

# Mesolithic, Neolithic and Earlier Bronze Age Settlement Patterns south-west of Oxford

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## SUMMARY

*A surface artefact collection survey was carried out around Abingdon and west of Oxford in 1982-83 to record the distribution of prehistoric flintwork. The results of this survey have been combined with a study of the distribution of mesolithic, neolithic and earlier Bronze Age sites located by aerial photography and rescue excavation, to reconstruct the contemporary patterns of settlement and land use in the area covered by the survey.*

## INTRODUCTION

The distribution of ditched monuments of neolithic and earlier Bronze Age date in the Thames valley has been mapped using aerial photography,<sup>1</sup> but this method cannot be used to map the complementary distribution of domestic sites. From what is known about neolithic domestic sites in Britain, they consisted of timber houses with shallow foundations and internal hearths, surrounded by pits, working areas and middens.<sup>2</sup> Given that subsequent denudation, e.g. slope creep and ploughing, has destroyed virtually the entire neolithic land surface in southern Britain, the chance that subsoil remains relating to these sites have survived is extremely remote. A survey technique other than aerial photography is needed to record the distribution of neolithic domestic activity.

Since the 1960s boom in cereal production, large tracts of southern Britain have been ploughed annually. The remains of neolithic domestic activity in areas under cultivation are likely to have been truncated and associated artefacts dispersed throughout the ploughsoil. As pottery of this date was poorly-fired, it disintegrates rapidly on exposure to weathering agencies. Thus stone artefacts, i.e. flints, in the ploughsoil are usually the only surviving component of neolithic domestic sites in areas now under cultivation. Surface artefact collection survey thus provides a suitable method for locating and recording the distribution of these sites. The area around Abingdon and to the west of Oxford (Fig. 1) was selected for such a survey for three main reasons. First, a number of neolithic and earlier Bronze Age monuments have been examined in this area.<sup>3</sup> Secondly, a large acreage of land is ploughed annually. Thirdly,

<sup>1</sup> D. Benson and D. Miles, *The Upper Thames Valley: An Archaeological Survey of the River Gravels* (1974).

<sup>2</sup> I.F. Smith, 'The Neolithic', in *British Prehistory: A New Outline*, ed. C. Renfrew (1974), 104-5; A.W.R. Whittle, *The Earlier Neolithic of Southern England and its Continental Background* (B.A.R. S.S. cxx), 46-9; J.V.S. Megaw and D.D.A. Simpson, *Introduction to British Prehistory* (1979), 85-7.

<sup>3</sup> H.J. Case and A.W.R. Whittle (eds.), *Settlement Patterns in the Oxford Region: Excavations at the Abingdon Causewayed Enclosure and other Sites* (CBA Res. Rep. xlv).

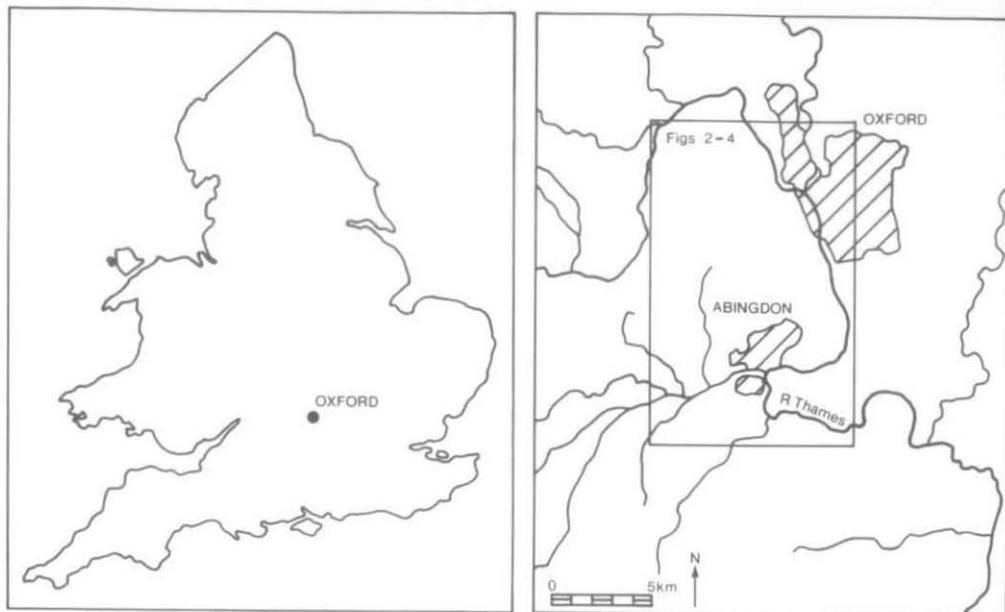


Fig. 1. Location map of the area included in the survey.

the Thames gravel terraces (Fig. 3) form a flat landscape free of alluvial and colluvial deposits where erosion other than ploughing has been minimal. Thus the distribution of flint artefacts on the surface of the ploughsoil is unlikely to be distorted by denudation. The aim of this paper is to demonstrate that surface artefact collection survey, used in conjunction with other techniques such as aerial photography and excavation, is an excellent method for investigating past settlement patterns and landscapes.

#### THE SURVEY

The survey was carried out in October-December 1982, April 1983 and October-November 1983 with the help of members of the Abingdon Archaeological and Historical Society and the Oxford University Archaeological Society. In order to cover as large an area as possible in the time available, a sampling strategy was used. Transects spaced at 50 m. intervals were walked across each field, and each transect was divided into 50 m. collection units. The fields selected for survey had all been ploughed, harrowed and drilled; once the crop had started to sprout and a few rain showers had washed the ground clean the field was walked, with the transects aligned along the drills. Since the main objective of the survey was to map neolithic domestic activity, all humanly-struck flints and fire-fractured flints were collected; post-neolithic pottery and other material was recorded, but not collected. The flint has been deposited in the Ashmolean Museum, Oxford, and a record of the survey lodged with the Oxfordshire Sites and Monuments Record at the County Museum, Woodstock.

## RESULTS

The distribution of all humanly-struck flint is plotted in Fig. 2. The raw material was mainly small nodular flint from either the Northern Drift deposits on Boars Hill or the gravel terrace deposits.

