ISSN 1478- 7008

Dyrham Park,
South Gloucestershire.

Archaeological Investigation Report Series AI/39/2002

DYRHAM PARK
South Gloucestershire

An archaeological earthwork survey

AI/39/2002

County: South Gloucestershire

Parish: Dyrham and Hinton

NGR: Area centred ST 745756

NMR No: ST 77 NW 9, 18

Surveyed Jan-Feb 2002

Surveyed by N Smith, M Calder and D Field

Report by N Smith

Illustrations by D Cunliffe

Photographs by N Smith

ISSN 1478-7008

National Monuments Record Centre, Great Western Village, Kemble Drive, Swindon, SN2 2GZ *Tel:* 01793-414700 *Fax:*01793 414707 http.english-heritage.org.uk

CONTENTS

LIST OF ILLUSTRATIONS

1. INTRODUCTION

Dyrham Park is a National Trust property consisting of a late 17th-century mansion surrounded by gardens and parkland. An archaeological investigation of earthworks within the *c*107ha of parkland was carried out by English Heritage during January and February 2002 in response to a request from the National Trust. The request resulted from a recommendation made in an archaeological assessment of the park (McDonnell 2000). Although the earthworks within the park were under no immediate threat, a metrically accurate plan was needed to ensure their continued preservation, and to assist in future conservation and management decisions. It was also required to inform Dyrham's imminent Countryside Stewardship proposal. The survey was further intended to contribute to the work of the National Trust by enhancing the understanding of the park and adding to its future public presentation.
The objective of the English Heritage investigation was to carry out an analytical field survey and to provide a hachured earthwork plan of the entire park at 1:2500 scale on a contoured base with an accompanying descriptive and interpretative report.

Centred at NGR ST 745757, next to the A46 Bath to Gloucester road and less than two miles south of the M4 junction 18, Dyrham lies approximately eight miles north of Bath and twelve miles east of Bristol. The area forms part of the parish of

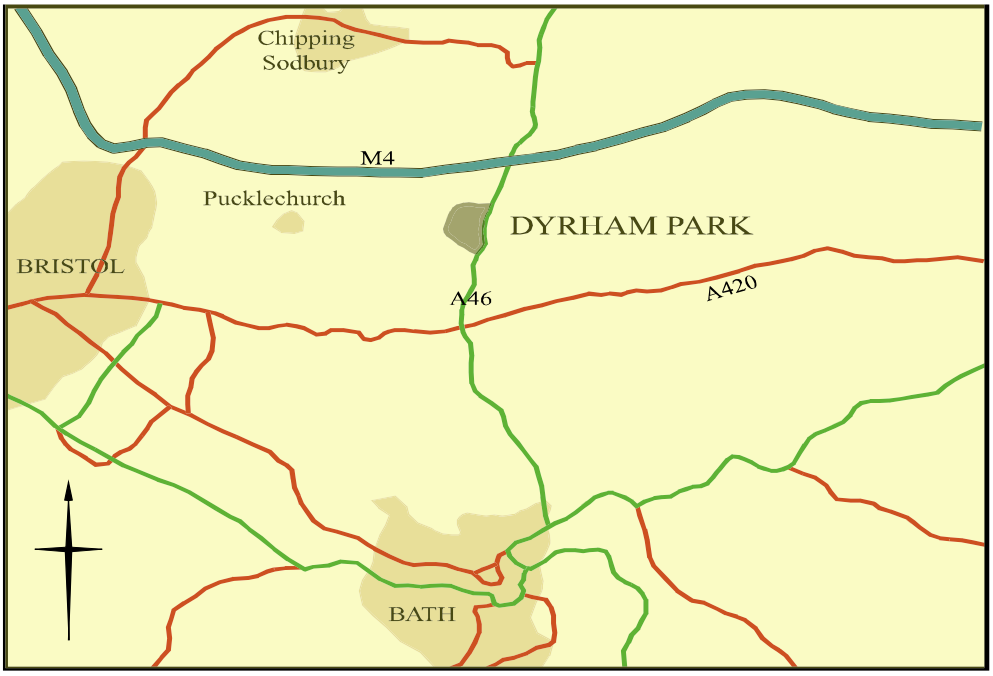

Figure 1: Location plan

Dyrham and Hinton, which was once within the ancient hundred of Lower Grumbald's Ash, Gloucestershire and is now part of the Unitary Authority of South Gloucestershire.

The small village of Dyrham sits immediately to the west of Dyrham Park, separated from Dyrham Park house only by the west garden. The village church, of St Peter, lies beside the house and is attached to its north-western corner. The park is used today for

grazing the large historic herd of fallow deer maintained by the National Trust and for seasonal cattle grazing. Both the house and park are also open to the public.

The house is listed by English Heritage as a Grade I building and the church is also listed as Grade I (DOE August 1985, 76-77, 79). The park is listed as Grade 2* by English Heritage (EH 1985). Dyrham Park house and park are recorded as ST 77 NW 9 by the National Monuments Record (NMR). An additional `site' within the survey area is `Celtic fields' (NMR ST 77 NW 18).

2. GEOLOGY AND TOPOGRAPHY

Figure 2. View looking west towards Dyrham Park house in the valley, with the rich farmland of the Severn Vale beyond. The tower of Dyrham church is visible immediately behind the house.

Dyrham Park is situated towards the southern end of the Cotswold escarpment where the hills rise dramatically and steeply to overlook the Severn Vale and Bristol to the west. Here the hard Jurassic limestone mass of the Cotswolds forms a great indented wall of steep hills with deep valleys (Kellaway & Welch 1948, 2). The house, at 125m OD, lies in the bottom of a re-entrant valley, which is narrow and steep-sided to the east of the house, where it is divided by a projecting spur. Parkland rises steeply to the north and east of the house, reaching a high point of 198m OD. To the west of the house the valley opens out and there is a level garden beyond which the ground gradually drops down to the Vale. Its situation has long made Dyrham a favoured site for settlement, not least because of the unfailing natural springs flowing from the hills within the park.

Situated on the escarpment, Dyrham Park straddles the outcrops of several different rock types and their soils. The eastern area of the park, on the plateau, is underlain by bands of Chalky White Limestone, Clay and Fuller's Earth. Further to the west as the land drops down towards the centre of the park the underlying rock becomes `rubbly limestone' descending to Midford Sands and Dyrham Silts on the lower hill slopes and in the valleys respectively (Geological Survey 1965). The resulting soil is silty and slowly permeable, calcareous and clayey in the valleys, but well-drained and brashy in other parts (Soil Survey, 1983, 7, 13, 16).

3. ARCHAEOLOGICAL CONTEXT

The area around Dyrham has attracted human activity from early times. Worked flints, possibly associated with a large sub-circular enclosure (NMR ST 77 NW 12), have been recovered from a field just to the north of the park, while the remains of a Bronze Age round barrow or a truncated Neolithic long barrow (NMR ST 77 NE 16) lie immediately to the north-west. A further possible barrow which lies to the south of the park (NMR ST 77 SW 35) may have been re-used as a boundary marker during the Anglo-Saxon period.

