06-085

THE NATIONAL TRUST

for Places of Historic Interest or Natural Beauty

SULLINGTON WARREN, WEST SUSSEX

AN ARCHAEOLOGICAL AND LAND USE HISTORY REPORT.

Volume One of Three

Compiled and written by Joy Ede on behalf of
The National Trust, Southern Region 1997.

Acknowledgements

Thanks go to Glynn Jones. Property Manager for the West Sussex Downs, and Jim Thorneycroft, Regional Land Agent for the National Trust, Southern Region, for enabling this survey to occur; to Vic Oliver, the warden of the property, for his useful tour of the property and other information and contacts. Thanks go to all those who helped with their information and memories of the property. As ever, John Mills Assistant County Archaeologist at West Sussex County Council, and West Sussex Records Office, were as helpful as they could be.

Contents

Illustrations

Summary

This report outlines the main periods of man's activity on Sullington Warren. It puts this activity into a local and regional context where necessary. The earliest period of activity for which there is evidence is the Mesolithic. Several flint blades have been discovered both on Sullington Warren itself, and in the area around it. This fits in with the regional picture of Mesolithic activity on land which is now heathland. Although the property was probably used for grazing and cultivation in later periods it is not until the Bronze Age that activity is represented again. Ten, and possibly more, round barrows were constructed on the small area of land now owned by the National Trust. Most of these lie on the tops of two ridges running north-south. Antiquarian excavation in the 19th century indicates that at least some were used for burial. Modern excavation elsewhere has shown that it is likely that the barrow cemetery on Sullington Warren probably developed over several centuries, and that each barrow is probably constructed in a different way. After this period, the Early Bronze Age, analysis from the region shows that soils probably degraded to such an extent that cultivation was not feasible on the by now acidic podzols. From this time onwards this property was probably an area of rough grazing using sheep and cattle predominantly. This remained largely unchanged until the early 20th century. The exception is a small enclosure of land in the middle of the property which was used for arable cultivation from about the middle of the 19th century until the First World War. Another enclosure in the north east of the property may also have been used for arable cultivation for a short period of time in the mid 19th century. It is unclear exactly how important the Warren was to the farm economy at Sullington Manor Farm since the beginning of the agricultural depression from about 1880. It is likely that, as this area of land was some distance away from the centre of farm activities, grazing was carried out to a lessened extent until 1935 when the land was sold and acquired by the National Trust. After that time the property has not been used for grazing but as a public open space for recreation.

The main conclusions of this survey are

- that this property illustrates several phases of activity typical of Sussex heathlands (Mesolithic flintwork, early Bronze Age barrows, continuous grazing preventing regrowth of woodland, open space increasingly used for public recreation since the last World War)

- that the archaeology, particularly of the Mesolithic and early Bronze Age periods, is highly vulnerable and at the same time is potentially very well preserved

- that further documentary research may explain the more recent land use history of the property in more detail (examination of the sale particulars in 1789 and other documents which may exist in the Petworth archives in particular).

The main recommendations of this survey (see both volumes) are

- that archaeological advice should be sought whenever any ground disturbance is planned
- that an archaeologist carries out at least a walk over survey of any ground which is disturbed, records any features and collects any artefacts. Any information to be distributed to the County Archaeologist for entry into their SMR as well as being entered onto the National Trust's own SMR. Any artefacts to be analysed and safely curated. Preferably any ground disturbance should be carried out only in the presence of an archaeologist
- that further documentary research is conducted.

1. Introduction to the report

1.1 Aims of the survey

The archaeological and land use history survey was carried out and written by Joy Ede between October and December 1997. It was carried out as part of a programme of surveys for properties managed by the West Sussex Downs team. The aim of all these surveys is to provide information about archaeological and historical aspects of the property which can be easily used by staff to enhance their management of the property. Obviously archaeology and human culture does not respect the National Trust boundary, so where feasible an attempt has been made to fit the known activity within the property into its local and regional context. However it is not considered appropriate here to tell the archaeology and history of Sussex. There are plenty of other publications which deal better with this such as Drewett *et al* (1988) and Brandon(1990).

1.2 How to use this report

I hope this report is easy to use. I have sub-divided it up comprehensively using many sub-headings to enable the reader to find out particular information quickly if required.

Two separate volumes have been produced

- 1. The 'story' of the property from earliest times up to the present incorporating any known information about archaeological monuments and activity on and around the property, and the land use history of the property.

- 2. The Archaeological Sites and Monuments Record inventory including prioritised management suggestions

- 3. A short volume outlining the important archaeological and historical aspects of the property, threats, and main management suggestions including a prioritised order of work required

In addition there is a comprehensive archive of colour photographs and slides kept with any photocopies and other information about the property . This information is deposited at the National Trust office at Slindon.

2. Introduction to the property

2.1 Geology, soils and habitats

Sullington Warren lies on the Lower Greensand and Sandgate Beds (see figure 2). These give rise to poor, sandy, acidic soils. On these a heather dominated heathland has developed. There are areas of both wet and dry heath, grassland, bracken, birch and gorse scrub and woodland on this property.

2.2 Main archaeological interest

There have been many finds dating from the Mesolithic period in the surrounding area as well as on the Warren itself.

There are certainly ten round barrows on two Greensand ridges. There is also possibly an eleventh barrow situated off the ridges. The areas between the barrows may contain archaeological material and give information about activities associated with the barrows.

There are also two bank and ditched enclosures on the property of uncertain date (probably between 1840 and 1870).

A white painted open trestle post mill stood on the highest part of the property from about 1800 until 1911 when it burnt down. The windshaft still remains, mounted on pillars.

2.3 Modern land use

The property is used as a place for engaging in leisure activities. Many people walk their dogs and take exercise around the Warren. There is an active Conservation Group which helps in the practical management of the property once a month.

2.4 Date of acquisition and designations

The National Trust acquired 28 acres in 1935 and a further 35 acres in 1986.

The whole property is a Site of Special Scientific Interest for its vegetation and its breeding birds. The eastern part of the property is a Registered Common.

There are ten round barrows covered by seven Scheduled Ancient Monument designations.