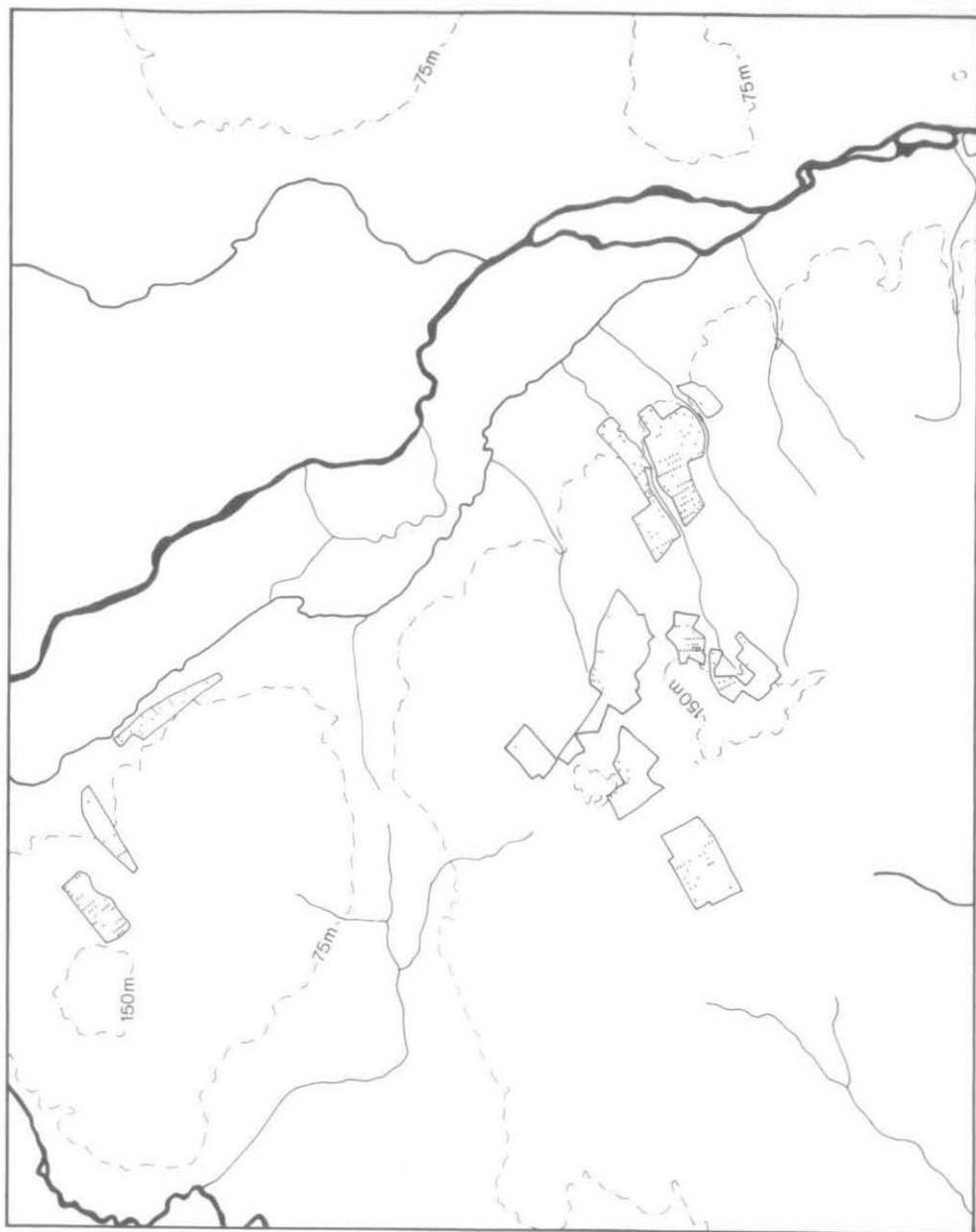
As a means of dating the flintwork, a study has been made of the flint assemblages from independently-dated closed contexts recovered by excavation in the Abingdon area. The sites chosen for this analysis included the earlier neolithic causewayed enclosure at Abingdon and the later neolithic pit-groups at Barrow Hills, Barton Court Farm and Sutton Courtenay (see Appendix). In the earlier neolithic period, it is apparent that emphasis was placed on producing blades from good-quality flint using similar techniques to those used in the mesolithic period, although there are differences in the way cores were worked resulting in the creation of cube-shaped blade cores. Leaf-shaped arrowheads replaced microliths as projectile points and a variety of scrapers, piercers, knives and ovates were manufactured. In the later neolithic period, a completely different method of working flint was adopted: flakes were removed from flint nodules of varying quality using hard hammers, resulting in the production of multiplatform flake cores. Transverse arrowheads replaced leaf-shaped arrowheads and a limited range of implements was produced, largely comprising scrapers, piercers, knives and combination tools. Similar flint-working techniques continued into the earlier Bronze Age, except that barbed and tanged arrowheads were substituted for transverse arrowheads and a variety of pressure-flaked knives and invasively-retouched scrapers was produced.<sup>4</sup>

A small proportion of the flint from the survey can be dated to the mesolithic period; these pieces include soft hammer-struck bladelets, bladelet cores and microliths (Fig. 3). The only definite earlier neolithic piece found during the survey is a leaf-shaped arrowhead (Fig. 3). Of the remaining flints, all the débitage is hard hammer-struck and can probably be assigned a date after the start of the later neolithic period; most of the implements could date to the earlier Bronze Age as well. The two barbed and tanged arrowheads are the only implements diagnostic of the earlier Bronze Age.

The density of surface flints varies considerably on different geological substrates. There is an almost complete absence of flint on the Thames floodplain. This is not surprising, as it has been demonstrated that alluvium masks the pre-Bronze Age ground surface.<sup>5</sup> Thus the spread of alluvium could overlies riverside sites of mesolithic to earlier Bronze Age date. Whenever areas on the floodplain are exposed in the future by the large-scale removal of the alluvial cover, they should therefore be searched for traces of prehistoric activity. The band of Kimmeridge Clay north of Abingdon, forming c. 17 per cent of the area surveyed, is devoid of flints. The Lower Greensand on Boars Hill, c. 9 per cent of the area surveyed, the Corallian Limestone west of Abingdon and south-west of Oxford (c. 14 per cent) and the gravel terraces south and east of Abingdon (c. 60 per cent), all support a virtually continuous scatter of flints (Fig. 2). However, within the spread of flints on the gravel terraces, there are four discrete areas south of Abingdon containing a greater flint density (Fig. 2). As post-depositional processes acting on the

<sup>4</sup> R. Bradley and R. Holgate, 'The Neolithic Sequence in the Upper Thames Valley', in *Neolithic Studies: A Review of Some Current Research*, eds. R. Bradley and J. Gardiner (B.A.R. cxxxiii), 109; R. Holgate, 'Settlement, Economy and Society in the Thames Basin in the 4th and 3rd Millennia bc' (D. Phil. thesis in prep.).