From the Iron Age period onwards there is evidence for an increasing amount of activity in the area around Dyrham. Hinton hillfort (NMR ST 77 NW 5), a univallate enclosure on Hinton Hill only 300m from the northern boundary of the park, may have been the site of an Iron Age settlement. A further possible Iron Age `camp' has been suggested at Pucklechurch to the west of Dyrham, within the alleged site of the royal palace of Edmund, King of the West Saxons (NMR ST 77 NW 2).

The area certainly attracted settlement during the Roman period, when its importance grew due to its proximity to the major Roman town of *Aquae Sulis* (Bath). Cropmarks and debris of Romano-British settlements abound in the vicinity with examples being found a mile to the west of the park (NMR ST 77 NW 1), and a mile to the north-west (NMR ST 77 NW 17). A Roman villa site has also been recorded at Doddington just two miles north of Dyrham (NMR ST 77 NW 4), while two Roman burials (NMR ST 77 SW 4) were unearthed less than a mile to the south of the park. Further archaeological evidence shows agricultural use of the area during this period. Earthworks of an Iron Age or Romano-British field system (NMR ST 77 NW 6) in the valley between Hinton hillfort and Dyrham park boundary may be associated with the hillfort. A Roman road (NMR RR 542) is also purported to have led from *Aquae Sulis* to Chavenage Green and followed the line of the present A46 past Dyrham Park, but the authenticity of this has not been verified.

Dyrham continued to be a well-settled agricultural landscape during the medieval period. Strip lynchets on many of the nearby hill slopes (NMR ST 77 NW 6, 13 and 39) show expansion of cultivation beyond the valleys at this time. Ecclesiastical building shows prosperity during the 13th century in particular. The Church of St Peter at Dyrham (NMR ST 77 NW 15) has a core dating from the second half of the 13th century and the tower dates from soon after 1400. The Ring O'Bells farmhouse (NMR ST 77 NW 16) near Hinton also incorporates remains from a 13th-century church or chapel. The 15th century appears to have been a time of further development. It was then that the north aisle of St Peter's church was widened and St Augustine's Abbey, Bristol, built an *infirmarium* (NMR ST 77 NW 20) at Codrington, north of Dyrham. At this time Healy Court Farm, Hinton (NMR ST 77 NW 25) was also constructed as a medieval house of some importance, although earthworks around Hinton village (NMR ST 77 NW 8) show contraction of settlement probably during the later medieval or post-medieval period.

4. HISTORICAL BACKGROUND

The first known documentary record for Dyrham dates from the 9th century. The name is believed to derive from the Saxon `*deor-hamm*', meaning `deer enclosure' (Smith 1964, 49), or alternatively `*dwr*' meaning `water' and `*ham*' meaning `little town' (Kenworthy-Browne 1980, 34). Dyrham is most famous for its mention, in the Anglo-Saxon Chronicle as the site of a battle of 577AD, in which three British kings were killed by Ceawlin of the West Saxons and his son Cuthwine, resulting in the capture of the cities of Cirencester, Bath and Gloucester. This was a strategically important victory in the Anglo-Saxon advance, opening up the Severn valley to settlement and severing the land-link between the Britons in Wales and their allies on the south-western peninsula. Although it is certain that the battle took place somewhere near modern Dyrham, its exact site is not known.

By the late Anglo-Saxon period a wealthy manor had been established at Dyrham. Prior to the Norman Conquest this was held by Aelfric and was valued at £12, a high amount for the area. By 1086 it was in the hands of William, son of Guy and its value was reduced to £8. It then had thirteen villagers and thirteen smallholders with two ploughs and one in lordship, eight slaves, three mills and 6a meadow (Moore 1982, 35.1).

The area covered by north Avon was a royal hunting preserve during late Saxon times and was largely occupied by Kingswood Forest until 1228 (Aston & Iles 1987, 117). Dyrham lay just outside the forest and throughout the medieval period its history was similar to that of most other small manors as it passed through the hands of a number of baronial families - in this case Newmarch, Russel and Denys. Following the disafforestation of Kingswood in 1228 (Aston & Iles 1987, 117) large numbers of deer parks were established close to Dyrham. Many were created in 13th and early 14th centuries and in 1295 Robert Walerand, husband of Matilda or Maud Russel, was granted the right of free warren on his estate at Dyrham (McDonnell 2000, 26), but there was no mention of a park at this time. In the later 15th and 16th centuries there was a revival of interest in parks (Aston & Iles 1987, 119). It is to this relatively late period that the park at Dyrham apparently belongs, the first known documentary reference to it being in 1511, when a licence to empark 500a with right of free warren was granted to William Denys. According to recent historical research (Fretwell 1997, 5) a park was established about half a mile to the south of the manor house during the 16th century, but it was not until after 1638 that the present deer park (NMR ST 77 NW 23) was created next to the house. In 1571 Dyrham was sold to George Wynter, brother of Admiral Sir William Wynter of Lydney who had played an important part in the defeat of the Spanish Armada and a further licence to empark was issued in 1620 (Fretwell 1997, 3). At some time during the medieval or early post-medieval period a rabbit warren was also established at Dyrham, although we have no documentary record of this until later.

In 1686 William Blathwayt became the owner of Dyrham when he married Mary Wynter, the daughter and heiress of John Wynter. Blathwayt held high diplomatic office, eventually rising to become Secretary of State to William III in Flanders. When he acquired Dyrham the old manorial estate and its Elizabethan manor house had become run-down. Soon after the death of his wife in 1691 he rebuilt the old manor house on a lavish scale and transformed the landscape around it by extending

the existing park and constructing formal gardens over a large part of it to equal the splendour of his new house. A wealth of documentary evidence survives to illustrate this including letters, bills, accounts, an engraving by Kip and contemporary descriptions (Kenworthy-Browne 1980, 29-30, 50). The garden was laid out between 1691 and 1704, although alterations and refinements continued until at least 1706. William III's new Dutch garden at Hampton Court must have been a model for the garden at Dyrham Park. George London, Deputy Superintendent of the Royal Gardens, advised on their design while William Talman, Comptroller of the Office of Works and the Royal Gardens, worked on both the buildings and gardens at Hampton Court (Thurley 1995, 27) and Dyrham Park. Others including Hurnall, the Head Gardener, and Blathwayt himself were also involved in its creation. Blathwayt had seen Continental gardens on his overseas postings to Holland, and from a `Grand Tour' he had made through Sweden, Italy, Germany and France. His garden was severely influenced by its geography. Its French and Dutch models were generally on flat sites, but the terrain was used to good effect (Fretwell 1997, 4) with high terraces on slopes giving good views of the garden and countryside beyond. The ample water supply was another compensation and was used to supply the many fountains and other water features.

