



Royal Commission on the Historical  
Monuments of England  
Brooklands  
24 Brooklands Avenue  
Cambridge CB2 2BU  
Telephone: 01223 324010

Library Copy

# HATFIELD FOREST WARREN, HATFIELD BROAD OAK, ESSEX

An Earthwork Survey  
by  
The Royal Commission on the  
Historical Monuments of England

REQUEST SURVEY

April 1993

---



**HATFIELD FOREST WARREN,  
HATFIELD BROAD OAK, ESSEX**

**An Earthwork Survey  
by  
The Royal Commission on the  
Historical Monuments of England**

**REQUEST SURVEY**

**April 1993**

---



---

## **CONTENTS**

---

1. Introduction	1
2. Description of the site	2
3. Interpretation and discussion	8
4. Survey and research methodologies	11
5. Bibliography	12

---

## **LIST OF FIGURES**

---

1. RCHME earthwork plan, surveyed at 1:1000 scale	7
---	---

---

## 1. INTRODUCTION

---

In April 1993, the Royal Commission on the Historical Monuments of England (RCHME) carried out an archaeological survey for management purposes of part of Hatfield Forest, following a request from the National Trust. The area studied comprised the site known as the Warren and an open area lying to the north between the Forest Lodge and the Shermore Brook which was known to contain a number of archaeological features. Hatfield Forest lies in the parish of Hatfield Broad Oak in the Uttlesford district of north-west Essex; the principal monument - The Warren - is centred at National Grid Reference TL 5365 1975.

Hatfield Forest as a whole covers some 1100 acres (445ha). It is owned by the National Trust and is now a popular recreational area. Formed between AD 1086 and AD 1225, the Forest is considered archaeologically important because it preserves many of the elements of the 'compartmental' Medieval forest of Hatfield Broad Oak: coppice, scrub and timber woodland, interspersed with grassland pasture for deer and cattle. The woodland is now predominantly composed of mixed deciduous trees, among which a large number of ancient pollards (mainly oak and beech) are to be found.

The geology is a mixture of clays and gravels, and extraction of both materials has taken place, generally on a fairly small scale. The topography is gently rolling, ranging between approximately 75m and 100m above OD. The Warren is partially wooded, the ground sloping gradually from north to south. To the east of the site, a small stream has been dammed to form an ornamental lake in the valley bottom.

The Warren is recorded in the Essex County Sites and Monuments Record as 4524 and in the National Monuments Record as TL 51 NW 47.

---

## 2. DESCRIPTION OF THE SITE

---

For letters in bold in the text, see RCHME earthwork plan surveyed at 1:1000.

### **The Warren TL 5365 1975**

The Warren consists of an oval arrangement of pillow mounds and an associated cottage. The earthworks were first surveyed and identified as a warren by the Ordnance Survey in 1874 on their 1st Edition 25-inch map, although a map of 1757 does depict the 'Warren House' (Essex Record Office D/DB P37). An archaeological survey conducted by Oliver Rackham (1989, 162-5) linked the site with the 'coney burroughs' listed in manorial records from the 1640s (Essex Record Office D/DB L1/6/10). The warren was subsequently revived by Sir Edward Turnor in the later 17th century but had apparently fallen into disuse by 1735.

The Warren comprises twenty-two pillow mounds. Thirteen of these are linear in form and arranged in a randomly-spaced series around the perimeter of an oval enclosure roughly 4 ha (10 acres) in area. The interior of the enclosure contains a further five linear pillow mounds, grouped in rows aligned north to south, and four circular mounds which probably served the same function. Shallow drains lead south from these pillow mounds towards the southeastern edge of the enclosure. No subsidiary features such as vermin traps are visible.

Each linear pillow mound is sub-rectangular in shape, flat topped, and surrounded by a ditch. The mounds vary greatly in length ranging between 13m and 45m; the majority are between 20m and 25m long. Almost all of the mounds are between 7m to 10m wide and roughly 1m high.

