Prehistoric and Romano-British Landscapes at Little Wittenham and Long Wittenham, Oxfordshire

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SUMMARY

A significant concentration of prehistoric activity is located close to the confluence of the Rivers Thames and Thame at Dorchester-on-Thames. The Dorchester monument complex including a cursus monument and a large henge (the 'Big Rings') is now largely destroyed due to gravel extraction and other development. In contrast, the Dyke Hills complex (usually assumed to be a Late Iron Age 'oppidum') and the Wittenham Clumps hillfort are largely unexplored. These large monuments exist within a complex distribution of cropmarks on the gravel terraces. Cropmarks are particularly well preserved within the meander of the River Thames between Little Wittenham and Long Wittenham. Any single aspect of the landscape must be considered within the context of the whole: this paper assesses the potential of Geographical Information Systems (GIS) as a tool to interpret aspects of the prehistoric landscape within their geographical and archaeological contexts, using multiple layers within the GIS to hold contextual information. A sequence of chronological development is suggested for the cropmark complexes on the gravel terrace north of the Wittenhams. The local, contextual trajectory suggested here is compared and contrasted with larger-scale narratives appertaining to the Thames Valley as a whole.

A rchaeological interpretation relating to the later prehistory of the Upper Thames Valley functions at a variety of scales, but is dominated by the narrative functioning at the level of the individual site, and the synthesis functioning at a regional level. While work at both these scales is vital, it is somewhat more difficult to pitch interpretation at a scale in-between, attempting to link up disparate sites within a local landscape, and to fill the gaps within a patchy record. Richard Hingley has addressed the potential of cropmarks, particularly on the gravel terraces of the Thames, to look in a more extensive way at whole landscapes, and to contrast developments between 'micro-regions' within the Thames Valley.¹ To deal with cropmarks alone is, however, to neglect the potential of a wealth of other evidence. The purpose of this study is, therefore, to select a landscape with a rich, extensive and chronologically varied cropmark record and the potential for validation of cropmark evidence against other categories of material.

Cropmarks on the gravel terraces of the River Thames north of the Wittenhams are characterised by large, apparently multi-period complexes, and a system of linking trackways. Other categories of evidence available for this area relate to topography, geology, soils and vegetation, past and present land use, and archaeological investigations within the survey area and more generally within the Upper Thames Valley. Using this evidence it is possible to construct a broad chronology for the cropmark complexes, to draw some tentative conclusions about changing land-use through time, and to suggest ways in which our accounts of local trajectories and local variations could be articulated within broader frameworks of interpretation for the later prehistory of the Upper Thames Valley. At various

¹ R. Hingley, 'Towards Social Analysis in Archaeology: Celtic Society in the Iron Age of the Upper Thames Valley', in B. Cunliffe and D. Miles (eds.), Aspects of the Iron Age in Central Southern Britain (1984), 72-88.



- Concentrations of metalwork finds from the Thames
- Artefact-rich dark earth (or 'midden'): Late Bronze Age

Early and Middle Iron Age settlement discussed in text

- a: Mount Farm, Berinsfield
- b: Allen's Pit, Berinsfield
- c: Wigbolds, Long Wittenham
- d: Appleford (Middle Iron Age paddocks)

Middle and Late Bronze Age field systems (Yates 1999)

- 1: Mount Farm, Berinsfield
- 2: Northfield Farm, Long Wittenham
- 3: Dorchester-on-Thames cursus
- 4: Wallingford Road, Didcot
- 5: Fullamoor Farm, Clifton Hampden
- 6: Appleford Sidings
 - Extent of detailed cropmark survey

Fig. 1. Location and extent of the detailed cropmark survey, also showing later Bronze Age and earlier Iron Age activity discussed in the text. Base map: Crown Copyright Ordnance Survey: an EDINA Digimap/JISC supplied service.

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times, fairly large-scale, inter-community activity is a key theme, expressed through the construction of major Neolithic monuments, a hillfort and riverside enclosure, the accumulation of artefact-rich dark earth, and the deposition of fine metalwork. On the first gravel terrace within the survey area, a predominantly pastoral landscape persisted throughout later prehistory, suggesting the playing out of smaller-scale relationships between communities engaged in redistribution. Future investigation should address the nature of the interactions between these social scales.

METHODOLOGY

The spatial distribution of cropmarks may suggest a chronological sequence, through joining, overlapping, shared alignment, or spatial discreteness. The morphology of cropmarks may also have chronological implications. However, cropmarks do not exist in a vacuum, but within the context of past and present landscapes. In order to construct a coherent chronology, it is essential to recognise the existence of other categories of evidence. Chronological interpretation therefore takes place through a process of interaction between a set of understandings derived from pre-existing narratives and concepts of enclosure morphology, and examination of spatial relationships within the cropmark record itself.

The survey area (Fig. 1) is particularly suited to this type of contextual investigation: modern development has impinged only minimally onto the cropmarks; additional archaeological evidence exists in the form of small-scale excavation, stray finds and surface evidence detailed in the National Monuments Record and the Oxfordshire Sites and Monuments Record, and metalwork dredged from the River Thames (now mainly within the Thames Conservancy Collection of Reading Museum). Although the separation of any discrete area from the wider continuum is essentially arbitrary, it could be argued that the survey area, bounded on three sides by a meander of the River Thames, possesses a degree of coherence. However, the immediate context of the survey area, for example the extensive prehistoric and Roman evidence from Dorchester-on-Thames, Iron Age and Roman occupation around Appleford, significant metalwork finds from the River Thames at Days Lock, and multi-period prehistoric evidence from the Wittenham Clumps hillfort and its environs, must also be considered in this account.

A Geographical Information System (GIS) was constructed to facilitate this contextual approach, allowing the categories outlined above to coexist as separate layers of information. All known cropmarks were initially digitised from RCHME plots,² along with information relating to their geographical and archaeological context. Each layer of information was then imported into the GIS. Using morphology, spatial relationships between cropmarks and the additional contextual evidence detailed above, four broad chronological phases were distinguished, corresponding to three major re-organisations of the landscape on the First Gravel Terrace.

Phase 1: Ring ditches and round barrows (Late Neolithic and Early Bronze Age) Phase 2: Systems of double-ditched enclosures aligned roughly north-west to south-east (Middle and Late Bronze Age)

Phase 3: Pit clusters and related enclosures; pit alignments (Early and Middle Iron Age) Phase 4: Trackways and rectilinear enclosures (Late Iron Age and Romano-British)

² Royal Commission on the Historic Monuments of England [hereafter RCHME], 'Cropmarks in the Vicinity of Long Wittenham, and at the Dyke Hills, Dorchester', 1:5,000 plot (1977); RCHME, 1:10,000 overlays produced for the National Mapping Programme, sheets SU 59 NW, NE, SW, SE (1995).



Fig. 2a. Relationship of cropmarks to geology. Source: British Geological Survey 1:50,000 Series (1980), Sheet 254.

