THE
MARCHES UPLANDS
SURVEY

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Preface and acknowledgements

The Marches Uplands Survey has been part of our lives since 1990, and has followed the same path as all too many archaeological projects, so that at times it has appeared that it would never be completed. However, with the help of many people and organisations, the project has now reached publication. In some ways the extended timescale has helped us to step back from the trees and see the wood, and this, we believe, has led to a better result in the end. In particular, we have both gained experience of archaeological resource management, as planning archaeologists (for different organisations). This too has given us a different perspective with which to reconsider the initial results of the work.

The 1990s has been a decade of exceptionally rapid change in archaeological resource management, and much of this change can be seen reflected in the history of the project. What were valid aims and objectives in 1990 would have been increasingly less so if they had not developed. Additionally, the detailed analysis necessary to produce the transect and other reports dramatically changed our preliminary perceptions of the survey results. As those who received early reports will see, the long lists of sites recorded form only a small part of the overall results. As was the aim from the beginning, the project has succeeded in addressing several broad issues and themes, and in making a significant contribution towards archaeological understanding in the area. A number of the issues highlighted by the project have also been taken up by others working in the region.

Even during the fieldwork phase of the project, it was evident to all concerned that upland farming in the region was in considerable difficulty. The many factors contributing to this have been joined by others (including BSE in its various forms) to present what is now a full-scale crisis. The parallel forces of neglect and desperate measures (overstocking, ploughing of previously unploughed land) give added urgency to calls for measures to protect the archaeological remains in this region, especially through agri-environmental incentives.

When the Marches Uplands Survey commenced, Herefordshire formed part of the county of Hereford and Worcester. In 1998 Herefordshire became a Unitary Authority, with boundaries almost identical to 'historic' Herefordshire. The survey was undertaken by the County Archaeological Service of Hereford and Worcester County Council, which became the County Archaeological Service of the resurrected county of Worcestershire in April 1998. As the survey is confined to the Herefordshire part of the former county, these changes have relatively little impact on this report, save for the prefix given to SMR numbers. The 'HWCM' prefix has been retained for this report.

The project was funded by English Heritage, with assistance in kind from RCHME, Hereford and Worcester County Council and Shropshire County Council.

The text of this report was written by James Dinn and Rachel Edwards in close collaboration. Although we started by writing sections of the report individually,

the final result must be seen as a joint effort. James wrote sections 1.2, 1.3, and the major part of section 3; Rachel wrote sections 2, 4 and 5, with the remainder being joint efforts. Laura Templeton and Rachel Edwards designed the CAD illustrations, and the photographs were taken by members of the project team unless otherwise stated.

James Dinn initiated and led the project. Rachel Edwards was the assistant project officer and led the fieldwork team. The fieldwork team consisted of Martin Cook, Mike Napthan, Charlie Miller, Doug Moir, Louise Muston, and Andy Towle. Fieldwork at Abbey Farm, Craswall, was undertaken by Martin Cook and Nigel Topping. Illustrations, CAD and graphic design were the work of Laura Templeton, Sam Whitby, Carolyn Hunt, and Steve Rigby. The palaeoenvironmental study was carried out by Clare de Rouffignac, and Susan Limbrey. Derek Hurst carried out the assessment of the artefacts, excepting the lithics which were assessed by Hal Dalwood. Victoria Buteux and Hal Dalwood commented on text drafts at various stages.

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Abbreviations

AONB	Area of Outstanding Natural Beauty
ARM	Archaeological Resource Management
EH	English Heritage
ESA	Environmentally Sensitive Area
HWCM	Hereford and Worcester County Sites and Monuments Record prefix (from 1998 replaced with HSM)
MU	Record prefix used by the Marches Uplands Mapping Project
MUMP	The Marches Uplands Mapping Project carried out by the RCHME as part of the aerial photographic National Mapping Programme
MUS	Marches Uplands Survey, also used as a prefix for sites recorded during the project
NMR	National Monuments Record, held by the RCHME
RCAHMW	Royal Commission for Ancient and Historic Monuments in Wales
RCHME	Royal Commission for Historic Monuments (England)
SA	Shropshire County Sites and Monuments Record prefix
SMR	Sites and Monuments Record
SSSI	Site of Special Scientific Interest
TSAS	*Transactions of the Shropshire Archaeological Society*
VCH	Victoria County History

Summary

The Marches Uplands Survey is a management-led assessment of the archaeology of the western uplands of Herefordshire and Shropshire. A range of extensive survey techniques were used to investigate the nature and potential of archaeological sites in the survey area, comparing the results with what was already recorded on the counties' SMRs.

The survey was funded principally by English Heritage, with contributions from RCHME and from both County Councils. Work started late in 1991 and continued with interruptions until 1999. The total area of the survey was 942.15km^2, with ground fieldwork covering 118.82km^2 on an area defined by the 250m contour.

Whilst some aspects of the archaeology of this area were well understood, it was unclear whether what was known represented all surviving archaeology, or just a part of a much more extensive body of data. This was of concern to those curating and managing the archaeology of the area. Most activities which are potentially damaging to archaeological remains in this area are not governed by the planning process which is currently used to secure protection of archaeological sites. It can nevertheless be possible to influence land management in some areas in an archaeologically sympathetic way. This, however, requires better knowledge and understanding of the archaeological 'resource'.

The primary aim of the Marches Uplands Survey was to improve the management of archaeological sites and landscapes in the western uplands of Herefordshire and Shropshire, through improved understanding of existing records and their relationship with the field remains. This was amplified by a series of objectives, set out in the project research design (Dinn (ed) 1991). With the completion of this report, the survey has achieved its objectives, providing a greatly enhanced platform on which the respective archaeological curators can base the management and protection of archaeological landscapes and monuments in the uplands.

The overall success of the survey is more than just an increase of numbers of sites recorded, though we have these in plenty. The Marches Uplands Survey has identified the strengths and the few weaknesses of the SMRs for the survey area, and has been able to establish the range of techniques required to gain a full understanding of the archaeology of this upland area. Perhaps the greatest success of the survey, however, is in identifying the range of archaeological sites which can be expected in Marches Uplands, and in drawing together existing models and proposing new ones for settlement and land-use in the area from early prehistory to the post-medieval period (Section 4).

1 Background

1.1 Introduction

1.1.1 Context

The western uplands of Herefordshire and Shropshire are generally not the wild purple moorland which one tends to think of in association with the word 'upland'. These uplands are more often rolling hills clothed in green pasture patterned with the patchwork markings of hedgerows (Fig 1). The sense of upland is there, however, and much of the area is remote; having more in common with Wales than the Hereford and Shrewsbury lowlands. Historically this has been a borderland for at least two thousand years, maybe more, and this has left its mark, in the form of Roman roads, Offa's Dyke and medieval castles. Other, older monuments are also present; hillforts, barrows and stone circles are clearly visible in the landscape.

The area as a whole has been relatively little studied, despite the presence of these frequently impressive monuments. Prior to the present survey the record of known archaeological sites was not believed to be representative of the full range of surviving archaeological evidence. Consequently, the existing models for past settlement and land exploitation were thought to be questionable.

The western uplands of Herefordshire and Shropshire are comprised of agriculturally marginal land where sheep farming is the primary land-use. When the project was being set up there was a perception that archaeological survey was needed in the context of changing systems of agricultural subsidy and support from British and European governments. Threats to archaeological remains which occur in rural areas are largely not covered by the archaeological development control system, since the most potentially damaging activitites do not require planning permission. However, potentially destructive work may be carried out or funded through agricultural subsidy schemes, although subsidy schemes also provide the potential to protect (and in some cases to enhance) archaeological remains.

The survey was commissioned by English Heritage to examine these issues in the context of the management of the archaeological resource on the English side of the border with Wales. For this reason the area surveyed stops at the border, although we have attempted to consider the results in a broader context.

The Marches Uplands Survey was established as a survey with broad based research aims which could also contribute towards archaeological resource management in the uplands.

Archaeological research in upland areas

The particular importance of upland areas for the study of past human activities has long been appreciated, because at the margins of settlement and intensive land-use visible remains survive most readily and can form whole 'relict landscapes'. These

may appear to be of a single period, or they may display features which have evidently developed over millennia.

Large-scale surveys have formed a characteristic part of the approach to the archaeology of English uplands, such as Bodmin Moor (Johnson and Rose 1994), Dartmoor (Fleming 1988; Balaam *et al* 1982, with references to earlier reports), the Pennines (Fleming 1998), or the Cheviots (Topping 1989). Studies of archaeology in the adjacent upland parts of Wales have tended until recently to concentrate on the production of inventories of discrete sites or site classes (Browne 1986). However, this has changed dramatically with the adoption of an uplands strategy by Cadw, RCAHMW and the Welsh Archaeological Trusts, and with the execution of a number of survey projects, especially in Powys.

For most periods, the understanding of human use of the landscape remains less refined in the Welsh Marches than elsewhere. Recent attempts which have been made nationally to define and classify types of historic landscape (eg Darvill 1992) have had little material from this region to draw on, and consequently make little reference to it.

The Marches Uplands Survey is the first attempt at systematic extensive archaeological survey coverage of the uplands of western Herefordshire and Shropshire. In contrast with other more extensive upland areas in Britain, upstanding remains of ancient landscape here are more scattered and less conspicuous. There is little tradition of organised amateur archaeological fieldwork over much of the area, and where this has occurred, the valuable results have often not achieved the publication or recognition they deserve.

Archaeological resource management in upland areas

Resource identification surveys have formed an important part of English Heritage's strategic approach to management (English Heritage 1991, 44-6). The threats to upland archaeology have long been known; in particular the afforestation of large areas of 'unproductive' land has been of special concern. However, the threats were only articulated on a national scale with the publication of major reviews of upland archaeology in England and Wales (Darvill 1986a, 1986b) and of the rural archaeological resource in England (Darvill 1987, 79-92, 148-63). It had by then become clear that it was agriculture which had the greatest impact on archaeological survival, in the uplands as elsewhere in the countryside, and that this had come about due to changes in agricultural policy.

Since the late 1980s, further changes have resulted in a shift of emphasis, partly as a reaction to these processes of change. The generalised threats to the survival of archaeological sites and landscapes which were set out by Darvill (1986a, 46-57) continue to be very real, although increasingly through the 1990s they have been offset by opportunities for positive management. Current approaches to landscape management emphasise that the conservation of both the historic and natural elements of the landscape must be integrated into the framework of the rural economy, and the extent to which these two strands intertwine is now well recognised by both the archaeological and nature conservation interests. The South

Shropshire AONB and the Clun ESA are good examples of schemes which afford clear opportunities to improve the management and the chances of survival of archaeological monuments in those defined areas.

The archaeological input to the landscape management process requires the development of a detailed understanding of the archaeological data, and its communication in an appropriate form. The prerequisite for this is a consistent record of known sites. There was a consensus in 1990 that the SMR databases for the area were uneven in their coverage, and in particular it was not possible to relate the data on the SMRs to systematically collected field data. Similarly, the resources available to archaeologists working in the region were in many cases insufficient to allow the full exchange of information with others working in landscape management. Further information on the completeness of the coverage of the SMRs, and on the survival of known sites, was required, both to allow the assessment and validation of the existing databases, and to provide a basis for improved communication. It was considered that a rapid archaeological field survey, building on a database derived from the SMRs, enhanced by a study of readily available sources, would provide the baseline data which would inform management policies and academic priorities.

The Marches Uplands Survey

The need for archaeological survey in the Marches Uplands was formally identified by English Heritage as a priority in 1990. As a result, a project design for what became known as the Marches Uplands Survey was commissioned by English Heritage from the Archaeological Service of Hereford and Worcester County Council at the end of that year and the project began a year later, in late 1991. In the light of the increasing land-use pressures which had been recognised, the project aimed to provide a basis for a more structured approach to archaeological management in the region, through improved knowledge of the resource and its survival. Taking the opportunity to develop a cross-border approach in parallel with the Welsh Uplands Strategy was an important part of the approach.

1.1.2 Scope and definitions

The Marches

In the medieval period the Welsh Marches formed a border zone between England and Wales. That area is now split between counties to either side of the border, with the large majority lying in Wales. The Marches Uplands Survey covers an upland area along the English side of the modern border, within the historic counties of Herefordshire and Shropshire (Fig 2); this corresponds very roughly to the eastern fringe of the medieval Marches.

A definition of upland

Although the term 'upland' is most frequently used to refer to a characteristic zone of land-use and topography, a more precise definition (in terms of elevation) can

also be used. Upland has been defined as an area where most of the land is higher than 800' (244m) above sea level (Department of the Environment and Institute of Terrestrial Ecology; Darvill, 1986a, 4). This definition was broadly followed by the Marches Uplands Survey, where the boundary of the survey area was defined by the 250m contour, squared off to the nearest National Grid kilometre square (Figure 1). While there are several other areas of high ground in both counties, notably Wenlock Edge, the Wrekin, the Clee Hills and the Malverns, these were specifically excluded from the survey. Other surveys have covered parts of these areas; nevertheless, many of the conclusions of the Marches Uplands Survey will also be relevant to these areas.

Survey area and subdivisions

The Marches Uplands Survey area was divided into six different areas. Each of these has distinct geological and topographical characteristics. The names used for the areas defined for the survey are Selattyn, Long Mountain, Long Mynd, Clun Forest, Ludlow Anticline to Hergest Ridge, and Black Mountains (Fig 2). The broad geological, soils, topographical and land-use factors characteristic of each area are introduced below (section 1.2). Each area was sampled in greater detail by 1km wide transects, aligned across the geological and topographical grain of the land. Twenty transects were surveyed, with at least two placed in each survey area. Whilst most of the desk-based data collection was carried out over the entire survey area, fieldwork was confined to the transects.

Survey date range

The survey encompasses archaeological remains relating to all periods of human activity, from early prehistory through to the post-medieval and modern periods. The forms of archaeological remains recorded include buildings and ruins, other stone structures, earthworks, individual finds and below-ground deposits. Most of these were readily visible in the field. Buried deposits, in contrast, could only rarely be recorded during ground fieldwork. If visible as cropmarks or soilmarks, these are usually only recognisable from the air; alternatively, their presence may be indicated by scatters of finds in ploughed or disturbed ground.

1.1.3 Strategy and organisational background

Project Design

The survey programme was based on a research design and proposal agreed between the County Archaeological Service, as the organisation responsible for the work, and English Heritage as the commissioning and funding body (Dinn (ed) 1991). Consultation with a wide range of other organisations and individuals allowed a broad spectrum of views and regional knowledge to be accommodated in the final project design.

Steering group

A steering group met regularly during the programme to receive reports on progress and results, and to discuss and develop academic and methodological proposals. Apart from English Heritage, the two bodies with which the project had closest links were Shropshire County Council and the Royal Commission on the Historical Monuments of England (RCHME).

Organisations

The role of English Heritage was central to the project at all stages of preparation and execution. As sponsors of the survey, English Heritage staff monitored progress and provided advice and support throughout the programme.

The County Archaeological Service of Hereford and Worcester County Council (now Worcestershire County Council) is an integrated service which combines curatorial functions with project execution. Curatorial and SMR staff contributed significantly to the survey.

The archaeological curatorial services of Shropshire County Council are divided between Conservation and Leisure Services, with the latter also carrying out archaeological projects. Both of these departments provided essential local knowledge and information, as well as discussion of conservation initiatives.

As the lead body for archaeological survey in England, the involvement of RCHME was crucial to the work of the project. RCHME provided expertise in defining levels of survey and field methods, and the National Monuments Record and the Air Photographic Unit made the contributions to data collection and fieldwork outlined in section 2.

Project programme and methods

An account of the project programme and methods forms part of the updated project design (Dinn and Edwards 1995a) and a summary is given in section 2 below. The emphasis of the approach was on rapid data collection and assimilation in all phases of the project. Data from the three main source groups (SMR and other records, fieldwork, and aerial photography) was integrated to provide a consistent and more rounded view of the archaeological knowledge and potential of each area.

Four case studies were also developed, to allow comparison with more detailed survey data, and to focus attention on areas of specific concern which had been identified during the main phase of fieldwork. The three smaller case studies undertaken covered relict field systems in southern Shropshire, the West Shropshire Mining District, and a sample farm survey in western Herefordshire. A larger case study concentrated on the management of Offa's Dyke in Shropshire and Herefordshire.

A range of different reports have resulted from the work of the Marches Uplands Survey, all but one of which have been produced as reports in the Hereford and Worcester County Archaeological Service internal reports series. These are listed in full in Appendix 1 and summarised below.

Report	Reference
Project Design	Dinn 1991
Sampling Strategy	Dinn 1992
Field survey manual	Edwards and Cook 1992
Fieldwalking manual	Cook and Edwards 1992
Palaeoenvironmental assessment	de Rouffignac 1992
Relict field systems in south Shropshire	Edwards 1994
West Shropshire mining study	Dinn 1995
Farm survey	Dinn et al 1994
20 x Transect reports	Dinn, Edwards, 1995-1996
Project Methodology	Edwards and Dinn 1998

During the course of the project papers were given at a number of professional and other conferences.

1.2 Physical and archaeological background

1.2.1 Introduction

The survey area extends along the central part of the English side of the Welsh border, from Oswestry southwards to the Black Mountains. The maximum extent is 112km from north to south, and 39km from east to west. Within this there are several discrete areas of upland and mountain, separated by river valleys and other lowlands. Some of these upland areas form isolated ranges extending well into England, especially in the central part of the survey area, while others are marginal to much larger areas of upland in Wales.