The ditches surrounding the pillow mounds are most prominent on the exterior where they form part of the main enclosure, varying between 3m and 4m in width and up to 0.4m deep. On the inner side of the enclosure the ditches are usually quite shallow and are likely to represent minor quarries for spoil to build the mounds. These smaller ditches encircle the ends of the mounds and descend into the main enclosure ditch. Where mounds are paired, they are separated by a 'saddle-like' depression in the bank.

The circular pillow mounds are much smaller, only 0.4m high and measuring 5m to 6m in diameter. They are also encircled by a ditch, but are found only in the interior of the enclosure.

Both the linear and circular pillow mounds are occasionally grouped in pairs. On the perimeter individual pairs are connected by lengths of ditch which have traces of an internal bank. The ditch is U-shaped in profile, generally 5m wide and up to 0.8m deep. The internal bank is usually poorly preserved, but can survive to a height of 0.4m. The gaps between the pillow mounds can extend for up to 60m; the interconnecting ditch may be evidence for a pre-existing enclosure (see below).

The pillow mounds within the interior of the Warren are concentrated in the southern half of the enclosure, but it is not clear how far this distribution has been influenced by the location of the woodland. The surviving mounds lie in open grassland; by contrast the wooded area in the north and an annex in the south-east (see below) contain few earthworks. Early maps such as that of 1757 (Essex Record Office D/DB P37) record that these woods are a relatively recent phenomenon.

The open grassland lying across the centre of the site now constitutes a ride; the through-traffic of horses and other animals has partly destroyed three of the pillow mounds. In each case a truncated mound survives south of the ride, the shallow traces of an encircling ditch preserving the original dimensions of the mounds.

In the south-eastern corner of the Warren, the original enclosure has been replaced by a rectangular annex measuring roughly 60m north to south by 100m. The annex is defined by ditch with a shallow U-shaped profile which has a more pronounced inner scarp up to 0.5m high. Traces of an internal bank are slight and largely confined to the eastern side where the annex and the wood bank of Warren Coppice coincide. From the juxtaposition of the earthworks it is apparent that the annex has cut into, and partly reused, the course of the coppice boundary to form its eastern side.

Warren Cottage (see plan), a 17th century brick-built structure, interrupts the ditch at the northern end of the earthwork. There are ground and first floor chimneys at the west and east ends respectively; the roof is of peg-hole tiles. The house faces south into the warren and would have been the home of a resident warrener. A wooden fence surrounds the property but an earlier boundary is visible in the form of an earthwork ditch at the rear (north). This corresponds to the fence shown on the 1st Edition OS map of 1874.

### **Wood Banks**

Each coppice in the area near the warren is demarcated by a bank and external ditch. When the coppice system was in operation, each bank would have been enhanced by a fence to exclude grazing animals from entering the coppice and damaging the new growth. The modern coppices were first documented in the 17th century. Warren Coppice is now defunct, but its enclosing bank and ditch survive intact. The ditch runs north-west for roughly 350m, parallel to the Warren enclosure and then turns north-east towards the valley of the Shermore Brook. The woodland banks are now gently eroded and exhibit a smooth, rounded profile; they are approximately 5m wide overall and up to 0.8m high. In layout, the sinuous boundary of Round Coppice contrasts sharply with the more angular Warren Coppice although the earthworks have a similar appearance.

A third stretch of ditch, at TL5335 1965 may represent a further boundary leading north to south between the Forest Lodge and Round Coppice, although this does not correspond with any historically documented coppice. This ditch is up to 5m wide and 0.6m deep, with slight traces of a bank on the west side. Although it has been cut by the woodbank, there is now no trace of the ditch within Round Coppice.

### **The London Road**

An area lying to the west and north of the Warren is now a large open clearing through which the course of the 'London Road' is traditionally thought to have passed. No evidence was found during the RCHME survey to support the former existence of a metalled road, although three tracks do follow this traditional route ranging in size from 4m to 10m in width. In certain places they have cut through or levelled other earthworks in the clearing, but in general these trackways have had little impact on the adjacent archaeological features which may suggest that they are of a relatively recent origin.