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Fig. 2b. Cropmark concentrations on the central gravel terrace, showing relationship with areas of heavy clay soil. Areas of prior excavation at Northfield Farm are also shown. Source: Heming, S. 1995: Soil Survey and Soil Database for the Northmoor Trust.

In addition, a number of cropmarks remained unphased, either because no phasing decision was possible, or where cropmarks appeared to post-date Phase 4 features.

The broad nature of the dating evidence available (based essentially on the morphology of features and on ceramic evidence) makes a certain amount of 'lumping' into broadly defined periods inevitable. The cropmark phases may not fit so neatly within the conventional 'periods' suggested. It may also be possible to suggest a degree of chronological overlap between phases; use or re-use of round barrows may have persisted into the Middle Bronze Age, for example. The nature and scale of change is also elusive: 'phases' may represent sudden change or gradual readjustment over a long period of time. Not all elements of a phase need therefore be strictly contemporary. Finally, the focus on broad phases of development may distract attention from smaller changes and shifts of emphasis, which may perhaps only be identified through excavation.

Where there is no additional information to validate chronological decisions, the cropmarks may support multiple interpretations. Rather than forcing one interpretation at the expense of others, alternative phasing decisions were incorporated within the GIS. A reliability factor, representing the strength of evidence, was assigned to each phasing decision, as follows:

A: An absolute date is furnished by excavation, or the cropmarks are clearly contiguous with excavated features;

B: A clear and unequivocal resemblance can be drawn between the morphology of the cropmarks and excavated evidence elsewhere. Morphology may in addition be supported by surface evidence or by relative (but not closely dated) stratigraphy;

C: A preferred, or probable, phasing, based on morphology, without supporting evidence;

D: Features which may be assigned to two or more phases on morphological grounds; context does not permit a preferred phasing;

E: Features where no phasing decision is possible, or a geological origin may be suggested.

For the purposes of this paper, features at reliability A or B are represented in each phase as *core* features, with a higher degree of certainty. Features at reliability C or D are represented as *possible* features. Unphased features (reliability E) are not included in any phase.

HOW REPRESENTATIVE IS THE CROPMARK RECORD?

The GIS permitted consideration of this question in terms of a number of potential factors. Within the study area, cropmarks are mainly visible on the First Gravel Terrace (Fig. 2a). Additional features may be present beneath floodplain alluvium, and in non-cropmarking areas such as the bands of Gault Clay and Upper Greensand on the slopes of the Sinodun Hills. On the First Gravel Terrace, while almost all areas have been used for arable crops at some time in the recent past, recorded cropmarks cluster noticeably on well-draining, medium clay soils, avoiding areas of heavier clay with poor natural drainage (Fig. 2b). The heavier soils do permit cropmark formation, for example where ditched trackways cross between cropmark clusters, so it is possible to suggest that the cropmark clusters reflect a preference for dry, easily-worked gravel 'islands' with poor drainage or relict river channels between.

Past and present land use may also have destroyed, damaged or masked buried archaeological features. On the First Gravel Terrace the gravel surface can be as little as 10 cm. below modern ground level; medieval ridge and furrow cultivation, and modern ploughing and subsoiling may therefore have removed or truncated features cut into the gravel surface. Modern field boundaries and drainage ditches may mask or remove potentially cropmarking features. Cropmarks are also interrupted by modern buildings and roads, for example at Long Wittenham and Northfield Farm.





Key: 1. Burcot; 2. Northfield Farm, Long Wittenham; 3. Hill Farm, Wittenham Clumps; 4. Round Hill, Wittenham Clumps; 5. Penn Copse; 6. Appleford Sidings; 7. Appleford; 8. Long Wittenham; 9. Northfield Farm (south); 10. Bishops Court Rectangle, Dorchester; 11. Mount Farm, Berinsfield; 12. Wally Corner; 13. Allen's Pit, Berinsfield; 14. Golden Balls, Nuneham Courtenay.



Fig. 4. Area 1 (Clifton Hampden – Northfield Farm), suggested chronology of cropmarks.a) Phase 1, Late Neolithic – Early Bronze Age; b) Phase 2, Middle and Late Bronze Age.

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Fig. 4. Area 1 (Clifton Hampden – Northfield Farm), suggested chronology of cropmarks.c) Phase 3, Early – Middle Iron Age; d) Phase 4, Late Iron Age and Romano-British.

More seriously, the cropmark record, even when complete, is only a partial record of past activity. Morphology and chronology give us little information concerning the nature of activity in the gaps, within and between cropmark complexes.

There follows a brief discussion of the suggested chronology of the cropmark evidence. For ease of illustration the survey area is divided into four (see Fig. 3).

Area 1: Clifton Hampden and Northfield Farm

The cropmark complex to the west of Northfield Farm was extensively excavated in the 1890s, the only record being a broad account by Haverfield in the *Proceedings of the Society of Antiquaries* of 1901,³ including a plot of cropmarks made from horseback. A smaller-scale (and better recorded) investigation of the north-south trackway and two associated enclosures, a pair of ditches aligned north-west to south-east, and a small circular ditch, was undertaken by Margaret Gray in 1969.⁴ Both reports will be referred to throughout this account (see also Fig. 2b).

Phase 1 (Fig. 4a): Large circular features with diameters between 20 and 35 m., one with a concentric ditch, are likely to be round barrows. The largest such circle at Northfield Farm was excavated in the 1890s. Haverfield describes a pit at its centre containing organic material. Another, smaller circle (unfortunately impossible to identify from Haverfield's description) produced a female inhumation and worked flint.

The interpretation of smaller circular features is more problematic, particularly within a multi-period complex. Small circular barrows and ring ditches may be indistinguishable from the foundation gullies of circular houses and pens. Cropmarked houses visible within the Dyke Hills enclosure (usually assumed to be Late Iron Age in date) have diameters between 8 and 15 m. However, a circular feature at Northfield Farm, diameter 11 m., was excavated by Gray, and proved to be the ditch of a small barrow with a roughly central pit containing charred material. Smaller circular features cannot therefore be attributed to a phase with great confidence. Tentative attributions (reliability C or D) have been made on the basis of the immediate context of features: those associated with pit clusters or aligned along the north-south trackway have been interpreted as houses or pens, and assigned to phases 3 and 4; more isolated features, and those which appear to be associated with a grave pit or pits, have been assigned to phase 1.

Phase 2 (Fig. 4b): A system of partially double-ditched enclosures close to Northfield Farm is aligned roughly north-west to south-east. The trackway ditches are stratigraphically earlier than the Roman period; nearby pit groups contained fragmentary (unspecified) 'Bronze Age' pottery.⁵ This system also bears a strong resemblance to the Middle Bronze field system at Fengate, as noted by Roger Thomas.⁶ More fragmentary double-ditched features east of Clifton Hampden may be part of another system, laid out on a different north-west to south-east alignment. Enclosures associated with this system resemble Late Bronze Age enclosures recorded elsewhere on the Thames Gravels.⁷

³ R.F. Haverfield, 'Some Romano-British Remains in the Upper Thames Valley', *Proc. of Soc. of Antiquaries*, 2nd ser. 18 (1901), 10-16.