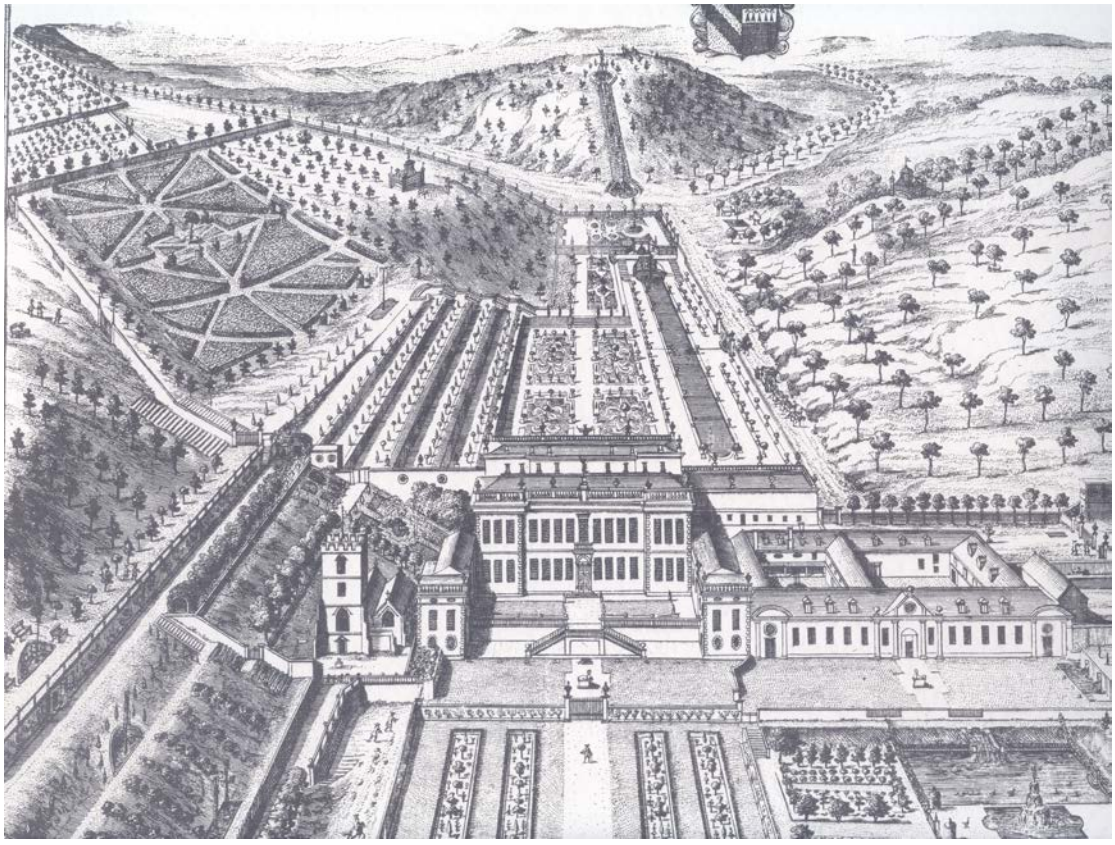

Figure 3. Kip's view, c1710, looking east towards formal gardens, now parkland, beyond the house

The garden at Dyrham Park was in its hey day between 1704 and 1750 (Mowl 2002, 51). It fell into three sections to the east, north and west of the house. That to the west of the house lay outside the current survey area. The east garden appears to have been envisaged at an early date and, in order to explain the odd alignment of its main

features of a cascade and canal in the direction of the later orangery, its design has been said to relate to the old house (Fretwell 1997, 4). However, the Great Hall, which is only remaining part of the original house to survive today, lies fairly centrally within the later building (Kenworthy-Browne 1980, 6-7). It could be that the layout was influenced by another garden, such as Hampton Court, or that the cascade and canal followed the direction of the natural watercourse, which the water rejoins beyond the west garden.

The main features of the formal garden were a canal extending from the orangery to a cascade of 224 steps on the hill beyond. In front of the house was a parterre, with five terraces ascending the hill to the west, with the Long Terrace and the Wilderness beyond. To the north beyond the churchyard were further terraces and small gardens. The whole was exuberantly decorated with fountains, statuary and ornamental buildings (Fretwell 1997, 4). Early maps (for example Coates 1766), as well as Kip's engraving, show that the parkland beyond the garden was also formalised as part of the design. The creation of the formal gardens was also accompanied by enlargement of the park. In 1691-1706 twenty-two deeds of lands in Upper Field (Glos RO D1799/T9) were purchased as part of this enlargement. A field named `Oxehouse Leaze' in 1689 was also taken into the park and became a `Nursery' next to the lodge and `Derbarton'. Although still enclosed, fields north of the park boundary appear to have been formalised as part of the parkland, with radiating tree-lined avenues (Coates 1766).

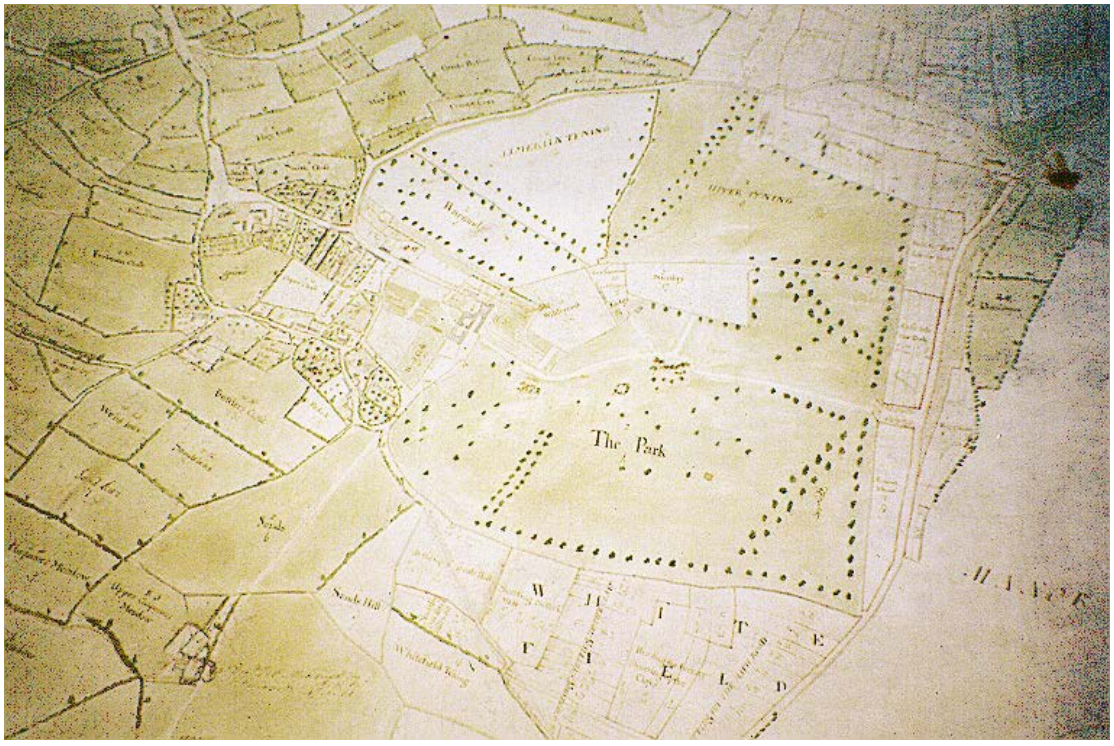

Figure 4. Survey of the Manor of Dirham by Giles Coates, 1766 (reproduced courtesy of Gloucestershire County Record Office)

The Dyrham garden was not only extravagant to build, but costly to maintain. During the later 18th century it became derelict as its upkeep became too expensive and it became more and more unfashionable. As early as 1779 Rudder describes `the curious

waterworks' as `much neglected and going to decay' (Kenworthy-Browne 1980, 53) and the garden seems to have been cleared away gradually. By 1766 the cascade is omitted from Coates's map and by 1791 the garden was described as `reconciled to modern taste' by Bigland (Kenworthy-Browne 1980, 53).