Until the Enclosure Acts of the mid-19th century, Hatfield Forest was common land and therefore it is not surprising that the clearing should have been used as a thoroughfare.

### **Ridge and Furrow Cultivation**

At least five strips of Medieval or post-Medieval ridge and furrow cultivation, oriented north-west to south-east, were located in the south-western area of the survey. The ridges are broad, up to 10m wide, and extend for up to 40m in length.

A possible field boundary, dis-associated with cultivation ridges, was located further to the north and roughly in the centre of the planned area of the clearing at TL 535 199.

This took the form of a low bank 0.4m high, running east-south-east to west-north-west for about 80m, which has slight traces of a ditch on its southern side. At its western end the field bank abuts the woodbank of Round Coppice, but thick vegetation made it impossible to establish the exact relationship between these two features.

### **Rides**

Immediately to the north of, and running parallel to, the area of ridge and furrow is a broad hollow, 10m wide and 0.5m deep. At its southern end, the hollow enters a steep-sided cutting, obviously reused for the course of a modern drain. The hollow was thought to be a possible field boundary associated with the ridge and furrow.

A closely comparable feature, sharing the same north-west to south-east alignment, was observed immediately south-west of the Warren, at TL 536 196. However, this hollow is a continuation northwards of a ride through Collin's Coppice. The ride is now overgrown, but the course is marked on the Ordnance Survey 1:2500 map. The first hollow may be connected, therefore, with another ride, which runs north-west through the coppice, although in this case the OS depiction and the hollow do not coincide.

The rides in Collin's Coppice radiate from a central point, forming a geometrical pattern called *pattes d'oie* (Rackham 1989, 165-6). The fashion for carving up woods in this manner belongs to the 17th and 18th centuries - the Hatfield examples are depicted on a map of 1757 (Essex Record Office D/DB P37) - and the hollows should be dated accordingly.

### **Gravel Pit TL 5365 2018**

A large irregular hollow measuring some 60m east to west by 20m north to south and roughly 1m deep, lies adjacent to the north-east corner of the enclosure north of the Warren. A cluster of similar hollows are situated immediately east of the Shermore Brook and are identified as gravel pits on the OS 1st Edition map of 1874; in addition an earlier reference exists to gravel extraction west of the Shermore Brook in 1783 (Essex Record Office D/DB L1/12/2). Taken together, the form of this feature and the documentary evidence would suggest that this hollow served a similar purpose.

### **Other Earthworks**

The clearing contains a large number of minor earthworks:

#### **'Furrow-like' features (a)**

More than fifty 'furrow-like' features lie east to west across the central area of the clearing. They take the form of shallow linear hollows, 3m to 5m wide, most of which



are less than 30m long. Although 'furrow-like', they do not resemble ridge and furrow cultivation in that there is no associated ridge, and their origin remains uncertain. It is possible that these features may be linked to the activities of the British Army who carried out manoeuvres in the Forest in 1937 (Rackham 1989, 14-8). However, aerial photographs taken in 1946 and 1948 (NLAP 304 (106G/UK/1367/5274 3-Apr-46); NLAP 2894 (58/10/5121 8-May-48)) do not show any military installations in this area, and no fresh earthworks can be seen, all of which argues against a Second World War context for these features, although this may not preclude activity dating from the earlier World War.

#### **Platforms (b) TL 5360 2001**

Approximately 130m north of Warren Cottage, lie the remains of two possible building platforms. Each platform is up to 20m square and 0.4m high. To the east they are bounded by the ditch of Warren Coppice, and both are disturbed by later trackways and the 'furrow-like' features described above.

#### **Ditched Enclosure TL 5362 2015**

An irregular ditched enclosure measuring roughly 80m north to south by 60m, lies 200m to the north of the Warren and within the clearing. The site was first noted by Rackham (1989, 156, Fig 22), who portrayed it as a three sided enclosure.