⁴ M. Gray, 'Excavations at Northfield Farm, Long Wittenham, Berks.', Oxoniensia, 35 (1970), 107-9; M. Gray, 'Northfield Farm, Long Wittenham', Oxoniensia, 42 (1977), 1-29.

⁵ Gray, op. cit. (1970),108.

⁶ R. Thomas, 'A Bronze Age Field System at Northfield Farm?', Oxoniensia, 45 (1980), 310-11.

⁷ RCHME, The Thames Valley Project: a report for the National Mapping Programme (Air Photography Unit, RCHME, 1995).

Phase 3 (Fig. 4c): Discrete clusters of pits are likely to represent Iron Age occupation. Six clusters of between 10 and 17 pits are visible. Those clusters close to the north-south trackway appear to be associated with small houses or pens, and may be aligned on an earlier counterpart of the trackway. Another cluster is associated with an irregular enclosure opening to the south-east, which appears to overlie the Bronze Age enclosures discussed above. An Early Iron Age bone weaving comb was found at SU 5585 9506, just south of the farm buildings.⁸

Phase 4 (Fig. 4d): Haverfield describes the excavation of some enclosures and 'wells' associated with the north-south trackway: 'late Celtic and local Romano-British' pottery was recovered, including fragments of Samian and a hard black ware. Painted plaster and stone roof tiles indicate the presence of a substantial building. The 'wells', possibly similar to a waterhole at Appleford,⁹ some lined with wood or stone, contained pottery, bone, worked flint, wattle and daub, and leather and wickerwork (presumably preserved below the water table). Haverfield also mentions 3rd- and 4th-century coins having been picked up further to the south of Northfield Farm. Five 'late Celtic urns' at the bottom of one well, and the 'late Celtic' pottery mentioned above, may suggest a Late Iron Age origin for this phase of occupation. Gray's excavation across the north-south trackway and related enclosures suggested several phases of use in the 1st and 2nd centuries AD. A trend towards smaller fields over the period of use may reflect changes in farming practice. Postholes in the enclosure ditches suggested that these were palisaded, and perhaps used as stock pens. On abandonment these posts were withdrawn and the ditches backfilled.

Area 2: pit alignments and eastern gravel terrace

Phase 1 (Fig. 5a): Isolated circular features are probably barrow ditches. A triple-ditched enclosure west of Northfield Farm may represent the ploughed-out remains of a multiphase barrow.

Phase 2 (Fig. 5b): Enclosures aligned north-west to south-east, to the east of Northfield Farm, appear to be a continuation of the Bronze Age system described above. A linear feature runs between the triple-ditched enclosure mentioned above and a number of probable small barrows. This is reminiscent of the alignment of a later Bronze Age field ditch on a round barrow at Mount Farm, Berinsfield¹⁰ and more extensive use of small circular barrows in land boundaries at Black Patch, Sussex.¹¹

Phase 3 (Fig. 5c): A pit alignment runs roughly south-west from the edge of the floodplain alluvium for over 900 m. A further fragment of alignment can be seen close to the north-south trackway between Northfield Farm and the concentration of cropmarks to the south. The longer alignment appears to overlie elements of probable Bronze Age activity. The majority of excavated pit alignments have a later prehistoric date: an alignment at Langford

⁹ J. Hinchcliffe and R. Thomas, 'Archaeological Investigations at Appleford', Oxoniensia, 45 (1980), 9-111.

¹⁰ G. Lambrick, 'Mount Farm, Berinsfield', CBA Group 9 Newsletter, 9 (1979), 113-15; G. Lambrick, 'Neolithic to Saxon Settlements at Mount Farm, Dorchester-on-Thames' (in prep.).

11 P.L. Drewett, 'Field Systems and Land Allotment in Sussex, 3rd millennium BC to 4th century AD', in H.C. Bowen and P.J. Fowler (eds.), *Early Land Allotment* (B.A.R. 48, 1978).

⁸ Oxfordshire Sites and Monuments Record, PRN 9784.



Fig. 5. Area 2 (Eastern gravel terrace), suggested cropmark phasing.

a) Phase 1, Late Neolithic – Early Bronze Age; b) Phase 2, Middle and Late Bronze Age; c) Phase 3, Early – Middle Iron Age; d) Phase 4, Late Iron Age and Romano-British.

Down, Lechlade¹² was associated with Late Iron Age activity; further afield, pit alignments were used to divide an Early Iron Age landscape close to the River Trent at Swarkestone Lowes, Derbyshire.¹³ It is probable that the pit alignments in the study area also belong to the Iron Age. The longest alignment, representing a fairly major land division, divides two areas of probable Iron Age activity.

In addition, an area of pit clusters, small enclosures, and some linear features close to the floodplain edge, bears comparison with some of the features at Farmoor¹⁴ where Early Iron Age pits at the edge of the gravel terrace were succeeded by small seasonal enclosures, mostly on the flood plain and subsequently buried beneath alluvium. It is possible that Iron Age occupation here also extends onto the floodplain.

Phase 4 (Fig. 5d): The presence of some rectilinear enclosures, some apparently overlying probable Iron Age enclosures, may suggest activity here in the Roman period, but with no great degree of certainty.

Area 3: southern gravel terrace (Fig. 6a)

Phase 1: A number of larger circular cropmarks (diameters between 16 and 27 m.) do not appear to be associated with the north-south trackway, and therefore probably represent ploughed-out round barrows.

Phase 4: The main concentration of cropmarks along the north-south trackway appears to represent sustained Romano-British occupation, although again with the possibility of a Late Iron Age origin as in Area 1. Surface evidence supports this conclusion: quantities of 2nd-and 3rd-century sherds from the site are in the Ashmolean Museum;¹⁵ a denarius of Trajan was found to the east of the cropmarks;¹⁶ an extended inhumation burial and coarse Romano-British pottery were found while laying drains.¹⁷ This evidence, and the complexity of the cropmarks, also seems to suggest a longer period of use than the enclosures at Northfield Farm. The combination of smaller and larger enclosures may suggest a mixed farming regime, with smaller stock pens and larger arable fields. Pits within enclosures may represent waterholes or wells, as suggested at Northfield Farm.

Further to the south-east, on a west-east extension of the main trackway, is a smaller cluster of cropmarks, tentatively allocated to this period solely on the basis of its apparent association with the trackway system.

Area 4: south of Long Wittenham (Fig. 6b)

Phase 1/Phase 2: A circular feature, diameter 17 m., and a smaller circle associated with two linear features, may represent barrows and later associated boundaries. Early Bronze Age metalwork (a flat bronze axe, a palstave and a looped bronze spearhead) has been found in

12 A. Williams, 'Excavations at Langford Downs, Oxon.', Oxoniensia, 11-12 (1946), 44-64.

¹³ D. Knight (ed.), A564(T) Derby Southern Bypass. Summary of Rescue Archaeological Works at Aston Cursus, Potlock Cursus and Swarkestone Lowes (Trent and Peak Archaeological Trust, Nottingham, 1994); L.Elliott and D. Knight, 'An Early Mesolithic Site and 1st millennium BC Settlement and Pit Alignments at Swarkestone Lowes, Derbyshire', Derbys. Archaeol. Inl. 119 (1999), 79-153.