The six areas introduced above were defined in part by geographical separation, in part by characteristics of geology and topography. The influence of geology on landform and on soil formation is important for the study of the history of human settlement and land exploitation; topography and soil quality have in turn influenced land-use patterns through time, more recent land-use (in particular modern mechanised agriculture) has inevitably had a destructive effect on remains surviving from earlier periods. Finally, modern activities have an important influence on the discovery of those remains.

An overall summary of geology, soils and topography introduces more detailed descriptions of the six survey areas, described in turn, from north to south. Information on the geology, soils, physical landform and predominant land-use in

each area is given as a background to a brief statement of the known archaeology. More detailed information on the topography of the uplands can be found in published works; in particular, Rowley (1989) covers Shropshire topography and its impact on the development of agriculture in the county.

1.2.2 General summary

Geology

The survey areas are geologically diverse; while they include some of the best-known and most studied regions in British geology, in particular the Church Stretton area and the Ludlow Anticline, much of the mapping is only generalised in nature (Earp and Hains 1971; Barclay *et al* 1988; Jackson 1990). The Long Mynd survey area in particular shows great complexity. The surface geology in the uplands is overwhelmingly solid. Drift deposits (including gravels) are only present on the lower slopes and fringes of some of the areas; however, the erosive effects of glaciation are much in evidence in the uplands.

Soils

Very little of the area is covered by detailed published soil maps, so again it is necessary to rely on generalised mapping for an overview. The soil survey of the West Midlands (Mackney *et al* 1983; Ragg *et al* 1984) shows a distribution of soils in the upland areas which is similar to that in the neighbouring lowlands, with a few specific exceptions. Brown earth soils are widespread, and gleyed soils rather less so. The main exception to this pattern is the Long Mynd, where there are extensive areas of podzols and stagnogleys; podzols are also present on the higher parts of the Black Mountains. Mainly the soils are acidic, with calcareous soils only present over the limestones of the Ludlow Anticline. Some colluvium is present on steeper slopes, but it has not been extensively mapped.

The impact of soils on the distribution of archaeological discovery can be demonstrated with reference to Whimster's (1989) study of cropmarks in the central Marches; in spite of the generalised nature of the mapping used, there is a very good correlation between soil mapping units and the distribution of cropmarks, which mostly occur on the brown earth soils.

Topography

As befits a border area between Wales and England, the central Marches share characteristics with both mid-Wales and the English Midlands. Landforms in the region are rarely dramatic, and even the higher hills have few steep slopes. The Stiperstones, the Long Mynd and the Black Mountains stand out in this respect. Bare rock outcrops and faces are also rare. Most of the hill ranges rise, often gently, to plateau-like tops, though the terrain is broken in many areas by steep-sided dingles where minor watercourses have eroded the soft bedrock. Most of the river valleys in the uplands are small and carry only minor streams, but some areas, in particular the Clun Forest, are characterised by broad and flat-bottomed valleys.

Land-use

Land-use in the region varies from intensive arable to areas of very poor mountain grazing. The bias is very heavily towards agriculture; there are few built-up areas (either residential or industrial), and mineral extraction on anything but the smallest scale is now very rare. As yet there are no wind farms (although a number have been proposed), and land used for leisure activities is only locally important.

Moorland and rough grazing are generally much less prevalent now than in recent historic times, though evidence from areas such as Stapeley Hill and the Long Mynd indicates that areas which have now reverted to open moorland were cultivated at various stages in the past. Elsewhere, for instance in the Black Mountains, it appears that the limits of cultivation have slowly been extended up the hillsides, and it is possible to begin to discern broad stages of enclosure. Where access is easy and the conditions permit, enclosed and improved grassland extends to the very tops of the hills, to a height of over 400m in many places. Arable cultivation is relatively scarce, though many areas are cropped in rotation with ley grassland. By far the majority of the survey area is occupied by grassland; in contrast to lowland grassland, here it has generally been necessary to improve the land by ploughing and drainage, so that few earlier earthworks survive. Very large areas of open rough grazing were enclosed in the mid to late nineteenth century, with the last major phase of this process taking place in the 1940s and 1950s.

Deciduous (often relict) woodland tends to survive on steep slopes which are otherwise unsuitable for cultivation. Forestry plantations occur in many areas, again often on steep slopes, with the greatest increases in acreage occurring after the Second World War.

As farmland, a very large proportion of the border area is considered to be marginal. As a result, there have been strenuous efforts to protect the rural economy. However, many of the measures used in the recent past have had a disproportionately destabilising effect on land-use and on the environment. There is a continuing and uneasy balance between agricultural intensification and abandonment.

1.2.3 Selattyn survey area

In the far north-west of Shropshire, to the west of Oswestry, this small upland area forms the eastern flank of the Berwyn range, although separated from the main mountain body by the deep valley of the Cynllaith. Geology consists of Ordovician rocks in the west and Carboniferous in the east, with a marked north to south alignment. Some earlier rocks outcrop in both the north and south of the area. There are no significant areas of drift. Soils in most of the area are well-drained, fine and loamy, though with some peaty soils on higher ground to the west. Broadly the area slopes downwards to the east from its highest point at Cefn Coch (424m), but it is dissected by several steep-sided valleys, increasingly so as one travels south, the largest of these being the valley of the Morda in the centre of the area. The upland area is defined to the south by the valley of the Tanat. Land-use is varied, with improved grassland predominating. There is some woodland present

(both established woodland and recent planting), and the quantity of arable is negligible.

Archaeologically this upland remains one of the least known areas in Shropshire, though there are several well-preserved stretches of Offa's Dyke. Some stray finds of prehistoric material have been made, and barrows, standing stones, and enclosures and hillforts occur in and around the survey area, though these are mostly little known.

1.2.4 Long Mountain survey area

The majority of the Long Mountain, including the hill-tops, lies in Wales, with only the eastern slopes in England. This isolated plateau has gently sloping sides, with some steep-sided dingles. To the west, it is separated from the Welsh hills by the Severn valley, while the valley of the Rea Brook divides it from the Stiperstones and Stapeley Hill to the east and south-east. To the north is the dramatic Ordovician inlier of the Breidden Hills, of which only a small part (Bulthy Hill) is in England and within the survey area. The Long Mountain is formed mainly of Silurian limestone, with some Old Red Sandstone, also of Silurian age, at the north-eastern end of the survey area. The soils are generally of good quality, and arable farming predominates, especially on the gentler slopes, in what is mostly a very open landscape. Woodland and rough grassland are present in restricted areas, particularly in the dingles.

The archaeology of the area is characterised by a number of cropmarks, mostly of enclosures, and earthworks are rare. The preservation and diversity of sites on the Welsh side of the border (Britnell 1982) are not matched by those known on the eastern side of the hill, though this can be at least partly explained by the levels of fieldwork carried out in the past.

1.2.5 Long Mynd survey area

This is the most complex and varied of the six survey areas. The hills of the Long Mynd area form a major block of upland in south central Shropshire, covering a number of hill ranges. From the west, the main hill ranges are Stapeley Hill, the Stiperstones, the Long Mynd, and the Stretton Hills. These are variously divided by deep valleys, such as the Church Stretton Gap, or by more undulating upland terrain, such as the valley of the Onny and the low hills on its western bank. The alignment of hills and valleys is in almost all cases south-south-west to north-north-east. To the north are the Rea Brook and the lowlands of central Shropshire, and to the east Ape Dale and Wenlock Edge, while the western edge of this area is defined by the Welsh border and the Camlad valley, and the southern by the wide glacial valley of the East Onny.

Geology and topography

Geologically the hills are characterised largely by Pre-Cambrian rocks to the east, and Ordovician rocks to the west. These tend to be steeply bedded, and consequently show a very great variety on the surface (Earp and Hains 1971, 10-

26); these have been extensively studied. Glacial effects on the area are largely limited to the lower slopes and valleys, for instance the Onny and Camlad valleys to the south, and the valleys and batches on the eastern fringe of the Long Mynd near Church Stretton (Earp and Hains 1971, 98).

Podzolic soils cover the hilltops and upper slopes; the stagnogleys which occupy the lower slopes are also poorly drained and acid.

The hills have widely differing characteristics, and consequently each hill range is introduced separately.

Stapeley Hill is a lower-lying area of open moorland extending northwards from Corndon Hill. Its gentle slopes are made up of Ordovician shales. Stapeley Hill is separated from the next major upland to the east (the Stiperstones) by an area of poorly drained lowland and by an undulating hilly area (including Shelve Hill and Grit Hill), again on Ordovician shales. This area has seen most of the activity associated with the Shropshire lead and barytes mining industries, which extended on to and east of the Stiperstones.

The Stiperstones form the highest part of this survey area, and are well known for their dramatic steep slopes as well as the rock tors on the summit. Pontesford Hill and Earl's Hill to the north are similarly dramatic, though lower, and are formed of Pre-Cambrian rocks.

To the east is another undulating area, on Pre-Cambrian Longmyndian rocks; the hills descend to the East Onny valley, formerly damp moorland but now drained for grassland.

The Long Mynd, which rises abruptly to the east, is the most extensive area of upland in this survey area, and the most extensive area of open moorland in Shropshire. It is characterised by very steep sides to east and west, gentle slopes to north and south, and a flat top. The east side of the massif is incised by several 'batches', steep-sided valleys many of which are in origin glacial meltwater channels.

The Stretton Hills are separated from the Long Mynd by the Church Stretton Gap; together with the hills to the east this is the result of a major fault line. The Stretton Hills (the Lawley, Caer Caradoc, Helmeth Hill, Ragleth Hill, Hope Bowdler Hill) are again on Pre-Cambrian rocks; in contrast to the even slopes and flat top of the Long Mynd, these have steeper slopes and ragged and narrow summit ridges, the result of numerous fault lines. The vegetation here is characteristically an acid grassland rather than heather moor.

Land-use

More than any of the other survey areas, recreational use is paramount on the Long Mynd and neighbouring hills. Most of the higher ground in the central area still consists of unenclosed open moorland or enclosed rough grazing. However, studies by the Shropshire Wildlife Trust (Kohler *et al* 1989; Tucker 1991) demonstrate that

there has been considerable loss of this through improvement in recent years (though not on the Long Mynd itself). On the north-facing and south-facing slopes there is a more mixed agricultural landscape, with arable, grassland and woodland all significant. Virtually the whole of the survey area lies within the Shropshire Hills Area of Outstanding Natural Beauty, and the Shropshire Hills Environmentally Sensitive Area covers a similar area.

Archaeological background

The geological variability of the Long Mynd area is paralleled by a range of archaeological remains not seen elsewhere in the central Marches. All periods from early prehistory to the post-medieval are represented, and some of the sites and groups of sites are well known.

Although Neolithic finds occur widely, and there is evidence of Neolithic occupation at a number of sites, sites from the early Bronze Age are the earliest to survive as landscape features, including a large number of round barrows. Stapeley Hill, at the western end of the survey area, preserves two stone circles and burial cairns, forming part of a complex of sites which extends into Wales (Arnold 1990, 32); these may have been associated with the axe factory at Cwm Mawr, or perhaps with copper mining in the Stiperstones area. Later Bronze Age sites include the enclosures and cross-dykes on Stitt Hill, Ratlinghope. Other enclosures in the same area may be Iron Age (Bodbury Hill, The Lawley), Roman, or medieval (Novers Hill), though most are undated. There are several hillforts on the steep summits, including Caer Caradoc (Church Stretton) and Castle Ring (Stiperstones).

The uplands preserve little or no evidence of Roman activity (though Roman lead mining probably took place), but there are villas or substantial buildings in the lowlands around, at Linley Hall, Acton Scott, and Lea Cross. The central Shropshire basin is densely scattered with enclosure sites of this period (Whimster 1989; Buteux *et al* 1993; Ellis *et al* 1994).

There are no major medieval features on the highest uplands of this area, although there are monastic sites such as the grange at Kinnerton, and castle sites such as the motte and bailey at Pulverbatch on the lower slopes and upland fringes. Settlements with medieval origins are also situated on lower ground. Some or all of the field systems noted below may be of medieval or post-medieval date. The post-medieval period has made a particular contribution to the landscape in one area, the mining district around the Stiperstones, where there are the remains of mine workings and smelt-mills as well as the associated dispersed settlement and enclosure.

Deserving special mention, though many are undated, are the earthwork field systems which are widespread in this area. The southern end of the Long Mynd provides the only example of small embanked 'Celtic' fields, but upland ridge and furrow cultivation is found at several locations on the Long Mynd and on Stapeley Hill, as well as elsewhere. Other examples include a co-axial field system on Wilderley Hill, at the north end of the Long Mynd.

1.2.6 Clun Forest survey area

The Clun Forest occupies a large area of south-west Shropshire. Much of this area is defined by the Welsh border, which runs along hilltops to the north and along the valley of the Teme to the west and south-west. In this area of flat-topped hills and wide valleys, Silurian rocks predominate, with some Pre-Cambrian and Ordovician rocks present close to the eastern limit of the survey area. The main soils present are typical brown earths and typical brown podzolic soils. There are also areas of typical argillic brown earths, in the centre of the survey area, cambic stagnohumic gleys to the north and west, and some alluvial soils in those river valleys which fall within the area defined. The area is made up of high, flat-topped hills, separated by steep-sided river valleys, of which the two largest are the Teme and Clun. The hills are substantially higher to the west, while the character of the eastern part of the survey area is more that of isolated hills separated by wider valleys.

The land-use is as varied as the terrain, with both unimproved and improved grassland, arable, and considerable areas of woodland in the lower, eastern and south-eastern part of the area. As would be expected, there has been less improvement in the westernmost part of the area, where much of the upland was enclosed for the first time only at the end of the nineteenth century. The Clun Forest has been subject to much improvement in the last decade. Recent figures from the Shropshire Wildlife Trust (Tucker 1991) seem to show that, despite the designation of an Environmentally Sensitive Area here in 1987 (the Shropshire Borders ESA, now the Clun ESA), which takes in the western part of the survey area, this process continued unabated between 1989 and 1991. As with the last area, the Clun Forest is part of the Shropshire Hills AONB.

Earthwork monuments in the Clun Forest area include enclosures and hillforts, castles, and several fine stretches of Offa's Dyke and other linear earthworks. The very large number of flint and stone artefacts from the area reflects the activities of a small number of fieldworkers in the 1940s and 1950s, when many areas of upland were being ploughed, often for the first time. Recent aerial photographic work has led to the discovery of many sites, including several cropmark enclosures; most of these are in the eastern part of the area.

1.2.7 Ludlow Anticline to Hergest Ridge survey area

The survey area is based on the Silurian hills of the Ludlow Anticline, extending northwards from the Welsh border near Hay-on-Wye, and joining Wenlock Edge at its northern end. The outcropping geology of most of this area is markedly linear, usually aligned south-west to north-east. At the northern end the Ludlow Anticline turns sharply westwards and then northwards. In the central part of the area, to the west of Wigmore and again to the west of Lingen, the geology, while still Silurian, is more varied (with some Old Red Sandstone) and less linear. There is a small area of Old Red Sandstone hills (Raglan Mudstone) at the southern end of the area (Huntington and Brilley), separated from the Black Mountains by the broad valley of the Wye.

Soils over most of the area are typical brown earths, and therefore of good quality, but there are significant variations to this. Typical and stagnogleyic argillic brown earths are also widely distributed, and there are smaller areas of poorer soils: typical brown podzolic soils on Hergest Ridge and Nash Hill, and cambic stagnogleys around Huntington and Brilley.

The area of high ground formed by the Ludlow Anticline is long and narrow, with a steep scarp slope to the west and a gentler slope to the east and south. A number of rivers have broken through this ridge, often forming gorges. the more dramatic examples, at Downton, Kinsham, and Lye, are the result of great changes in the drainage pattern in the area following the last glaciation (Cross 1969). Away from the anticline itself, the landscape is more uneven, though rarely with steep slopes. The Silurian hills are heavily wooded, especially on the scarp slopes, as are the hills to the west of Wigmore. Those to the west of Lingen are less wooded, but are easily accessible to mechanised farming, and there is therefore a greater incidence of improved pasture and arable.

The area preserves a number of well-known hillforts and earthwork castles, but archaeological sites of all types are thinly scattered and there had been no systematic work prior to this survey.

1.2.8 Black Mountains survey area

Only a small part of the Black Mountains proper lies within the survey area, the rest being in Wales. This includes the highest point in England south of the central Pennines (703m, on the national boundary on the eastern ridge of the mountains); however, most of the area is comparatively lower-lying, in or between the numerous small south-east flowing river valleys which characterise this area. The ridges between these valleys are generally flat-topped.

The solid geology of the area is all of the Old Red Sandstone. The high ridge forming the eastern side of the Black Mountains is made up of the Brownstones Formation. The rest of the area is on lower lying ground of the St Maughans Formation, with Raglan Marl in the deeper valleys. Bands of limestone are a distinctive feature of the St Maughans Formation, their location being indicated by several lime-kilns. The majority of the soils in the area are typical argillic brown earths, with typical brown earths present in the westernmost valley. Both of these soil types provided favoured areas for prehistoric settlement. The top of the Black Mountains ridge is characterised by strongly acidic ferric stagnopodzols, which are also present along the heads of the valleys, and there is an area of peat on the highest point of the Black Mountains. Some patches of poorly-drained cambic stagnogley soils are also present.

There is very little arable within the survey area, although the flat hilltops are in places suitable for arable cultivation. There has however been much pasture improvement, and there are also some coniferous plantations, mainly at the northern end of the survey area. The Black Mountains ridge is open moorland (common land, subject to recreational pressures), and further unenclosed commons survive at the heads of the valleys at a rather lower elevation.