<sup>5</sup> M.A. Robinson and G.H. Lambrick, 'Holocene Alluviation and Hydrology in the Upper Thames Basin', *Nature*, cccviii (1984), 813.



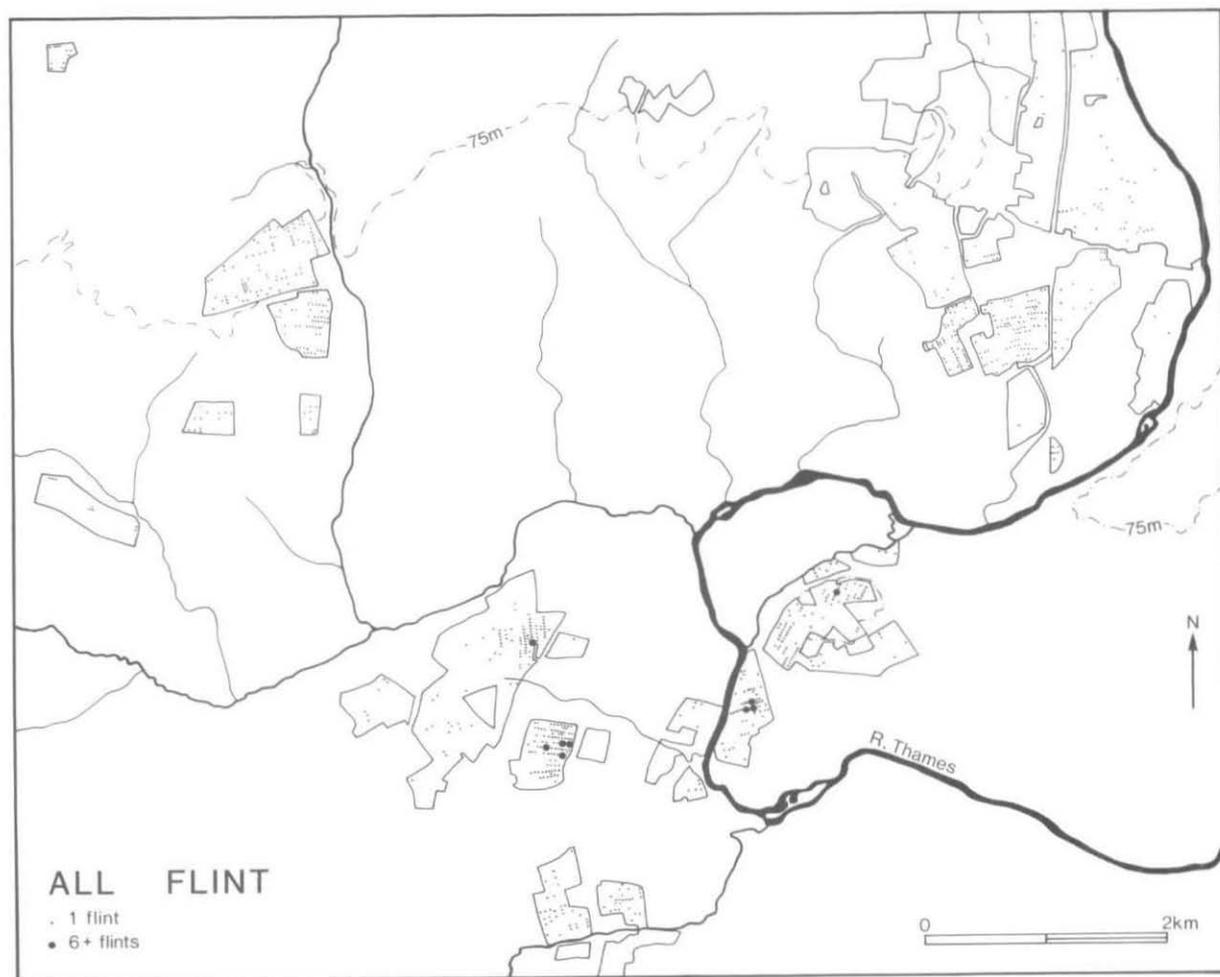
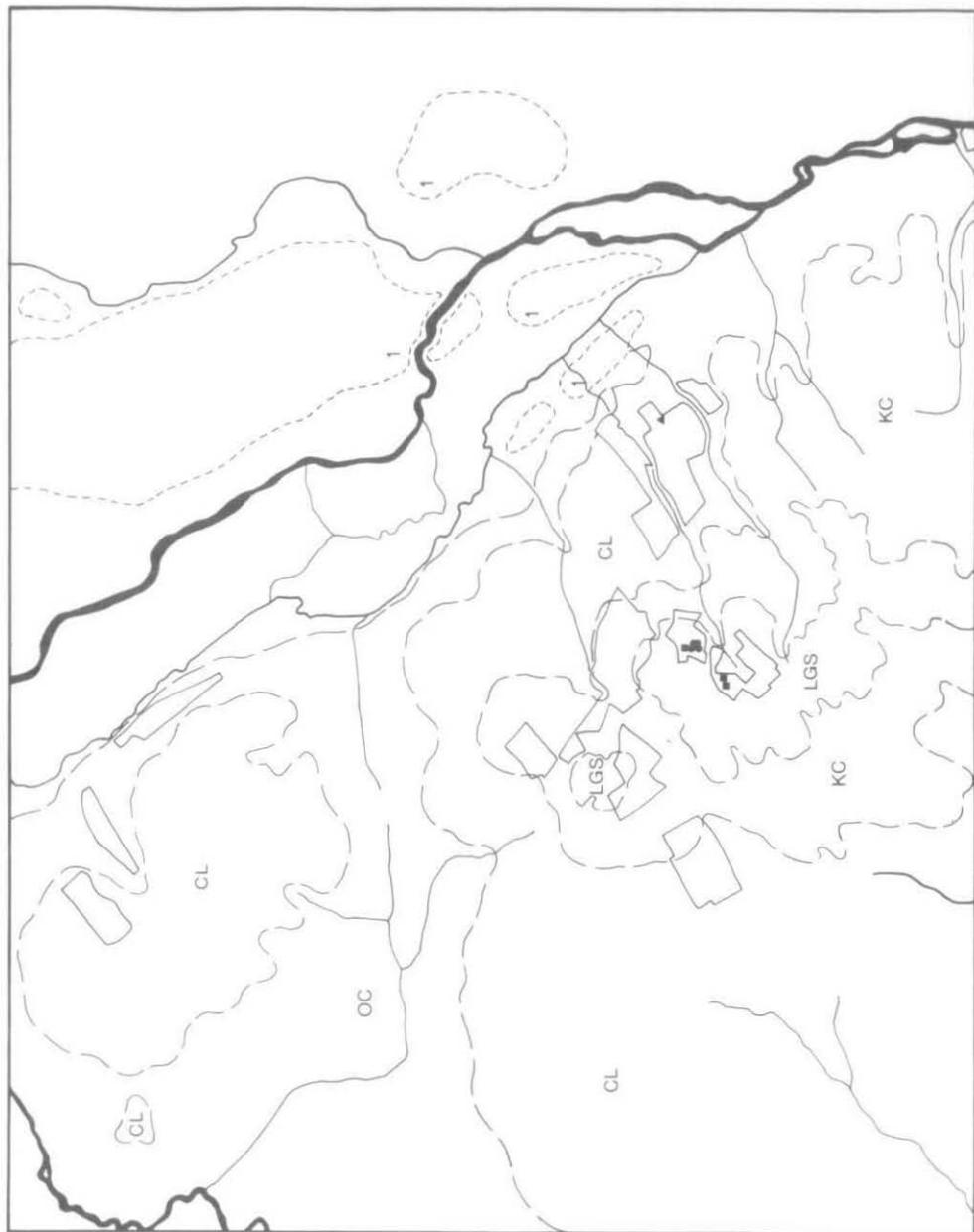