¹⁴ G. Lambrick and M. Robinson, Iron Age and Roman Riverside Settlements at Farmoor, Oxfordshire (CBA Res. Rep. 32, 1979).

¹⁵ National Monuments Record Number SU59 SE 61.

¹⁶ Berks. Archaeol. Jnl. 6 (1901), 122.

17 D. Sturdy and H. Case, 'Archaeological Notes: 1961', Oxoniensia, 27 (1961-2), 337.



Fig. 6a. Area 3, all cropmarks. The main concentrations have been assigned to Phase 4; a few larger circular ditches within the largest concentration may belong to Phase 1.



Fig. 6b. Area 4, all cropmarks. Mostly assigned to Phase 4. The larger circular mark south of the trackway appears to be a ploughed out barrow (Phase 1). Pit clusters and the rectilinear enclosure with associated circular ditch may relate to Phase 3.

the Thames at Long Wittenham.¹⁸ An Early to Late Bronze Age cemetery lies 1500 m. to the south-west at Pearith Farm.¹⁹

Phase 3/Phase 4: Loose scatters of pits may represent Iron Age occupation, although their apparent avoidance of the east-west trackway may suggest a later date. Similarly, a rectilinear enclosure with an eastern entrance and probable house may belong to either of these phases. Iron Age activity is suggested by a sherd of 'A2 ware' found in the Thames.²⁰ An Early Iron Age settlement at Wigbalds Farm, approximately 1500 m. south-west, was excavated by Savory.²¹

Roman activity at Long Wittenham is suggested by rectilinear enclosures associated with the east-west trackway, some resembling Late Iron Age and Romano-British 'laddersettlements' elsewhere (for example in the Yorkshire Wolds²²) and disappearing under the edge of Long Wittenham village. In addition, a hoard of 102 late 3rd-century coins was found at Long Wittenham in the 19th century;²³ pottery, a 4th-century coin and 'mud foundations', similar to those at Northfield Farm, were seen in 1898 at Willington Farm to the west of Long Wittenham church;²⁴ pre-Roman and Roman cremation urns have been found in Long Wittenham churchyard.²⁵ Fieldwalking in 1998 in the vicinity of College Farm revealed concentrations of Romano-British pottery close to the east-west trackway and the rectilinear enclosure.²⁶

Having a suggested a broad (and highly provisional) chronology, for the cropmark complexes on the gravel terrace, I will proceed to consider whether it is possible to draw any comparisons or contrasts between the local trajectory outlined here, and patterns of evidence and interpretation elsewhere in the Upper Thames Valley.

LATE NEOLITHIC AND EARLY BRONZE AGE (Fig. 7a)

The cropmark evidence for this period is dominated by monuments. The distribution of barrows and ring ditches visible today is likely to have been the result of gradual development over a long period of time. Large round barrows may have been the result of many stages of construction, involving multiple episodes of burial and deposition, typically evolving from a small ring ditch to a large round barrow.²⁷ When ploughed out, multiple-phase barrows may produce concentric cropmarks. Small ring ditches are not, however, necessarily early: a small ring ditch associated with a Beaker burial at Barrow Hills, Radley dates to around 1750 BC.²⁸ Some degree of clustering of barrows is visible, particularly

¹⁸ National Monuments Record Number SU59 SW 22.

¹⁹ Oxfordshire Sites and Monuments Record, PRN 2382, 2384, 2385.

²⁰ Oxfordshire Sites and Monuments Record, PRN2864.

²¹ H.N. Savory, 'An Early Iron Age Site at Long Wittenham, Berks.', Oxoniensia, 2 (1937), 1-11.

²² B. Bevan, 'Bounding the Landscape: Place and Identity during the Yorkshire Wolds Iron Age', in A. Gwilt and C. Haselgrove (eds.), *Reconstructing Iron Age Societies* (Oxbow Monograph 71, 1997), 181-91.

- ²³ National Monuments Record Number SU59 SW 40.
- 24 National Monuments Record Number SU59 SW 23.

²⁵ National Monuments Record Number SU59 SW 3.

²⁶ J. Hinchcliffe, 'Fieldwalking at Long Wittenham, 13 Sept. 1998' (unpubl. report for Northmoor Trust, 1998).

²⁷ J. Barrett, 'The Living, the Dead and the Ancestors: Neolithic and Early Bronze Age Mortuary Practices', in J. Barrett and I. Kinnes (eds.), *The Archaeology of Context in the Neolithic and Bronze Age* (1989), 30-40.

²⁸ A. Barclay and C. Halpin, Excavations at Barrow Hills, Radley, Oxfordshire. Vol. 1: The Neolithic and Bronze Age Monument Complex (English Heritage, 1999).



Fig. 7a. All cropmarks assigned to Phase 1, Late Neolithic and Early Bronze Age.



Fig. 7b. All cropmarks assigned to Phase 2, Middle and Late Bronze Age.



Fig. 8a. All cropmarks assigned to Phase 3, Early and Middle Iron Age.



Fig. 8b. All cropmarks assigned to Phase 4, Late Iron Age and Romano-British.

around Northfield Farm, although without the clear linear organisation visible, for example, at Barrow Hills. The clustering of barrows in cemeteries may formalise pre-existing notions concerning significant places within seasonal patterns of movement. Clustering may also reflect an association of areas with particular individuals or descent-lines.

Environmental evidence from this period is lacking in the vicinity of the study area. Elsewhere in the Upper Thames Valley, pollen sequences suggest a varied pattern, with cleared areas close to monument complexes, but a significant woodland component remaining elsewhere.²⁹ Environmental evidence from the gravel terrace/floodplain sites at Yarnton suggests periodic, grazed clearings, within a wooded landscape.³⁰ Although analogies with other areas are tendentious, they may capture something of the broad character of the landscape.

Permanent settlements before the Late Bronze Age are almost unknown in the region, and this may reflect the persistence of a shifting pattern of activity connected with the movement of livestock and low-intensity cereal cultivation. Round barrow groups appear to show a preference for the river valley, clustering particularly around confluences.³¹ This may reflect the importance of valley routes within seasonal movement. Monument complexes such as that at Dorchester-on-Thames may have provided foci for the seasonal gathering of large numbers of people: analysis of lithic scatters, both on the gravel terrace and around the Sinodun Hills,32 would enhance our understanding of the character of settlement within the survey area, across the river from a major concentration of Neolithic and Early Bronze Age monuments.