Figure 1: **Sullington Warren Location Map 1:25 000**

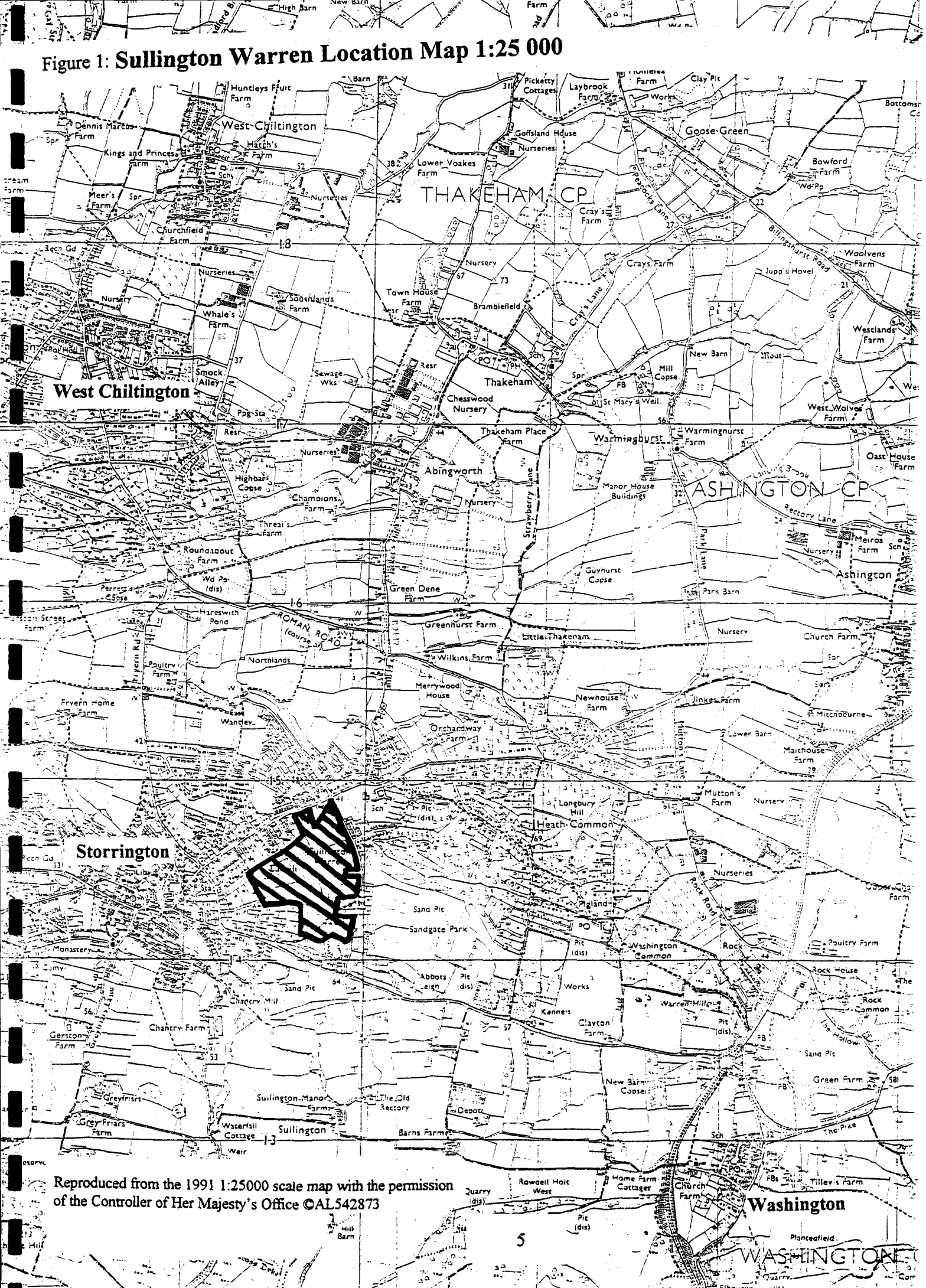
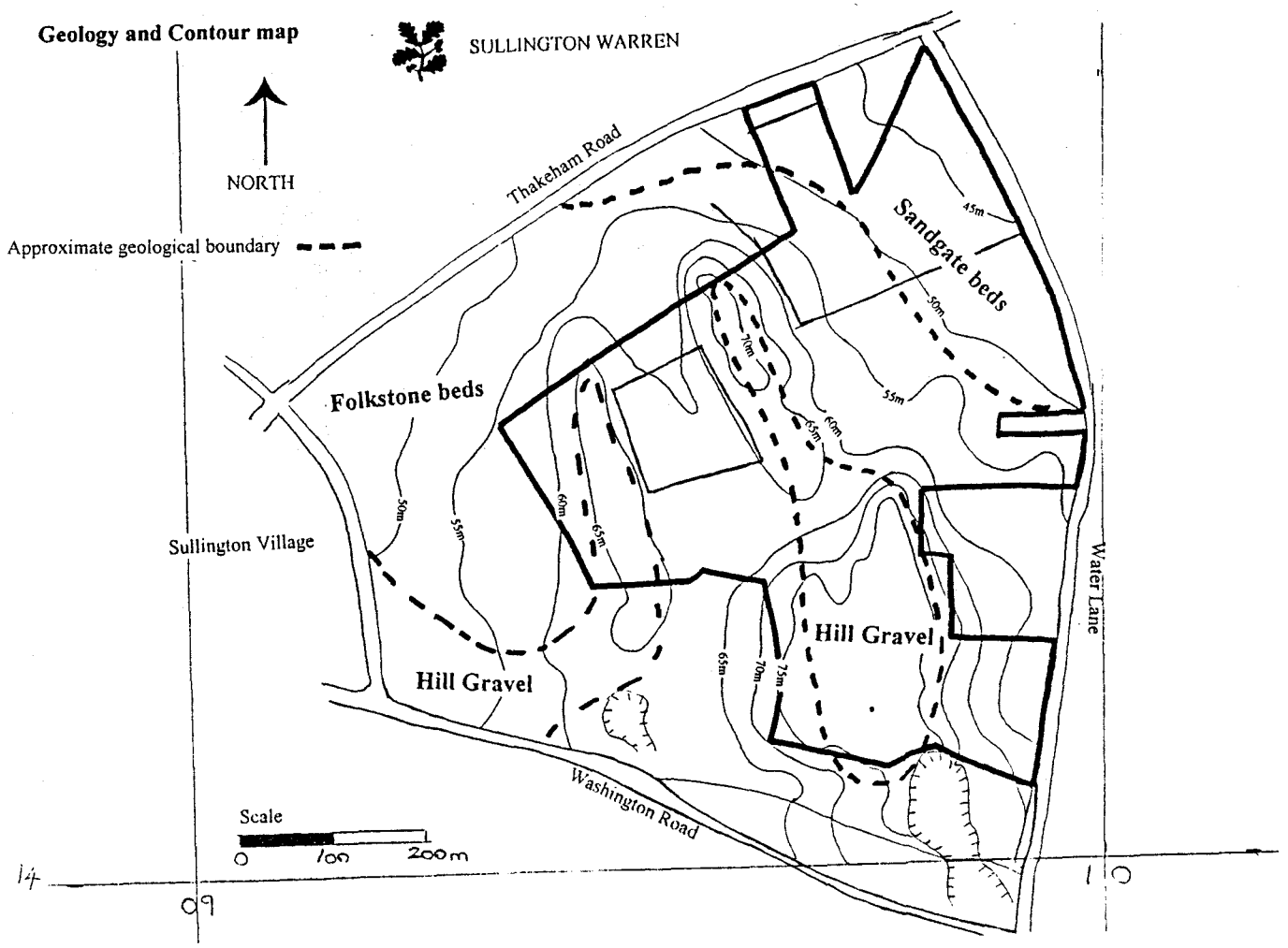
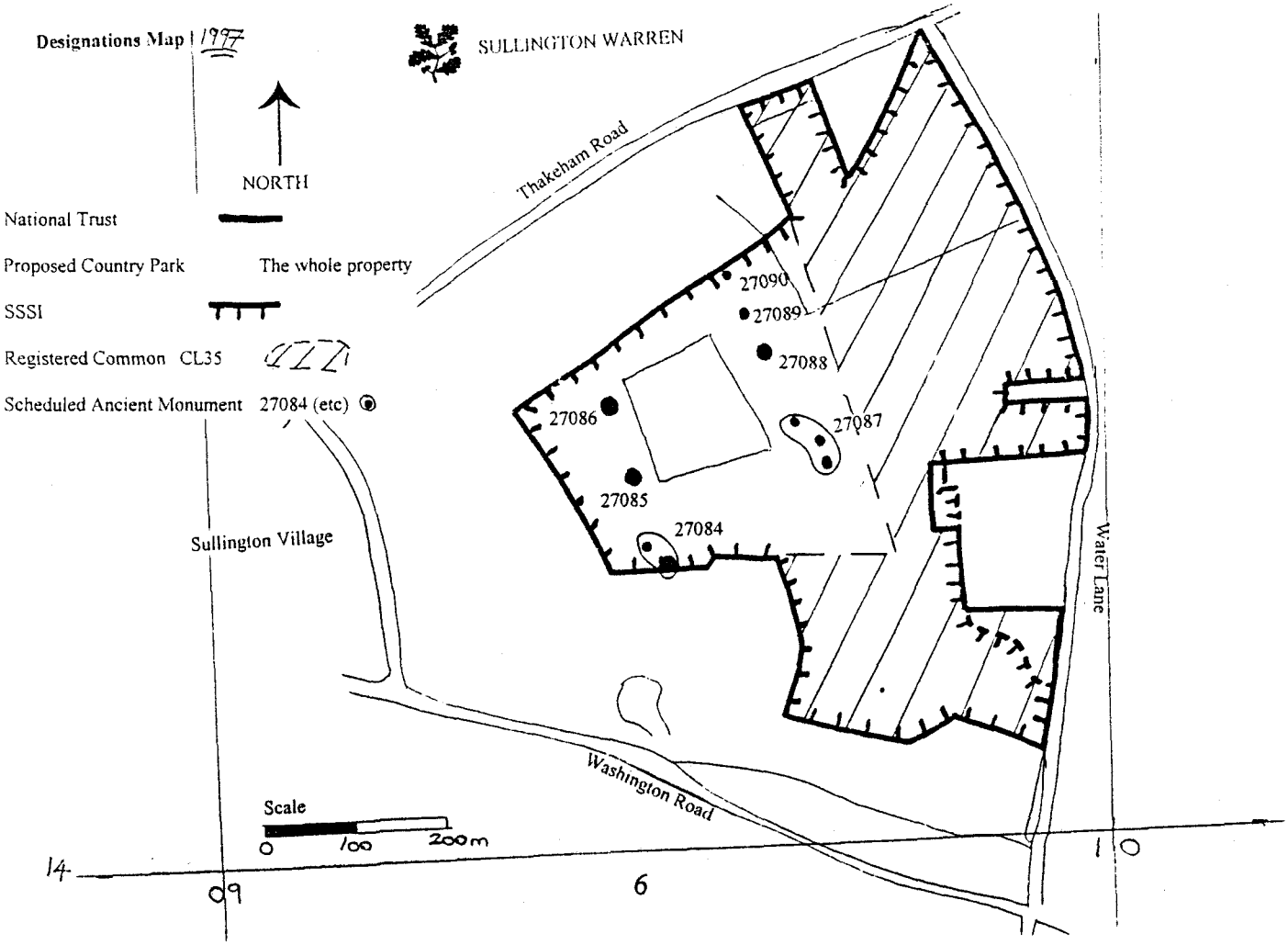