Landscaped parks in the style of Capability Brown were fashionable long before 1800 and the occasion for remodelling the park and garden came after the Bath-Gloucester road had been improved in the late 18th century. This enabled a new drive to the house from the east to be laid out by Charles Harcourt-Masters in 1798-9. In 1798 William Blathwayt IV also employed Harcourt-Masters to `mark out the plantations' and to 'dispose and plant trees' (Kenworthy-Browne 1980, 32) and soon afterwards Humphrey Repton gave advice on further landscaping. Letters from him, of 1803, refer to the building of a pavilion, steps and a terrace (Fretwell 1997, 8), but the new layout was mostly plain with the north and east areas grassed over and opened up to the park. Earth moving occurred as part of the landscaping and new lodges were built with radiating tree-lined avenues. At the same time enclosure provided the opportunity for further expansion as Dyrham Upper Field and White Field were taken in and the park boundary became as it is today (Weaver 1833). The park changed little after this time and came into the possession of the National Trust in 1976.

5. PREVIOUS ARCHAEOLOGICAL WORK

Archaeological work has been carried out on the gardens to the west of Dyrham Park house and within the park itself, but no accurate and comprehensive plan of the earthworks in the park existed before the present survey. Previous work in the park consisted of a survey covering 21ha of the central area by Avon County Council in 1992 and a survey covering the area of the formal gardens immediately to the north and east of the house by the Cotswold Archaeological Trust in 1996. They compiled records for archaeological features they identified, with an accompanying descriptive list. Both surveys had limitations as management tools, not least because they only covered 27.1% of the park (McDonnell 2000, 24).

In August 1999 excavations were carried out in the area of the former gardens to the east of the house. These demonstrated that 18th-century garden features, including revetment walling, survive only 16-20cm below the ground surface. A stone-filled pit was also recorded, containing fragments of a possibly medieval cooking pot. Geophysical survey further revealed the position of some of the formal 18th-century garden walls, statue bases and the 18th-century drive and showed the ground plan of a rectangular building orientated differently to the house and garden (McDonnell 2000, 25).

An archaeological assessment of the park by Richard McDonnell followed in 2000. This summarised all that was known at the time and archaeological features previously recorded were depicted on a 1:2500 scale base map. Primary Record Numbers 1-100 were used for features identified in the 1992 survey, 101-200 for features identified in the survey of 1996 and 201-300 for features added by the assessment itself, although it did not enumerate new individual sites as a matter of course (McDonnell 2000, 25).

These numbers appear on the annotated earthwork plan, figure 5. Where earthwork features were previously unnumbered, new feature numbers 301-44 have been allocated. These new numbers are purely for the purpose of this report and bear no relation to the numbering system of any records kept elsewhere.

6. THE EARTHWORKS

6.1 General description

Figure 6. Aerial photograph showing earthworks in the centre of Dyrham Park in 2001. © English Heritage NMR (NMR 21102/09).

The earthworks within Dyrham Park can be divided into characteristic blocks of features whose state of preservation has been dictated by their position within the park and by the topography. In the northern area of the park all the remains are very denuded consisting of, at best, very low banks with further undulations giving hints of further earthworks. These were surveyed where possible. Poor preservation of earthwork features here may, as has been suggested (McDonnell 2000, 28), result from much of this area of the park having been brought into the park at a relatively late date. Further to the south - on the central eastern plateau of the park - there are further low earthworks of former fields and ridge and furrow, equally denuded, which also became part of the park following later expansion. In this area there are also small, but clearly defined, linear banks and ditches, features remaining from the formal parkland. Further south again, on the plateau between the driveway and White Field lies a remarkably complete medieval field system defined by spread banks. The earthworks of narrow ridge and furrow, which still cover much of the park, show that the area was once extensively cultivated.

The earthworks of former field systems continue westwards along the valley to the south and east of Dyrham Park house, where the earthworks become greater and form a series of contour-following terraces along the hill slopes. Towards the house are well-preserved earthworks of pillow mounds, field boundaries, a quarry, hollow-ways and several platforms cut into the hillside. These have similarities to earthworks lying

immediately to the north of the house, where the boundary of a former rabbit warren, further pillow mounds, and garden terraces are also well-preserved.

The final group of earthworks includes very low linear banks and ditches of former avenues, a building platform and ponds in the valleys leading from the house. On a projecting spur above the house the statue of Neptune stands, in the centre of a dried up pond, looking down over the house. The further ponds and culverts lie at the head of the re-entrant valley beyond Neptune, including the `Old Pond' - a substantial header pond formed by throwing a large dam across the valley.

Within the re-seeded area known as `White Field' there has clearly been far more destructive land-use than in the rest of the park and although vague irregularities in the ground surface were visible the field contained no surveyable archaeological earthworks. A bank following the line of the exit road, presumably made recently to control vehicle traffic, was surveyed only to ensure completeness of the earthwork plan. Aerial photographic evidence confirms that this field has been subjected to, probably continuous, modern cultivation over a long period. All coverage examined (ranging in date from 1946 to1989) showed it as ploughed (APs RAF 106G UK 1415 14 April 1946, NMR 70/356 202 20th Sept 1970, NMR 89/299 232 18th June 1989).

6.2 Earthworks of the pre-parkland landscape

The extensive field systems within Dyrham Park include the earliest archaeological earthworks to be found there. From its proximity to Hinton hillfort and field systems possibly associated with it and, since the area around Dyrham was heavily settled during the Roman period, it is probable that some of the field boundaries surviving as earthworks within Dyrham Park date from the prehistoric or Roman periods.

The evidence for pre-medieval fields is common throughout Avon, particularly on the limestone uplands, where elongated fields of about 0.5a to 2a in size, normally very regular in layout, survive in places which were not cultivated in the post-Roman period (Aston & Iles 1987, 109-110). Good examples lie on Charmy Down (Grimes 1960, 224) and Bathampton Down (Crawford & Keiller 1928, 144-5). Unlike such examples, we know that cultivation within what later became Dyrham Park continued into the medieval and later periods, making it more difficult to date the field systems.

The most convincing of possible later prehistoric or Roman fields surviving within Dyrham Park are those to the south-east of the house. Here several pillow mounds lie at right angles to, and run downhill from, the contour-following banks and strip lynchets. It was common practice to construct pillow mounds over earlier earthworks, and elsewhere in Dyrham Park pillow mounds 005, 332 and 012 overlie earlier earthworks. The pillow mounds may thus follow the position of cross-banks of a `Celtic' field system. Any banks running downhill would have been lesser earthworks than the strip lynchets and could have been effectively destroyed by the pillow mounds' construction. The alignment of the system is similar to that of the fields below Hinton Hill. This is partly an accident of topography but may also indicate that they formed part of the same system.

Other field systems in the park may have been laid out incorporating boundaries of earlier fields. A close relationship can be seen between the medieval and earlier fields of Bleadon on the Mendips where earthworks of early fields surviving in historic pasture appear to have been once part of the same system as medieval strip field boundaries fossilised by enclosure (Aston & Iles 1987, 109-111).

During the medieval period the open fields of Dyrham village may have occupied large parts of what is now Dyrham Park. Fields were gradually taken into the park, either on its creation or during subsequent phases of expansion. Some of the field boundaries surviving as earthworks within the park today are not depicted on any maps. These lie in the central area, which formed the core of the 17th-century park. They include features 018, 325, 312-4 and 001-4.