MIDDLE AND LATE BRONZE AGE (Fig. 7b)

In the Upper Thames Valley this period appears to be characterised by the creation of land boundaries in the form of field systems, with monument complexes falling into disuse,33 and this may indicate a shift towards more static settlement and land-use. A Middle Bronze Age field system with double ditches cuts across the monument complex at Dorchester.³⁴ In addition, Middle and Late Bronze Age field systems have been identified at a number of other sites nearby (see Fig. 1); double-ditched and banked boundaries are typical, as at Mount Farm, Berinsfield³⁵ and Eight Acre Field, Radley.³⁶

29 S.P. Day, 'Post Glacial Vegetational History of the Oxford Region', New Phytologist, 119 (1991), 445-70; A.G. Parker, 'Late Quaternary Environmental Change in the Upper Thames Basin, Central Southern England' (unpubl. D. Phil. thesis, Univ. of Oxford, 1995).

³⁰ G. Hey, 'Neolithic Settlement at Yarnton, Oxfordshire', in P. Topping (ed.), Neolithic Landscapes (1997), 99-112. ³¹ A. Barclay, R. Bradley, G. Hey and G. Lambrick, 'The Earlier Prehistory of the Oxford Region in the

light of Recent Research', Oxoniensia, 61 (1996), 1-20.

32 I.P. Brooks, 'Interim Report on Fieldwalking for the Chalgrove to Didcot Pipeline' (unpubl. report for British Gas, 1992); C. Lingard and M.D. Wilson, 'Archaeology along the Chalgrove-Didcot British Gas Pipeline 1995' (unpubl. report by Roxby Engineering International Ltd., 1995).

³³ Barclay et al., op. cit. note 31, p. 20.

34 A. Whittle, R.J.C. Atkinson and R. Chambers, 'Excavations in the Neolithic and Bronze Age Complex at Dorchester-on-Thames, Oxfordshire, 1947-52 and 1981', Proc. of Prehistoric Soc. 58 (1992), 143-201.

³⁵ Lambrick, op. cit. note 10 (1979); Lambrick, op. cit. note 10 (in prep.).

36 A. Mudd, 'The Excavation of a Late Bronze Age/Early Iron Age Site at Eight Acre Field, Radley', Oxoniensia, 60 (1995), 21-65.

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Environmental evidence from Mount Farm, Berinsfield, on the third gravel terrace, suggests a predominantly open landscape, although with trees and shrubs much in evidence. Elements of pasture and arable cultivation are suggested. Among broader discussions relating to evidence from the Upper Thames Valley, David Yates³⁷ suggests that the development of field systems with waterholes represented an intensification in pastoral farming within a mixed farming regime; the resulting need for grazing land may have accelerated woodland clearance. A relatively low water table in the Bronze Age, combined with minimal flooding and alluviation³⁸ may indicate that areas close to the river were exploited.

The form of double-ditched enclosures at Northfield Farm suggests stock management. The paired ditches, between 5 and 8 m. wide, may represent droveways, ultimately giving access to the river or to areas of grassland. Pryor suggests that the double-ditched field systems at Fengate may have been community stockyards used in the seasonal management of sheep flocks.³⁹ Double-ditched boundaries may have incorporated a bank or hedge between the ditches; six post- or stake-holes in one of the ditches excavated by Gray suggest a palisade or fence. Although most of the 'wells' described by Haverfield appear to be associated with the later Romano-British paddocks, it is possible that some are waterholes associated with the Bronze Age field system, as at Appleford Sidings⁴⁰ and Mount Farm.

Round barrows, probably originating earlier than the double-ditched enclosures (although some overlap in chronology is entirely possible), are generally located on the fringes of the field system at Northfield Farm, perhaps with more open areas beyond. This layout raises the possibility that the later Bronze Age field system may formalise earlier patterns of land use, perhaps relating to seasonal use of particular places marked by barrows.

Because of the lack of cropmark evidence on the Gault Clay and Upper Greensand geology around Wittenham Clumps, it is difficult to suggest how the gravel terrace landscape may have been articulated within its local context. Fieldwalking⁴¹ and two small-scale excavations⁴² suggest major activity to the south of Round Hill during the Bronze Age. An Early to Middle Bronze flake industry and Deverel-Rimbury sherds (possibly deriving from ploughed cremation burials) is superseded by a pottery assemblage dominated by a flint-tempered fabric apparently characteristic of the Late Bronze Age. In addition, a potentially very extensive artefact-rich dark earth deposit, dating to the Late Bronze Age/Early Iron Age transition, was located in both excavations. The Castle Hill hillfort is probably contemporary in part with this deposit.

³⁷ D.T.Yates, 'Bronze Age Field Systems in the Thames Valley', Oxf. Inl. of Archaeol. 18(2) (1999), 157-69.

³⁸ G. Lambrick, 'Alluvial Archaeology of the Holocene in the Upper Thames Basin, 1971-1991: a Review', for proceedings of a conference Archaeology under Alluvium (British Museum, 1991).

³⁹ F. Pryor, 'Sheep, Stocklands and Farm Systems: Bronze Age Livestock Populations in the Fenlands of eastern England', *Antiquity*, 70 (1996), 313-24.

⁴⁰ P. Booth, 'Appleford Sidings (ARC Sutton Courtenay Pit), Oxfordshire, 1997-1998, Archaeological Watching Brief: short interim report' (Oxf. Archaeol. Unit unpubl. report, 1998).

⁴¹ Brooks, op. cit. note 32; Lingard and Wilson, op. cit. note 32.

⁴² P.P. Rhodes, 'A Prehistoric and Roman Site at Wittenham Clumps, Berks.', Oxoniensia, 13 (1948), 18-31; R. Hingley, 'Excavations by R.A. Rutland on an Iron Age Site at Wittenham Clumps', Berks. Archaeol. Jnl. 70 (1983), 21-55.

The work of David Yates⁴³ has highlighted a correlation between clusters of field systems in the Upper Thames Valley, concentrations of metalwork recovered from the river, and the distribution of pottery styles, each cluster situated upstream from an anomalous site: an 'aggrandised enclosure' or island settlement. The Northfield Farm field system falls into a cluster lying upstream from the river eyot site at Wallingford.44 Drawing on George Lambrick's suggestion that the accumulation of large herds of livestock may have been a symbol of prestige,45 Yates interprets these anomalous sites, including Wallingford, Runnymede-Petters and Marshall's Hill, Reading⁴⁶ as regional power bases, from which elites controlled agricultural production in the upstream field systems. The agricultural surpluses thus generated were used to support the conspicuous consumption of metalwork, evidenced by concentrations of metalwork deposition in and around the Thames itself. The dark earth deposit close to Wittenham Clumps, above the confluence of the Rivers Thames and Thame, and close to a group of contemporary metalwork recovered from the Days Lock area (Fig. 1), also falls into this anomalous category, bearing comparison with the Marshall's Hill enclosure above the Thames/Kennet confluence. The apparently continuous occupation at Wittenham Clumps into the Iron Age contrasts with the abandonment of the Wallingford site, perhaps indicating the growing importance of one site and the decline of the other.