Figure 2: Geology and contours, and Designations maps





2.5 Sullington Chronology

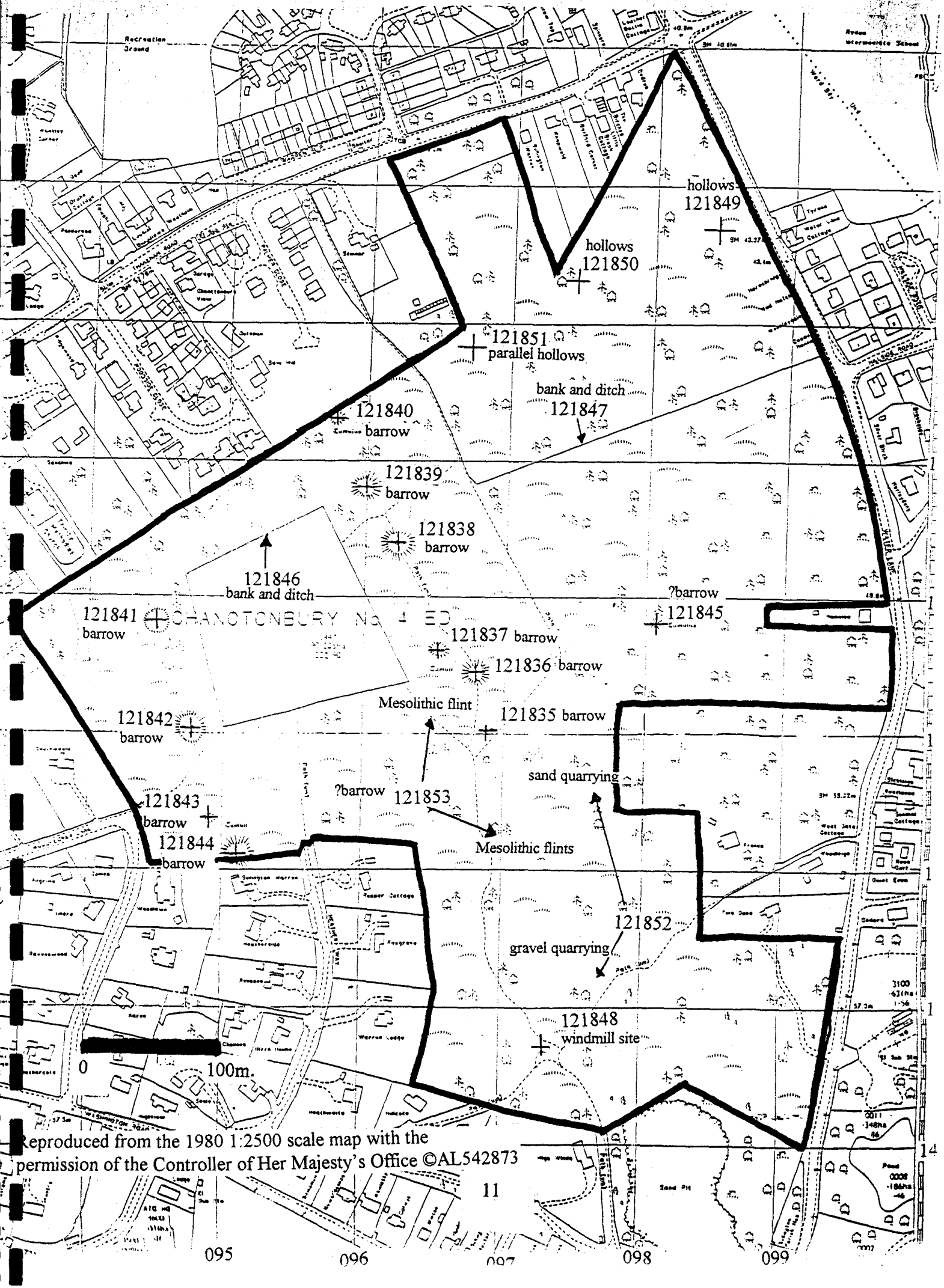
1086	Ulward held the manor of the Confessor before the Conquest. Robert now held it of Roger of Montgomery. One villein with half a plough so v. small. Called Sillintone (Cilletune). In West Easwrith hundred and Steyning hundred.
After 1086	Family of de Aguillon held it. A daughter married a Covert and it passed to them.
1242	By this time the Coverts certainly held the manor. William de Covert held two knights fees in Sullington and Broadbridge
1296	By this time Sullington was accepted as part of East Easwrith hundred (VCH VI, 5)
1297	Manor valuation on the death of Roger de Covert included two watermills and a windmill. It also included pasture and heath valued at 9s but no acreage is given.
1335	John Covert settled Sullington on the Earls of Arundel subject to various successors.
1379	Baldwin de Covert granted the manor to the Earls of Arundel on his death and that of his successors
1386	Sullington had passed to the Earl of Arundel
1397	The manor was forfeited and granted to John Holand, Duke of Exeter
1400	The manor reverted to Thomas Fitzalan, Earl of Arundel who settled it in trust to his Hospital of the Holy Trinity at Arundel.
1404	One water mill only is recorded (VCH VI, 26)
1540	The dissolution meant that the manor became owned by lay owners again.
1546	Sullington Manor was granted to Sir Richard Lee who resold it to Edward Shelley of Warminghurst. It remained in this family until 1697. It was sold to the White family and then the Arnolds.
1582	Sullington demesne farm had 146a arable, 183 a. pasture, 47 a. meadow and downland pasture for 400 sheep ie ?sheep/corn husbandry.
1727	Henry Shelley of Lewes bought Sullington Manor.
1734	About this time rabbits were kept on Sullington Warren and Cobden farm (VCH VI, 25). Sullington Farm was one of three large sheep/corn farms in the parish. Arable crops in order of importance were wheat, barley, oats, peas, tares, beans, buckwheat, hemp and flax, and french wheat.

1767	Eleanor and Thomas Fuller were the tenants of Manor Farm, Sir John Shelley the owner.
1789	Earl of Egremont bought part of Sullington Manor from Sir John Shelley including Manor Farm (VCH VI, 21)
1800	Around this time the windmill was built (Brunnarius 1979, 107)
1806-42	At some time Chantry Mill relocated to the mill upstream and the old Chantry Mill became Waterfall Cottage. It was then used as a corn mill until about 1918.
1809	Barrows opened up at Sullington Warren. Contained sherds and cremations with one complete vessel.
1810	Pulborough to Storrington road turnpiked (VCH VI, 18)
1824	Thakenham to Storrington road to the north of Sullington Warren was turnpiked (VCH VI, 18)
1825	George John Gibson purchased the Sandgate Estate, at that time a small estate.
1828	The stretch of turnpike road (Pulborough to Storrington) near Sandgate Park was diverted to the south by Mr Gibson the estate owner.
1835	Sullington became part of Thakeham union
1842	George Wyndham owned 719a, the largest landowner in the parish. Of these 697 a. was Sullington Farm.
	Henry Wilmer was the miller of the windmill on Sullington Warren.
1851	Robert Crowhurst was the miller, wind and water, at Sullington
1864	Sullington Manor was assigned to W.W. Dalbaic
1869	George Carew C. Gibson altered the Sandgate Estate, by now a large estate.
1870	Robert Crowhurst died and his widow became the miller
1871	G.C.Carew Gibson was lord of the manor and the lordship is still said to be in this family (VCH VI, 21)
1875	Sheep were of great economic importance in the parish - nearly 3000 sheep and lambs (only 44 dairy animals and 103 other cattle) (VCH VI, 25)
1877	Pulborough to Storrington road was disturnpiked (VCH VI, 18)

1894	Sullington became part of Thakeham rural district
1899	Mrs Crowhurst is listed in Kellys directory as 'miller, wind and water' (Hayward ca 1957)
1907	Sullington Windmill stopped being used and the stones and most of the machinery were removed to the water mill (Brunnarius 1979, 107)
1911	The windmill burnt down and most of the Warren was also burnt, started by a spark from a steam engine on the road
1912	The tenant of Manor Farm, Albert Hecks, bought part of the farm from the Petworth Estate
1918	Chantry Mill fell into disuse
1920	Mr Hecks bought the rest of the farm. This land included much of Sullington Warren but not the windmill site (Ham 1992,178)
1921	Cheese was made on Sullington Farm (VCH VI, 25) About this time Chantry Mill was used to generate electricity for the farm and church
1920s	Birch grew up on Heath Common and obscured views previously present (Letter from Mrs Joan Davies 1979 in SPS archives)
1930s	The Angel sandpit was opened west of Water Lane. It manufactured concrete blocks and other products
1933	Sullington became part of Chanctonbury rural district
1935	A local and national appeal raised enough money to buy 28 a. land at Sullington Warren from Mr Hecks the farmer. This was given to the National Trust (for more details refer to Ham 1992)
	Chanctonbury RDC bought the other part of the Warren (Ham 1992, 200)
1939-44	Sphagnum moss collected from the Warren for use in bandages etc in the 2nd WW
1947	Tony Jenner helped his father then became warden for Warren Hill and Sullington Warren
1930s/40s	Mr Floate was the warden of Sullington Warren (SPS Newsletter 8, 6)
1956	A memorial seat to Sir Edward Cook was put up on the largest barrow by his sons (SPS Newsletter 8, 6)