Fig. 2. Distribution of all humanly-struck flint recovered during the survey.



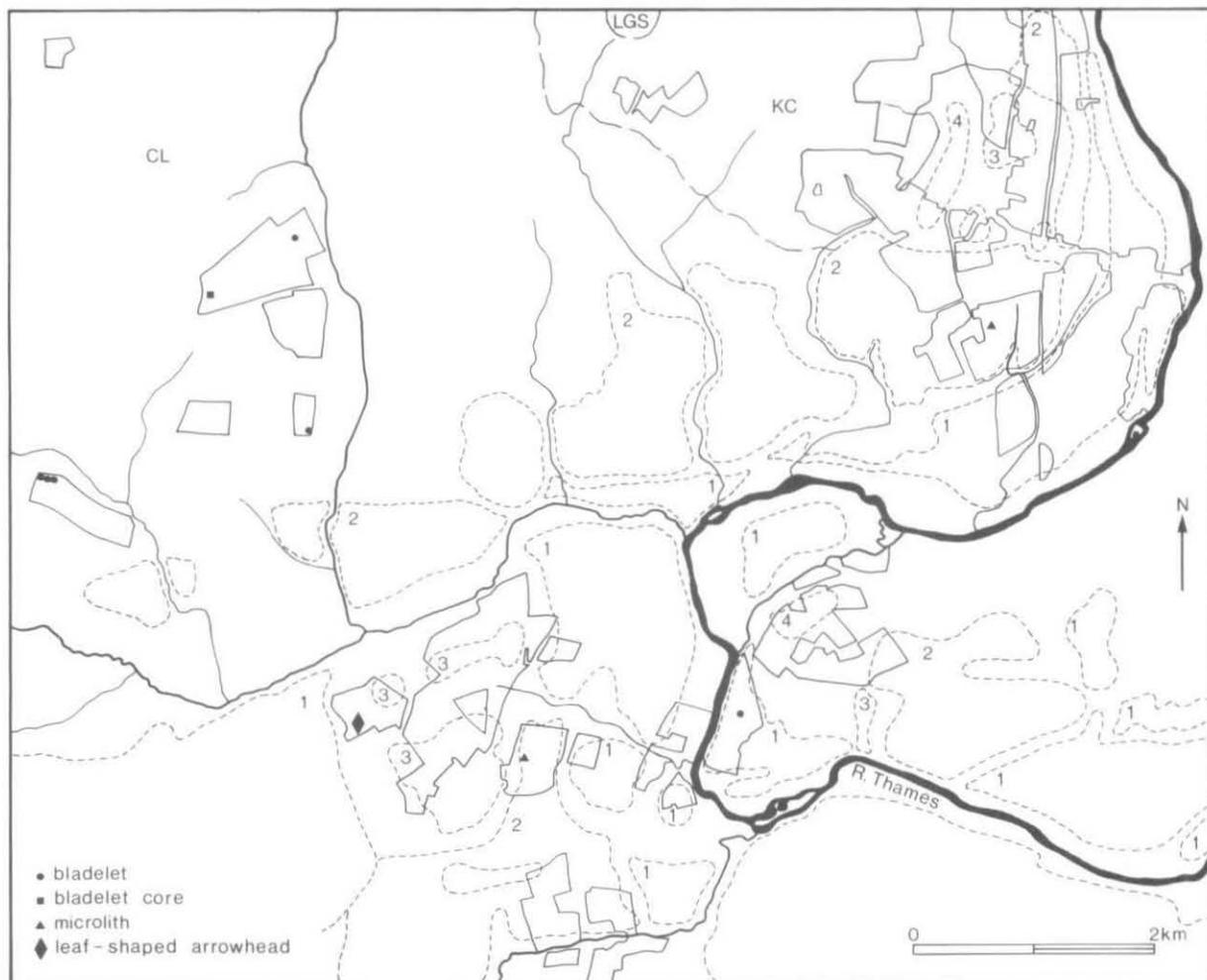
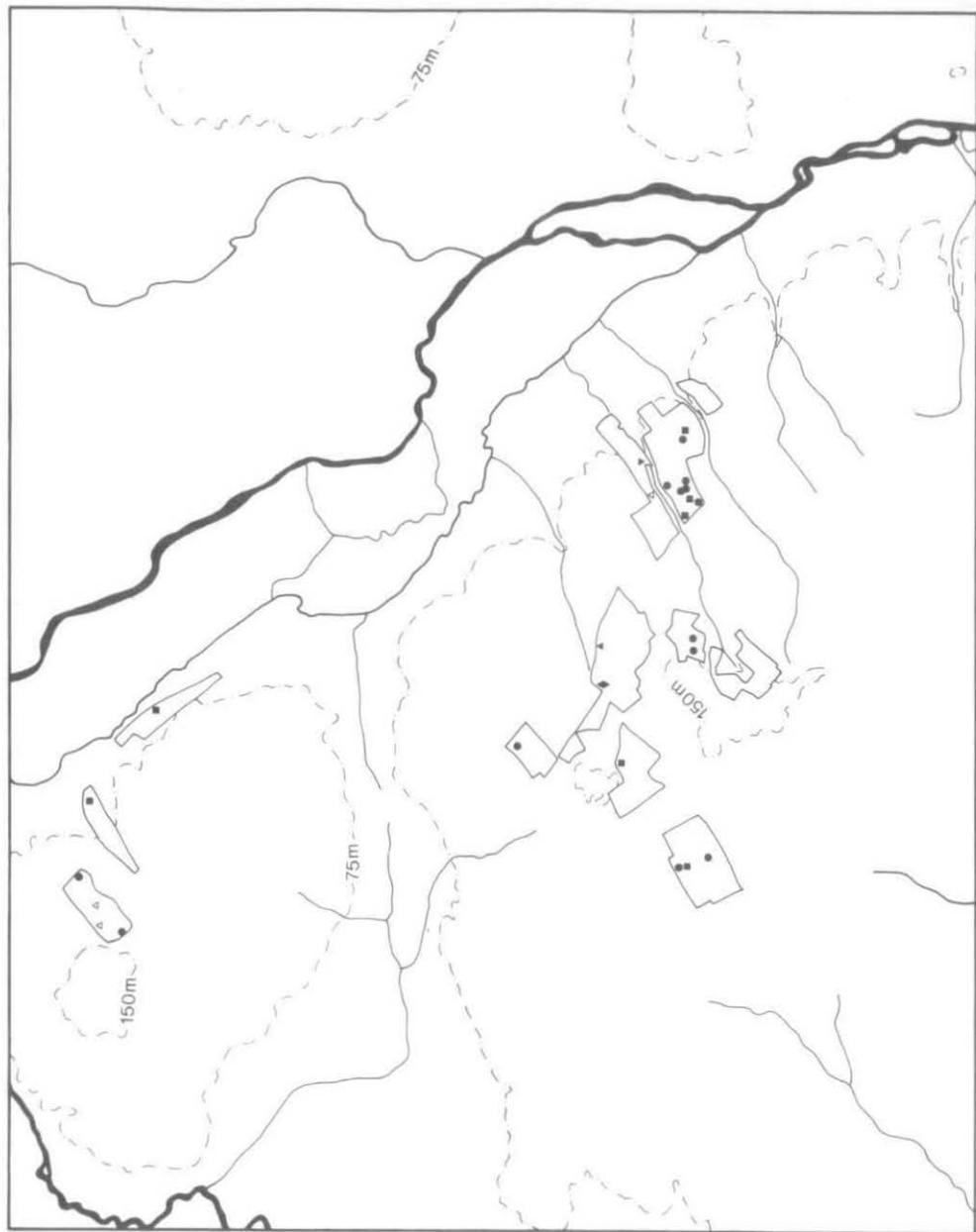