The enclosure is roughly rectangular in shape and enclosed by a shallow U-shaped ditch up to 0.5m deep. There is no trace of an inner bank, the only internal feature is a shallow depression located in the centre of the north side. This feature is 15m in diameter, and may have been one of the quarries recorded in 1783 lying to the west of the Shermore Brook (Essex Record Office D/DB L1/12/2). The northern perimeter of the enclosure runs into the gravel pit at TL537 202 (see above) and appears to have been recut, perhaps as a drain.

Immediately to the north of the enclosure lies a series of ditches which may have been cut by the northern perimeter of the enclosure, thus offering the possibility that the enclosure could originally have extended further to the north than its present limits suggest.

# HATFIELD WARREN, ESSEX



unsurveyed

TL 52 SW 60

TL 52 SW 39

b

TL 52 SW 41

- Fence
- - Ridge and furrow
- ... Drain
- ... Ride
- - 'Furrow'
- ... Track

WARREN COTTAGE

ROUND COPPICE

WARREN COPPICE

THE WARREN

TL 51 NW 53

TL 51 NW 50

unsurveyed

TL 51 NW 52



---

### 3. INTERPRETATION AND DISCUSSION

---

There is no doubt that the main earthwork functioned as an artificial warren. The two types of pillow mound are found together at other warrens, but the reason for the variation in form is not clear (Williamson and Loveday 1988, 294); it is possible that they relate to a different phase of construction. Despite their very different form, however, it seems likely that both circular and linear pillow mounds served the same basic function, as an artificial burrow which facilitated the commercial farming of rabbits.

There is, however, some doubt as to the origins of the earthwork. Rackham (1989, 164-5) has suggested that the warren reused an earlier prehistoric earthwork, the warreners simply converting the enclosure bank into the series of pillow mounds now visible. This hypothesis has much to commend it. Iron Age activity has been recorded during the recent excavations at Stansted (Essex County Council 1989), some 3km to the north of the Warren, and perhaps at the nearby site of Portingbury Hills within Hatfield Forest (Rackham 1989, 161-3). More importantly in relation to the Warren, a putative Iron Age sherd of pottery and a flint blade were recovered from the ground surface within the Warren during the course of the recent RCHME survey (finds lodged with the Essex SMR). Elsewhere, other warrens are known to have utilized pre-existing features, for example at Minchinhampton Common in Gloucestershire, two pillow mounds were superimposed on an Iron Age linear earthwork (Williamson and Loveday 1988, 296).

The principal concern with this interpretation lies in the relationship of the Warren enclosure to the boundary of Warren Coppice lying along its eastern side. This side of the warren enclosure and the woodland bank bounding Warren Coppice run parallel for some 200m and are no more than 20m apart. If the Warren enclosure were prehistoric in origin, and thus so much earlier than the coppice, it is difficult to explain why the entire eastern perimeter was not re-used as the coppice boundary to save time and labour.

The function and date of the annex are uncertain; there are no pillow mounds on the perimeter and the interior is devoid of earthworks, although this may, in part, be a factor of preservation. If the warren enclosure ever extended across the neck of the annex - which is suggested by the fact that the drains from the interior pillow mounds appear to terminate at this point - no trace now survives on the ground. Although the

purpose of this feature is uncertain, it may be associated with the refurbishment of the warren in the later 17th century.

Alternatively, the warren may predate the establishment of the present coppice boundaries. Although the coppices are usually assigned to the medieval period, they are not well documented until the 17th century, and the earliest list of 1654 makes no mention of Warren Coppice (Essex Record Office D/DB T15/25). This argument is hard to sustain, however, since Rackham has made a good case for identifying Warren Coppice with a site called "Scalemoore" in the 1654 list.