One complex formed by low parallel banks 312, 314 and 209, is a well-preserved sub-rectangular block of fields extending north to the Old Pond and cut by the driveway leading to the house from the east. It has the characteristic reversed S-shaped furlong boundaries of medieval fields. It is associated with further similar, though less complete systems on the plateau, such as 201. Narrow ridge and furrow, with furrows approximately 3m apart, follows the alignment of the field boundaries and covers large areas of the plateau within the park. It appears absent from the valleys and the hill slopes, despite the presence of field banks on the slopes, indicating that the field systems on the plateau continued in use until later. Narrow ridge and furrow of this type has a wide date range from the early medieval to post-medieval periods and in some parts of England it remained in continuous use throughout the Middle Ages and beyond (Drury 1981, 51-8). Later narrow ridge and furrow is generally very straight, unlike the sinuous layout seen at Dyrham. It is probable that these earthworks, both the field banks and ridge and furrow, represent the layout of the open fields of Dyrham at the time they were taken into the park soon after 1620.

Further field boundaries now in Dyrham Park continued in use until the park was extended. These can be traced on early maps. They include 207a and 206b shown on a map of 1689 (Jacob) as the northern and southern boundaries of `Oxehouse Tininge' and 308 and 205, shown on a map of 1766 as the boundaries of `Dunsdown Furlong' and `Warrand' respectively (Coates).

Other pre-park features to survive at Dyrham are hollow-ways 016-7 leading to Dyrham village. These substantial earthworks represent the old course of Sands Hill, a road now truncated by the park boundary with its present course running around the outside of the park. The route led to the old manor house and village and perhaps formed one of several parallel courses of the road. Jacob's map shows that the hollow-ways fell within the park before 1689. The road continuing south from the hollow-ways cuts diagonally through and thus post-dates furlongs of the open fields on Coates's map.

A quarry (203) lying at the top of the steep natural scarp close to the northern boundary of the park may be an early lime quarry from its situation within an area named `Limekilln Conigeare' on Jacob's map, but its date and purpose are uncertain. Further quarries within the park are similarly undated (see below p18).

6.3 Earthworks of the deer park

The most obvious earthwork feature of a deer park is usually its boundary, generally a large earthen bank and ditch following a curvilinear alignment. At Dyrham the enclosing stone wall does not stand upon an earthwork circuit and there is surprisingly little evidence for the earlier park boundary. Except where the park wall follows the contours of hills adjacent to the house, it follows straight lines and has angular changes in direction. The earthwork remains of the park boundary as it was on a map of 1689 can be traced on the ground as features 207a, 333, 018b, 018f and part of 206 These survive as low banks, while the remainder of the circuit follows the present park wall. Feature 206a appears to be a park pale from its earthwork form, but it is difficult to reconcile this interpretation with the documentary evidence as at present understood. The park wall overlies it and its line is continued to the east of the A46 by a curvilinear field boundary suggesting that it pre-dates the present road. Feature 137, three terraces including a terraced walkway leading towards the house and church, continues its line westwards but is very different in form. This may have been due to later adaptation as part of the formal garden. We have no record of an early park adjacent to Dyrham Park house but know that feature 206a existed before 1689. Although it is not shown on Jacob's map, there is a significant kink in the park's eastern boundary at the point where it runs in, and this is still visible in the earthworks today. There was a tendency for later parks to be enclosed by walls rather than banks and ditches, which would explain the absence of an earthwork circuit at Dyrham. Later maps show a boundary running parallel to the north of 206a, as recorded in the archaeological assessment (McDonnell 2000). One explanation for 206a could be that there had been an earlier park at Dyrham and that it had once been larger and had extended south from this boundary. Perhaps the 13th-century right of free warren had been accompanied by the creation of a park. The 1511 licence to empark allowed for the enclosure of 500a of parkland, while in 1689 the deer-park only covered 78a and the area immediately to its east appears as a large swathe of unenclosed land without a field name. A deed dated 1624 records that the park was then of 152a. This area included a field of 4a named `Horse Leaze' `where the poole was lately enclosed'. By 1665 the park had grown to 264a with field names including Foxholes and Horse Leaze Pool land described as 14a in the `new park' (Glos RO, D2659/T7).

Whatever the truth is about its early history the northern, eastern and southern areas of the later park were outside the park in 1689. The area beyond the northern boundary was divided into fields and to the south and east was unenclosed land whose use is not stated. Earthwork features surviving from this period are 309, 206b and perhaps 334, the boundaries of a field called `Newlands Tininge'. Earthworks 207a and b are former avenues delimited by narrow, but well-defined banks. In 1689 feature 207a appears as the southern boundary of a field named `Oxehouse Tininge'. Along the outside of the field's southern boundary earthwork 207a probably represents the line of an avenue leading to a lodge at its western end. This lodge was a small building in approximately the same position as the present lodge. In 1624 deeds also record a lodge called `Foxhole' which then consisted of a hall, kitchen, buttery, five upstairs rooms and outbuildings. In 1654 New Wood Lodge and Lower Lodge are mentioned with lands. Within the former `Oxehouse Tininge' the survey identified a small square earthwork platform, 310.

We do not know exactly when the warren was established at Dyrham, but its earthworks survive in the form of pillow mounds and an earthwork enclosure. Two groups of pillow mounds were recorded during the present survey. One group lies to the north of the house and the church. This comprises eight pillow mounds (204, 301-4, 130, 140, 336) and one possible pillow mound (205), in varying states of preservation. Characteristically, although their lengths vary considerably their width remains constant at about 8-10m. Some of the pillow mounds lie within an irregular trapezoidal enclosure named `Warren' or `Warrand' on early maps (Jacob 1689; Coates 1766), whose boundaries survive as low banks (335, 331). Pillow mound 204 lies outside the enclosure but within the area of a field named `The Stub Conigeere'. Two of the pillow mounds overlie earlier earthworks. 205 is a very denuded earthwork, but appears to be a pillow mound. If this is the case, it overlies the line of bank 335. A further pillow mound, 336, lies on top of lynchet 306.

A further group of ten pillow mounds lies to the south-east of the house. This consists of at least eleven examples. The best are features 007, 005, 008, 019, 332 and 337-9, the other three, 340-2, are less well-defined but are almost certainly pillow mounds. Pillow mounds in this group display less variation in their length than those to the north of the house, all being about 20-30m long, and the same width as those of the other group, 8-10m. Feature 019 represents the less common round type. 001-4 are field boundaries with hints of pillow mounds on top of some. Their similar alignment to 204 in the northern group suggests 204 also follows the line of a field bank, though none is visible today.

Pillow mounds are a typical feature of post-medieval parkland. Fieldwork and excavation have seldom produced any evidence for their construction before the 16th century and most in lowland England were built in the period after 1600 (Williamson & Loveday 1988, 298-9). Although the distribution of the northern group is not confined by the `warren' enclosure all the mounds here lie within the same general area. The southern group has no evidence for any enclosure. This suggests that the enclosure and the mounds may not have been in use at the same time. Documentary evidence exists for rabbit keeping at Dyrham as late as the 18th century, when a letter of 1704 discusses the keeper's salary, his responsibility for maintaining a good stock of rabbits and supplying the house (Glos RO D1799/E244). Certainly any rabbit keeping during this period of the formal gardens would have needed to be strictly controlled and the warren enclosed. The mounds may only represent a short period of the warren's use, since there are many warrens in Avon and elsewhere without pillow mounds (Aston & Iles 1987, 121). By 1833 the warren enclosure boundary had been removed (Weaver).