Fig. 3. Distribution of mesolithic and earlier neolithic flint recovered during the survey against solid geology. LGS, Lower Greensand; KC, Kimmeridge Clay; CL, Corallian Limestone; OC, Oxford Clay. The Thames gravel terraces are indicated by broken lines and numbered in sequence.



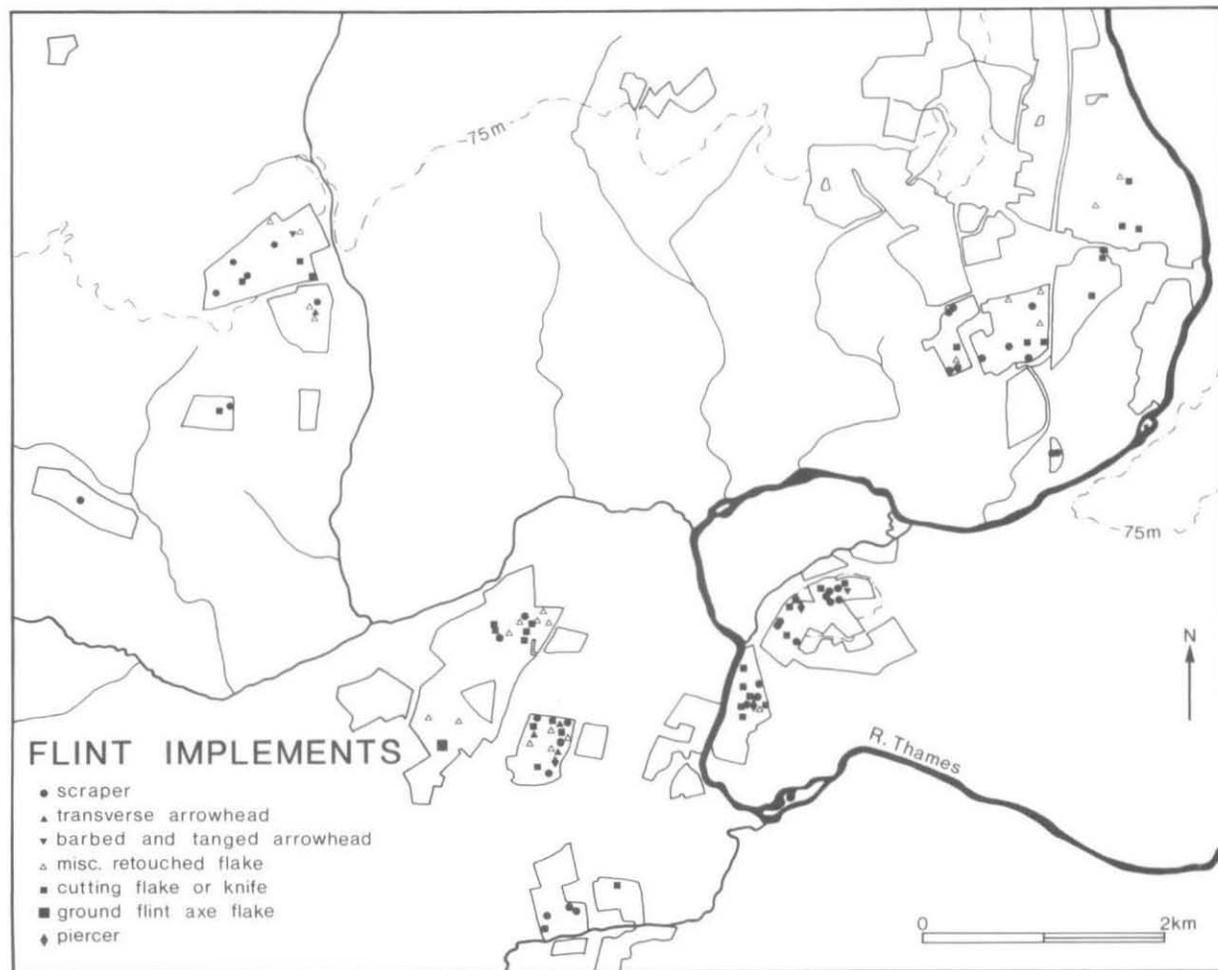


Fig. 4. Distribution of all flint implements recovered during the survey.

gravel terraces have all been remarkably uniform, differential erosion is unlikely to account for the observed variations in the density of surface flintwork.

Fig. 4 records the distribution of implements. Four major clusters can be discerned, which correspond with the high-density flint areas shown in Fig. 2. It has been argued elsewhere that, by analogy with the settlement residues of present-day stone-using societies, discrete concentrations of humanly-struck flint containing a high proportion and range of different implements indicate domestic activity.<sup>6</sup> The dense clusters of flintwork on the gravel terraces are thus interpreted as later neolithic and earlier Bronze Age domestic sites (Fig. 5). The widespread low-density flint scatter probably represents the extent of land exploited at this time for farming and other activities, and is represented on Fig. 5C as 'activity areas'.

#### DISCUSSION

Surface artefact collection survey can be used to map the extent of prehistoric domestic activity; this record complements the distribution of sites plotted from aerial photographs (Fig. 5B-D). Sites discovered in the course of rescue excavations in advance of gravel extraction or housing development have also been included in Fig. 5A-D (see Appendix). For the mesolithic period, two substantial sites are known on the edge of the first terrace overlooking the Thames: Corporation Farm and Thrupp site B (Fig. 5A). The two small sites on the edge of the Lower Greensand on Hurst Hill and Boars Hill are on the springline feeding the tributary rivers of the Thames; in both cases, intensive surface collection has only produced a small quantity of débitage and microliths. Dating is difficult, but on the evidence of the microlith forms, the sites adjacent to the Thames were certainly occupied in the later mesolithic period (c. 6000-c. 4000 bc). Other mesolithic findspots suggest that river valleys were exploited, probably reflecting hunting and gathering activities at the forest margin.

In the earlier neolithic period (c. 3200-c. 2700 bc), a causewayed enclosure was constructed at Abingdon (Fig. 5B; cf. below, pp. 183-7). Although interpreted by Avery as an enclosed settlement,<sup>7</sup> the carefully contrived nature of the burial of refuse, particularly the deposits containing human and articulated animal bones, suggests that this material was not settlement refuse at all.<sup>8</sup> There are possible traces of domestic activity at Corporation Farm and Thrupp site B, but the presence of mesolithic and later neolithic flintwork at these sites makes it difficult to isolate the earlier neolithic component. However, the limited number of implements produced on blades, particularly soft hammer-struck blades, suggests that these were either short-lived domestic sites or task-specific sites. A number of thick-butted stone axes have been recovered from the Thames itself and peaty areas close to rivers and streams; these could have been intentional 'ritual' deposits and not merely casual losses. It should be added that thick-butted axes are occasionally found, in addition to thin-butted axes and chisels, in later neolithic contexts; some of the axes plotted in Fig. 5B could thus date to the later neolithic period.

<sup>6</sup> Bradley and Holgate op. cit. note 4, 112; R. Holgate, 'Identifying Neolithic Settlements in Britain: the Role of Field Survey in the Interpretation of Lithic Scatters', in *Archaeology from the Ploughsoil: Studies in the Collection and Interpretation of Field Survey Data*, eds. C. Haselgrove, M. Millett and I. Smith (1985), 53-6; R. Holgate, D. Phil. thesis in prep.

<sup>7</sup> M. Avery, 'The Neolithic Causewayed Enclosure, Abingdon', in Case and Whittle (eds.) op. cit. note 3, 24.

<sup>8</sup> Bradley and Holgate op. cit. note 4, 116.