A further possibility may be that the warren re-used an early undocumented medieval enclosure; this could be supported by the similarity between the angular north-western corner of the warren and the angularity of the adjacent boundary of Warren Coppice. What this putative enclosure may have been is uncertain. The possibility of an unrecorded coppice was considered and rejected by Rackham (1989, 162-5); it was argued that the enclosed area was too small and would not have needed a separate boundary from those of the neighbouring coppices.

Finally, the enclosure and pillow mounds could have been constructed simultaneously as part of the original warren complex to create an enclosed warren. However, enclosure at other warrens was usually limited to the larger examples on open heathland, and very few appear to be associated with small enclosures of the type recorded at Hatfield (Williamson and Loveday 1988, 297).

In conclusion the available evidence suggests that the warren did re-use a pre-existing enclosure, probably of later prehistoric date. The warren was not incorporated into the boundary of the adjacent coppice bank, although the construction of the south-eastern annex of the Warren did eventually join the two sites together at some unknown date, possibly during the ownership of Sir Edward Turnor in the late 17th century.

The ridge and furrow cultivation is of particular interest, since the physical remains of arable agriculture have not been recognised previously within the confines of Hatfield Forest. Rackham (1976, 163) suggested that '*Hatfield is of supreme interest in that all the elements of a medieval forest survive.*' However, the physical evidence of this intrusive episode of arable activity appears to have been overlooked. The identification of ridge and furrow in the clearing might call into question the antiquity of the coppice system which is only documented from the 17th century in its present form, and might suggest that parts of the medieval forest were given over to 'assarting', or clearance for cultivation at an earlier period.

Few documentary references to assarting within the Forest survive. In 1324, the Prior of Thremhall was convicted for having enclosed a croft in 1305, although the court allowed him to keep this holding (Essex Record Office D/DB L1/5/10). Rackham believed that this croft corresponded with an area known as 'Yemerlinoke' which lay in the north-western part of the Forest. In a survey of 1328, Yemerlinoke covered an area of some 14 acres (Rackham 1989, 70). That a threat from assarting may have been more long-standing is suggested in the Calendar of Close Rolls of 1242, where there is a reference to an '*order to Richard de Muntfichet to guard the forests of Writtle and Hatfield as before, and not to let Ysabel de Bruys destroy or assart the wood of the said forest, because ..... the venison of the same forest ..... will be worth nothing ..... if the wood of the said forest is destroyed*' (Translated in Rackham 1989, 75). The implication of this reference is that assarting had already begun in Hatfield Forest.

---

#### 4. METHOD AND ACKNOWLEDGEMENTS

---

Control points were established by means of a Wild TC1610 theodolite with integral EDM (electronic distance measuring equipment) and processed using the RCHME's own software package to produce a plot at 1:1000 scale. The archaeological detail was surveyed graphically using these fixed points.

The survey was undertaken by Paul Struth and Alastair Oswald of the RCHME's Cambridge Office. Jeremy Weisenfeldt, Warden of Hatfield Forest, provided practical assistance during the course of the survey. The earthwork plan was drawn up by Paul Struth; the report was researched and written by Paul Struth and edited by Paul Pattison. The site archive has been deposited in the National Monuments Record, Kemble Drive, Swindon SN2 2GZ (TL 51 NW 47).

Crown Copyright: Royal Commission on the Historical Monuments of England.

---

## 5. BIBLIOGRAPHY

---

- Essex County Council      1989    Archaeology at the Airport: The Stansted Archaeological Project 1985-89. Chelmsford, Essex County Council.
- NLAP                              The National Library of Air Photographs, Alexander House, 19 Fleming Way, Swindon, SN1 2NG. (Tel 0793 414100)
- Rackham O                      1976. Trees and Woodland in the British Landscape. London, Dent.
1989. The Last Forest. London, Dent.
- Williamson T                  1988    'Rabbits or Ritual ? Artificial Warrens and the Neolithic Long Mound Tradition' The Archaeological Journal, 145, 290-313.
- & Loveday R