Archaeological work in the area has included some landscape survey (Skelton (ed) 1983), and during the middle years of the twentieth century this area was the focus of considerable activity, including excavation and the recording of large numbers of stray finds. The existing evidence, much of it in the form of flint finds, suggests that the valleys and ridges to the east of the Black Mountains were the most densely populated part of Herefordshire, at least in the Neolithic and early Bronze Age. Iron Age enclosures and hillforts also occur. There are several medieval castles.

1.3 Archaeological survey and research

In contrast with many other areas of England, the Welsh Marches have not been the subject of systematic archaeological survey or coordinated research. Because of the lack of research, it has not usually been possible to set the major monuments into their context or to identify landscape features which might be associated. Additionally, the large-scale landscape threats which have precipitated surveys elsewhere have not been identified here.

1.3.1 General studies

There are a number of recent general studies of the archaeology of the region. Stanford's 1980 survey (partially updated in 1991) gives a traditional view, but was significant as the first archaeological study to treat the Welsh Marches as a meaningful unit. Rowley's treatment of the region (1986) was able to take advantage of some of the more recent advances in archaeological knowledge, especially for the prehistoric periods, though the application of ideas from elsewhere was at that stage often rather speculative. Both of these works provide important frameworks for considering the archaeology of the region; however, they are not based on extensive survey, and neither was able to incorporate the results of more recent fieldwork, much of which was not readily available. Both Rowley and Stanford ranged across an extensive geographical region, extending from the Mersey and north-east Wales southwards to the Severn estuary, well into mid-Wales, and eastwards to Worcester. It is generally necessary to go further back to find more detailed treatments of the archaeology of the central Marches.

1.3.2 Herefordshire

For Herefordshire, the most recent coverage is the Woolhope Club's centenary volume of 1954; this encompassed summaries of archaeological research on the prehistoric and Roman periods, including the results of fieldwork carried out in the 1940s and early 1950s (Gavin-Robinson 1954; Dudley 1954), as well as a series of historical essays on later periods. The major work of field survey was published in the 1930s (RCHME 1931, 1932, 1934), at a time when the scope of such work was much more limited than it is today. The VCH made little progress in Herefordshire, completing only the introductory volume in 1908 (although funds are now being sought to continue work). Its treatment of archaeological monuments was fully superseded by the RCHME volumes.

Detailed landscape surveys, for instance the work around Peterchurch (Skelton (ed) 1983) or Leominster (Mills (ed) 1983), or the National Trust management survey of the Croft estate (Dalwood and Waller 1992), have been ground-based, and not integrated with aerial survey at the same level. An assessment of lowland (specifically river valley) archaeology of the prehistoric and Roman period was recently carried out by the County Archaeological Service (Dinn 1996b), but there is very little overlap between the Marches Uplands Survey and Herefordshire Valleys Survey areas, and the latter was in any case more concerned with methodology and classification of existing knowledge than with extensive resource identification. Recent publications have covered monument types such as barrows (Grinsell 1993) and castles (Stirling-Brown 1989).

1.3.3 Shropshire

The archaeology and landscape history of Shropshire has been better served by recent publications, including a popular summary (Rowley 1972). Bird's *History on the ground* (1977) is idiosyncratic, but does contain reports on a large amount of fieldwork in the south-western part of the county, including some important discoveries. The VCH (1908, 1989) continues to make an important contribution, although coverage even within the areas completed has in some cases been patchy (eg some parishes in the Worthen area). There is no published RCHME survey of earthworks or buildings, though some field survey has been completed on Clee Hill and in Corvedale.

More recently, the North-west Wetlands Survey has published an overview of prehistory in the Shropshire lowlands (Middleton and Wells 1991). Whimster's (1989) work on the aerial photographic evidence provides a valuable counterbalance to interpretations based solely or largely on the evidence of earthworks and finds, and recent advances in aerial research have also been published by Watson and Musson (1993). The Wroxeter Hinterland Survey being carried out by Birmingham University Field Archaeology Unit has been able to build on Whimster's work in particular, and is providing valuable new information on lowland settlement in the Iron Age and Roman periods.

1.3.4 Regional and period studies

A small number of regional period studies have been published. Sylvester (1969) covered the medieval period, against a broad chronological and geographical background. Lloyd Jones (1984) assessed settlement patterns in Herefordshire during later prehistory and the first millennium AD, based on a limited range of archaeological data. However, this was a 'broad-brush' survey, which involved neither fieldwork nor detailed analysis of archaeological field data. There is now an important historical study of the early medieval period (Gelling 1992), which covers both Herefordshire and Shropshire, but for this period there is very little archaeological evidence to draw on.

1.3.5 Excavated sites

A catalogue of excavated sites (to 1995) is given in Appendix 3. This clearly shows the very small amount of excavation which has occurred in this extensive area. Castles, hillforts and Offa's Dyke figure largely, while there were several antiquarian excavations of barrows (including one of a pillow mound). The 1980s and 1990s saw a sharp increase in the number of excavations, though little of this was associated with development. The post-medieval period is particularly poorly represented. Only a small proportion of the excavations have been fully published.

1.4 Aims and objectives

The Marches Uplands Survey commenced with a series of briefly stated aims and objectives (Dinn (ed) 1991), laid out in the project design, and these were developed through the project.

The primary aim of the Marches Uplands Survey was to improve the management of archaeological sites and landscapes in the western uplands of Herefordshire and Shropshire, through improved understanding of existing records and their relationship with the field remains.

The project's main objectives as stated in the research design (Dinn (ed) 1991) were:

a) to evaluate the nature, survival and potential of the archaeological resource, of all periods from early prehistoric to post-medieval

b) to evaluate the nature, survival and potential of palaeoenvironmental material

c) to assess the existing quality of the Hereford and Worcester and Shropshire County Sites and Monuments Records (SMRs) for the survey areas

d) to assess the contribution made to the SMRs by rapid survey

e) to assess the threats to archaeological and palaeoenvironmental remains in the area from change of land-use and other causes

f) to examine existing models of past settlement and land-use, and to produce a preliminary reassessment

g) to make recommendations and draft policies for the management and protection of archaeological landscapes and monuments in the uplands

h) to establish a framework into which subsequent discoveries can be fitted

i) to make recommendations for further archaeological and palaeoenvironmental fieldwork and research

The major tasks identified as required for the achievement of these aims were:

i) the assimilation of SMR data, and the collection of further data to be added to the SMRs

ii) the collection of non-archaeological data, especially on land-use, land-use change, and topography

iii) the assessment of archaeological and environmental potential of the regions defined, from existing data

iv) the assessment of air photographic cover compared to current land-use and other factors

v) the analysis and morphological classification of cropmarks and earthworks (RCHME)

vi) the detailed survey of sample areas, to be chosen with regard to air photographic cover, land-use and other factors

vii) the application of methodologies for rapid survey, based on those employed in other upland areas

viii) the checking of the condition of known sites

ix) the evaluation of the techniques used and the data collected

x) the production of a report, detailing methodology, results and recommendations for management and for further work

2 Methods and results

2.1 Methodology

2.1.1 Introduction

The Marches Uplands Survey consisted of several dependent phases of work, together with a number of component and affiliated projects. The project programme commenced in autumn 1991, and continued (with interruptions) to 1999.

The phases of the main project were: desk-based survey, field survey, assessment, analysis and report writing. The main project was augmented by seven component and affiliated projects, comprising: the Marches Uplands Mapping Project (MUMP); a palaeoenvironmental study; sample excavations on the Long Mynd, and four Case Studies. The MUMP was undertaken by the RCHME, and the other six were carried out by the Hereford and Worcester project team. These elements are outlined in the following table and in the sections below. A more detailed account of the project methods and programme can be found in the *Assessment and updated project design* (Dinn and Edwards 1995a). The internal reports produced during the course of the project are listed in Appendix 1.

Project stage	Data produced	Reports produced
Desk-based survey	Database, CAD maps	Sampling strategy report
Field survey & fieldwalking	Databases	20 Transect reports, Finds assessment
MUMP AP plotting & analysis	MORPH database, maps	MUMP report
Assessment	Tables	Updated Project Designs (x2)
Limited analysis	Tables, CAD plots	
Report		This report
Palaeoenvironmental study		Report
Sample excavations on the Long Mynd	Radiocarbon dates, environmental samples	TSAS Report
Case studies		Reports on each

2.1.2 Desk-based survey

The initial phase of the Marches Uplands Survey was office-based. SMR records from both counties (Hereford & Worcester and Shropshire) were copied to a project database. Computer CAD mapping of the survey area was started. A bibliographic search was carried out, and sites not already included on the SMRs were added to the database. Further sites were added from First Edition Ordnance Survey 6" maps.

	Source	Number of records
Existing records	Hereford & Worcester SMR	815
	Shropshire SMR	953
New records	National Monuments Record	22
	Journals	9
	Books	42
	Ordnance Survey 1st Edition 6" maps	108
	Aerial Photographs	88
	Other	28
Total number of new records from data collection		297

The sampling strategy for the subsequent, fieldwork phase was based on a rapid assessment of the survey areas' geology, topography, land-use and known archaeological remains, and aimed to achieve a representative coverage of all these main factors. It was agreed at the outset that random sampling was unlikely to provide the data required for each survey area, and consequently a judgment-based sample was selected. Transects were considered to provide the most effective coverage, and these were aligned perpendicular to the grain of the topography wherever possible. Twenty transects were positioned, with between two and seven in each of the main survey areas. It was important to achieve a balance between coverage and achievability, given the limited time-scale. The sum of the transect areas was 143.63km^2 (15.2%) while the area actually surveyed was 118.82km^2 (12.6%). The rationale behind the sampling strategy is explained in a project report (Dinn 1992).

2.1.3 Field survey

The level of detail of the field survey had been defined at the inception of the project. The Marches Uplands Survey as a whole was designed to assess the existing knowledge and understanding of the archaeology of the area. The purpose of field survey was therefore to locate and characterise new and known archaeological sites over a wide area, rather than to survey a small number of known sites in great detail. This corresponds with 'Level 1' or Rapid investigation survey as defined by the RCHME (Bowden (ed) 1999, 190). The field survey also aimed to assess the condition of known sites in order to identify any changes. The methodology used for rapid survey was adapted from that used by the Clwyd-Powys Archaeological Trust for extensive survey in upland areas (Silvester 1990). Recording of earthworks located by rapid survey was influenced by surveys in Cornwall (Johnson 1985, Johnson and Rose 1994).

A team of six spent eight months carrying out rapid survey in the winter/spring and autumn/winter of 1992. Sites and land-use were recorded on pro-forma record sheets and located on map overlays at a scale of 1:2500. A report which set out the survey methodology in detail was prepared as a manual for the project team (Edwards 1992, revised as Edwards and Cook 1992). Sample records and mapped information are reproduced in Appendix 2. Following the fieldwork, records were

entered onto computer, and field map overlays were transcribed onto 1:2500 map sheets.

The fieldwork phase also included fieldwalking. This was limited to the small proportion of the survey area which was ploughed for arable or rotational pasture in autumn 1992. A rapid line-based method was adopted to allow location and broad definition of sites (Cook and Edwards 1992). This method was based on walking lines at 25m intervals and collecting finds from 50m long stints. Although this only represents a small proportion of the survey area as a whole, it is the most extensive programme of fieldwalking to have been carried out in the Marches Uplands.

Fieldwork summary	
Fieldwork area	118.82km^2
Rapid survey land parcels recorded	3368
Rapid survey sites recorded	2996
Number of fields fieldwalked	44
Fieldwalking area	210ha
Fieldwalking sites recorded	84

2.1.4 Component and affiliated projects

Seven component and affiliated projects were carried out, by the project team, and by other bodies. These were designed to enhance the overall survey.

Projects	Product	Follow-on projects
Marches Uplands Mapping Project	Report	
Palaeoenvironmental study	Report	
Sample excavations on the Long Mynd	Report	
Field systems on Black Knoll, Long	Report	Fieldwork by RCHME
South Shropshire Mining	Report	
Whole Farm Management Plan	Report	
Desk-based assessment of Scheduled parts of Offa's Dyke within MUS area	Report to EH	Management prescriptions for ESA by EH

The Marches Uplands Mapping Project

The aerial photographic element of the Marches Uplands Survey was carried out as a affiliated project by RCHME as part of the National Mapping Programme (NMP). The purpose of the NMP is to 'map, document and classify, at a common scale and to a common standard, all archaeological sites and landscapes recorded in England on aerial photographs' (Stoertz 1993, 1). The Marches Uplands Mapping Project (MUMP) covers an area larger than the MUS area (as it is based on Ordnance Survey 6" quarter sheets), and was carried out independently, using

the methodology established for the National Mapping Programme, and adapted for the area (Stoertz 1993).

The project started in 1993, and the initial phase of mapping archaeological sites from all oblique and some vertical aerial photographs was completed in 1994. The final analytical phase is now complete, and a report has been prepared (Stoertz forthcoming). As the MUMP survey area is larger than the Marches Uplands Survey area, the results are not directly comparable. In the sections of this report which follow, it is the results of the MUMP within the MUS area which are considered.

MUMP	
Total area	1650km^2
MUS area	942.15km^2
Total number of sites	4233
Number of sites within MUS	1764

Palaeoenvironmental study

A study of palaeoenvironmental work carried out within and close to the MUS area was carried out, and an assessment of palaeoenvironmental potential was made. The results of this form a project report (de Rouffignac 1992).

Sample excavations on the Long Mynd

Limited sample excavation was carried out on three earthwork monuments on the Long Mynd, with the aim of assessing the preservation and potential of associated environmental material and recovering dating information for each (Dinn forthcoming). The work was carried out in association with earthwork repairs being carried out by the National Trust. The earthworks sampled were the Shooting Box barrow (Fig 3, SA 198), the Devil's Mouth cross-dyke (SA 251), and the High Park Cottage cross-dyke (SA 199).

Case studies

Four component projects were carried out by the project team, covering specific areas, sites or themes in greater depth than allowed in the main project. The four projects were: a study of earthwork field systems on Black Knoll, Long Mynd; a study of the South Shropshire mines; a 'Whole Farm' management plan; and a desk-based assessment of the scheduled parts of Offa's Dyke within the MUS area. These resulted in three project reports (Edwards 1994, Dinn 1995, Dinn *et al* 1995), and a confidential report to English Heritage on Offa's Dyke.

2.1.5 Assessment and analysis

The fieldwork stage of the Marches Uplands Survey produced a large quantity of undigested data. An assessment phase was added to the project, following which the analysis and report stages were carried out. As with many archaeological projects, the amount of time required for post-fieldwork data checking, collation, assessment and analysis proved to be greater than originally anticipated. The assessment report collated and compared the data from all parts of the project, and identified potential for further analysis (Dinn and Edwards 1995a). This was then revised due to restricted resources and the scope of analytical work was focussed more tightly (Dinn and Edwards 1995b).

2.1.6 Report

The scope and aims of the present report were addressed in the updated project design (Dinn and Edwards 1995b). The aims and objectives set out in the original project design were revised, and this stage of the project aimed to concentrate on the first three revised aims which were:

a) to use the data collected by the Marches Uplands Survey and the Marches Uplands Mapping Project to produce a rounded assessment of the archaeological resource and its potential in the central Marches.

b) to use the data to produce a reassessment of existing models of past settlement and land-use as a contribution to the development of regional understanding.

c) to make recommendations for further archaeological and palaeoenvironmental fieldwork and research.

2.2 Results

2.2.1 Introduction

The different parts of the Marches Uplands Survey introduced above resulted in different types of information. The desk-based survey, the MUMP, the field survey, and the Mining and Farm surveys all collected data, which was then computerised, and can be quantified in terms of numbers of sites. The other component and affiliated projects served to enhance or synthesise understanding of known sites, areas or themes.

The twenty transect reports (listed in Appendix 1) discuss the results of the survey for each of the fieldwork transects. These provide far more detail about archaeological sites and the historic landscape than can be covered in the present report. Information from fieldwork is integrated with the results of the MUMP, and compared with what was known about the areas before the survey commenced.

Each report includes an assessment of the archaeological evidence, an account of the historic landscape, and data listings for SMR, MUMP and fieldwork results for the transect area. The results of each of the component and affiliated parts of the Marches Uplands Survey (introduced above) are similarly reported in greater detail in the relevant separate reports.

Quantifications of numbers of sites recorded by the different parts of the project are introduced and discussed in the following sections. The definition of what is a 'site' can probably never be fully consistent, either within a single SMR-type database, or between such databases. Although it is possible with computerised data to analyse and compare the different databases in great detail, this has been avoided, due to the fundamental inconsistencies inherent in the data. The aim here is to present general trends and differences, rather than to make comments on precise details. Numbers of sites are given only in the first section below; the remaining sections use percentages.

2.2.2 Results of each part of the survey

SMRs and survey phases	Number of sites recorded	Number of new sites added
H&W SMR	809	-
Shrops SMR	953	-
Desk-based survey	297	297
MUMP sites	1764	1193
Field survey sites	2996	2864

Before the survey commenced, a total of 1762 sites were recorded on the two counties' SMRs for the survey area. Desk-based survey only added a further 297 sites to that total. The majority of the new sites recorded were derived from the Ordnance Survey First Edition 6" County Series maps, to which neither SMR had previously had easy access (Fig 4). This part of the Marches Uplands Survey revealed that the SMRs had already accessioned information from most existing sources of archaeological information.

The number of new sites recorded by the MUMP is an indication of the importance of the ongoing National Mapping Programme, of which the MUMP forms part. Vertical and oblique aerial photographs taken over the last fifty years or more are a significant source of information on archaeological sites, but in many parts of England SMRs have not been able to accession this information and record cropmarks, earthworks and soilmarks as SMR sites. Although aerial photographic analysis is frequently carried out for specific purposes, few counties or regions have been subject to this level of consistent and systematic coverage.