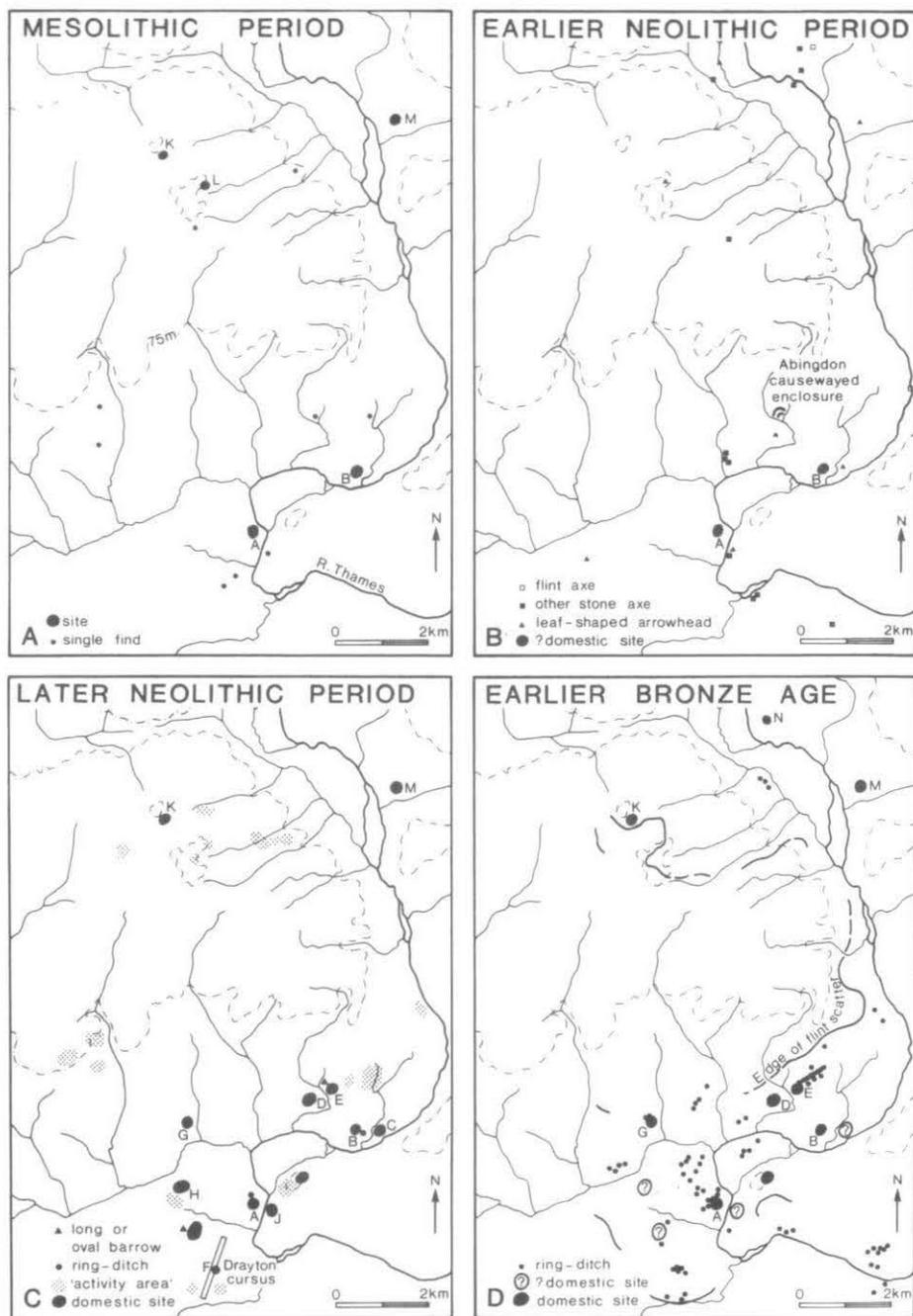


Fig. 5. A: mesolithic (c. 8000–c. 3200 bc) settlement pattern; B: earlier neolithic (c. 3200–c. 2700 bc) settlement pattern; C: later neolithic (c. 2700–c. 2000 bc) settlement pattern; D: earlier Bronze Age (c. 2000–c. 1400 bc) settlement pattern. Key: A, Corporation Farm; B, Thrupp site B; C, Thrupp site C; D, Barton Court Farm; E, Barrow Hills; F, Sutton Courtenay; G, Ashville Trading Estate; H, Tithe Barn Field; J, Culham; K, Hurst Hill; L, Chilswell House; M, Iffley; N, The Hamel, Oxford.

As in the mesolithic period, this stretch of the Thames valley was probably largely wooded, with activity taking place at the forest margin. It is suggested that this activity was largely non-domestic in character and probably attributable to communities living either on the Corallian Limestone west of Abingdon or on the Oolite Limestone of the Cotswolds. In fact the gravel terraces of the upper Thames valley are singularly devoid of earlier neolithic domestic activity, while a number of domestic sites have been located on the upland areas of the Gloucestershire and Oxfordshire Cotswolds and the Marlborough Downs, Wiltshire, both within the catchment of tributaries of the Thames.<sup>9</sup> The Abingdon enclosure and the other enclosures near the southern edge of the Cotswolds in south-east Gloucestershire and west Oxfordshire therefore appear to have been situated on the periphery of at least one major settlement zone, namely the Cotswolds, rather than in the midst of a settled area.

The later neolithic period (*c.* 2700–*c.* 2000 bc) witnessed a considerable expansion of settlement into previously unoccupied stretches of the gravel terraces and slopes adjacent to the Thames (Fig. 5C). New monuments associated with Peterborough Ware were built, e.g. the Drayton cursus, and a number of extensive domestic sites became established. The edges of gravel terraces adjacent to rivers or streams appear to have been the most favoured landscape settings for domestic sites. Associated with this settlement spread was a change in flint technology, as outlined above. Furthermore, the cereal remains and animal bones recovered from pits at Barton Court Farm show that mixed farming was certainly practised in the later neolithic period.<sup>10</sup> It has been suggested elsewhere that the later neolithic period saw the emergence of permanently occupied farmsteads, with the adoption of new flint-working techniques being associated with the change of work schedule resulting from this development.<sup>11</sup>

Domestic activity continued into the earlier Bronze Age (*c.* 2000–*c.* 1400 bc) in the areas settled during the later neolithic period (Fig. 5D). Animal bones from one of two beaker pits and ploughmarks at the Hamel, Oxford indicate livestock production and arable farming on the floodplain and lower gravel terraces alongside the Thames.<sup>12</sup> Ring-ditches were constructed on the first and second gravel terraces. The rapid fall-off in the distribution of flints on land beyond the ring-ditches (Figs. 4 and 5D) implies that these monuments were positioned at the edge of either woodland or grazing land, perhaps marking the interface between the infield and the outfield. Another possibility is that certain ring-ditches were aligned on trackways, for instance the Barrow Hills linear cemetery.

## CONCLUSION

The results of controlled surface artefact collection have been combined with a study of the sites revealed by aerial photography and rescue excavation to provide a reconstruction of mesolithic, neolithic and earlier Bronze Age settlement patterns around Abingdon and west of Oxford. The publication of excavations at Barrow Hills,

<sup>9</sup> R. Holgate, 'Neolithic Settlement in the Upper Thames', *Curr. Arch.* xcvi (1985), 374–5; R. Holgate, D. Phil. thesis in prep.