1968-72	The Angel sandpit was a motor repair works. After 1972 it was a storage depot
1973	Another 16.5 ac bought by Chanctonbury rural district
1974	An appeal is made by NT for money to manage SW. A part time warden was employed then called Mr Bert Lidbetter. Other work done by visiting NT staff 'at cost price' and volunteers such as scouts and guides (WSCT 22.11.74). At that time NT approached new Sandgate Preservation Society to help.
	Chanctonbury rural district became part of Horsham District
1975	Sandgate PS started monthly work parties on SW. Tony Jenner was warden.
1976	May. Windshaft erected on concrete pillars with information plaque.
1970s	The machinery in Chantry Mill was removed and taken to the Weald and Downland Museum in Singleton
1981	Miss Clarke-Williams died
1986?	NT took over 41 acres of Horsham District Council land at Sullington Warren
1991	Tony Jenner retired
1993	Vic Oliver became new warden WH and Sw etc
1995	Feb 22 Tony Jenner died

Figure 3: **SULLINGTON WARREN SITES AND MONUMENTS MAP**



3. The Archaeology and Land Use History of the property

3.1 Palaeolithic/Mesolithic/Neolithic

3.1.1 Landscape

Work in the past on other heathlands has indicated that in the Mesolithic period this area would have been covered with predominantly deciduous woodland composed of lime and oak with elm, ash, holly and hazel (Scaife and Allen 1991). There was probably an understorey of ericaceous shrubs and these more open areas within the woodland were probably exploited by Mesolithic people. These more open areas would attract grazing animals which could then be hunted and killed more easily than in the denser woodland. Such open areas could have been slightly expanded by the felling of trees using tools available in the Mesolithic period. However this activity would have been on a small scale and probably had no long lasting effect on the overall vegetation. Such open areas would easily have regenerated back to woodland on abandonment by people.

It is probable that these lighter, sandy soils, still relatively fertile brown earths, were exploited in the Neolithic for cultivation. Agriculture in Britain began in the Neolithic and would have required larger areas to be opened up in the woodland. Settlements became more permanent so the same areas, once opened up, would have been exploited for long periods of time. The rate and extent of podzolisation of the soils increased resulting in the very acidic and nutrient poor soils we now associate with heathlands. This soil is rather more unsuitable for cultivation and the heathland shrubs would expand into these open areas as cultivation ended. Grazing animals were also an important part of Neolithic economy and it is this activity, possibly associated with deliberate burning, which prevented regeneration of the woodland. The extensive heathlands we see today are likely to have been created by the end of the Early Bronze Age period (Allen and Scaife 1991).

3.1.2 Artefacts

There is no known Palaeolithic or Neolithic activity.

On the area of Heath Common, now mainly built upon, there have been several finds of Mesolithic tools and waste flakes. On a distribution map of the local area there was a gap at Sullington Warren prior to this survey. In the course of the survey it was discovered that at least two separate people have found Mesolithic blades from different places on Sullington Warren (Caroline Wells, Richard Steinborn pers. comm). The lack of building and gardening on Sullington Warren has meant that the archaeological deposits may remain largely undisturbed. The implication of this is that there may well be extremely high potential at Sullington Warren for well preserved archaeological information from this period of time. This information is always very ephemeral and difficult to understand as there were no settlements occupied for long periods of time. Food was obtained by hunting and gathering wild animal and plant foods.

3.2 Bronze Age

In this period the main archaeological activity on this property appears to have occurred. Not only was the development of heather dominated heath probably completed but the main monumental interest, the barrows, were constructed.

3.2.1 The landscape

Pollen analysis at West Heath, Harting, suggested that here at least the local vegetation was one of 'open woodland with clearings in which ericaceous shrub communities were the dominant ground flora' (Scaife in Drewett 1985, 59). Tree species within the woodland included oak.(*Quercus*), lime (*Tilia*) and hazel (*Corylus*) with some ash (*Fraxinus*), elm (*Ulmus*) and birch (*Betula*). This landscape picture is presumed to date to the time when the barrows were constructed or a period just beforehand. After this the vegetation remained dominated by *Calluna* heather until the present. Here, as at Sullington, Mesolithic activity has been found. Another site with pollen analysis is Iping Common. Here again a soil from below a barrow was analysed and showed a similar story - open hazel and birch woodland just prior to the barrow construction phase followed by heather when the barrow was constructed and this heathland then continuing until the present day (Keatinge 1983; Dimbleby 1962). Dimbleby suggests that fire must have played a part in retaining the heather as grazing alone would result in a grassland habitat (Dimbleby 1962, 88). Again Mesolithic activity was discovered on Iping Common, and was indeed the main focus of the palynological analysis.

The presence of Mesolithic activity and the similarity of soils, location and altitude on these other sites, implies that the vegetation history may well have been the same at Sullington Warren as at West Heath and Iping Common. Indeed this picture was probably much the same over areas of the Lower Greensand, exploited at low levels since at least the Mesolithic period.

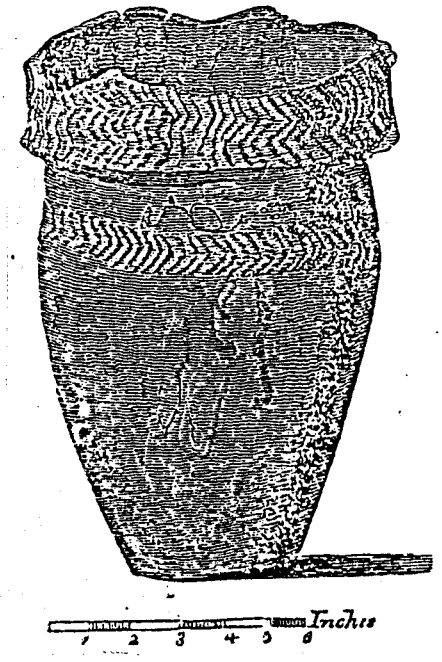
3.2.2 The barrows

Although this property only covers an area of about 60 acres the topography is varied within it. There are two large hills on the southern side with steep slopes, and two ridges running north- south running up towards these hills. It is on these two ridges that the barrow cemetery is located, in two linear alignments on the very top of the ridges. We know very little about these barrows and so can only interpret them with reference to other, excavated barrows.

In 1809 some of the barrows were excavated but the only published reference to this work (Cartwright 1830, 128) mentions simply that several sherds, portions of burnt bones and some charcoal were found as well as one complete vessel (illustrated). This vessel would appear to be a collared urn of the later early Bronze Age (J. Kenny pers. comm.) and contained pieces of burnt bone. Collared urns were commonly used for cremation burials in barrows and there are many examples in museums. This find, as well as the reference to other burnt bones, implies that at least some of the barrows are likely to have contained burials. This is an interesting fact in the light of other, better excavated and recorded

barrows.

Figure 4: Bronze Age urn (Cartwright 1830)



Barrows on sandy heathland elsewhere, when excavated, have been found to have been constructed by laying turves on top of each other to form a mound (Drewett 1976, 141). Such barrows have been excavated in Hampshire, Dorset and on the Continent, particularly the Netherlands. Sometimes preservation is so good in these acidic soils that the form of the turves can be seen in section, with the darker bands representing the old top soil which was more organic and therefore darker than the soil below the turf itself. Sections like this could be seen in the West Heath barrows excavated in advance of sand quarrying at Harting, West Sussex. Occasionally a suggestion of a wickerwork retaining fence around the mound has been found, presumably to help ensure the mound of sandy soil remained a mound and did not simply wash away. Many other barrows however do not show any signs of such a structure. Turf mounds do not always have a ditch. Without excavation we cannot know how the barrows at Sullington Warren were constructed. Most barrow *cemeteries* that have been excavated do show that they were built over a considerable period of time and that they tend to be of individual construction, no two alike. The cemetery at West Heath appears to have been constructed over a period of about 500 years (Drewett 1976, 142). It seems most likely that these generalisations - constructed at different moments of time and in different ways, are probably true also of the barrows at Sullington Warren.