The numbers of new sites resulting from fieldwork was to some extent expected at the start of the project. In Herefordshire, a survey of Peterchurch, Vowchurch and Turnastone parishes carried out in the 1980s increased the numbers of recorded sites very considerably, and this was one of the reasons behind the Marches Uplands Survey in the first place (Dinn (ed) 1991, 2 and fig 3).

2.2.3 Results: dates of sites recorded

Percentages of sites by period for each part of the survey

	Prehistoric	*Unknown (pre)*	*Roman*	*Early medieval*	*Unknown (med)*	*Medieval*	*Post medieval*	*Modern*	*Undated*
H&W SMR	16		1	1		23	41		18
Sh SMR	51		4	1		13	8		23
Desk-based	8		2	1		7	60		23
MUMP	7	3	1	1	30	15	12		32
Fieldwork	1			1		3	80	11	4

The date ranges of the two SMRs is broad, as would be expected. The difference between the two in the post-medieval period is because the fully computerised Shropshire SMR did not include buildings when the Marches Uplands Survey started. The majority of buildings recorded on the Hereford and Worcester SMR are listed buildings of post-medieval date.

The large proportion of post-medieval sites recorded during the desk-based part of the survey is also unremarkable, as the majority of these sites were recorded from Ordnance Survey First Edition 6" County Series maps.

The date range of sites recorded by the MUMP is broad, but includes relatively few prehistoric and Roman sites. This is also reflected in the date range of previously unrecorded sites from aerial photographs. Only 31 new sites (3%) were prehistoric, Roman or 'unknown prehistoric' (ie prehistoric or Roman) in date. For medieval, 'unknown medieval' (early medieval or later), post medieval, modern and unknown, however, the total of new sites recorded was 1162, or 97% of new sites recorded by the Marches Uplands Mapping Project. The proportion of sites which could not be dated is quite high (32% of all sites), but this was expected. Aerial photographic work relies on morphological classification, and although the morphology of some sites is very period-specific, in many cases it is not. Without dating evidence from fieldwork or other sources, such sites cannot be dated with certainty. Certain types of features have an overall currency, however, which helps the division of features into the 'unknown prehistoric' or 'unknown medieval' categories. Association with other features of known historic context can also contribute to assigning features to these broad date ranges.

A very large majority of sites recorded during fieldwork were post-medieval in date. As with aerial photography, however, dating sites proved to be difficult in many cases. Over half of all the sites recorded could not be assigned dates in the field, but dating was refined during post-fieldwork analysis, when dates or date ranges were assigned for most of these. At this stage it was very often possible to determine the historic landscape associations of the features recorded; the

Ordnance Survey First Edition County Series maps were particularly useful in this process.

2.2.4 Results: types of site recorded

Percentages of sites by site type for each part of the survey

	Agricultural	*Artefact*	*Boundary*	*Building*	*Burial*	*Communications*	*Defensive*	*Entertainment*	*Industrial*	*Natural*	*Parkland*	*Religious*	*Settlement*	*Unclassified*
H&W SMR	15	11	1	34	4	1	5		8		2	5	10	3
Shrops SMR	5	37	3	1	9	3	6		5	2	1	6	17	6
Desk-based	15	5	2	1	3	7		1	37	1	1	1	16	10
MUMP	55		2		3	5	6		10				15	4
Fieldwork	50	3	2	1		23			16	1	1		1	3

The categories used to define site type are those in use by the SMRs at the start of the project. These correspond with the Hereford and Worcester SMR 'site type general' category, derived originally from the specification for SMRs developed by English Heritage in the 1980s.

The two SMRs again include a broad range of sites. The most striking difference between the two is the proportion of buildings recorded, which is explained above. The high proportion of artefacts recorded in the Shropshire SMR can be attributed almost entirely to the activities of fieldworkers in the 1950s, largely in the Clun Forest area, who collected flints and other finds, often from fields which were being ploughed up for the first time. No other area of upland Shropshire or Herefordshire has had this degree of attention.

Desk-based survey also covered a broad range of site types. The high percentage of industrial sites recorded (37%) is accounted for by the numbers of quarries previously unrecorded in the survey area. These are shown on the Ordnance Survey First Edition County Series maps, either as 'Quarry' or as 'Old quarry'. Agricultural (15%) and settlement (16%) are the other types of site which are best represented.

Percentages for the MUMP are slightly different, and fewer types of site were represented, largely because the method of investigation rules out the discovery of certain site types, such as artefacts. Agricultural sites (55%) form the majority, followed by settlement (15%) and industry (10%).

Agricultural sites are again well-represented in the percentages for fieldwork (50%). Communications (23%) and industrial (16%) were the next highest categories. Although some of the general site types appear not to be represented,

this is because there were only very small numbers of records for these, and they amount to less than 0.5%.

Finds from fieldwalking are covered in more detail in the finds assessment report (Hurst 1993), and are summarised as follows:

Material	Quantity recovered
Roman pottery	3
Medieval pottery	33
Post-medieval pottery	1101
Clay pipe	128
Brick/tile	1010
Stone	675
Flint	49
Iron	90
Copper alloy	2
Glass	150
Bone	9

2.2.5 Results: site form

Percentages of sites by site form for each part of the survey

	Building	*Buried remains*	*Circumstantial*	*Cropmark*	*Docu-mentary*	*Earthwork*	*Finds*	*Natural*	*Other structure*	*Placename*	*Ruin*	*Soilmark*
H&W SMR	31	3		7	15	26	11		2	2	3	
Shrops SMR	1	0	4	12	10	29	37	2	4	1		
Desk-based	1			13	47	24	5	1	3	2	5	
MUMP				19		79						1
Fieldwork	2					85	3	1	4		4	

The physical form of sites recorded is to a great extent highly predictable, given the data collection methods employed in each case. The large proportion of sites recorded by the MUMP which were cropmarks (19%) is interesting, however. The majority of the survey area is under pasture, and only a minority of the area would be expected to show cropmarks. This proportion suggests that there may be more buried sites across the area as a whole than those currently known about.

2.2.6 Results: land-use

During fieldwork, the land-use of every land parcel surveyed was recorded. Although this is expressed as numbers of land parcels, not as proportions by area, the table gives a useful overview.

Land-use in land parcels recorded during fieldwork

Landuse	*number of land parcels*	*percentage of land parcels*
Arable	275	8.2
Improved pasture	1756	52.1
Pasture	380	11.3
Rough pasture	331	9.8
Woodland	352	10.4
Orchard	5	0.1
Road/track	64	1.9
Farm/house	70	2.1
Heathland	21	0.6
Scrub	69	2.0
Water	12	0.4
Not recorded/other	33	1.0
Total	3368	100

As the table shows, the majority of fields (52.1%) were recorded as 'improved pasture'. This is taken here to refer to grassland improved by ploughing and reseeding, generally carried out on a three to five year cycle. If the arable fields are added to the percentage of improved pasture, the percentage of land parcels recorded during the survey which are being regularly ploughed rises to 60.3%.

Heathland forms a very small proportion of the recorded land parcels, given that the area is classed as upland. In terms of area, the proportion is probably larger, given that a single 'parcel' of heath or moorland covers a considerable area. Consequently, in the survey area as a whole open heathland is very much a minority land-use, although the proportion in the different survey area subdivisions varies. The Long Mynd and Black Mountains survey areas (Fig 2) include higher proportions of heathland than the other areas.

The land parcels recorded as woodland include 2.7% which were recorded as coniferous woodland, 2.3% recorded as deciduous, and 5.4% which were not differentiated. The same caution must be applied as with heathland, since individual parcels of woodland too tend to be extensive. Nevertheless, it indicates that in 1992, at least, huge swathes of the survey area were not yet covered with coniferous plantations.

2.2.7 Results: condition of sites

A subjective assessment was made of the condition of all the sites recorded during fieldwork, using a five-point scale based on the Hereford and Worcester SMR and on that used by English Heritage for monitoring the condition of scheduled monuments. Although such judgements can be difficult to make, the resulting

information demonstrates that the condition of earthworks in the Marches Uplands Survey area is not particularly good.

Condition of earthworks recorded during fieldwork, shown as percentage.

Condition	*Percentage of earthworks*
Bad	1.4
Poor	21.0
Fair	62.5
Good	14.0
Very good	0.5

Completeness of monuments was also recorded, again following the Hereford and Worcester SMR and English Heritage record format (a seven-point scale). This proved to be a less useful and useable measure, and is therefore not tabulated here. For example, a tumble of stones may be recorded either as a fully complete ruin, or as a house in very poor repair.

2.2.8 Discussion

A number of conclusions can be drawn from the raw survey data. These relate to methodology, interpretation and resource management. They have particular bearing on the quality of existing information, and on methods for the survey and interpretation of new sites.

SMRs

It is clear from the results of the desk-based survey that the two counties' SMRs constituted a good index of previously recorded archaeological sites. However, the number of new sites recorded by the MUMP indicates that existing aerial photographs can contain significant new data. The numbers of new sites from fieldwork confirmed the impression at the beginning of the survey that the SMRs were not representative of surviving evidence. However, it must be emphasised that the SMRs were found to be representative of the best-preserved monument types. Figures 5 and 6 show the distribution of sites recorded before and after the survey.

Survey techniques

The tables above reveal that a combination of different survey techniques is required to obtain the best results. No single method can produce a comprehensive record of archaeological sites. Desk-based data collection produced the fewest new sites, although cartographic study was useful. Aerial photographic analysis produced the broadest date range of sites, and a significant number of new prehistoric sites. Fieldwork is, however, essential, to complete an assessment of archaeological sites in an area. Given that 2996 sites were recorded from 15.2% of

the total survey area, fieldwork at the same level across the whole area would produce in the region of 18,000 sites.

Post-medieval sites

The overwhelming majority of sites recorded during the rapid ground survey were earthworks resulting from post-medieval agricultural activities. This should come as no surprise, as it is the most recent revision of the historic landscape palimpsest. When approaching survey, it is necessary to consider how the more recent landscape features will be treated. Although some may not consider post-medieval lynchets to be as important as Iron Age field systems, both are threatened by current and probably by future agricultural practices. Recording recent features does, however, have significant resource implications.

Dating of sites

The tables above are not as revealing about one aspect of both rapid survey and aerial photographic study. Dating earthworks and cropmarks is inevitably an inexact science. In the absence of documentary or other supporting evidence, dates can only be assigned on the basis of morphological similarity to known monument types, or through physical relationships to monuments of known date. This aspect of the work is more obvious in the results of the MUMP shown above, which uses three categories to indicate features of uncertain date range: 'undated' (32% of MUMP records), 'unknown prehistoric' (3%) and 'unknown medieval' (30%). The proportion of rapid survey records which were described as 'undated' in the field was 57%, slightly less than the total of MUMP records of uncertain date (65%). The majority of undated rapid survey records could be assigned to a date range during the analysis stage of the survey, mostly through comparison with the First Edition Ordnance Survey County Series maps. Even after this, however, 4% of records could not be assigned to a date range. Figures 7.1 and 7.2 show undated sites recorded by the MUMP and by field survey.

Current land-use

The recorded land-use within the fieldwork survey area confounds some preconceptions about an upland survey. Unexpectedly, open heathland and rough grassland formed only a small proportion of the areas surveyed. Over 60% of the land parcels recorded are subject to regular ploughing, for arable or grassland improvement. While the Marches Uplands Survey made a 'point in time' assessment of land-use, this can be given some time-depth by comparison with the Shropshire Wildlife Trust's surveys (Kohler *et al* 1989; Tucker 1991), which showed that the process of agricultural improvement had affected wide areas of western Shropshire in the 1980s. This process is equally damaging to earthwork monuments and to the chances of field survey actually detecting those earthworks which survive.

Vulnerability

The vulnerability of earthwork sites in the Marches Uplands is borne out by the table showing condition of the earthworks recorded during fieldwork. Of these, 62.5% are recorded as in 'fair' condition, with only 14% recorded as in 'good', and 0.5% 'very good' condition. This suggests that regular ploughing is gradually eroding upstanding earthwork sites.

The Walton Basin Project (Gibson 1999) recorded interesting and relevant data from an adjacent lowland area in Wales. A number of barrows had been surveyed in the early 1970s, and were resurveyed in 1993. The reduction in height recorded varied from 0.4-1.0m. These barrows, although some were scheduled, had been subjected to regular ploughing.

3 Period summaries

3.1 Introduction

This section gives an account of the archaeology of the Marches Uplands Survey area, organised chronologically. The conclusions of this part of the report are used in Section 4 to present suggested models of land-use and landscape change in the Marches Uplands.

Context

The Marches Uplands Survey has been able to build on over a century of intermittent investigation of the archaeology of the survey area. Nearly all of the accumulated site-based data, whether from excavation, local or regional survey, or other sources, has now been accessioned into the SMRs. The consistent collection of new data from field survey, and from the assessment of aerial photographs, has provided a significant enhancement to the existing database. An improved understanding of the past in this region can be based on these foundations.

The survey area

It is necessary to emphasise the extent and diversity of the survey area. The full distance from north to south is 112km. This is greater, for instance, than the distance between Oswestry in north-west Shropshire, and Anglesey or the White Peak, or that between Longtown in the Black Mountains, and central Wiltshire or Exmoor. The survey area should not therefore be presumed to have had a uniform landscape history - indeed it would be surprising if it had. This is not to deny, however, the unifying influence of the boundary between upland and lowland.

The marginal location of many of the Marches uplands in relation to Wales means that associations with the more extensive uplands in Wales are often more important than those within the survey area. Furthermore, very few parts of the survey area are further than 5km from an area of lowland or a major river valley, and therefore understanding of the neighbouring lowlands is often critical to fuller knowledge of the uplands, regardless of any closer or more structured connections through, for instance, transhumance or land tenure.

Sources and records

All of the main sources used by the Marches Uplands Survey (the SMRs, additional published records, aerial photographs and fieldwork, and ground survey and fieldwalking) have contributed data and understanding to the largely period-based discussions which make up this section. The SMRs, along with published accounts of the archaeology and landscape history of the region, form the basis of the discussions which follow, for all periods up to and including the medieval. In many cases, however, national and sometimes regional research agendas have developed beyond the frameworks which have been applied in the Marches to date.

The analysis of aerial photographic and ground survey data, in particular, has suggested a number of alternatives which challenge established interpretations.

Discussion of palaeoenvironmental material draws heavily on the study carried out by Clare de Rouffignac as part of the survey. The report on this work was produced as a project report (de Rouffignac 1992).

It must be stressed, however, that the Marches Uplands Survey has followed a broad brush approach in all the methods of data collection used. Rapid survey is not in any way a substitute for detailed analytical survey, either for understanding an individual monument, or for extensive thematic survey covering specific periods or site types. Sample survey using transects can, however, be a useful way of assessing proportions of sites to be expected in areas of the landscape and thus can contribute to archaeological resource management.

Dating and text divisions

Conventional period divisions are used here; each is defined in the text sections which follow. The prehistoric period has been subdivided into Palaeolithic; Mesolithic; Neolithic and earlier Bronze Age; later Bronze Age and Iron Age. There is a short discussion of modern earthworks and other monuments.

The difficulty of dating sites through non-intrusive techniques such as earthwork survey or aerial photography has been mentioned earlier (2.2.8 above). This section of the report deals with sites or complexes to which dates or periods can be assigned. Once analysis of the rapid survey data was complete, the majority of sites had been assigned to a date range, even though a large proportion could not be dated in the field (see 2.2.8).

Presentation of results

A pair of distribution maps is given for each of the main periods discussed, covering the northern and southern parts of the survey area (roughly equivalent to Shropshire and Herefordshire). A set of standard symbols, based on a simplified classification of site form, is used, and the maps include all records from all of the main sources.

For each period, the archaeological material from the Marches uplands (from all the sources used) is discussed in the context of national research strategies and of the current understanding of the English and Welsh upland resource. The individual site records have been classified according to the 'site type general' headings used in the Hereford and Worcester SMR, with some modifications based on the RCHME / English Heritage Thesaurus (RCHME 1995). This allows the ordering of records by broad function. The contributions made by the Marches Uplands Survey and the related projects are highlighted.

3.2 Palaeolithic

3.2.1 Upland areas in Britain

Palaeolithic material is rare in almost all upland areas, and where it does occur it is only on the upland fringes.

Evidence for the palaeolithic in the uplands of England and Wales has been summarised by Mellars (1986). There is a corpus listing of flintwork (Roe 1968), as well as a recently published extensive survey of lowland palaeolithic material (Wymer 1996).

3.2.2 Marches Uplands Survey area and environs

Around the Marches Uplands Survey area, the palaeolithic is known only from a very small number of single chance finds, the closest being at Llanyblodwel (Britnell 1984, M D Watson, pers comm), and Arrow Court, Kington (HWCM 8373: Norwood 1964, 348); both finds are thought to be later upper palaeolithic. Within the survey area there are no finds of this period.

3.2.3 Contribution of the Marches Uplands Survey

No sites or finds were recorded by the Marches Uplands Survey.

3.2.4 Conclusions

Upper palaeolithic activity is likely to have been scarce and ephemeral over most or all of the area, perhaps consisting of temporary or seasonal hunting camps.

3.3 Mesolithic

3.3.1 Upland areas in Britain

In upland areas Mesolithic material is most frequent on the upland fringes, although at a greater altitude than the earlier finds; in the south Pennines, finds are commonest between *c* 360 and 490m (Mellars 1986, fig 16). Stratified Mesolithic finds and occupation sites are rare.

Recent study of palaeoenvironmental evidence suggests that human activity in the early Mesolithic could be described as transient, with hints of local impact on woodlands and soils. In the later Mesolithic, however, there is evidence for widespread management of woodlands and their edges (Simmons 1996, 224)

Mellars (1986) summarises evidence for the Mesolithic in the uplands of England and Wales, and there is also a corpus listing of flintwork for the period (Wymer 1977).