Whether or not mediated through the control of an elite, the nature of island settlements and 'aggrandised enclosures' suggests activity on a significant scale, in terms of the large numbers of people required to construct major earthworks or to generate the masses of cultural material associated with the artefact-rich dark earth deposits at Runnymede,⁴⁷ Wallingford and Wittenham Clumps. It is possible to suggest that these anomalous sites were the locations for periodic gatherings of large numbers of people, where senses of community at a fairly large scale were negotiated and reaffirmed, perhaps through feasting, the bringing together of herds, and the deposition of metalwork. The adoption of similar layouts for field systems within each cluster, and of similar styles of pottery, may also have been caught up in the articulation of this sense of a broader social identity.

EARLY TO MIDDLE IRON AGE (Fig. 8a)

In the Upper Thames Valley, Early Iron Age sites provide clear evidence for arable crop production within a mixed farming regime. Such settlements are generally on the higher gravel terraces, for example at Mount Farm, and Wigbalds⁴⁸ to the south-west of Long Wittenham (Fig. 1). A gradual shift towards more intensive arable production, and more extensive pastoral agriculture, may have accelerated clearance of areas of the gravels to provide winter pasture, causing a rise in the water table, though without alluviation.⁴⁹

⁴⁴ R. Thomas, M. Robinson, J.C. Barrett and B. Wilson, 'A Late Bronze Age Riverside Settlement at Wallingford, Oxfordshire', Archaeol. Jnl. 143 (1986), 174-200.

⁴⁵ G. Lambrick, 'The Development of Late Prehistoric and Roman Farming on the Thames Gravels', in M. Fulford and E. Nichols (eds.), *Developing Landscapes of Lowland Britain: the Archaeology of the British Gravels:* a Review (Soc. of Antiq. Occas. Papers, 14, 1992), 78-105.

⁴⁶ G. Lambrick, 'Wallingford Bypass: Late Bronze Age Settlement', South Midlands Archaeology, 17 (1987), 99-100; S. Needham and T. Spence, *Refuse and Disposal at Area 16, East Runnymede: Runnymede Bridge Excavations, vol. 2* (British Museum, 1996); R. Bradley, 'The Bronze Age in the Oxford Area – its Local and Regional Significance', in G. Briggs, J. Cook and T. Rowley (eds.), *The Archaeology of the Oxford Region* (1986), 38-48.

47 Needham and Spence, op. cit. note 46.

48 Savory, op. cit. note 21.

⁴⁹ Lambrick, op. cit. note 38 (1991); Lambrick, op. cit. note 45 (1992).

⁴³ Yates, op. cit. note 37.

Continued expansion of arable and pastoral agriculture in the Middle Iron Age is suggested by the use of less easily-worked land, and the development of specialised pastoral farms on the lower gravel terraces and flood plain, as at Appleford and Farmoor.⁵⁰ The lack of evidence for grain production at some of these settlements implies that commodities were redistributed between these specialised settlements and mixed farms on the higher terraces.

There are morphological similarities between cropmarked enclosures in the survey area and excavated pastoral farms in the Upper Thames Valley. Small irregular enclosures in Areas 1 and 2 are reminiscent of the Middle Iron Age paddocks at Appleford. The presence of pit clusters may indicate an arable component, or, more likely, may reflect links with mixed farming settlements nearby. The settlement component of the landscape appears dispersed and insubstantial; comparisons could be made with Thrupp,⁵¹ near Abingdon, where small pastoral settlements were set within an open grassland landscape. Further sites indicating seasonal use of the floodplain may be present beneath alluvium.

Work on a similar scale in the Stanton Harcourt area⁵² suggests that the structure of the Early and Middle Iron Age landscape is heavily influenced by monuments of earlier periods. A central area on the well-drained gravel terrace, associated with earlier burial mounds, was used for grazing; linear pit cluster settlements such as Gravelly Guy separated this area from arable fields which were confined to a narrow strip between the settlements and the River Windrush. The Iron Age landscape around Northfield Farm, characterised by much less intensive occupation, appears to be structured to a lesser extent by the earlier barrows and field system. The more durable early features, such as large round barrows, are in general respected. However, Iron Age pits and enclosures appear to overlie parts of the Bronze Age field system, and the longer pit alignment runs through a small ring ditch. The long pit alignment, although undated, appears to be the main structuring feature of the Iron Age landscape, perhaps separating areas of differential land-use relating to the enclosures around Northfield Farm and to the floodplain-edge activity at the north-eastern edge of the survey area. Indeed, the alignment appears to separate the well-drained gravel terrace around Northfield Farm from wetter, poorly-drained clay soils to the east. Tim Allen has suggested that the specialised nature of some settlements indicates that they were part of something larger: a community working in a number of locations across the landscape, perhaps with a seasonal character to the use of some places.⁵³ Perhaps the gravel terrace and floodplain-edge activity in the survey area were linked in this kind of relationship with mixed farming settlements on the higher gravel terraces.

This relatively small-scale communal activity contrasts with the large-scale undertaking represented by the Castle Hill hillfort, although, as in the later Bronze Age, the absence of cropmark evidence from the Gault Clay and Upper Greensand close to the hillfort and in areas to the south precludes a fuller understanding of its relationship with the broader landscape. The form of the hillfort and sherds from the ramparts argue for Early Iron Age construction.⁵⁴ The occupation or midden deposits to the south and west of the hillfort, discussed above, suggest continuous activity from the Late Bronze Age to the Early Iron Age, predating the hillfort but also contemporary with its construction and use. Middle Iron Age pottery from the ramparts is rare, probably indicating a decline in importance or change of role. However Middle Iron Age material present in the ploughsoil on the southern slopes of

⁵⁰ Hinchcliffe and Thomas, op. cit. note 9; Lambrick and Robinson, op. cit. note 14.

⁵¹ R. Ainslie, 'Excavations at Thrupp near Radley, Oxon.', South Midlands Archaeology, 22 (1992), 63-5.

⁵² Lambrick, op. cit. note 45 (1992), 89-90.

⁵³ T. Allen, 'The Iron Age Background', in P. Booth and M. Henig, Roman Oxfordshire (2000), 1-33.

⁵⁴ E.M. Jope, 'Wittenham Clumps', Berks. Archaeol. Jnl. 51 (1949), 68.

the Sinodun Hills⁵⁵ may indicate that small-scale activity outside the hillfort continued. Cropmarks within the Dyke Hills site, just across the river, usually assumed to be a Late Iron Age 'oppidum', bear comparison with known Middle Iron Age sites, and may indicate an earlier origin, perhaps with earthworks added in the Late Iron Age. At a time when produce was being redistributed between specialised sites, and where longer distance trade was also of growing importance, a riverside site giving access to the Thames and Thame might have been of great value.

The River Thames at Days Lock has yielded an amount of Iron Age metalwork that is unique in the Upper Thames Valley, including at least three swords and associated gear (Fig. 1). We may therefore be able to argue for continuity in the choice of this location for the deposition of metalwork.