It is also possible that not all the barrows at Sullington Warren contain burials. There have been several barrows excavated without burials such as those at West Heath and Minsted in Sussex and others elsewhere (Drewett 1976, 142). As Drewett says 'It must be

remembered that probably only a very small percentage of the population were buried in or under barrows, so that the construction of a mound was clearly not essential for the simple disposal of a body' (Drewett 1976, 142). In other words barrows perhaps indicate something more than just burial, and represent rather the ritual associated with death. Their position on ridges and hill tops may have been pivotal in this. Most, if not all barrow cemeteries on the Lower Greensand in West Sussex were positioned on higher land than their surroundings eg Iping Common, West Heath, Duncton, Rackham Plantation, Heyshott, Stedham, Selham and Sutton Commons as well as those at Sullington Warren. However this distribution could have resulted from differential preservation - any barrows built on more fertile lower slopes having been destroyed by later cultivation, particularly perhaps in the Iron Age/ Romano-British period as well as more recently (18/19/20th centuries). Pollen analysis suggesting that the barrows may have been constructed in open woodland (Scaife 1985) may preclude the theory that the barrows were built on higher land so they could be seen from further away even if they were in localised clearings. However soil analysis suggested that the soils by this time were already degraded into podzols, similar to those in existence today (Macphail 1985). Pollen analysis from Iping Common (Keatinge 1983) also suggested that the onset of podzolisation had occurred before the barrow was constructed, and that the barrow sampled was constructed in a heather dominated landscape. Perhaps then the suggestion by Scaife that the open woodland environment dated from a period just before barrow construction is more likely and that these barrows too, at West Heath, were constructed in a fairly new heathland. However more samples from excavated sites are required to corroborate or not this vegetation pattern for all barrow sites on present day heathland in Sussex, let alone for those on the chalk where the exact pattern of deforestation is also uncertain.

3.3 Iron Age/ Romano-British

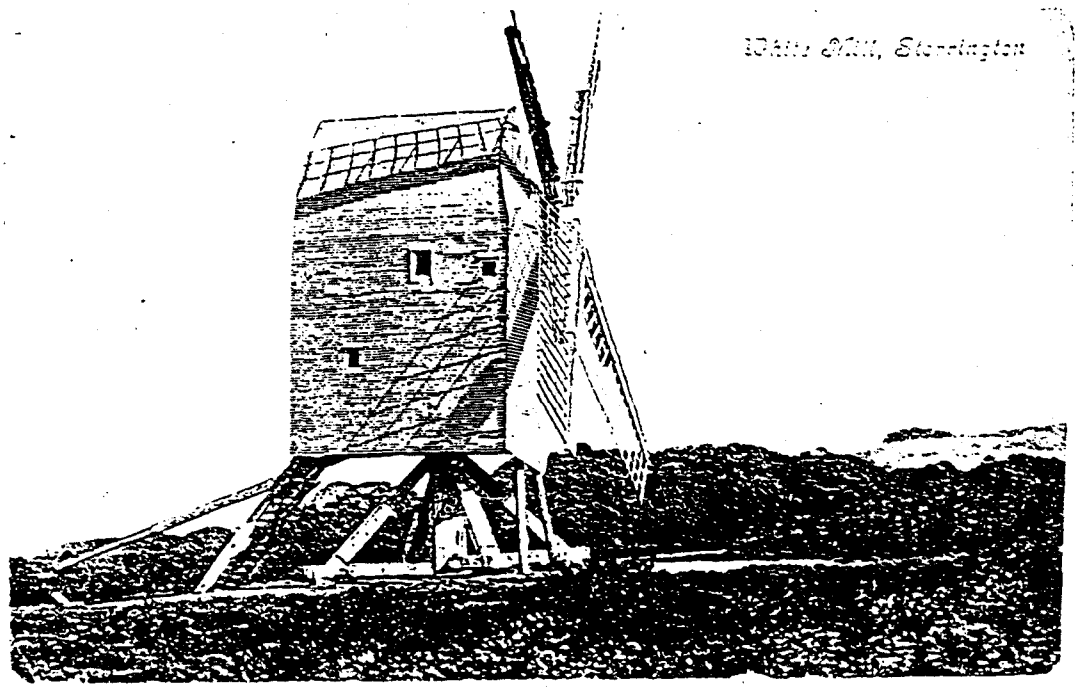
There are no finds representing activity on the property dating from this period. A Roman road however was constructed to the north running east-west and joining Steyning area with areas further west near Pulborough, the centre of much activity in the Roman period. It is likely that Sullington Warren was one small area within an extensive area of heather dominated heathland. It was probably used for grazing the domestic animals of the day - sheep and cattle, perhaps goats and pigs. Some droving may have occurred between the various areas of land suitable for grazing animals, namely the Downs, the heaths and the wooded areas in the Weald. At this time though the Weald was also fairly intensively used for iron making. It is possible that some local exploitation of sand for building and pottery manufacture occurred on the property although this would not leave any remains particularly datable to this period.

3.4 Medieval/Post Medieval

Again there is an almost total lack of remains attesting to activity here. This is no doubt because the rural activity carried on much as before, with grazing animals maintaining the heathland. The two main points of interest here are the presence of a windmill throughout the 19th century, and the attempt to cultivate part of the property in the mid 19th century.

3.4.1 Sullington Windmill

Figure 5: The windmill at about the end of the 19th century



This was an open trestle post mill. It was weatherboarded on the sides and painted white. It was known as the White Mill or Crowhurst's Mill and was a local landmark, clearly visible standing on the highest point of Sullington Common in open heathland. There was a black painted mill closer to Sullington.

Sullington Mill does not appear on the late 18th century maps of Yeakell and Gardner (1780) or Gardner and Gream (1795), it does appear on the O.S. surveyors drawing drawn in 1806-7. The mill then was built approximately at the turn of the 19th century. It was part of Sullington Manor Farm, as was the Common. It was leased to a tenant along with the water mill, Chantry Mill. Perhaps the building of the windmill had something to do with the relatively new owner, the Earl of Egremont, who bought part of the manor, including the manor farm, in 1789. At the time of the tithe commutation (1842) Edward Wilmer was the miller. In 1851 Mr Robert Crowhurst was the miller. He died in 1870 and his wife took over the business until it closed in about 1907 (Brunnarius 1979, 107). The

machinery was then removed from the mill and relocated to Chantry Mill. This was just as well as in 1911, just when funds had been gathered to repair the mill, it burnt down in a large fire which swept over much of Sullington Warren.

The details of windmills will not be discussed here - refer to other published works for the more detailed history of mills and their history in Sussex (eg Brunnarius 1979). However a few details are necessary in relation to the type of windmill at Sullington Warren as follows:

Sullington Mill was an open trestle post mill with a tailpole and talthur. This means:-

Open trestle:

> The structure (the trestle) upon which the mill stood was open and clearly visible, rather than having a roundhouse built around it. Nutley Mill is the only open trestle post mill now left in Sussex and is very similar to the mill which stood on Sullington Warren. The trestle which supported the mill was composed of the central post and two interlocking triangular frames which were morticed into a cross tree at their base and kept the central post vertical. The cross tree rested on brick piers which in turn supported the cross tree just above the ground. At the top of the central post, which ran up to about half way up the middle of the mill, was another cross-tree and a bearing upon which the whole top part of the mill rotated.

Post mill:

> A post mill is one which rotates around a central pole. It is built of wood and the frame, the trestle, supports the whole building.

Tailpole:

> The tailpole was the pole by which the mill was steered round into the wind. This was done by hand, the mill being correctly balanced so that this was easily possible.

Talthur:

> The talthur was the means by which the steps up to the mill door could be raised to allow the mill to rotate. It was lowered once the mill was in the right position for the wind again and the steps effectively stopped the mill moving round.

The mill had three levels. The top level contained the bins of grain. The grain was fed down to the stones by hoppers. There would have been two stones on the middle floor. The bottom floor is where the ground flour ended up, being directed into sacks.

3.4.2 Land Use

Sullington Warren was a very small part of the agricultural system at any time in history or prehistory, except perhaps the very earliest beginnings of agriculture. As agriculture developed an increasing range of soils was exploited, for a variety of purposes. Here at Sullington Warren this area was used as a place to graze animals since the Iron Age and probably earlier. It is this activity which has maintained the heathland as an open area dominated by ericaceous shrubs. Without grazing the Warren would have reverted back to woodland. In 1298 there is documentary evidence for use of the heath for grazing - worth 9s (VCH VI, 24). By the late 14th century the pasture at Sullington was worth more than the arable. (VCH VI, 24). In 1582 there was more pasture (183 a. plus 47 acres meadow) than arable (146 a.) land on Sullington Manor Farm, (VCH VI, 25) with pasture for 400 sheep on the downs. Sullington Warren was, by at least this time, part of this demesne farm.