3.3.2 Marches Uplands Survey area and environs

The corpus publication of Mesolithic flintwork (Wymer 1977) provides the most consistent assessment of the quality of the records. Nearly all Mesolithic records from the area (a total of 29 finds, 21 from Shropshire and 8 from Herefordshire) are chance finds. Few of the records represent more than a single item. Stanford (1980, 43) has noted the tendency for small quantities of Mesolithic material to occur among much larger collections of later flints, which suggests that more sustained and intensive fieldwork may be necessary to allow sites of this period to be identified. Half of the previously recorded finds were from the Clun Forest area. A perforated macehead from The Roveries (SA 1221) is the only reliably stratified find from the whole survey area, perhaps from a buried soil layer below the hillfort rampart.

Many of the finds from the Black Mountains seem to be stratified below peat. Gavin Robinson reported some probable Mesolithic flints from Cefn Hill (HWCM 164), apparently from the edge of a former lake or pool; this is in a very similar level hilltop situation to the recently published Waun Fignen Felen (Barton *et al* 1995), and at almost the same elevation (475m). The eastern summit ridge of the Black Mountains (at between 600 and 700m) has recently been a prolific source of flints, which have been collected from the eroding peat at several locations. Many of these sites have included Mesolithic material (A Foxall, C S Briggs, pers comm).

Palaeoenvironmental evidence from the survey area and nearby suggests that Mesolithic woodland clearance or management was occurring, both at Church Stretton (Osborne 1972) and the Breiddin (Musson *et al* 1991). This theory is strengthened by the evidence of lowland alluviation outside the survey area. The earliest alluvial sequences at Wellington (HWCM 5522) are of Mesolithic date, and are associated with the formation of peat deposits over the glacial gravels, now buried by as much as 3m of alluvium. This can be interpreted as evidence for woodland clearance on the surrounding hills and uplands, leading to soil erosion and deposition of alluvium in the valleys (E Pearson pers comm; see also Roseff 1992; Dinn 1996b).

3.3.3 Contribution of the Marches Uplands Survey

From the Marches Uplands Survey, two of the 20 fields which produced flints included Mesolithic finds (MUS 13704, 41659: Hurst 1993). Figures 8.1 and 8.2 show the distribution of Mesolithic sites and findspots within the survey area, including all Marches Uplands Survey records.

3.3.4 Conclusions

In the Mesolithic, whilst there is little by way of direct archaeological evidence for human activity in the uplands area, palaeoenvironmental evidence indicates that woodland clearance was taking place on quite a large scale. This would have been to facilitate hunting, both by managing habitats to attract certain animals to particular areas, and by providing open land for hunting with bows and arrows.

3.4 Neolithic to Bronze Age

3.4.1 Upland areas in Britain

While there is generally only slight evidence for upland settlement during the Neolithic (Darvill 1986c, 24), the early Bronze Age marks the high water mark in upland land exploitation before the medieval period (Lynch 1986), and woodland clearance may have been rapid. Survey in many of the upland areas of England and Wales has indicated the intensive nature of occupation and agriculture, from Dartmoor to the Cheviots. The recorded evidence includes field systems, barrows, and enclosed and unenclosed settlement. Palaeoenvironmental reconstruction, in association with archaeological survey, for instance at Shaugh Moor, Dartmoor (Balaam *et al*, 1982) and Cefn Gwernffrwd, mid-Wales (Chambers 1983) has been critical in understanding developments in this period of climatic optimum.

Continuity over long periods of time is evident in both site types and locations, especially in ritual sites. Identified settlement sites are rare. Although finds are the largest category of identified sites of this period, many are poorly recorded and imprecisely dated.

3.4.2 Marches Uplands Survey area and environs

The 'fossil landscapes' which have been identified elsewhere in upland Britain are much harder to see in the uplands of the Marches. While some elements can be discerned, only a restricted range of monument types datable to the Neolithic and early Bronze Age have as yet been recorded in the Marches uplands: principally barrows and ring-ditches, cist burials, and pits associated with apparent settlement activity. Other site types, such as enclosed or unenclosed settlements, field systems, and ritual sites, largely remain to be identified. Datable cropmarks in this area tend to reflect the same range of sites (identified on the basis of morphological comparison with sites already recognised), though some of the unidentified site types may be present but unrecognised among the archive of cropmark sites. There are very large numbers of lithic finds, though few made recently or under controlled conditions. No doubt the recorded sites conceal a great complexity of temporal and cultural associations, though this would require detailed reassessment.

Arnold (1990, 24) noted an 'explosion of data' between the Neolithic and Bronze Age in Montgomeryshire, and this can certainly be seen here in numbers of field monuments, though apparently not in finds. A shift in site and finds distributions is evident between Neolithic and Bronze Age, with Neolithic sites concentrated in the Black Mountains foothills and the south-eastern part of the Clun Forest, and Bronze Age more widely distributed on the Long Mynd, Stiperstones and Stapeley Hill, the Clun Forest, and higher in the Black Mountains foothills.

Evidence for continuing woodland clearance can be inferred from the presence of charcoal in deposits from the Breiddin from around 3000bc onwards, with a decline in pine noted in the pollen record from around 2750bc (Musson *et al* 1991).

At Dorstone Hill unidentified charcoal was collected, with radiocarbon dating giving dates from the Neolithic period (Pye 1967, 1969).

Prior to the Marches Uplands Survey, plant macrofossil remains of this date had not been recovered from any sites within the survey area. The limited sampling exercise on the Long Mynd (Dinn *et al* forthcoming) showed that remains do survive. An episode of burning had accompanied the construction of the Shooting Box barrow (SA 198; Dinn *et al* forthcoming), and the carbonised material recovered included wood charcoal, seeds and cereal grains, bramble thorns, nuts and tubers. There was also reasonable pollen preservation. Nearby, Neolithic charred plant remains have been recovered from Bromfield (Colledge 1982) and from Trelystan, Powys (Britnell 1982); however, these remains included no charred cereal grains. This has been interpreted not as evidence for absence of cultivation in the region, but as a possible indication for exchange between arable and pastoral communities (Hillman 1982).

Nearly all bone recovered from excavations consists of human bone from excavated barrows and cist burials, and many of these sites were not excavated under modern conditions. Bone in general does not survive well due to the acidity of the soils, unless it has been cremated, as at Bromfield (Stanford 1982), Trelystan (Britnell 1982) and Four Crosses (Warrilow *et al* 1986).

Unlike other areas with metalliferous deposits, there are as yet no suggestions of early mining in south-west Shropshire.

Field systems

In contrast with many other uplands (eg Dartmoor; Fleming 1988), no early field boundaries or systems have been identified The Long Mynd seems to have been characterised by grassland in the early Bronze Age; this could well have been unenclosed. Clearance cairns are frequently recorded as part of Bronze Age field systems elsewhere, but while they were commonly encountered in the field survey, only one, on the Long Mynd (MUS 40494/03), is likely to be early. The Shooting Box barrow (SA 198) showed evidence of a turf construction, with very little stone present. It can be suggested that little clearance took place, or indeed was required, on the Long Mynd.

Settlement

Settlement sites of the Neolithic to early Bronze Age are of course rare everywhere in Britain, and it is probable that there were few substantial stone structures. Few have been identified in the Marches; most of these are chance finds from excavations and produced no surface indications. Occupation deposits have been recognised at Pontesford Hill (SA 1055; Barker 1972) and The Roveries (SA 1221; Shropshire SMR), buried under hillfort earthworks. The presence of Neolithic or early Bronze Age finds or structures sealed below hillfort ramparts does not necessarily indicate any sort of continuity of activity, but may result from a common interest in hilltop or hillside siting. Many if not most of the excavated hillforts in the region have produced some form of evidence of earlier use.

Several sites in the Black Mountains area have produced evidence of Neolithic or Bronze Age settlement. At Dorstone Hill (HWCM 1551), the excavated evidence comprised occupation surfaces, hearths, a pit (see below), and stake- and postholes. Flints and pottery from the site were dated to the Neolithic (Pye 1967; 1969). Two areas on Cefn Hill (sites A and B: both referenced as HWCM 164) produced large numbers of flints and stone tools, which were dated to the Neolithic (Site A) and Bronze Age (Site B). These were apparently stratified within occupation deposits, but no structural remains were recorded (Gavin Robinson 1947). There is also no structural evidence from the claimed settlement sites at Abbey Farm (HWCM 162) and Birches Farm (HWCM 161), both Craswall, which are only represented by concentrations of flint and stone finds (Gavin Robinson 1951). None of these sites has received full publication.

Aerial photographic and fieldwalking evidence combines to suggest the presence of a late Neolithic to early Bronze Age settlement at Bryn Dadlu, Mainstone (SA 4404; MUS 41659); this is the only settlement site in the region where something of the form can be reconstructed. On this high (360m) south-facing slope, cropmarks (MU.45.2.1-5) indicate an unenclosed settlement consisting of five hut-circles. The flint scatter collected here (18 flints; MUS 41659/01) was far greater than any other recorded during the survey, though it was not confined to the area of the cropmarks.

Beaker pits occur sporadically in the surrounding lowlands (eg Rock Green, Ludlow: Carver and Hummler 1991; Bromfield: Stanford 1982), and there is an upland example from Collfryn (Britnell 1989, 104); these very characteristic oval pits are usually found only during the excavation of more extensive sites (Gibson 1982, 39-41). A Neolithic pit reported from the Dorstone Hill settlement (Pye 1967) appears to have been similar to these. A small number of other possible settlement sites (Haye Park, Richard's Castle, Herefordshire: HWCM 12656, and Ratlinghope: SA 7071) are not securely identified. Oddly, no burnt mounds have been recognised.

Ritual and burial sites

Traditionally, research into the Neolithic and early Bronze Age has concentrated on ritual and burial sites. A series of large and important ritual sites has been identified in the surrounding lowlands: Sarn-y-bryn-caled (Gibson 1994), Berriew (Gibson 1995), Walton basin (Musson 1995; Denison 1996, Gibson 1999), and Stretford, Wistanstow (Whimster 1989, 36-7). These comprise enclosures, cursus and henges, and at Hindwell a massive palisaded enclosure (Gibson 1999). Possible henges also occur in the Wye valley, around Winforton. The only major exception to the lowland distribution seems to be the group of stone circles on Corndon and Stapeley hills, which includes Mitchell's Fold and Black Marsh. A more widely distributed class of ritual monument in the Marches uplands is the ring-cairn; these are known to occur at locations in the Black Mountains (HWCM 13082) and Clun Forest (SA 1162, 2533). Single standing stones are widely distributed but scarce.

The Black Mountains mark the north-western extent of the Cotswold-Severn long barrow distribution. Several survive as earthworks in the eastern foothills, while the best known of the group is Arthur's Stone (Fig 9, HWCM 1528), where only the chamber stands above ground. Identified Neolithic burial sites are almost totally absent from the rest of the area. However, round barrows are much more frequent and widely distributed, occurring both in the higher uplands as earthworks (some of these are stone-built cairns) and in cultivated areas as cropmark ring-ditches. Few have been excavated, and virtually none recently. Consequently it is impossible to say whether the pattern of continuity from Neolithic to Bronze Age, as seen, for instance, at Trelystan (Britnell 1982) in the uplands, or Bromfield (Hughes *et al* 1995) in the lowlands, is matched within the survey area. The concentration of over 35 round barrows on the Long Mynd is very striking, and the results of the Marches Uplands Survey as well as other recent fieldwork have both indicated that this number could easily be augmented by further survey of this area. An earthwork barrow at Stanley Knap, Clunbury (SA 3104) is surrounded by an indistinct cropmark complex which may represent a more extensive burial or ritual site. While there are small groupings of barrows and ring-ditches at several locations (this pattern is echoed in the distribution of ring-ditches in the Severn valley (Watson 1991)), barrow cemeteries as such appear to be absent, although they are of course present in the lowlands, most notably at Bromfield (Hughes *et al* 1995). However, parts of the Long Mynd could be argued to be an extensive cemetery. The two barrows at Trelystan proved to be part of a long-lived cemetery including smaller barrows, and this site demonstrates the complexity which may be concealed by the apparently simple barrow earthworks. Some additional details of burial mound structure have been revealed by fieldwork. At Stanley Knap, cropmark evidence has indicated that the earthwork barrow is surrounded by a ditch, now completely infilled; the small trench excavated at the Shooting Box barrow (SA 198) on the Long Mynd showed that the mound was partially constructed of turfs; and ploughing for grassland improvement at the Llan-oleu cairn, Craswall, disturbed part of a stone kerb (Fig 10, HWCM 6127).

Single inhumation burials in cists, usually associated with Beakers, are by contrast rare, and have been recorded in the southern part of the study area only: Aymestrey Pit (Fig 11, HWCM 7060; Woodiwiss 1989), Olchon Court (two adjacent cists: HWCM 1585; Marshall 1932), and Trelan Farm, Craswall (HWCM 5493; unpub). Further possible examples were at Upper Llanon Farm (HWCM 1010: Marshall 1938, LXXIX), and Pentwyn Farm (HWCM 1011). At Trelan Farm and Upper Llanon Farm the cists were in barrows. Lowland sites in the surrounding areas have been recorded at Brinsop (HWCM 3208: Watkins 1931, 134-5) and Wellington (HWCM 5522: M Napthan, E Pearson, pers comm).

The distributional bias among burial sites appears straightforward: ring-ditches occur in the lowlands (including river valleys in largely upland areas, such as Oakfield, Bicton) and earthwork barrows on the higher uplands. This distribution demonstrates more clearly than most others the problem of the 'middle ground'; evidence here is very scanty, and it is by no means clear whether this reflects a genuine absence or the undoubted problems of fieldwork in this zone.

Finds

Most of the finds of this period are from fieldwalking (nearly all lithics), and there is very little excavated and far less stratified material. Lithic finds make up a very large proportion of the SMR records for the survey area (14% overall), but dominate the record for the Clun Forest area (over 35% of records). These finds have been made over a long period (mostly in the 1940s-50s) and few have been subjected to modern analysis (the Palaeolithic and Mesolithic material is an exception to this; see above). Most of the dated flint finds (which represent a small proportion of the total) seem to be Neolithic or early Bronze Age, and it may be significant that the later Bronze Age cemetery at Bromfield (Stanford 1982), one of the very few sites dated to that period in the region (see below), was almost completely devoid of lithics. Ceramic finds are rare, as can be seen from Woodward's review of excavated finds in the region (Hughes and Woodward 1995, 15-18); though the distribution map published there can now be augmented with unpublished and recently excavated material.

3.4.3 Contribution of the Marches Uplands Survey

Data collection produced a number of records of earthworks and findspots. New sites added by the Marches Uplands Survey fieldwork reflect the two major categories recorded on the SMRs, with three barrows (one probable and two possible sites) and twenty flint records. The MUMP identified no Neolithic sites within the survey area, but did record 62 Bronze Age sites. All but three of the latter, however, had already been recorded (47 by the NMR, and 49 by the SMRs). Figures 12.1 and 12.2 show the distribution of Neolithic and Bronze Age sites and findspots within the survey area, including all Marches Uplands Survey records.

3.4.4 Conclusions

The lack of fine-tuning of artefactual dating is exacerbated by an absence of stratigraphic sequences and scientific dating. However, in a number of areas there is clearly great potential for an improved understanding of the Neolithic and early Bronze Age landscape. It must be acknowledged that this potential has not been realised even in the Black Mountains and on the Long Mynd, the areas where there are the greatest known concentrations of sites. Nowhere are there sufficient identified or investigated sites for landscape changes to be visible. The major research questions at the moment centre around the understanding and classification of existing and known sites, though there are limited areas where the need for some prospective fieldwork is indicated. The potential for new discoveries from aerial photography in particular should not be disregarded, however. The Walton Basin survey not far from the Marches Uplands Survey area has identified a previously unknown Neolithic landscape in an area of extensive modern cultivation (Gibson 1999).

3.5 Later prehistory: Bronze Age to Iron Age

3.5.1 Uplands areas in Britain

Nationally, the later prehistoric period presents a steady retreat from the highest uplands, and there is evidence of a more intensive and structured use of the hillslopes and lowlands, including fortified sites, a process which may lead ultimately to the tribal pattern seen at the end of the Iron Age. Excavation of later prehistoric sites has not usually focused on the uplands as such. The hillforts form an obvious exception, though not all of the excavated sites are in upland locations. However, the changes which can be seen on the lower ground must be accompanied by significant changes in upland land-use, which may be visible in the archaeological record. Characteristic sites in both upland and lowland include the massive earthworks of hillforts, smaller settlement enclosures (which still have a defensive aspect in many cases), and 'ranch boundaries' and systems of smaller fields. Finds are generally rare, with a decline and eventual cessation of the use of flint, while the other uses of stone have until recently been poorly understood. The picture for the uplands of England and Wales is summarised by Lynch (1986) and Cunliffe (1986).

3.5.2 Marches Uplands Survey area and environs

No aspect of the later Bronze Age or Iron Age is well understood in the region, with the possible exception of the hillforts, which have dominated the study of later prehistory here even more than nationally (Fig 13). There is an apparent decline, both in the numbers of sites identified for the middle to later Bronze Age and Iron Age in the survey area, and in the range of site types represented, though there are hints of relationships between sites, and even organised landscapes, in some areas. The middle to later Bronze Age is particularly enigmatic, represented by not much more than a small number of linear earthworks and metalwork finds, with occasional lowland sites such as the Bromfield flat cemetery (Stanford 1982) standing out. While most of the limited excavated data from the region is from hillforts (excavations in the survey area have been even fewer), in practice much of this work has been on a very small scale.