6.4 Remains of the formal garden

Figure 10. The statue of Neptune, c1706, survives from William Blathwayt's garden at Dyrham.

Kip's depiction of the formal gardens gives us a remarkably detailed view of what they looked like in their heyday. The main area of the gardens lay in the valley immediately in front of the house, where much has since been either deliberately levelled by later landscaping or by chance from its former use as a car park, making the few visible remains of the formal gardens here very slight. It is, however, still possible to identify some of the features shown by Kip. The most obvious are the Statue of Neptune, which until about 1706 stood lower down the hill (Fretwell 1997, 2), but now stands in the centre of a dried up pond, and the cascade running downhill from them. The steps of the cascade are difficult to see and too slight to survey at 1:2500 scale, but linear features running down the hill from Neptune appear to delimit its edges. Although the canal appears as a major feature of the garden, surprisingly no earthwork remains of it were found. The parterres of the formal garden were confined to the valley in front of house, where the flat ground was extended as much as possible by levelling. The levelling of the valley is still evident but other remains in the valley are far from clear. Narrow and slight ditched features may follow the courses of walkways amongst the parterres, but are too fragmentary to interpret with any certainty. Of the terraces depicted by Kip, the Long Terrace survives well immediately above the church (feature 324), as does the line of the, now partly tumbled, retaining wall running parallel with it just to the north. The Long Terrace was extended further west in 1694 and four terraces were constructed below it (Fretwell 1997, 4) as shown by Kip. However, it is difficult to reconcile Kip's depiction of the east terraces with remains on the ground today. The terraces were either covered by dumps of earth or levelled when the area was landscaped later. The former may be most likely since the slope in this area lies very far forward in relation to the façade of the house. Alternatively, it is just possible that the terraces are represented by feature 137, but in this case Kip's perspective would be very

misleading indeed. Feature 137 is more likely to be an old boundary (a continuation of feature 206) perhaps re-modelled for the western side of `The Wilderness'. This was created in 1696 as a place for reading and contemplation and was cut by diagonally crossing straight walks (Fretwell 1997, 4) of which no earthworks were found.

By 1766 (Coates) the park had been extended eastwards to take in the former unenclosed land between the old park boundary and the road, leaving only narrow band of fields between it's eastern edge and the road. The eastern park boundary was thus established where it is today with the old boundary becoming an earthwork in the park.

Beyond the area shown by Kip further features of the formal gardens and parkland remain to be seen. The most impressive of these is the Old Pond, feature 311, a header pond which once supplied water for the formal gardens. This survives as a good complex of earthworks, now within a tree enclosure. The pond was created by throwing a massive dam across the head of a re-entrant valley at a point where several springs issue from the hillside high above the house. Contour-following banks form its sides. It is water-filled in summer and has the remains of a large masonry structure beside it.

Figure 11: The Old Pond

The remains of stone lined channels, features lie on the slopes above the pond and further traces can be seen on the hill slopes below. The masonry structure may have been a feature of the later park, since it appears as a small circle on a late 19th-century map (OS 1882).

Platforms of buildings or other structures were also recorded within the park. Two of these features, 011 and 326, lie on the upper slopes of the hills to the south-east of the house. They consist of sub-rectangular levelled areas terraced into the slope. Feature 011 is clearly sited to take maximum advantage of a stunning view towards the house

and perhaps also to be visible from the house. The tree planting of the later park enhances the view for this platform, suggesting that it may have been created as

Figure 12: Remains of stone and brick-lined culverts which once took water to the gardens

part of the landscaped park. Feature 326 is a smaller platform, which faces away from the house. These may have been the sites of small buildings, arbours, seats or statues.

A further earthwork platform, feature 310, lies in the valley mid-way between the Old Pond and the Old Lodge. This is very different from the other two. It is a well-defined sub-square depression. Its date and purpose are not known and it does not appear on any maps. It has been suggested that it could represent the site of an ox-house, but it may be of a later date. Another, sub-rectangular platform (feature 307), is situated to the north-east of the Old Lodge, above a pond. This is on a similar alignment to the previous platform and to the building discovered in the valley in front of the house during geophysical survey (see above page 9). None of these features were depicted on any early maps consulted.

Figure 13: Collapsed stone structure adjacent to the Old Pond

A further earthwork feature, which may have been contemporary with the formal gardens at Dyrham, is a quarry to the south of the house. This feature, 021, cuts field boundaries 001-002. The purpose of this quarry is not known. It may have been for lime, but gravel extraction for paths is recorded in 1696 (Fretwell 1997, 7) and men prospected for lead ore in the park in 1698, although they failed to find any. Although stone for the house, garden walls and buildings came from the local quarries at Oldfield and Tolldown (Kenworthy-Browne 1980, 47) rather than from the park itself, small quarries within the park may have provided stone for minor repairs to the park wall. Smaller quarries within the park are similarly placed along the edge of the escarpment. Examples lie on the northern slopes of Neptune Hill and on the hill immediately to the north of the house.

One enigmatic earthwork is feature 009. It appears as a field boundary overlain by one or two pillow mounds, but is dissimilar to the other pillow mounds and banks in the park because its ditches appear larger. This may result from the fact that it is cut into the side of a slope, but its alignment in the direction of the Neptune Statue indicates that it may have had a use as part of the formal garden.

On the northern side of the Old Pond enclosure are the narrow banks forming straight, parallel, walkways (features 207a and b). These remain as well-defined earthworks for much of their course and both end abruptly on the line of bank 333 and here similar narrow banks form a small square arrangement of uncertain date or purpose, but probably another feature of the formal 17th- to 18th-century parkland.

6.5 The landscaped park and later features

By the time the park was landscaped at the beginning of the 19th century, the formal gardens had already begun to be swept away and further alterations had been made. New structures were also built prior to the landscaping of the park, such as the `Temple in ye Walk' mentioned in accounts for 1776-9 (Glos RO D1799/A137). This may have been a round pavilion faintly shown on the terrace north of the house in a drawing of *c*1790 (Fretwell 1997, 8).

As part of the landscaping the present driveway was laid out. This followed the line of a Blathwayt avenue as far as the Old Pond, cutting through the earthworks of the early field systems to approach the house from the east.

Sculpting of the natural landscape at Dyrham took place at this time. In 1797-8 bills for work included extensive alterations to the Hill and one of the first tasks Charles Harcourt-Masters carried out in 1798-9 was earth-modelling (Fretwell 1997, 8). This modification of the natural landscape is extremely difficult to identify today because it was designed to appear as natural as possible. This has been recognised in relation to recording `Brownian' landscapes elsewhere (for example, Phipps 1998). Despite this, the Neptune Hill has evidently been flattened on top and the levelling of the valley in front of the house remains obvious. The slope forming the northern side of the valley has probably also been built up, so covering the terraces of the formal gardens. Contemporary with this earthmoving was the removal of the remaining internal boundaries within the park to leave a very open landscape.