The earliest reference to something slightly different occurring is the 18th century reference to keeping rabbits on Sullington Warren.(VCH VI, 25). This may account for its name 'Warren' although on contemporary maps this area is called Sullington Common. It is not until the tithe map in the 19th century that the area is called Sullington Warren on maps. This present survey has not found other references to the keeping of rabbits here, and there are no visible signs which could be definitely attributable to this activity on the Warren. The tithe commutation map shows that this heathland is part of the arable/grazing regime of the largest farm in the parish, namely Sullington Warren Farm, owned by the Petworth Estate. There is no mention of rabbit warrens at this time.

Another sign of something other than grazing occurring are the two bank and ditched enclosures. On the 1875 O.S. survey one of these, now grassy, was used for arable cultivation. The north east enclosure was rough grazing with scattered trees at this time. The earlier map, the tithe map, shows neither of these enclosures. This is not an absolute indication that they did not exist at this time although it can be said with some certainty that they were not cultivated. The obvious interpretation then is that the bank and ditch around the now grassy area was built to enclose a field from the heathland, and that the same explanation probably accounts for the north eastern enclosure too. It does however seem a lot of work - the banks and ditches are fairly large, the banks standing over one metre higher than the ground surface today. Of course the sandy soil is easily dug. It would appear from the map evidence that these enclosures were constructed in the period of agricultural prosperity of the 1850s, 1860s or early 1870s, this latter unlikely as the 1875 survey shows the NE enclosure as heathland and rough grazing once more. Perhaps the NE one did not last long, proving totally unsuitable for cultivation, or perhaps simply unnecessary. The area it encloses is the dampest area of the property whereas the grassy enclosure is on a dry area although somewhat sloping. Maybe further documentary research would elucidate the date and function of these enclosures.

The grassy area was used to grow crops until the First World War (SPS Newsletter 8) when buckwheat and oats were grown there. After the War sheep were folded on it for a time. The rest of the area would have been used for grazing throughout the 19th century, which in fact may explain the large banks around the enclosed areas - necessary to keep

the grazing animals away from the growing crops. After the First World War the whole property was threatened with house building (see Appendix 1). Areas on its periphery to the north, south and west began to be built upon. In the early 1930s the local people decided they would try to preserve the remaining open area as heathland and enough money was raised to buy 28 acres from the farmer. This was given to the National Trust to ensure its preservation for ever. The remaining 35 acres on the eastern side of the Warren were purchased by the local council, and eventually, in 1986, this land also was acquired by the National Trust.

It is unclear exactly when grazing stopped on the heathland. In 1875 sheep were an extremely important part of the economy in Sullington parish (VCH VI) and it is certain that the Warren was grazed at this time. This activity is likely to have remained the same until the First World War. We have a record of sheep folding after the War which may imply that grazing was still practised on the Warren then. It may be that extensive grazing only ceased when this property stopped being part of Sullington Manor Farm ie when it was given to the National Trust in 1935. However any grazing activity immediately prior to 1935 may have been at a much reduced intensity to that occurring before the First World War. Few, if any, trees are of a size that dates them to earlier than the 20th century. Most probably originate from a period after the 1911 fire which swept across the whole property. A record in the SPS newsletter in 1976 mentions felling a pine tree twelve inches in diameter. The ring count gave it an age of only 22 years. (SPS Newsletter 2). The Ordnance Survey maps indicate that there were less pine trees on Sullington Warren in 1911 than in 1875. This could be due to differential grazing pressure, or perhaps to fire damage sometime between 1875 and 1911. The survey for the 1911 map would have occurred before the large fire in August that year. As the agricultural depression continued, from the 1880s until the Second World War, it is likely that Manor Farm concentrated increasingly on cattle for beef and dairying and sheep declined. It is easy to envisage a situation where the Warren was not used for much grazing due to its distance from the main centre of farm activity, around Sullington village itself and on the immediately adjacent downs. We know that by the 1920s Sullington Manor Farm was producing cheese, implying a strong emphasis on dairying. This fits in with the common pattern on the downland areas in response to the much cheaper imported grain. Milk was still needed to feed the ever increasing urban population, refrigeration technology not allowing this commodity to be imported cheaply too.

3.4.3 Roads

Both roads to the north and the south of Sullington Warren were turnpiked at the beginning of the 19th century. At this time the Storrington to Washington road ran to the south of the present day southern boundary of the NT property but north of the present day road. This was altered sometime between 1813 and 1840 to run on its present day alignment, moved by the owner of the Sandgate Estate to run further away from his new country house (Sandgate Estate was bought in 1825 by George John Gibson). No tracks are shown across the Warren on the tithe map but it is likely that several existed, particularly around the windmill.

3.4.4 Quarrying

3.4.4.1 For flint/gravel

There are various depressions over the property, particularly around the area of the windmill site. This hill top appears to be capped with a more gravelly sediment (Hill Gravel) which may well explain its probable exploitation. There is no indication of a date for this activity which could have begun (and ended) in prehistoric periods or rather more recently.

3.4.4.2 For sand

To the south east of the NT property there is a large sand pit indicating the deposits underlying this whole area. After the Second World War sand quarrying became an important part of the local economy, and is still so today. However smaller scale quarrying for sand no doubt took place for many centuries before this. Many of the depressions to be found on Sullington Warren probably result from this small scale sand extraction. The sand would be used for a variety of purposes including building work (mixed with lime to make mortar etc). Within the sand are deposits of a rock locally used in house building and held in high esteem in previous centuries (SPS Newsletter 12, 1981, 6).

To the north of the gravelly hilltop a large gully attests to fairly substantial quarrying activity, for sand. The size of the depressions within this gully may indicate a medieval or post-medieval date for this activity but again there have been no datable remains found here.