The clear majority of known sites, as opposed to findspots, are earthworks; most of the cropmark sites which may prove to be later prehistoric are not securely dated. Finds are rare, but given soil conditions and the fragile nature of Iron Age pottery and metalwork this may be a reflection of poor survival and the difficulty of detection rather than a real absence of material. The lack of findspots is certainly a pattern which continues into the succeeding periods.

Environmental material reflects the range of excavations carried out on sites of this period. Within the survey area Stanford's excavations at Croft Ambrey hillfort (Stanford 1974a) produced large quantities of charcoal, some of which was identified as oak. Preservation of charred plant remains was poor but wheat and hazel were identified. Over 7000 fragments of animal bone were also recovered, and these included both domesticated and wild species.

Waterlogged wood has been recovered from two upland Iron Age sites close to the survey area: Collfryn (Britnell 1982) and from Buckbean pond on the Breiddin (Musson *et al* 1977; Musson *et al* 1991).

Agriculture and land divisions

A limited number of earthworks which are potentially related to later prehistoric agriculture or land boundaries have been recorded in the region. These consist of 'Celtic' fields, linear earthworks ('ranch boundaries'), and perhaps strip fields, and most are to be found on what is now unimproved or semi-improved upland (Figs 14 and 15). The only dated example is the linear earthwork at Devil's Mouth (SA 251) on the Long Mynd, where sampling carried out as part of the MUS produced radiocarbon dates of 1520-1320 and 1510-1260 cal BC from the buried soil below the earthwork. This is only one of a number of linear and other earthworks on the Long Mynd which may be associated (Guilbert 1975), though it is uncertain how well the early dates represent the life-span of these monuments. It is similarly unclear how these extensive but apparently simple boundaries relate to the rather more complex 'Celtic' field system earthworks at Caer Caradoc (SA 241), Black Knoll (SA 421) or Bircher Common (HWCM 11362); there may be a chronological distinction, or they could easily be different elements of the same system. Still less clear is the status of sites such as Stapeley Hill (SA 4328 and others; Fig 16), where linear earthworks, 'stone rows' and cultivation ridges form a distinctive though as yet undated pattern (Edwards 1994; Watson and Musson 1993, 23; Dinn 1996a, 18-19). Excavated cropmark field systems in the lowlands, for instance Sharpstones A (Barker *et al* 1991), and Duncote Farm (Ellis *et al* 1994) may add to our understanding of the form and dating of these earthwork sites.

Settlement and hillforts

There is very little evidence for unenclosed settlement in the region, with the exception of the newly-identified settlement at Black Knoll (Ainsworth and Donachie 1995). All of the other settlement sites which have been recognised are enclosed by ditches and/or banks, and none in the survey area have yet been excavated. There is a fuller discussion of enclosure settlement sites at the end of this chapter.

On the basis of data from excavated sites in the surrounding areas (both hillforts: the Breiddin (Musson *et al* 1991), and enclosures: Sharpstones A and E (Barker *et al* 1991), Collfryn (Britnell 1989), and perhaps Bromfield (Stanford 1995), a combination of circular and rectilinear buildings would be expected within these enclosures, though probably few finds. Croft Ambrey (Stanford 1974a) may be an exception, as there is only evidence for small four-poster structures here.

It is now well established that many of the region's hillforts have origins in the late Bronze Age or even earlier. Comparison with the size of the late Bronze Age rampart at the Breidden suggests that, on surface evidence alone, some of the region's hillfort earthworks could date solely from this period. Of the 25 hillforts within the survey area, five (Croft Ambrey, Burrow Hill, Pontesford Hill Camp,

The Roveries, Caer Caradoc) have been excavated; however, only at Croft Ambrey was the excavation large-scale, and even here this took in only a small proportion of the interior.

Ritual and funerary sites

Religious, ritual and funerary sites appear to be absent from the survey area, in common with many other parts of Britain; the Bromfield barrow burial (Hughes 1994) is unparalleled in the region. Burials may commonly have been inserted into pre-existing barrows, but no others have been recognised. The Combe Moor metalwork find (HWCM 6230) could perhaps have been a ritual object or have formed part of a ritual deposition.

Finds

Unassociated later prehistoric finds are extremely rare in the Marches uplands (fewer than 20 from the survey area), and consist mostly of metalwork. The only pottery finds are from excavated contexts; late Bronze Age pottery in particular is rare, and apparently absent from the southern part of the region (Hughes and Woodward 1995, fig 4). The majority of the metalwork finds seem to be late Bronze Age, while the extremely small number of Iron Age finds consist of metal or worked stone (spindlewhorls, a quern) and do not represent adequately the diversity of materials or object types which occur on excavated sites. It must be acknowledged, however, that finds are generally scarcer on excavated later prehistoric sites in the Marches (eg Collfryn; the Breiddin) than on lower-lying sites to the east (eg Beckford, Worcs).

3.5.3 Contribution of the Marches Uplands Survey

As the evidence for later prehistory consists almost entirely of large and obvious earthworks, or cropmark enclosures, it is unsurprising that no new sites were added by Marches Uplands Survey fieldwork. Although seven enclosures were fieldwalked, no datable finds were recovered from any of them; however, this lack of surface finds has been noted for similar sites across the border in Wales (R Silvester pers comm).

The MUMP, by contrast, in addition to specific monument types, identified several areas of field systems of probable or definite Iron Age or Romano-British date. In some cases these could be associated with enclosures and/or hillforts, and form fragmentary relict landscapes.

The Black Knoll study of an earthwork field system on the southern tip of the Long Mynd plateau (Edwards 1994) highlighted the potential interest of this site, and subsequently the RCHME carried out a detailed earthwork survey (Fig 17; Ainsworth and Donachie 1995). This revealed that the earthworks comprised not only a field system but also a nucleated settlement, and on the basis of comparison with other similar sites, suggested an Iron Age to Romano-British date for the complex. Detailed earthwork survey revealed more than one phase of activity.

Figures 18.1 and 18.2 show the distribution of Iron Age sites and findspots within the survey area, including all Marches Uplands Survey records.

3.5.4 Conclusions

While later prehistoric sites must surely be present and even abundant in and around the uplands, they are often undiagnostic in form, not easily recognised on the ground or from artefact scatters, or not easily dated. The results of the MUMP, however, provide a very good basis for any future consideration of the Iron Age in the region. Further aerial photographic work, including new flying, would clearly be of benefit. The areas of relict landscapes identified by the MUMP could usefully be further examined using other techniques.

3.6 Iron Age to Romano-British settlement sites

This section covers a particular site type, and is not structured in the same way as the other period-based sections.

Enclosure sites are widely distributed and consist of a bank and/or ditch (or multiple circuits) enclosing a small area, usually less than 0.5 ha (Fig 19). Plan forms differ very considerably; Whimster (1989, 35-57) provides the most complete discussion of enclosure morphology. Small enclosures of this type have increasingly been recognised as the typical later prehistoric and Romano-British settlement site in many areas of Britain, most notably in the north and west. The Marches have only belatedly been seen to conform to this pattern. Spurgeon (1972) first noted the existence of earthwork enclosures as a class in this region, while the cropmark sites were first classified on a large scale by Whimster (1989).

Excavations of (mainly lowland) sites in the region outside the survey area have begun to provide information on dating, as well as revealing details of internal layout and indications of their economic basis (M Watson pers comm). Over 20 have now been sampled by excavation in Shropshire alone. From just outside the Marches Uplands Survey area, the most notable recent excavations include Collfryn (Britnell 1989), Sharpstones Hill (Barker *et al* 1991), Bromfield (Stanford 1995), and the Shrewsbury bypass sites (Preston, Calcott and Duncote Farms: Ellis *et al* 1994).

The excavated enclosures generally date to the Iron Age and Roman period. Some are primarily middle to late Iron Age in date (for instance Bromfield). Others are equally clearly Roman (Duncote Farm). Many, such as Collfryn, span the two periods, and there is little indication of major changes at the Conquest. At the later end of the sequence, the New Pieces enclosure adjacent to the Breiddin produced glass which has been dated to the 5th to 6th centuries AD, though the nature of any use of the site at this time is unknown.

As yet there is no clear way of dating unexcavated enclosure sites, whether earthwork or cropmark, from their surface morphology. Guilbert (1975) suggested

that the two enclosures at Ratlinghope might be as early as the Bronze Age, on the basis of their presumed association with the linear earthworks on the Long Mynd. The Devil's Mouth linear earthwork (SA 251), sampled during the Marches Uplands Survey, has a *tpq* of around 1500-1300 BC (radiocarbon dates from soil horizon buried below the bank; Dinn *et al* forthcoming). In the same area the MUMP has identified a field system of possible Iron Age date, which Stoertz (forthcoming) suggests is related to an enclosure and hillfort, and all of Iron Age date. A number of upland enclosures have been dated to the Iron Age, on the basis of siting or morphology (eg Bodbury Ring, Dorstone Hill), but these attributions have not been tested. A further suggestion is that the more angular or rectilinear examples show Roman influences and may therefore be post-Conquest in date. However, within the scope of the work during the Marches Uplands Survey no significance could be assigned to this variation (Cathy Stoertz pers comm), and this is matched in the vicinity of Wroxeter (White and Barker 1998, 68), and elsewhere (Hingley 1989, 140).

Enclosures are now generally believed to have been primarily settlement sites, and many of the excavated sites contain remains of houses and other features relating to domestic and agricultural use. Internal features rarely show as cropmarks (Whimster 1989, 36), and only excavation is likely to provide such detail. The internal details excavated even on sites with relatively poor preservation, such as Bromfield, add very significantly to what can be interpreted from cropmarks alone, while Collfryn demonstrated the potential of better-preserved sites. Other sites have been suggested as Roman signal stations (Linley Hill, Webster 1956, and Edenhope Hill, Watson and Musson 1993, 43; see below) or prehistoric ritual sites (Stretford Bridge, Whimster 1989, fig 22, no 19), but these seem to be exceptional in plan form.

Aerial photography over the last 20 years has increased the numbers of recorded enclosure sites in the region very considerably. Their distribution does show biases: the average density in Whimster's study area was 14.97 per 100km^2 (Whimster 1989); 13.08 per 100km^2 were recorded in the Herefordshire valleys (Dinn 1996b); 37.5 in the Wroxeter hinterland (Buteux *et al* 1993); 39.66 in the MUMP area outside the MUS area, and 24.39 were recorded by the MUMP within the Marches Uplands Survey area. Whilst it might be tempting to suggest that this represents a real variation in distribution, it is quite likely to demostrate the difficulty of identifying these sites. The majority are recorded as cropmarks, and since the dominant land-use in the Marches Uplands Survey area is pasture, they would be less frequently observed. The large numbers around Wroxeter could similarly reflect the amount of flying which has taken place around the Roman city, and the small numbers in the Herefordshire valleys may be related to the depth and extent of alluviation.

3.7 Roman

3.7.1 Upland areas in Britain

Some of the best-surviving military works in Roman Empire are found in upland areas of Britain. Conquest of these areas took the Roman army a long time, and a considerable effort, as historians including Tacitus describe. Subsequently these areas were kept under close military supervision. Large numbers of forts survive, especially in the Penines and Wales.

Mineral resources were of great interest to the Roman Empire, and mines were under imperial control. Most of the mineral deposits the Romans were interested in were in upland areas, and some have been identified, including gold from Dolau Cothi and silver and lead from the Mendips. Remains of Roman mining are difficult to identify, since the areas have in most cases been reworked since. The Roman road network exends into upland areas to serve and supply the military and mining sites.

The distribution of villas and substantial towns in the south-east of Britain has led to the assumption that wealth in the Roman period was centred in this area. However, animal products, especially wool and leather, were amongst the most prominent exports from Britain, and the majority of this was probably derived from upland pastures.

There are remains of settlements and field systems surviving in quite a number of upland areas, and in some areas, such as Northumberland, our understanding of the settlements and their material remains is good. In many other upland areas of Britain the range of settlement forms is not clear, nor are any changes which took place through the Romano-British period. It is clear, however, that settlement in the uplands is characterised by its essential continuity from the pre-Roman Iron Age.

Upland areas in Britain should not be regarded as peripheral areas in terms of importance during the Roman period. It is likely that in some upland areas the population was more dense then than at any time until the early modern period. It is probable that the contribution made by upland areas to the Roman economy may have been bigger than the available evidence now suggests.

This summary was distilled from Todd's account of the Roman period in upland areas (Todd 1986).

3.7.2 Marches Uplands Survey area and environs

The number of Roman sites recorded on the SMRs from the survey area is extremely small (total 42: Herefordshire 9, Shropshire 33). This is in contrast to the distribution in the adjacent lowlands where Roman sites are much better represented. Roman pottery tends to be easily visible, and the majority of the records from the survey area are of stray finds (22 in Shropshire, 7 in Herefordshire). Apart from finds there are villas at Linley (SA 1226) and Stowe (SA 1776), a cropmark fort at Bicton (SA 3047), and the earthwork on Linley Hill

(SA 1234; Webster 1956). The evidence for Roman mining is largely confined to lead pigs, and the suggested Roman workings at Roman Gravels (SA 1318) and Norbury (SA 3797) are unconvincing. Some of the major Roman roads have been traced (eg Watling Street West; SA 108 / HWCM 6089).

Settlement

The extreme paucity of Roman finds from native sites in mid and north Wales led Hogg to argue that the area was wholly devastated by Agricola's campaign, as described in Tacitus' *Agricola* (Hogg 1966, 30 and 35), with widespread abandonment of hillfort settlements. This view is now, however, largely discredited, and Tacitus' statement is read as a rhetorical device appropriate to the context in which he was writing (Hanson and Macinnes 1991, 86). The depopulation theory was exchanged for one in which a change was seen from settlement in upland hillforts to lowland enclosed sites, as a result of the Roman conquest (Stanford 1974b, 54; 1991, 91).

The results of aerial photography, both from new discoveries and from the consistent assimilation of earlier photographs, have played a part in developing this theory, but are now causing it to be revised. The concentrations of enclosure sites in the lowlands are now known to be matched in the uplands, though not currently at the same density. While only a very few of these sites are as yet datable (see above), the limited indications of dating from an excavated sample of over 20 in Shropshire suggest that a large proportion, perhaps as many as half of all sites will produce Romano-British settlement evidence, while many, for instance Sharpstones Hill site E (Barker *et al* 1991, 43) and Collfryn (Britnell 1989, 119), show continuity of use from the late Iron Age until well into the Roman period.

The new evidence therefore indicates a late Iron Age settlement pattern of large hillforts interspersed with smaller, enclosed settlement sites, both on low and high ground. This new understanding of Iron Age settlement has implications for the interpretation of the nature of settlement in the Roman period. The level of continuity from the Iron Age to the Roman period is greater than has been assumed in the past. People continued to live in the small enclosed settlements of 'Romano-British' or 'native' style which they were inhabiting before the arrival of the Romans.

The lack of villas and other obviously Romanised forms of settlement do not therefore have to imply a lack of population, given the presence of so many enclosure sites. The almost complete absence of Roman pottery from the Marches Uplands Survey fieldwalking seems surprising in comparison with lowland and more Romanised areas of the country. However, in view of the relatively low-level use of pottery in the preceding period (Britnell 1989, 119), the small quantities of Roman pottery are likely to indicate continuation of the local aceramic tradition (Davies 1974, 34). Nor does the lack of the trappings of a Romanised lifestyle have to imply poverty; rather, it may indicate the continuation of a social difference predating the Roman period, and suggests that wealth may have been measured differently, possibly in terms of livestock, or social power and influence, neither of

which would necessarily be observable in the archaeological record (Hingley 1989, 145-148). White and Barker (1998, 35) suggest that this was indeed the case in the preceding period for the *Cornovii*, whose territory extends into the northern part of the Marches Uplands Survey area from the Long Mynd northwards. Taxes, however, did have to be paid, and this may have changed the economic basis of society, but the acquisition of cash would not of itself lead to Romanisation in the material sense (Hingley 1989, 145, 159).

Agriculture

The economic basis of settlement in the Marches Uplands Survey area during the Roman period is uncertain. Upland areas are generally assumed to have been pastoral (Todd 1986), and to date there is no evidence to the contrary in the survey area. There are indications of localised, but not widespread, arable cultivation at relatively high altitudes from earlier periods (Edwards 1994), probably continuing into the Roman period.

Environmental evidence from the survey area no answers at present (de Rouffignac 1992), but pollen analysis could provide useful information, and micromorphological studies of buried soils to identify cultivated areas could be revealing.

Industry

The mineral resources of the area are assumed to have been exploited by the Romans, although the evidence is slight. The discovery of five lead pigs of Roman date from the area around Minsterley (SA 1323, SA 3503, SA 3504, SA 3505, SA 3523) indicates that exploitation of the lead mining area of south Shropshire dates back at least to the Roman period. No Roman lead mines have been conclusively identified due to the extensive working of the area in the post-medieval period, although finds of Roman mining implements were reportedly recovered from a shaft at Roman Gravels Mine during the nineteenth century (SA 1318, Dinn 1995, 9). Much effort has been expended in attempts to identify Roman sites relating to lead mining activity, which has led to a tendency to interpret any Romanised material in or near the south Shropshire lead mines as associated with Roman mining. The earthworks associated with the Linley Hall villa site (SA 1226) are a case in point, since these appear to lie some distance from the ore source. Field investigation of the possible 'hydraulic mining' at Norbury (SA 3797) has led to the suggestion that the earthworks represent unevenly preserved ridge and furrow rather than mining remains (Dinn 1995, 9). Any confirmed remains of Roman lead mining which are discovered would clearly be of great importance.