<sup>10</sup> M. Jones, 'Carbonised Cereals from Grooved Ware Contexts', *Proc. Prehist. Soc.* xlvi (1980), 61–3; D. Miles, 'Abingdon/Radley, Barton Court Farm, 1972–6', *CBA Group 9 Newsletter*, viii (1978), 106–7.

<sup>11</sup> Bradley and Holgate *op. cit.* note 4, 114; Holgate *op. cit.* note 9, 375; R. Holgate, D. Phil. thesis in prep.

<sup>12</sup> N. Palmer, 'A Beaker Burial and Medieval Tenements in the Hamel, Oxford', *Oxoniensia*, xlv (1980), 128–34.

Corporation Farm, Drayton and Thrupp should provide further information on how the later neolithic and earlier Bronze Age barrows/ring-ditches relate to domestic sites. It is recommended that surface collection survey should, where possible, form one component alongside other techniques in all field projects and regional surveys concerned with investigating the relationship between archaeological sites and their contemporary landscape.

#### ACKNOWLEDGEMENTS

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#### APPENDIX: SITES LOCATED BY RESCUE EXCAVATION AND SURVEY

##### *Monuments*

Abingdon, SU 511 983: causewayed enclosure (below, pp. 183-7).<sup>13</sup> Excavated material in the Ashmolean Museum, Oxford.

Barrow Hills, Radley, SU 515 982: oval barrow and ring-ditch cemetery.<sup>14</sup> Recent excavations for the Oxford Archaeological Unit by Richard Bradley and Claire Halpin, 1983-5.

Thrupp, SU 521 971: ring-ditch. Excavation for the Oxford Archaeological Unit by David Miles.<sup>15</sup>

Drayton, SU 489 944: Cursus. Excavation by the Abingdon Archaeological and Historical Society.<sup>16</sup>

Corporation Farm, SU 497 956: ring-ditches. Excavation by Mr. and Mrs. R. Henderson. Sutton Courtenay, SU 488 942: ring-ditches.<sup>17</sup> Excavated material in the Ashmolean Museum, Oxford.

Ashville Trading Estate, SU 483 973: ring-ditches.<sup>18</sup>

<sup>13</sup> E.T. Leeds, 'A Neolithic Site at Abingdon, Berks.' *Antiq. Jnl.* vii (1927), 438-64; Avery op. cit. note 7, 10-50.

<sup>14</sup> D.N. Riley, 'Radley 15, a Late Beaker Ring-Ditch', in Case and Whittle (eds.) op. cit. note 3, 76, summarizes earlier archaeological investigations at the Barrow Hills cemetery.

<sup>15</sup> Miles op. cit. note 10, 106-7.

<sup>16</sup> R. Thomas and J. Wallis, 'Recent Work on Neolithic and Early Bronze Age Sites in the Abingdon Area', *CBA Group 9 Newsletter*, xii (1982), 181-91.

<sup>17</sup> E.T. Leeds, 'A Saxon Village at Sutton Courtenay, Berkshire (second report)', *Arch.* lxxvi (1927), 59-80.

<sup>18</sup> M. Parrington, *The Excavation of an Iron Age Settlement, Bronze Age Ring-Ditches and Roman Features at Ashville Trading Estate, Abingdon (Oxfordshire) 1974-76* (CBA Res. Rep. xxviii).

*Domestic sites*

- Corporation Farm, SU 497 956: mesolithic to earlier Bronze Age material. Excavation and collection by Mr. and Mrs. R. Henderson.
- Thrupp site B, SU 520 971: mesolithic to earlier Bronze Age material. Excavation by the Abingdon Archaeological and Historical Society;<sup>19</sup> collection by Bill Skellington.
- Thrupp site C, SU 525 972: neolithic material. Excavation for the Abingdon Archaeological and Historical Society by Jeff Wallis; collection by Bill Skellington and Jeff Wallis.<sup>20</sup>
- Barton Court Farm, SU 509 978: neolithic material. Excavation for the Oxford Archaeological Unit by David Miles.<sup>21</sup>
- Barrow Hills, Radley, SU 513 981: neolithic and earlier Bronze Age material. Collection by the Abingdon Archaeological and Historical Society; excavation for the Oxford Archaeological Unit by Claire Halpin, 1983–5.
- Ashville Trading Estate, SU 483 973: neolithic and earlier Bronze Age material. Excavation and collection.<sup>22</sup>
- Sutton Courtenay, SU 488 941: neolithic material.<sup>23</sup> Excavated material in the Ashmolean Museum, Oxford.
- Iffley, SP 527 048: mesolithic to earlier Bronze Age material. Collection by A.M. Bell.<sup>24</sup> Material in the Pitt-Rivers Museum, Oxford.
- Tithe Barn Field, Caldecott, SU 482 958: neolithic material. Collection by Mrs. R. Henderson.
- Culham, SU 501 953: neolithic material. Collection by Bill Skellington.
- Chilswell House, SP 488 034: mesolithic material in the Ashmolean Museum, Oxford.
- Hurst Hill, Cumnor, SP 478 039: mesolithic to earlier Bronze Age material. Collection by Roger Ainslie.
- The Hamel, Oxford, SP 507 061: earlier Bronze Age material. Excavation by the Oxford Archaeological Unit.<sup>25</sup>

*The Society is grateful to the Council for British Archaeology for a grant towards the publication of this paper.*

<sup>19</sup> G. Jones, G. Wallace and W. Skellington, 'Abingdon, Oxfordshire', *CBA Group 9 Newsletter*, ix (1979), 8.

<sup>20</sup> Thomas and Wallis op. cit. note 16, 181–91.

<sup>21</sup> Miles op. cit. note 10, 106–7.

<sup>22</sup> Parrington op. cit. note 18, 90–1.

<sup>23</sup> Leeds op. cit. note 17, 59–80; E.T. Leeds, 'Recent Bronze Age discoveries in Berkshire and Oxfordshire', *Antiq. Jnl.* xiv (1934), 264–76.

<sup>24</sup> H. Case, 'Mesolithic Finds In The Oxford Area', *Oxoniensia*, xvii/xviii (1953), 1–13.

<sup>25</sup> Palmer op. cit. note 12, 128–34.