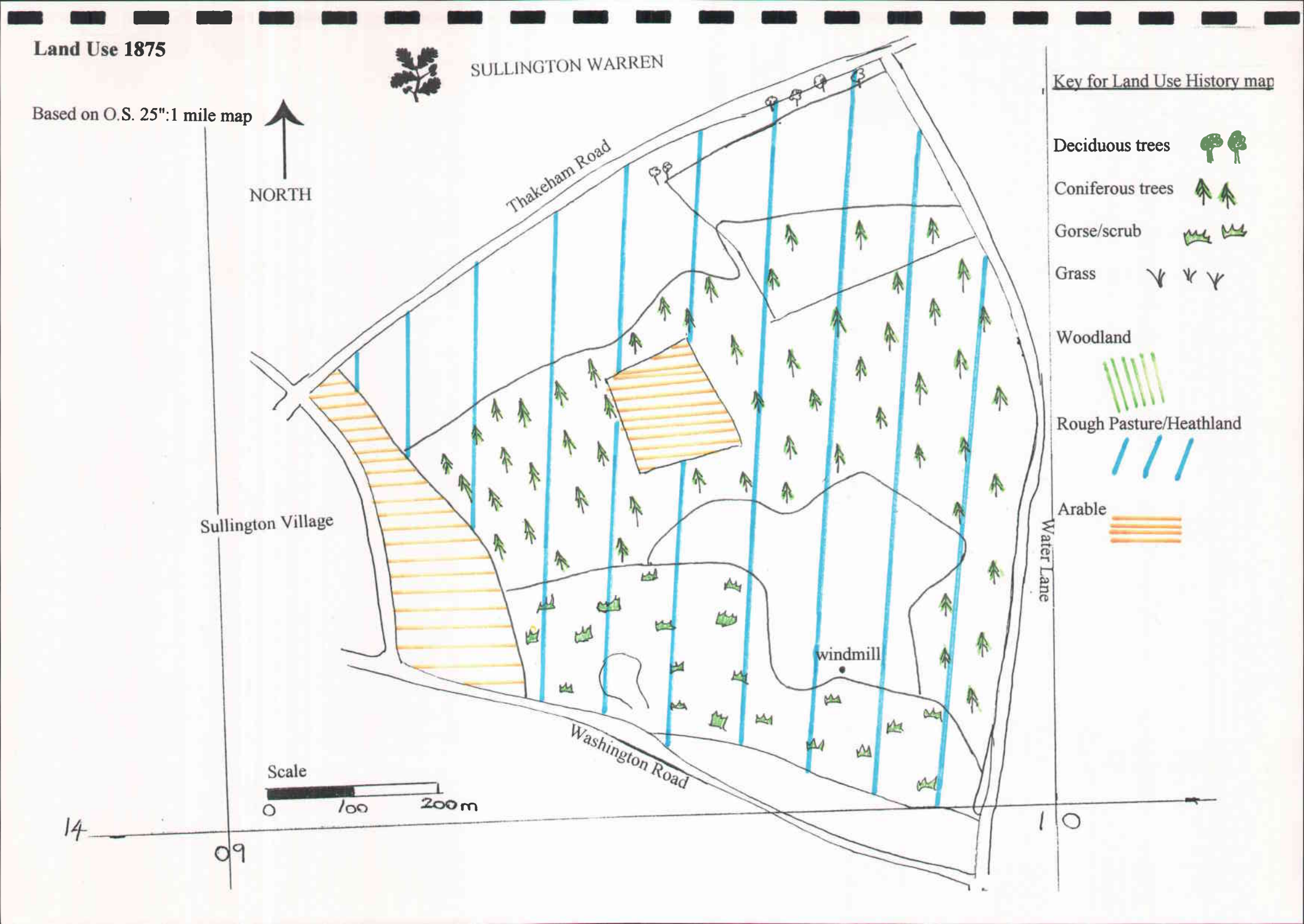
3.4.5 Common Land Designation

Part of this property was designated as common land, proposed in 1967 and accepted in 1975 (Commons Registration CL 35). The designation was not opposed and was presumably based on the assumption that this area was part of the wastes of the manor, a reasonable assumption although the present survey has found no evidence to prove this. Rather it may have been part of the demesne farm (ie land used by the lord of the Manor for his own purposes) as Sullington Warren was part of Sullington Manor Farm (the demesne farm) in the tithe commutation in 1840. It may well have been part of this farm since at least 1582 when a survey of the manor mentions 'wastes' and heaths in the demesne. No information about its use as a common or commoners rights has been discovered during the present survey. However this area is called Heath Common and Sullington Common on 18th century maps which suggests that indeed it was common land, even if no documentary evidence to that effect has been found. Perhaps in fact the new owner, the Earl of Egremont, who bought part of the manor in 1789 including Sullington Manor Farm, bought out the commoners at the end of the 18th century / early 19th century. Time during this survey has not allowed the sale particulars and any further documents to be examined for this information.

As a common the likely activities, other than grazing, would have included the cutting of gorse for fuel, cutting bracken for litter and possibly fertiliser, cutting turf for fuel and possibly digging sand for use by glassmakers and builders (to make tiles and bricks, mortar and cement).

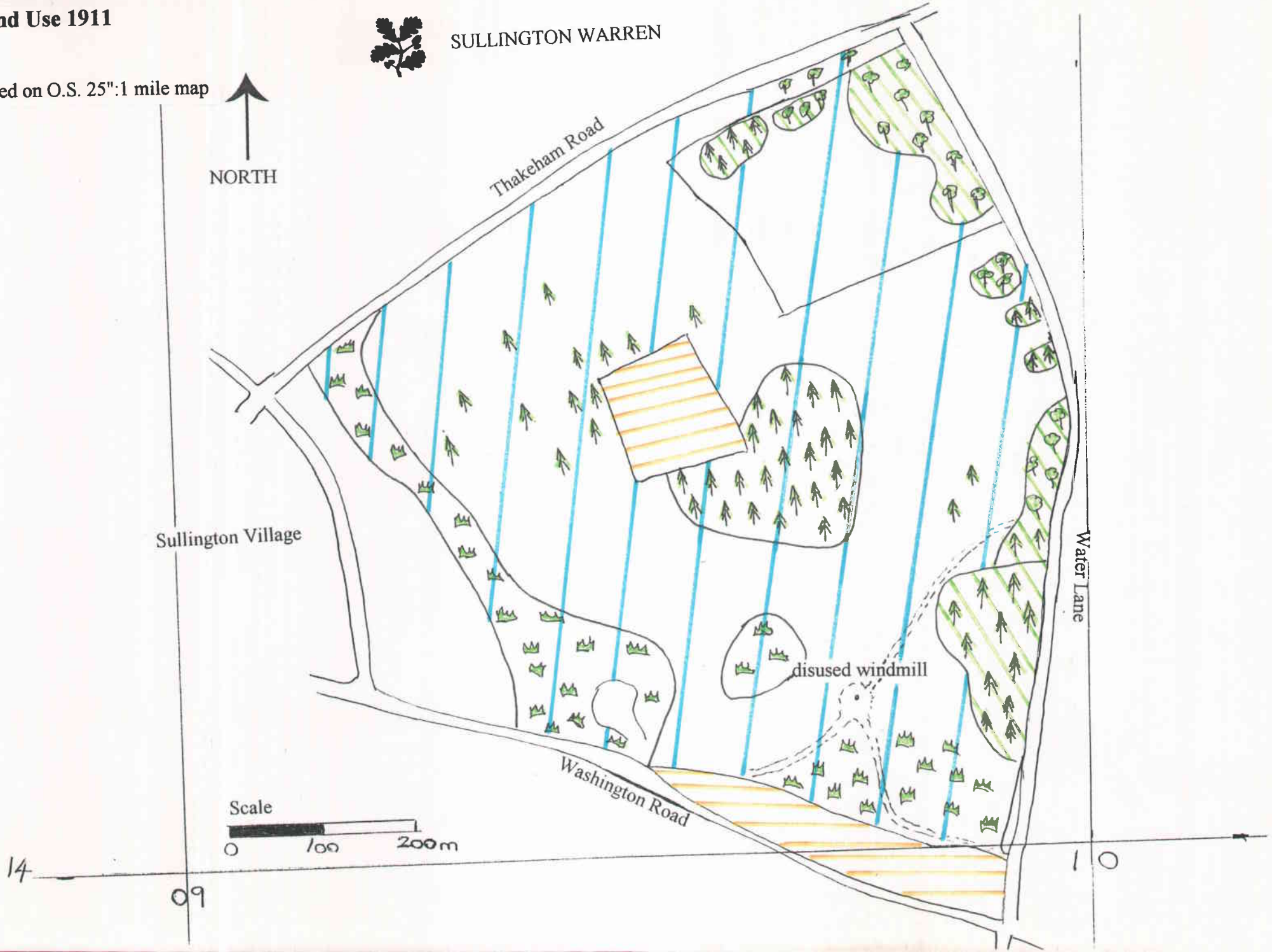
In the Second World War, although not a commoners right, local women collected Sphagnum moss to make bandages for the soldiers.