Figure 14: Dyrham Park as depicted by Weaver, 1833 (reproduced courtesy of Gloucestershire County Record Office)

7. SUMMARY

The creation of Dyrham Park in the 17th century has preserved earthwork remains of field systems with a wide date range. The most prominent and complete systems were almost certainly those connected with Dyrham village and these probably remained in use until the area became parkland. In addition to these there are fragmentary earthworks of further fields which, despite their poor preservation, are not necessarily earlier in date. That some of the earthworks represent prehistoric or Roman fields is very likely and one probable system has been identified. Early fields would also perhaps have dictated the layout of the later systems which may well incorporate earlier boundaries. One might conjecture that the terraces of the formal gardens re-used strip lynchets of early fields.

Although there is slight earthwork evidence for an early deer park at Dyrham, the present park was a relatively late creation and so it lacks some of the earthwork remains characteristic of medieval parks. Little evidence for an enclosing earthwork boundary of any great size was found during the survey. Although the line of a 17th - century boundary of the park can be followed as an earthwork on the ground it bears little resemblance to a medieval park pale. The 17th-century lodge also lies beneath the present lodge in the centre of the park. The pillow mounds were, however, found to be more numerous than previously thought and the boundary of the warren to the north of the house survives.

The most remarkable period in Dyrham Park's history was the `Blathwayt period' when its formal gardens lay across what later became parkland in front of the house. Unfortunately much has been lost, but interesting features were recorded during the survey. The most impressive earthwork feature of this phase is the header pond. This forms a focal point within the park but lies within a wooded enclosure and is therefore unseen by visitors. Glimpses of the channels for taking water down to the gardens were identified as part of the survey, but there are undoubtedly more to be discovered. The water systems at Dyrham and how they functioned would form a fruitful topic for study. Of the terraces which were created in front of the house most are no longer visible and filling them in or levelling them was probably part of the `earth-moving' mentioned in bills when the landscaped park was created. Notable survivals are the `Long Terrace' and the walled terrace immediately above it, while Ground Penetrating Radar may reveal buried examples. Of the platforms and avenues within the wider parkland, some probably result from formalisation of the parkland, while others may be later.

8. METHOD OF SURVEY

The field investigation was carried out by Nicky Smith, Mike Calder (an MA student of Bristol University) and David Field. Survey control and most of the archaeological and topographical detail was recorded using a Trimble 5700 Global Positioning System (GPS) and the survey data processed using Trimble Geomatics and AutoCAD 2000i software. In some areas of the park GPS survey was not possible because dense tree cover obstructed satellite signals or high horizons prevented adequate satellite configurations. The wooded enclosure around the Old Pond and the quarry and the hollow-ways to the south of the house were therefore surveyed using a Leica TC 1610 Total Station theodolite and data was processed using Key Terra Firma software. Archaeological detail in the woodland to the north of Dyrham church was recorded from known points by using taped offsets.

Where possible the earthwork features have been depicted on the survey plan by using hachures. The dotted lines depict earthwork features which were too narrow to be depicted as hachured features at 1:2500 scale. Back scarps to some earthwork banks have also been omitted for reasons of scale. These, and other earthwork features, are fully described in the Gazetteer of earthworks - Appendix 1. Restraints of both scale and time precluded the surveying of trees and tree holes.

The hand-drawn archive plan and CAD plans were produced by Deborah Cunliffe. Site photography was taken by Nicky Smith and is held on disk. This report was researched and written by Nicky Smith, and edited by Mark Bowden. The project archive has been deposited in English Heritage's National Monuments Record, Great Western Village, Kemble Drive, Swindon SN2 2GZ, where it can be consulted.

9. ACKNOWLEDGEMENTS

English Heritage wishes to thank Martin Papworth, National Trust Regional Archaeologist for Wessex, who commissioned the field investigation. Thanks are also due to Wendy Stott, Property Manager, Dale Deheny, Head Gardener and the site wardens for access to the park and for facilitating the fieldwork.

10. BIBLIOGRAPHY

Aston, M & Iles, R 1987 *The Archaeology of Avon* Bristol: Avon County Council

Coates, G 1766 *A Survey of the Manor of Dirham* Gloucestershire Record Office D2659/18

Crawford, O & Keiller, A 1928 *Wessex from the Air* Clarendon Press: Oxford

Department of the Environment, August 1985 *List of Buildings of Special Architectural or Historic Interest, District of Northavon, Avon.*

Drury, P 1981 Medieval `Narrow-Rig' at Chelmsford and its possible implications *Landscape History* **3** 51-8

English Heritage, 1985 *Register of Parks and Gardens of Special Historic Interest in England*, Part **I**: Avon

Fretwell, K 1997 *Dyrham Garden Survey* (unpublished report for the National Trust)

Geological Survey of Great Britain, 1965 *Solid and Drift, Bath*: Sheet **265**. Ordnance Survey: Chessington

Grimes, W 1960 *Excavation of Defence Sites 1939-45* HMSO: London

Jacob, C 1689 *The Manor of Dyrham* Gloucestershire Record Office D2659/16

Kellaway, G & Welch, F 1948 *British Regional Geology, Bristol and Gloucester District* HMSO: London

Kenworthy-Browne, J 1980 *Dyrham Park, Gloucestershire* London: The National Trust

McDonnell, R 2000 Archaeological Survey Report in *Dyrham Park Conservation Plan*, 23-30. The National Trust

Moore, J 1982 *Domesday Book, Gloucestershire*, volume **15**. Phillimore: Chichester

Mowl, T 2002 *Historic Gardens of Gloucestershire* Tempus: Stroud

Ordnance Survey 1882 25" County Series, 1st edition. *Gloucestershire*, sheet LXXIII.11

Phipps, J 1998 Recording What Isn't There: Three Difficulties with 18th-century Landscapes *There by Design: Field Archaeology in Parks and Gardens* ed P Pattison BAR British Series **267** Archaeopress: Oxford

Smith, A (ed) 1964 *The Place-Names of Gloucestershire*, part **III**. English Place-Name Society volume XL. The University Press: Cambridge

Soil Survey of England and Wales, 1983 *Soil Map of England and Wales*, Sheet **5**; South-West England. Soil Survey: Harpenden

Thurley, S 1995 *The King's Privy Garden at Hampton Court Palace 1689-1995* Apollo: London

Weaver, T 1833 *Plan of the Manors of Dyrham & Hinton & West Littleton* Gloucestershire Record Office D1799/P7

Williamson, T & Loveday, R 1988 Rabbits or Ritual? Artificial warrens and the neolithic long mound tradition *The Archaeological Journal* **145**, 290-313

Fig. 5 Earthwork plan (reduced from original 1:2500 survey)

