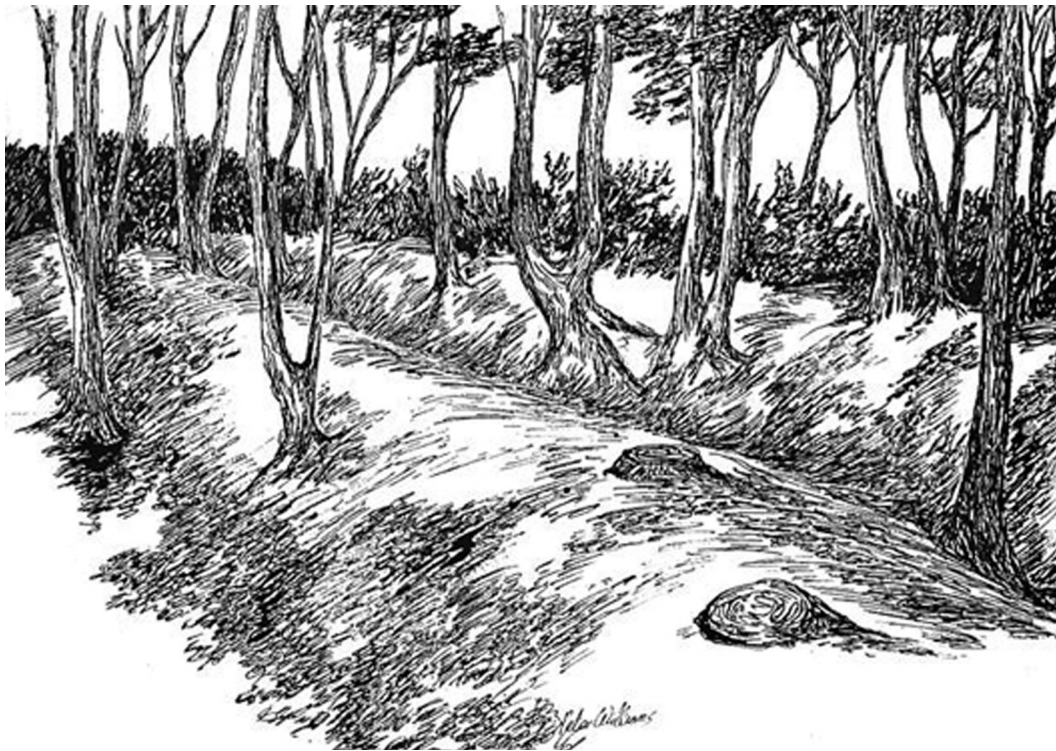
Deer parks were expensive to maintain and many were abandoned between the 15th and 18th centuries to become coppice woods or farmland. Many were lost during the English Civil War, and agricultural improvements from 1600 onwards also accounted for a large number. Some deer parks, such as Tinsley Park in Sheffield and Tankersley

Park in Barnsley were lost to industrialisation and coal extraction (Rotherham in Liddiard 2007, 84–5).

## CONCLUSIONS

In conclusion it can be said that the medieval deer park was a mainly high status, utilitarian enterprise: it was in effect a specialised farm producing venison, along with other activities that could include woodland management, arable cultivation, animal husbandry and more rarely industrial activities and fish breeding. Birrell has discussed the mechanisms and workings of deer parks and notes that there may be an over-emphasis on the status concept and that deer were in fact integrated into the wider context of park management, mixing with other animals and other functions (Birrell 1992, 126).

The Heriot's Wood earthworks were overgrown with oaks, hawthorn and brambles when the survey was carried out in the autumn of 1985 (Fig 3), which would not have been present when the earthworks were originally



*Fig 3. Heriot's Wood earthworks in 1985 (Drawn by Peter Williams)*

constructed and maintained. Without any excavated evidence, the date of construction of the banks and ditches is impossible to confirm; however, it is argued here that these features are medieval in origin, and relate to management of the Bentley Priory estate by ecclesiastical authorities linked to the Archbishopric of Canterbury. It should be noted that it is also possible that the development of a deer park at the site could relate to later medieval or even post-medieval land management, especially post-Dissolution development of the estate and its grounds.

Heriot's Wood is currently part of the Bentley Priory Nature Reserve, and there is indeed still a small private deer park containing fallow deer.

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