Military activity

A number of the accounts of the Roman period in the area concentrate on the military history (Frere 1987; Salway 1981). The basis for the study of military activity in Wales and the Marches is Tacitus' accounts of the campaigns waged between 48 and 78 AD. Other authors propose links between historically recorded events and the surviving archaeological sites in the area (Stanford 1991; Jarrett (ed)

1969). The Marches Uplands Survey area is almost devoid of military features, however, with the possible exception of a fort south-east of Bicton (cropmark site SA 3047), and the identification of this site is regarded as dubious (Frere 1970, 382). By contrast, in the lowland just to the east of the survey area and along Watling Street (West) there are clusters of forts around Leintwardine and Stretford Bridge. Access to the west generally followed river valleys, and therefore the roads to Caersws and Clyro marking the military advance into Wales lie in the lowland outside the survey area. Two possible signal stations have been identified in the uplands, at Edenhope (SA 3798; Watson and Musson 1993, 43) and Linley Hill (SA 1234; Webster 1956).

3.7.3 Contribution of the Marches Uplands Survey

Prior to the survey, there were just 38 Roman SMR records for the survey area in Hereford and Worcester and Shropshire (28 findspots, 4 roads, 3 villas, 1 fort and 1 lead mine). The Marches Uplands Survey bibliographic search increased this with 4 more references to findspots and 1 more to a road. Rapid survey added no new earthworks which could be positively identified as Roman. Only two sherds of Roman pottery resulted from the 210ha of fieldwalking, a very small quantity compared with both the earlier and later material. The Marches Uplands Mapping Project was more productive, as it identified 24 enclosures of 'Romano-British' type (recorded as 'unknown prehistoric'; Cathy Stoertz pers comm). Figures 20.1 and 20.2 show the distribution of Roman sites and findspots across the survey area, including all Marches Uplands Survey records.

3.7.4 Conclusions

Despite the small numbers of finds, the evidence of enclosure sites can be regarded as demonstrating that the area was far from deserted during the Roman period. These sites are, however, more difficult to locate in improved grassland which rarely reveals cropmarks or parchmarks, and which is likely to have destroyed any surviving earthwork traces. More enclosures are therefore likely to be found in the survey area and similar upland areas.

The distribution of Roman sites and findspots across the survey area appears to diminish in the southern and northern parts of the Marches Uplands Survey area. However, as there are so few sites in the area as a whole, it is not possible to say whether the variation is real or a reflection of the types of fieldwork undertaken and the nature of land-use in the area. More, specifically targeted, fieldwork would be required to clarify this question.

The methodological implication of low pottery use and a general lack of Romanisation is that in an area where Roman pottery is rare, a settlement site may be indicated by just one or two sherds. This may have implications for the interpretation of what is found in hillforts in the area, since continuing occupation could well be indicated by a few sherds of pottery. The presence of Roman pottery in some of the hillforts of the area has been interpreted as indicating sporadic, seasonal use (Davies 1974, 35), but it is possible that occupation with minimal use of pottery continued into the Roman period. This would go some way towards

explaining the considerable quantities of Roman pottery found at sites such as Poston Camp (Anthony 1958). Further excavation of hillforts showing evidence of occupation in the Roman period could elucidate the issue.

3.8 Early medieval

3.8.1 Upland areas in Britain

The early medieval uplands of England and Wales have received little study. There is a general dearth of field monuments from the whole period 400-1050, and few are distinctive enough in form to be identified from surface evidence alone. Finds are often scarce, and only frequent in cemeteries or on late occupation sites. In addition, the historical sources are often ambiguous and provide little information on rural life or the uplands.

Despite the paucity of material remains, recent research into sepulchral inscriptions on stones from Wales reveals that a highly literate culture survived and was flourishing in the 7th-9th centuries. These inscriptions can be read as sophisticated linguistic devices which play with words, meaning and quotations following a tradition which goes back through Classical Latin and Greek to Hebrew texts. The letters inscribed in some cases are clearly derived from manuscript forms, which is a further indication of a highly literate tradition (Howlett 1998).

3.8.2 Marches Uplands Survey area and environs

All of the difficulties mentioned above appear to be multiplied in the Marches; while there is a particular impetus here in the wish to understand the nature of the frontier between Anglo-Saxon and Celt, the nature of the frontier and the lack of any clear definition of material culture on either side of it adds to the problems. The archaeological resource is so slender that inevitably the period has to be considered almost totally within a historically imposed framework, with the identification of historically attested sites (Offa's Dyke, the *burhs*, the pre-Conquest castles) being given a high priority. The periods preceding or in between these intermittent bursts of earthwork construction remain as difficult to approach archaeologically as ever. There is a palpable contrast between the physical presence of Offa's Dyke, the largest monument of its date in Europe, and the absence of even remotely contemporary material of any sort to either side of it. The documentary and place-name evidence for the region in the early medieval period has therefore usually been discussed without reference to the archaeological data (Gelling 1992; Davies 1982).

The level of Welsh influence in parts of the borders during at least part of the period is evidenced by missionary activity in Herefordshire, with many churches being dedicated to Welsh missionary saints, such as Dyfrig and David. This influence in church matters continued into recent times, and it was only in the early 20th century that a number of parishes in the Herefordshire Black Mountains

(formerly in the diocese of St David's) and to the west of Oswestry (St Asaph) were transferred to English dioceses.

The very limited nature of the archaeological material is indicated by the number of SMR records for the entire period. For Herefordshire there are 9 (including 5 references to Offa's Dyke). In Shropshire, the total of 16 records includes Offa's Dyke (SA 1000) and a single findspot (SA 3010), but the remaining 14 (while they do include some unconfirmed earthwork records) are all to some degree circumstantial. No new sites were identified by the Marches Uplands Mapping Project, and both of the two added by data collection are circumstantial. Unsurprisingly, given the nature of sites of this period, no new records were added by fieldwork, although several stretches of Offa's Dyke were recorded. There are three possible *burh* sites, at Clunbury (dubious), Lydbury North and Pontesbury, as well as others just outside the survey area (Chirbury).

There has only been very limited environmental work on sites of this period (for instance in Wales: Caseldine 1990, 110), and virtually none in the study area (de Rouffignac 1992), in spite of the demonstrated potential at some locations on Offa's Dyke.

Figures 21.1 and 21.2 show the distribution of early medieval sites and findspots within the survey area, including all Marches Uplands Survey records.

Offa's Dyke

Whatever the true purpose of Offa's Dyke (and this has been extensively debated by Fox (1955), Noble, Hill and others), its study has dominated early medieval studies in the region. Its size and prominence, however, perhaps explain this, since it is the longest earthwork boundary in Britain (Figs 23 and 23), and one of few monuments of its period. Most recent work has been carried out by the Offa's and Wat's Dyke Project (Hill nd). Excavation has concentrated largely on the constructional details of the Dyke itself, and its wider archaeological potential has rarely been tapped; this includes environmental sampling as well as possible evidence from features to either side of the Dyke, or intersecting with it. A small number of cropmark features which appear to be cut by Offa's Dyke have been noted from aerial photographs. The other upland linear earthworks in the region (on the Long Mynd and around the Kerry Ridgeway) are no longer thought to be associated with Offa's Dyke.

Burh *sites*

More certainly defensive are the *burhs* dating from the Danish wars of the late ninth and early tenth centuries. Several locations in or around the northern part of the survey area have been cited as *burh* sites: *Weardbyrig* (possibly Westbury or Caus), Pontesbury, Lydbury North, Chirbury, and Clunbury. While Chirbury and *Weardbyrig* have been identified from written sources, the others are circumstantial, and none of the sites has been positively demonstrated by fieldwork. The identification of a series of comparable sites west of Offa's Dyke as

Dark Age (Musson and Spurgeon 1988) has recently been challenged by Huggett and Arnold (1995).

The administrative arrangements made by the Normans for the Marches were anticipated to some extent in the years from *c* 1050, when renewed attempts were being made to extend English control westwards over the border areas (Stenton 1971). Pre-Conquest castles are recorded at Richards Castle and Ewyas Harold. Settlements associated with these castles may also prove to be significant, however, no early features have as yet been defined at these sites.

Settlement

No houses or other domestic buildings are known from the period in this region (although there are lowland examples from the immediate post-Roman period at Wroxeter, and there is the slightest of evidence for ninth century occupation at Leintwardine). Evidence for the use (or re-use) of enclosure sites is limited to one or two pieces of glass from New Pieces, Powys (see below).

Religious sites

Documented pre-Conquest religious sites were mainly in the lowlands, and there is very little pre-Norman fabric in any of the Marches churches. An important exception is a small group of stone grave markers from the eastern Black Mountains. This is, however, a very disparate group, comprising a pillar from Llanveynoe (HWCM 1456), dated to the sixth century but only known from a record by Edward Lhuyd from the end of the seventeenth century; a tombstone of the ninth century from Clodock church (HWCM 7174), and two grave-crosses of the mid eleventh century at Llanveynoe church (HWCM 7178). While these are in an area of known Welsh Christian activity (both Clodock and Llanveynoe churches are dedicated to Welsh missionary saints), it is uncertain if any significance can be attached to this concentration.

Three excavated prehistoric barrow cemeteries in the surrounding area have produced early medieval inhumation burials: Trelystan (Britnell 1982, 161-3; 7 graves excavated), Four Crosses (Warrilow *et al* 1986, 61; 5 graves), and Bromfield (Stanford 1995, 130-41; Hadley 1995; 31 graves). These sites exemplify the re-use of earlier ritual or burial sites by the early Christians. It is likely that more such sites may be anticipated.

Finds

The region is believed to have been more or less aceramic for the whole of the early medieval period. Only very few pre-Conquest pottery finds have been recovered. Other finds from the region seem to be Saxon in character, and most are from burials. The only stray find recorded is the jet bead noted above (SA 3010). Part of a glass vessel dated to the fifth-sixth centuries AD, from the New Pieces enclosure on the Breiddin (Musson *et al* 1991, 194) is a solitary link to the series of sites in the south and west of Wales which have produced early post-Roman material.

3.8.3 Contribution of the Marches Uplands Survey

There were no finds of early medieval date.

3.8.4 Conclusions

The lack of material evidence from the uplands area, as from Wales, for this period is surprising. The monumentality of Offa's Dyke, and the recent suggestions of the survival of a highly literate culture (Howlett 1998), would suggest that more physical traces remain to be found. It is possible that sites which continue into this period are not always being recognised.

3.9 Medieval

3.9.1 Upland areas in Britain

The medieval is the earliest period for which written documents survive which describe how the landscape was laid out, used, and how it changed through time. This relates to both upland and lowland. The combination of documentary sources and fieldwork is contributing to a developing picture of upland areas. Changes in patterns of settlement during the medieval period are visible, due both to population fluctuations and to climate changes. The 13th century sees population expansion and moorland clearance. A decline in population and climatic deterioration follows in the 14th century. The population rises again in the 15th century, which sees the creation of new isolated farmsteads with surrounding fields. This is a crude model, however, and despite general climatic changes, local weather conditions have a significant effect in different areas of the country.

The role played by manorial lords in managing the countryside is a significant factor in the uplands as well as in lowland areas. Many large estates would have included upland as well as lowland, since both contributed to a balanced manorial economy.

Uplands were primarily pastoral areas, although subsistence level arable cultivation supported permanent inhabitants. Seasonal occupation during summer months was common, and shepherds or even whole communities would migrate to upland areas on an annual basis. The remains of shelters built for transhumance are common in all upland areas, although some became permanently occupied, and survive as farms.

Quarrying was common in upland areas for building stone, and in specialised locations for roofing slate, millstones and whetstones. Minerals were also exploited, including coal, iron, silver, tin, and most of all, lead. Water power was used for mills and for other industrial applications, including processing of mineral ores.

Hunting parks and royal forests would frequently be located in upland areas, as were rabbit warrens. These all left distinctive earthwork traces which allow them to be recognised without too much difficulty.

Upland areas were extensively used by monastic establishments, either through the construction of granges, or for grazing, although there are few upland monasteries. Extensive grazing rights for cattle, sheep and horses are recorded in documents, and the mineral wealth of upland areas was also exploited, especially by the Cistercians.

Many medieval routeways passed through the uplands, both local and more important manorial routes. Droveways relating to transhumance and other large-scale movements of stock can still be seen, and other routes survive as deeply cut holloways or braided packhorse trails.

Upland areas in the medieval period were a specialised part of the economy, and different from but mutually dependent with the lowlands. Medieval uplands were a properly organized and well-managed landscape, although fluctuations in their use are visible.

This summary has been principally derived from Moorhouse (1986).

3.9.2 The Marches Uplands Survey area and environs

The Welsh Marches

The Marches Uplands Survey area lies within the medieval border zone between England and Wales which was administered by the Marcher Lords, and within which a legal system different from that of the rest of England applied. The boundaries of the different lordships varied throughout the period, but a map of their extent in the 14th century can be found in Davies (1989) and is reproduced here (Fig 24, from Davies 1989, map 8).

Settlement

Settlement in the Marches Uplands Survey area lies at the eastern edge of the the Welsh area described by Sylvester (1969, 200) as an 'almost unbroken expanse of dispersed dwellings', and on the edge of the 'mixed patterning' of the English counties east of the modern border (*ibid*). Nevertheless, a number of deserted and shrunken medieval villages have been recorded for the survey area (SMR records for Shropshire: 16 deserted settlements, 2 shrunken; for Herefordshire: 6 deserted, 5 shrunken). This is clearly an area where recent fieldwork is having a considerable impact, since the map reproduced by Roberts and Wrathmell (1995, Vb) on the basis of Deserted Medieval Village Research Group information available in 1968 appears to show only three deserted settlements for the entire survey area. It is not an area of villages with 3-field system around in 'classic' medieval style, although a certain amount of ridge and furrow is recorded on the two SMRs.

The provisional rural settlement maps reproduced by Roberts and Wrathmell (1995, Appendix 5) place the survey area in a national context. Map Vb, showing the intensity of dispersion, indicates that the Black Mountains survey area lies within a zone of high to very high density, whilst the Clun survey area is zoned as very low density.

The medieval period saw the emergence of towns, many of which in the Marches were strategically planted boroughs established by the Marcher Lords. In the survey area these included Caus, Clun, Bishop's Castle, Wigmore, Stapleton, Richard's Castle, Kington and Huntington. Planning of villages is also apparent, and probably also due to Norman Lords.

Agriculture

Of the ridge and furrow recorded in the survey area and fieldwork transects some is likely to be of medieval date, but the majority is later since it post-dates enclosure of open land into fields, which was taking place up to the mid-nineteenth century. Of 120 records of ridge and furrow from the ground survey, very few were diagnostically medieval. Ridge and furrow of all periods was severely under-represented on existing records. As in lowland areas, the former open fields surrounding villages and townships can also be recognised by 'reversed-S' ridge and furrow earthworks, while the pattern is also sometimes fossilised in field boundaries, for instance at Wentnor, and Hinton, Peterchurch, or as strip lynchets, as at Lingen (Fig 25). Earthworks and field boundaries are conventionally taken to exemplify the medieval pattern, although the features themselves usually date to the post-medieval period. There is very little evidence in the survey area for the traditional medieval 'three field' system. Strip fields were recorded in only eight of the 3368 land parcels surveyed during rapid survey. The survey area is on the edge of Rackham's 'ancient countryside' and upland zones (1986, fig 1.3). However, ridge and furrow identified as probably of medieval type was recorded by the MUMP in 38 parishes. Preliminary analysis suggests that it was commonest in the Black Mountains, Ludlow Anticline and Clun Forest areas, and absent from the Selattyn area.

It is assumed that the dominant land-use during the medieval period was pasture, primarily for sheep. The physical remains which would be associated with this would therefore include sheepcotes. Sheepcotes are a type of medieval agricultural site whose significance and distribution has only recently been highlighted (Dyer 1995). It is clear from extensive medieval documentary evidence that it was customary to keep sheep in sheepcotes between November and April. The character and significance of these sites had not been published when ground fieldwork was underway, so it is likely that some have been misinterpreted. Four probable examples were identified during post-fieldwork analysis (MUS 40127/04 at Ritton Castle, Shropshire; 40750/01 on the Long Mynd above Ratlinghope; 41505/01 near Five Turnings north of Knighton, and 13678/04 west of Lingen). On the evidence put forward by Dyer (1995), many more sheepcotes would be expected within the survey area. Some of these may of course have vanished without trace; others may have been incorporated within later farmsteads.

Two crofts and five tofts were recorded by the Marches Uplands Mapping Project. Few fishponds were recorded in the survey area. Pillow mounds and warrens are discussed in the post-medieval section below; there is documentary evidence that at least one of the recorded warrens was in use in the post-medieval period.

Defensive sites

Archaeologically, the effect of the area's position on the border can be seen in the number of earthwork castles within the survey area, of which 58 are recorded on the two county SMRs. There are proportionately more earthwork castles in the Herefordshire part of the survey area (a total of 30, against Shropshire's 28). However, there are 10 moated sites recorded on the Shropshire SMR, but only two in Herefordshire.

Defensive sites were recorded both by rapid survey and by the Marches Uplands Mapping Project. These were mottes, mottes and baileys, and ringworks, but none were previously unrecorded.

Parks and forests

Very large areas were included in forests and chases. These included Mocktree, Bringewood, Wigmore and Deerfold (royal forests in north-western Herefordshire), and the Long Forest (Long Mynd) and Stiperstones in Shropshire; some of these areas will have been well wooded. Features associated with forests include enclosures and woodbanks; there is also potential for atypical settlement and agricultural patterns, as well as other types of land exploitation (including industry). There were other extensive areas of unenclosed upland common, especially in the western Clun Forest and the Black Mountains.