LATE IRON AGE AND ROMANO-BRITISH (Fig. 8b)

Four separate concentrations of largely rectilinear enclosures opening onto the linked northsouth and east-west trackways have been assigned to this period, with some other isolated rectilinear enclosures included as possible features.

Environmental evidence suggests that both arable and pastoral agriculture continued to expand during this period with many areas entirely cleared. A very open environment with a significant arable component and some grassland is suggested at Mount Farm on the third gravel terrace; environmental samples from waterholes at Appleford imply an open landscape with extensive pastoral grassland and rather less evidence for arable use. Increased flooding and the onset of alluviation in this period may result from the cultivation of poorly drained soils on valley slopes, and the subsequent erosion and run-off.⁵⁶ There is some evidence for innovations in arable agriculture, such as the adoption of the mould-board plough and new crop species, which were not however consistently adopted. There is more widespread evidence for manuring, evidenced by scatters of 1st- and 2nd-century pottery, for example at Drayton.⁵⁷ The extent to which this represents an innovation is unclear, as Iron Age pottery does not survive so well in the ploughsoil. An accompanying intensification in pastoral farming is attested by the provision of systems of paddocks and waterholes, often associated with trackways, for example at Appleford, where haymaking probably took place.

The concentrations of cropmarks within the study area appear to represent genuine concentrations of activity, even 'villages'; the different configurations of enclosures may represent some degree of specialisation within an organised landscape. Post- and stake-holes in enclosure ditches suggest paddocks for livestock, as do wells and waterholes. An arable component may be also suggested by the presence of larger enclosures; scatters of early Roman pottery may be evidence for manuring. A programme of fieldwalking might identify manuring scatters both within cropmark concentrations and in non-cropmarked areas.

The complexity of some of the cropmark concentrations suggests continual reorganisation over a long period of time. Gray's excavations provided evidence for a shift from larger to smaller enclosures during the early Roman period. The abandonment of the enclosures at Northfield Farm during the 2nd century AD may be due to the worsening

⁵⁵ Brooks, op. cit. note 32; Lingard and Wilson, op. cit. note 32.

⁵⁶ Lambrick, op. cit. note 38 (1991).

⁵⁷ M.K. Jones, 'The Development of Crop Husbandry', in M.K. Jones and G. Dimbleby (eds.),

The Environment of Man: the Iron Age to the Anglo-Saxon Period (B.A.R. 87, 1981), 95-127; G. Lambrick and J.P. Moore, 'Drayton Cursus', South Midlands Archaeology, 17 (1987), 85-7.

flooding and alluviation mentioned above (occupation slightly higher on Terrace 1b appears to have continued much later) although a general disruption in the settlement pattern is noted on many sites during the 2nd century AD⁵⁸ and may reflect broader social change.

There is positive evidence, therefore, for a significant pastoral element on the first gravel terrace, possibly within a mixed farming regime. There is also evidence of habitation: roof tiles and painted wall-plaster from Northfield Farm suggest the presence of a substantial early Roman building, numerous cremation burials in Long Wittenham churchyard suggest nearby settlement, and the trackway system running west from the survey area incorporates an early Roman 'proto-villa' at Appleford Sidings.⁵⁹ What appear to be ritual deposits in wells and pits (described by Haverfield) may reflect a continuation of Iron Age ritual practice.

As well as linking together areas of settlement (apparently extending west at least as far as Appleford) the trackways appear to lead under alluvium in two places, opposite Burcot Church, and opposite Dorchester (Fig. 3). While this may simply reflect access to floodplain grazing, it may also indicate river crossing points. Miles⁶⁰ notes the presence of a Roman building at Burcot, and pottery kilns at Golden Balls, suggesting perhaps the existence of a river crossing and wharf. Small-scale and large-scale movement of produce and other goods was of increasing importance during this period. Supply of produce to the small town at Dorchester may have been a factor in agricultural production. Pottery from the Oxford kilns is common at Northfield Farm; a few sherds of Samian were also present. The possible survival of Iron Age trackways into the Roman period here and at Appleford has already been noted.

In addition to trackway settlements on the gravel terraces, there is evidence for occupation in the vicinity of Wittenham Clumps. It seems likely that there were at least two substantial Roman buildings, one close to the summit of Round Hill, another in the vicinity of Hill Farm,⁶¹ possibly connected with a small villa. Evidence from fieldwalking⁶² suggests that this occupation persisted throughout the Late Iron Age and Roman period. Coin finds and two bronze bracelets reported from Castle Hill, and the bronze awl found within a rectilinear cropmark enclosure on Round Hill,⁶³ suggest the presence of a shrine or temple associated with the earlier hillfort, which may have retained symbolic importance. Late Roman or early Saxon burials have also been found close to Castle Hill.⁶⁴ The usual scenario involving Late Iron Age abandonment of hillforts and a move to lowland 'oppida' therefore appears too simplistic. It may be possible to discern a gradual decline, or change in role, of this location through the later Iron Age, although it seems that some form of activity did persist, and the hillfort may have retained a symbolic role. At the same time, the growing role of redistribution, trade and ultimately the establishment of the River Thames as a tribal boundary⁶⁵ may have stimulated the growth of the settlement at Dyke Hills, followed by the Roman town at Dorchester.

⁵⁸ P. Booth and M. Henig, Roman Oxfordshire, 107-9.

⁵⁹ P. Booth and A. Hardy, 'Appleford Sidings, near Didcot, Oxfordshire: Archaeological Evaluation' (Oxf. Archaeol. Unit unpubl. report, 1993).

⁶⁰ D. Miles, 'Cropmarks around Northfield Farm', in M. Gray, 'Northfield Farm, Long Wittenham', Oxoniensia, 42 (1977), 25-9.

⁶¹ Rhodes, op. cit. note 42; Oxfordshire Sites and Monuments Record, PRN 3158.

⁶² Brooks, op. cit. note 32; Lingard and Wilson, op. cit. note 32.

63 Oxfordshire Sites and Monuments Record, PRN 3163, 3164, 11605.

64 R.A. Chambers, 'An Inhumation Cemetery at Castle Hill, Little Wittenham, Oxon., 1984-5', Oxoniensia, 51 (1986), 45-8.

65 G. Lambrick, 'Frontier along the Thames', British Archaeology, 33 (1998), 12-13.

CONCLUSIONS

General accounts of later prehistory in the Upper Thames Valley tend to trace a gradual intensification and expansion of agriculture, with associated clearance, through the later Bronze Age and Iron Age, culminating in the populous and intensively farmed Romano-British landscape. Within a local, specific trajectory, it may be possible to suggest more complex and nuanced developments, to begin to trace the interactions between purely local concerns and developments relating to a broader sense of community, and to draw comparisons and contrasts between 'micro-regions' within the Upper Thames basin. I would like to draw out two key themes from the discussion above.