Land Use 1875



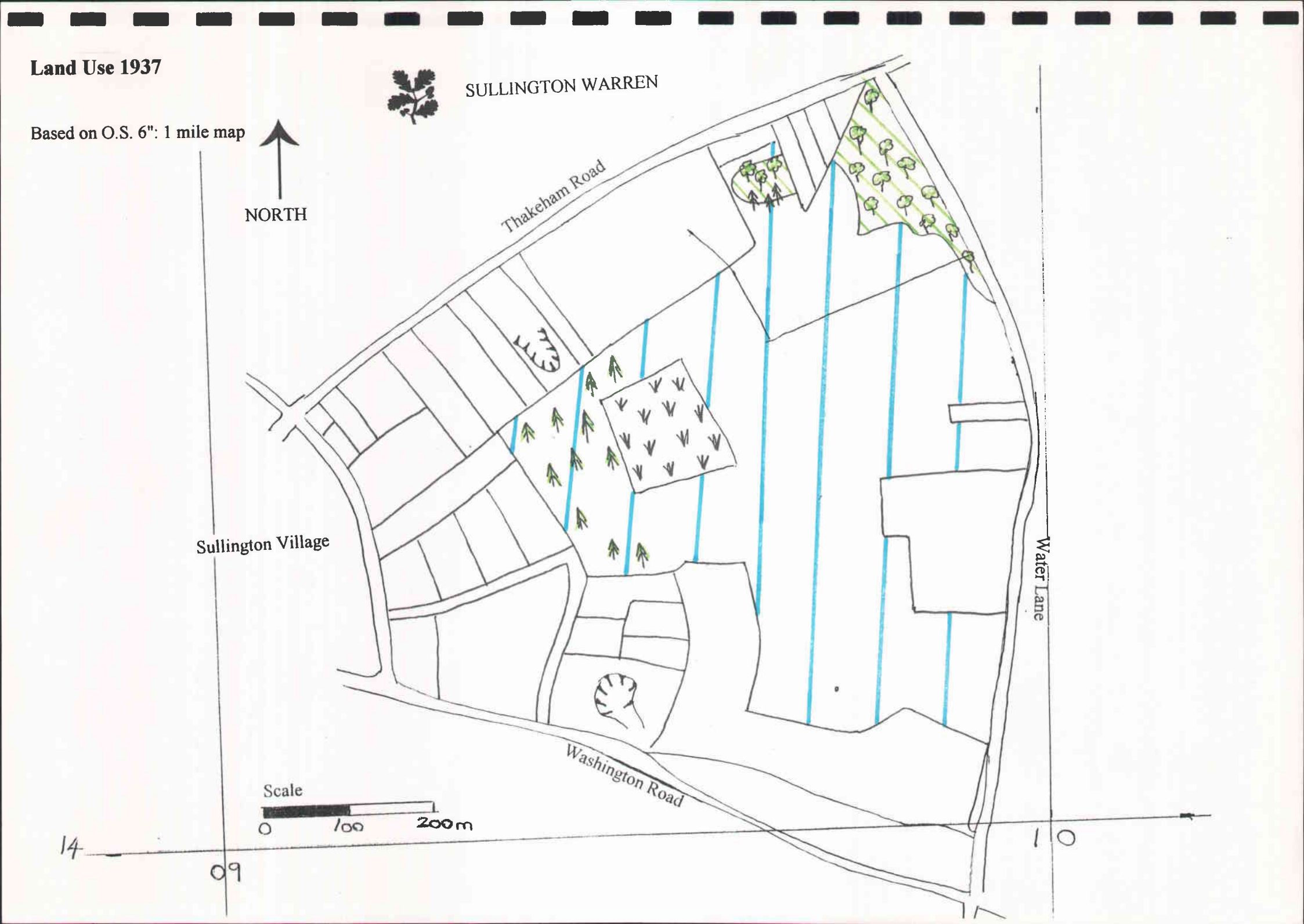
Land Use 1911

Based on O.S. 25":1 mile map

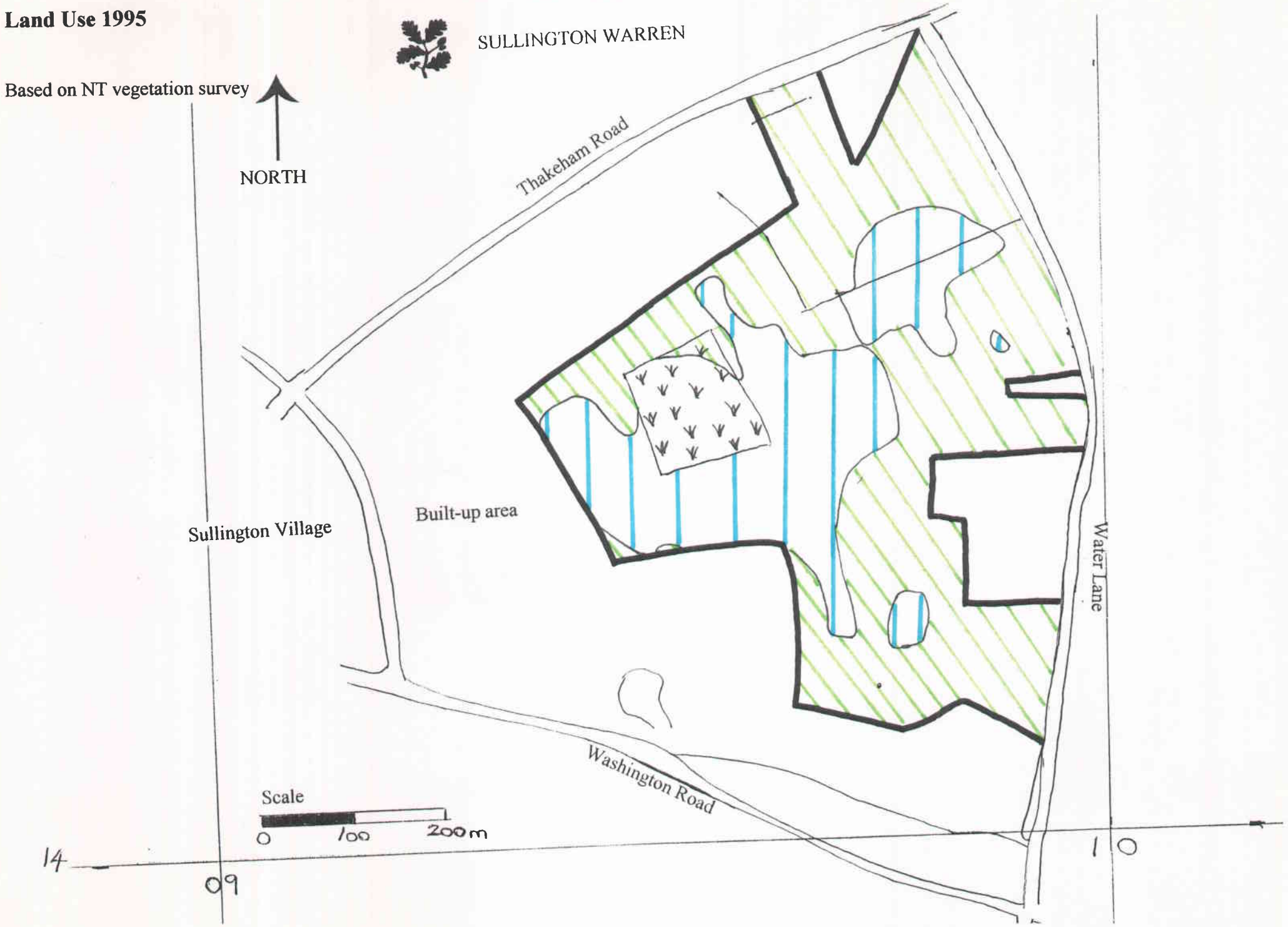


Land Use 1937

Based on O.S. 6": 1 mile map



Land Use 1995



IN WEST SUSSEX: PRESERVATION OF SULLINGTON WARREN

26

NG ACROSS THE WARREN.—Efforts are being made to save part of Sullington Warren, a delightful stretch of heather-clad downland in ssex, from building development. Already the lower parts are being built upon and an appeal is made for £1,740 to purchase 29 acres of the highest the Warren. Our photograph by a staff photographer was taken from the top of the Warren, and on the hills to the right can be seen the famous Chanctonbury Ring.

Figure 6: Sullington Warren in 1934 (The Times)

Conclusion

Mesolithic activity is the earliest period represented on this property. Several pieces of flintwork dating from the Mesolithic have been found on paths.

There are at least ten early Bronze Age round barrows on two Lower Greensand ridges, running north south. There may also be other barrows on lower areas of the property although their identification is by no means positive. Geophysical survey may help identify these in a non-destructive way. In this period and earlier in the Neolithic this area was probably cultivated. After about the Middle Bronze Age soils would have been so acidic and poor that cultivation was no longer feasible and the area was used to graze animals.

This grazing continued for many centuries preventing the regrowth of the woodland. Fire may also have helped keep this area open and dominated by ericaceous shrubs rather than grass.

In the 19th century a windmill was built on the hill in the southern part of the property. This was used throughout the century and fell into disuse in about 1907. In 1911 it was burnt down accidentally by a fire which swept across the whole property.

In the mid 19th century two enclosures were constructed by surrounding areas of land with a bank and ditch. One enclosure in the middle of the property on sloping ground was used until the First World War to cultivate crops such as oats. The other enclosure, if it was used for arable cultivation, did not last long. By 1875 it was shown on the Ordnance Survey map as rough pasture with scattered trees.

At some period in the past there was small scale quarrying, for sand and for gravel. This activity has left many small hollows, particularly in the southern half of the property. There are other hollows in the north east of the property which are of unknown function and date.

The history of this area as either a common or waste of the manor is unclear and would warrant further research.

Bibliography

Allen and Scaife 1991 — The exploitation of the flora and fauna and its impact on the natural and derived landscape in Cox, P.W. and Hearn, C. M., Redeemed from the Heath: The archaeology of the Wytch Farm Oilfield (1987 - 90). Dorset Natural History and Archaeological Society Monograph Series No. 9, p.216-220.

Brandon, P., 1990 — The South East from AD 1000. Longman.

Brunnarius, M., 1979 — The windmills of Sussex. Phillimore.

Cartwright, E., 1830 — The Parochial Topography of the Rape of Bramber in the Western Division of the County of Sussex. Vol II Part the Second.

P. Drewett *et al* 1988 — The South East to AD 1000. Longman.

Drewett, P., 1976 — The excavation of four round barrows at West Heath, Harting, 1973-75. Sussex Archaeological Collections 114.

Drewett, P., 1985 — The excavation of barrows V - IX at West Heath, Harting, 1980. Sussex Archaeological Collections 123.

Grinsell, L.V., 1940 — Sussex Barrows: Supplementary Paper. Sussex Archaeological Collections 81

Keef, P.A.M., Wymer, J.J., and Dimbleby, G.W., 1965 — A Mesolithic site on Iping Common, Sussex, England. Proceedings of the Prehistoric Society 31.

Macphail, R. — Soil analyses in Drewett 1985.

Scaife in Drewett 1985 — Palynological analyses of West Heath barrows V, VIII, IX.

Victoria County History of Sussex Vol. VI, 18-31.

Sullington Preservation Society Newsletter 8
Sullington Preservation Society Newsletter 12, 1981

Index

APPENDIX 1

Copies of historical maps

Yeakell and Gardner 1780

Showing Sullington Common as part of an extensive area of heathland to the north, west and east.

Tithe Map 1841 ammended 1928 showing building plots and land parcels.