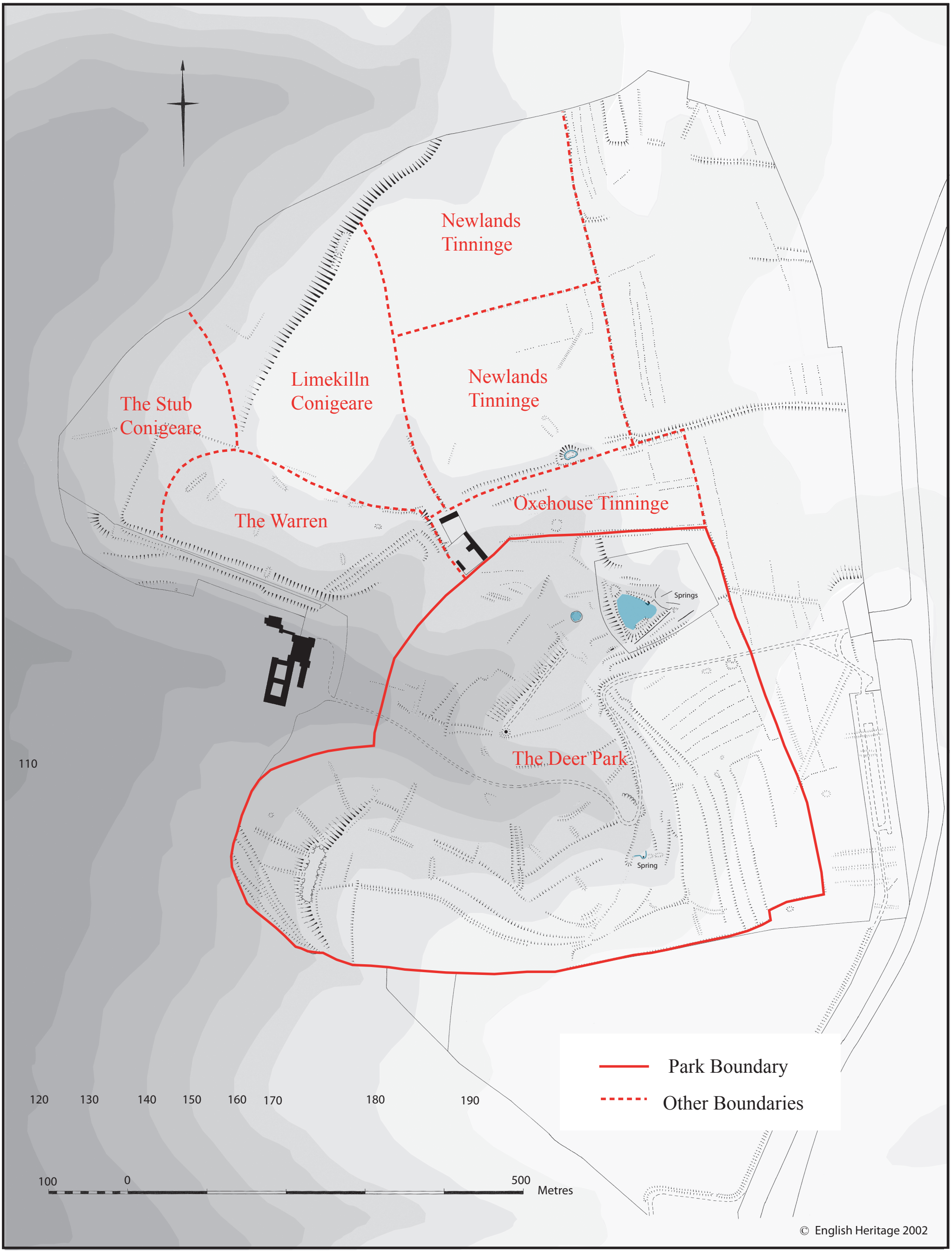

Fig. 7 Dyrham Park in 1689

Fig. 8 The extent of ridge and furrow

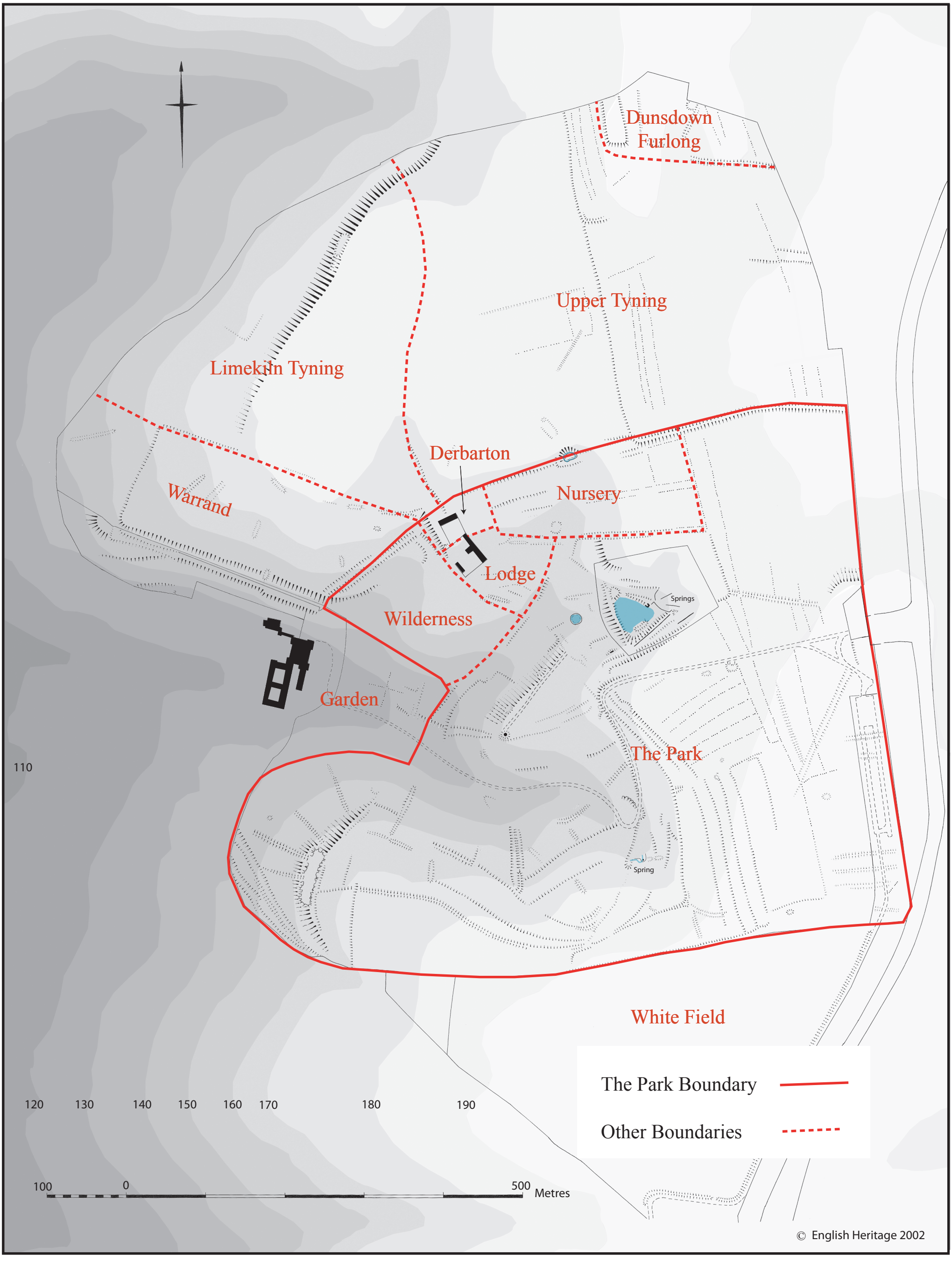

Fig. 9 Dyrham Park in 1766