First, any study, such as this one, carried out at a 'micro-regional' level, is likely to highlight variation, between the study area and other comparable locations, and between the study area and broader regional models. It is much more difficult to address the nature of variability, and the factors informing particular patterns of continuity and change on a local level. A major theme in the above discussions has been the articulation of a larger community, at a scale beyond that of the individual settlement; indeed, from at least the Neolithic onward, this particular location appears to have been important in the operation of community at quite a large scale, taking different forms of expression at different times. The Neolithic and Early Bronze Age monuments at Dorchester, the dark earth deposit and the hillfort at Wittenham Clumps, the enclosure at Dyke Hills, and the deposition of metalwork in the river, all attest to the presence of fairly large numbers of people at certain times. The particular form of the Bronze Age field system at Northfield Farm, shared with others within the cluster upstream from Wallingford, may also be caught up in the expression of a larger social identity. This persistent association with large-scale communal activity may then be a key factor in the particular character of the study area, and in its trajectory through time. As suggested by Roy Loveday, the topographic singularity afforded by the twin hilltops of Wittenham Clumps, and the confluence of Thames and Thame, may have initially set this location apart;⁶⁶ as time progressed, monuments relating to the past are likely to have accrued mythic and ancestral resonance.

Second, despite the changing nature of the cropmarks, the predominantly pastoral character of the gravel terrace around Northfield Farm appears to have been surprisingly persistent; the suitability of the well-drained gravels for cereal cultivation is amply demonstrated by current land use. This may in part reflect the longevity of cultural perceptions attached to particular areas of the landscape, perhaps originating when areas cleared for groups of barrows were used for pasture, formalised through the construction of an ordered field system with the barrows at its periphery, persisting into the Iron Age, when very different forms of landscape organisation still suggest a predominantly pastoral landscape, and possibly even as late as the first two centuries AD, with paddocks on the lower gravel terrace. Tim Allen suggests a similar situation at Thrupp, where scattered pastoral enclosures in the Iron Age may have been associated with the persistence of a grazing regime over the earlier burial mounds at Barrow Hills.⁶⁷ The corollary of this sense of pastoral specialism is that links with other communities were necessary, and perhaps here we can discern the operation of smaller, more localised senses of community, involving the

⁶⁶ R. Loveday, 'Dorchester-on-Thames – Ritual Complex or Ritual Landscape?', in A. Barclay and J. Harding (eds.), *Pathways and Ceremonies: The Cursus Monuments of Britain and Ireland* (2000), 49-66.

⁶⁷ Allen, op. cit. note 53, p. 11.

exploitation of different parts of the landscape, and the redistribution of produce. This comes most clearly into focus in the Iron Age, in common with other areas, notably around Abingdon and Stanton Harcourt, and prefigures the 'joined-up' landscape of the Romano-British period.

The broad chronology suggested above, reliant on the cropmark record, morphological comparison, and a handful of small-scale interventions, should be seen as highly provisional, pending further work. Indeed, GIS provides an ideal medium for 'holding' a dynamic interpretation of the archaeological record. Changing interpretation can be incorporated through the re-allocation of features to new layers; multiple alternative interpretations can also be accommodated.

The potential for further investigation within the survey area is huge. Indeed, the discussion above may be seen to raise more questions than it answers. If we are suggesting that different scales of community are operating in the later Bronze Age and Iron Age, we need more detail, to investigate, in particular, the nature of the interaction between different social scales: the large-scale use of monuments and the smaller scales manifest in redistribution within and between communities. Future investigation could address, for example, the nature of the clusters identified by Yates, the nature of occupation between the surviving field systems, the nature of the environment in different places, and the nature of settlement outside and in-between the clusters. A more close-grained approach is also necessary to investigate the potential relationships between the Iron Age settlements on the first gravel terrace, those higher up the valley sides, and the hillfort at Wittenham Clumps. Particularly unsatisfactory at the moment is the 'time slice' approach to prehistory perpetuated to some extent in the above discussion. While the cropmark record lends itself admirably to the discussion of major phases of development, we have no insight into the nature of change. The four major re-organisations of the landscape represented by the four cropmark 'phases' may represent sudden, or very gradual change. The process of development, evolution and abandonment of the early Roman enclosures at Northfield Farm provides a glimpse of the potential detail masked by the apparent homogeneity within phases.

Clearly, any future investigation should address the problem of joining up these isolated pockets of evidence. A balance of techniques, and of extensive and intensive investigation, is needed. While this is not the place for a full-scale research design, the following observations may be useful:

- While prehistoric ceramics do not survive well in the heavily ploughed soils of the first gravel terrace, there is considerable potential for lithic analysis. Young and Humphrey have recently outlined a number of key characteristics relating to later Bronze Age lithic technology.⁶⁸ While intensive ploughing probably limits the potential for any close-grained lithic studies, an extensive programme of field-walking may at least be able to locate concentrations of later Bronze Age activity both over the gravel terrace and on non-cropmarking geologies such as to the south of Wittenham Clumps. This approach might also generate some evidence relating to Neolithic and Early Bronze Age settlement.
- Environmental sampling within the study area is vital for the development of a more extensive understanding of this landscape and its trajectory through time. Ideally, a number of samples from different sources would help to address variability. Potential sources of material relating to the prehistoric record might include buried soils below

⁶⁸ R. Young and J. Humphrey, 'Flint Use in England after the Bronze Age: Time for a Re-evaluation?', Proc. of Prehistoric Soc. 65 (1999), 231-42.

floodplain alluvium and beneath the ramparts and dark earth deposit at Wittenham Clumps; waterlogged deposits from pits and waterholes on the gravel terrace; environmental columns through the hillfort ditch at Wittenham Clumps; peat deposits associated with parts of the floodplain and in Little Wittenham Wood; relict river channels.

- More intensive investigation should be used to supplement the above approaches. A
 geophysical survey of the area surrounding Wittenham Clumps, and the interior of the
 hillfort, would add detail to our patchy knowledge of the structural evidence here. In
 particular, magnetic susceptibility survey could be used to define the extent of the dark
 earth deposit.⁶⁹ In addition, geophysics could be used to add detail to known cropmark
 complexes, and over concentrations of material identified through fieldwalking.
- It is suggested that two factors should be prioritised when targeting small-scale excavation. First, a programme of dating is fundamental to our understanding of the nature of change, with the aim of obtaining a suite of absolute dates against which to calibrate ceramic chronologies. Second, soil micromorphology may enable us to say more about close-grained sequences of land-use, and therefore to address the nature of change in more detail.

While general narratives tracing change over long time-scales and broad areas are undoubtedly relevant and necessary, the coherence they seek tends to be achieved at the expense of a sense of local complexity and variation. This study, collating pre-existing categories of evidence for one small area, cannot claim to do more than scratch the surface of this complexity. It is to be hoped, however, that the discussion above has conveyed some sense of the potential for further investigation at many different scales, in this 'micro-region' and in others within the Thames Valley, towards a fuller understanding of the complex articulation and development of these landscapes.

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⁶⁹ A.J. Lawson, Potterne 1982-5: Animal Husbandry in Later Prehistoric Wiltshire (Wessex Archaeology, 2000), 16.