Industry

Medieval lead mining is documented in the Shelve area (VCH 1989b; Dinn 1995) but has not been identified in the field.

A number of mill sites were recorded during fieldwork, but although they may date back to the medieval period, only the confirmed post-medieval attribution was recorded.

A very large number of quarries were recorded during rapid survey, and some of these also may date back to the medieval period, but no clear evidence for medieval dates could be established.

Monastic sites

A number of monasteries had granges and extensive landholdings in the uplands, as well as grazing rights on the then much larger commons; these included Ewyas Harold, Llanthony, Dore (Williams 1976), Craswall, Wigmore, Limebrook, Chirbury, Alberbury, Haughmond, Buildwas, and Strata Marcella. Kinnerton (Fig 26; SA 2922; MUS 40685/01) is one example of a grange (of Buildwas) where

earthwork remains have newly been identified. The granges themselves are often well documented, although little work has been done to tie this into field evidence.

This pattern follows that for upland areas in the country as a whole, described above. Despite the extensive landholdings and granges, in the Marches Uplands Survey area there are few actual monasteries: the physical remains of only three sites (a nunnery and two priories) are known in Herefordshire, and only one in Shropshire (a preceptory).

3.9.3 Contribution of the Marches Uplands Survey

A total of 24 new medieval sites were recorded during the data collection phase of the survey, and 79 medieval sites were recorded during fieldwork. This includes some linear sites which were recorded several times (in different land parcels), and 15 fields which contained medieval pottery recovered during fieldwalking. The MUMP recorded 268 medieval and 529 'unknown (medieval)' sites (the latter being sites of post-Roman to 19th century date). The majority of previously unrecorded fieldwork sites were related to agriculture, although a few known castle sites were recorded. The MUMP sites followed the same pattern.

Figures 27.1 and 27.2 show the distribution of medieval sites and findspots within the survey area, including all Marches Uplands Survey records.

3.9.4 Conclusions

One of the problems for the medieval period is that continuity of settlement and land-use into the post-medieval period can mask the earlier remains. 'Undated' fieldwork sites were generally attributed to the post-medieval period during the analysis phase unless there was a good reason to suggest a medieval date. Consequently, medieval features may well be under-represented in the results of the survey. More detailed and intensive survey could probably correct this to some extent, especially in areas for which good cartographic evidence is available.

3.10 Post-medieval

3.10.1 Upland areas in Britain

Archaeological surveys of British uplands have tended to focus on remains from earlier periods. Although there has been a general recognition that post-medieval remains are widespread, few of the surveys have acknowledged their complexity or significance. In some cases, fieldworkers may have been discouraged by the sheer volume and diversity of post-medieval remains, in particular where interpretations are not immediately clear.

There are of course many notable exceptions, in particular recent surveys of a number of upland districts characterised by the widespread remains of extractive industry. Roberts' survey of Cockfield Fell, Co Durham was perhaps the first to

show the complexity and potential of these areas. Important recent surveys by the RCHME focussing on industrial remains include those in the Yorkshire Dales, Bodmin Moor, Cornwall (RCHME, forthcoming), and Clee Hill, Shropshire (RCHME, unpub).

It is rare to find agricultural landscapes with this degree of survival or documentation, though enclosure awards can often provide a framework for explanation of a whole landscape. The evidence for human activity in the uplands becomes ever more diverse as the climatic controls on occupation and land-use become less significant.

With the publication for the first time of a major overview of the archaeology of the post-medieval period (Crossley 1990), and the first steps towards the articulation of theoretical approaches (eg Johnson 1996), different aspects of post-medieval archaeology can now more readily be discussed in a broader context which takes in contemporary society as much as the archaeological resource and its management. There is still, however, a pressing need for an improved definition of the post-medieval archaeological resource.

3.10.2 Marches Uplands Survey area and environs

In the Marches region, it has been conventional for historians to set the break between medieval and post-medieval at around 1536-40. This half decade saw the end of the separate status of the Marches, and the incorporation (or reincorporation) of the eastern Marcher lordships into the counties of Shropshire and Herefordshire, which thus assumed more or less their present shapes. The dissolution of the monasteries saw the largest transfer of landownership in a short timescale in the area, at least since the Norman conquest, with the establishment of many of the large estates which still survive.

Prior to the survey, only a very small proportion of post-medieval sites had been accessioned on to the SMRs for the survey area. While there were large numbers of records in both county SMRs (taken together more than for any preceding period), these comprised mostly buildings (in Herefordshire; buildings occurred in the computerised Shropshire record only where associated with other remains, for example on mine sites). The total of 75 records on the Shropshire SMR is not disproportional to a reduced Herefordshire total of 80 (if buildings, approximately 250 of the 330 Herefordshire records, are excluded from the latter). The only well recorded post-medieval sites apart from buildings were the mines in western Shropshire (28 of the 75 records), although even here it has been possible to document biases and large gaps in the record (Dinn 1995). There had been little attempt to apply archaeological research priorities to the sites recorded.

Post-medieval remains are ubiquitous in the region, and no commentary is offered on the overall distributions, which reflect most closely the locations of field survey; instead the distributions of certain individual site types are commented on in the text.

It is far too early to offer a definitive framework for the post-medieval archaeology of the Marches uplands. It is much more useful in the present state of knowledge to present the evidence recorded from different sources, to assess the pre-existing records, and to identify areas where field survey and other work has made a contribution in the past or is likely to do so in the future. This places the post-medieval discussion on a similar basis to the preceding periods, but in this case comments are based much more on the Marches Uplands Survey fieldwork than on earlier excavation or survey.

Unsurprisingly the range of activities represented by recorded sites of the post-medieval period is considerably greater than for any earlier period. 'Innovations' include recreational sites of various types, and planned and 'aesthetic' landscapes; north-west Herefordshire contains some of the most important of the latter in Britain. There is a preponderance of agricultural sites, and transport (roads and tracks) and industrial sites are both widespread and complex.

The tenurial and settlement framework, largely inherited from the medieval period, forms an essential backdrop to the field remains, and has been described and analysed on a regional basis (Sylvester 1969) as well as a more local level (the county-wide and more detailed VCH volumes for Shropshire). A number of factors may be noted here as having potentially had effects on the landscape, although these effects can rarely be identified or characterised in the current state of knowledge, and would require integrated documentary and field research. Transfers of landownership following the dissolution of the monasteries, and to a lesser extent, the ending of the separate legal status of the Marches, must have had far-reaching effects on land-use, and on social and economic relationships at all levels. While few alterations in the landscape can yet be attributed directly to changes in ownership and tenure at that time, many of the developments of the following centuries should be traceable to origins at the very beginning of the post-medieval period. In particular the long drawn-out process of enclosure in general, and of enclosure and conversion of waste specifically, was shaped by the pre-existing landscape and by manorial, parish and township structures.

Land division

Many legal and ownership boundaries can be traced through field patterns, which are discussed below. Parish boundaries were made concrete by boundary markers, and a number of these survive or are recorded from documents or maps. These include stones (Stapeley Hill) and mounds (Long Mynd); the latter may be the result of stone clearance. Linear earthworks occur on some parish boundaries, for instance between Pipe Aston and Richards Castle, Herefordshire (HWCM 5790). However, it is unclear whether such earthworks define the parish boundary or another area; the substantial bank and ditch boundary which marks the extent of the former Snodhill park also forms the boundary between Peterchurch parish with Michaelchurch Escley and Dorstone.

Transport and communication

Transport and communications networks have rarely been studied from an archaeological perspective, although there has been an increasing emphasis on their place within studies of the wider landscape (see Hindle 1993). Fleming has stressed the importance of the layout of routeways, from footpaths upwards, within detailed landscape studies, as an indicator of activity patterns within and around settlements (Fleming 1998). A wide variety of earthwork and other remains were recorded, supplementing the very small number of features which had previously been noted. Clearly these should be considered in conjunction with cartographic evidence for routeways which are no longer evident on the ground; it should equally be noted that many of the tracks and paths recorded in the field appear on no maps.

The transport routes recorded in the field cover the range from turnpikes and major long-distance routeways to ephemeral features, many recorded as 'packhorse trails' which may represent anything from local footpaths to major routeways or drove roads. Some survive as paths or roads in current use, but many, at all levels of importance, are disused and are visible primarily as earthworks, usually holloways or terraceways, and often multiple or braided. A small number can be seen only as cropmarks or as scatters of metalling in ploughed fields. Associated features which have been recorded include bridges, culverts, fords and milestones. The road networks have if anything been even more fluid than field layouts.

In most cases it is difficult to assess the contribution of earlier periods to the post-medieval road system. Even in well-known cases like the Portway on the Long Mynd (SA 157), a medieval or earlier origin is almost entirely speculative. Even when an early date can be demonstrated, the alignment is likely to have varied considerably, especially where the route crossed unenclosed land, as is so often the case with those which survive as earthworks. The braided earthwork holloways and packhorse tracks at the south end of the Portway where it ascends the Long Mynd at Black Knoll are a clear example.

The turnpike alignments often survive in use on the lower ground, but a number of upland routes have disappeared. Two examples from north-west Herefordshire are the Knighton to Mortimers Cross turnpike, which crossed Harley's Mountain, and the Mocktree turnpike, between Knighton and Ludlow, now surviving variously as a green lane and a cropmark. Drove roads more often cross the uplands and were frequently established to avoid turnpike tolls. These may appear as braided packhorse trails. Routes of this type are particularly frequent crossing the Ludlow Anticline hills; a good example of this is the multiple braided track funnelled through a narrow gap between Bircher and Oaker Coppices on Bircher Common.

Wide straight roads are particularly characteristic of the late nineteenth century enclosures, and are common in the Clun Forest and parts of the Black Mountains foothills. Here they are associated with the rigidly rectilinear 'surveyors' landscapes' (Figs 28 and 29). A recent survey identified enclosure roads on

Urishay Common, Michaelchurch Escley, and an associated stone quarry, which were specified in an enclosure award of 1855 (Edwards and Woodiwiss 1990).

By far the majority of the roads recorded are farm tracks. Here, the conventional post-medieval dating must disguise much variation and chronological development of trackway networks, although in only a few cases does enough of a network survive to allow reconstruction.

These extensive sites offer the opportunity to develop a stratigraphic approach to landscape study in some areas, largely where they can be related to dated events (such as enclosure), or (functionally) to other datable or mapped features (eg quarries or mines). The potential of this approach for widespread application has perhaps been exaggerated, and may be limited by the very long life of many roads and tracks, and lack of distinctive constructional features. However, in areas of concentrated routeways and associated features a stratigraphic approach of this type may provide a useful visualisation of the sequence of development.

Agriculture

Both Shropshire and Herefordshire are still primarily agricultural counties, and this was even more the case through most of the post-medieval period. Most of the recorded agricultural remains are either (mainly relict) features relating to use of the commons, or refer to later events, including enclosure clearance and field systems. A limited number of records can be related to identified later activities (eg warrens and associated enclosures; see below).

Documented agricultural history and the mapping of field patterns forms an essential background to an understanding of the field remains, although the level of research has been very uneven. Shropshire is well covered by the historical discussions given in the VCH (1989a), which cover parts of the upland area, though these are rarely closely linked to cartographic evidence and still less to field remains. Extensive studies such as these, or the analyses of farming patterns from the tithe and other records (Dodd 1956; 1980; Phillips 1979), have hardly begun to be applied at a local level.

Most of the Marches has for some time been recognised as an intermediate area between lowland and upland. Lowland farming systems in the region were divided between what Rackham (1986, 4-5) has characterised as 'ancient' and 'planned' landscapes. These broadly (though not exactly) correspond to the division between 'wood pasture' and 'champion' or mixed-farming landscapes. An alternative classification places the Marches uplands firmly in an 'open pasture' region (Thirsk 1967; Dyer 1988).

The post-medieval history of these landscape types, whatever classification is followed, shows an erosion of local distinctiveness, but also of varying developments, though the enclosure process, from the different points of origin. The juxtaposition and interaction of the different lowland and upland traditions makes this an important region for the study of medieval and post-medieval agricultural changes.

At the beginning of the period, upland commons figured very largely in the economy of most communities in the survey area. Although the incidence of open-field arable was much less here than in the midland counties, the evidence suggests that most parishes and townships had some. By the end of the nineteenth century, most of the commons and open fields had been enclosed, converted into private grazing or arable. The process was long and complex, and has to date been mainly documented from maps and written records. The evidence of field archaeology, of boundary forms and relict field systems, has rarely been called on.

The primary use of the enclosed fields was probably for pasture, since the area is too elevated for arable crops to flourish in most parts. Nevertheless, ground fieldwork demonstrated that the majority of fields have been ploughed sufficiently to create lynchets along their enclosure boundaries. Whilst most ploughing has probably been carried out in the second half of the 20th century for pasture improvement, it would be reasonable to assume that some earlier arable cultivation took place, especially in times of crisis, such as the Napoleonic Wars when grain was scarce. Narrow, straight, ridge and furrow earthworks were identified in some fields, and interpreted as the evidence for steam ploughing.

Commons

The commons vary from the bleak heather moorlands of the Black Mountains (Fig 30), through lower-lying but still markedly 'upland' moorlands such as the Long Mynd, to the much less exposed and smaller commons of the Ludlow Anticline, such as Bircher Common. Commons can be defined both by their physical form (including plan morphology) and by the nature of the rights held on them. While only the former is susceptible to recording in the field, the common rights are likely to affect the plan and also features within the common. The most frequent rights involve the grazing or feeding of animals, the gathering of fuel, and the collection of various other raw materials, including stone and water. Other uses include leisure (eg horse racing; see below).

The plan forms of wood-pasture commons, or open grazing commons in the wood-pasture zone, are typified by a 'scalloped' edge, with deep funnel-shaped entrances separated by extensions of encroachment extending on to the common. The limit of encroachment or enclosure is often defined by a very substantial bank or bank and ditch. Because enclosure of any area of a common is likely to be vigorously opposed by the commoners, any enclosures or boundaries within the common are likely to predate it. In general, there is a high potential for the preservation of extensive relict features, including field systems, enclosures and barrows, although twentieth-century ploughing has levelled many of these. Where there is settlement around the edge of a common, features close to the houses will probably include ponds and watercourses, pollarded trees, and quarries.

Encroachment and enclosure

Encroachment-related settlement occurs in three main situations in the Marches uplands. These are common-edge (linear, scattered or ring-fence), island (small island, ring-fence or linear), and extensive (either single-period or accumulative).

Accumulative encroachment involving a sequence of settlements is unusual. No doubt the establishment of a line of houses along the edge of a common was enough in many cases to fossilise that edge, as settlement between those houses and the common would have been actively discouraged. Further encroachment would then have been small in scale and associated with the existing occupation.

The table which follows offers a preliminary classification of encroachment enclosure plans using examples recorded in the Marches uplands. The categories presented are based on the plan morphology of the enclosures and do not take account of the buildings within them. While this plan morphology may be established from cartographic evidence alone, it may also be possible to develop the classification through fieldwork to include the characteristics of the earthwork boundaries.

Encroachment enclosure plans

Type	Characteristics	Example
Common-edge		
linear		Stapeley Holding
linear (scalloped edge)		Bircher Common
scattered (serrated bites)		Olchon valley
ring-fence	occasionally occurs as common-edge feature	Llan-oleu
Island		
small island		Bircher Common
ring-fence	'classic'	Plush Hill
ring-fence (incorporated into extensive)	accumulative model	Mitchell's Fold
rectilinear ring-fence		Blakemoorgate
linear - valley-bottom	constrained by topography	Perkins Beach
linear - other		Moelydd
Extensive		
single-period	no apparent development	Tankerville Maes-coed
accumulative	showing clear sequence of development	Upper Stapeley Farm and Mitchells Fold Bog, Knolls

Close analysis of field and settlement patterns is likely to reveal different types in close association, if not together. Mapping of Urishay Common, Michaelchurch Escley in 1844 shows combinations of the linear and ring-fence patterns encroaching on its southern edge, while the common itself was fully enclosed by an award of 1855. Ring-fence patterns around Kings Arms and Clothiers Farms appear to show evidence of accumulative encroachment (Edwards and Woodiwiss 1990).

One minor feature which has been recorded on the edges of commons in the Long Mynd survey area is the D-shaped enclosure. Six of these are known (from both ground and aerial survey), on Stapeley Hill (MUS 40102/01, /02, MU.321.7.1), the

Long Mynd (MU.34.6.1), and the intervening hills (Ritton: MUS 40464/01; The Knolls: SA 1890). Each is defined by a single bank, with no ditch, and all but the last enclose an area of 0.15 ha or less. Although their morphology is distinctive, it is uncertain whether they had a specific function. However, almost all are adjacent to former ring-fence farms.

Manorial enclosure is a feature of some commons. One striking example is on Bircher Common, where two large coppices (Bircher and Oaker), in the middle of the grazing common, were enclosed with woodbanks, probably at some point in the post-medieval period. These occupy a substantial proportion of the common, and appear to represent the imposition of a strong manorial authority over common rights; of existing uses, only the packhorse trails which pass through the narrow gap between the two woods seem to have been respected.

Parliamentary or large-scale enclosure is relatively rare in the Marches, though where it did occur it could be very extensive. The largest areas were in the Clun Forest uplands, where over 75 km^2 was enclosed between 1847 and 1891. The landscape of the western Clun Forest is characteristic, with patterns of mathematically regular fields, defined by banks (incorporating stone clearance), linear quarries and shelter belts, and straight roads with wide verges.

The conversion of hunting forests and deer parks to farmland was a continuing process through the post-medieval period. Perhaps the most extreme case of this was the disafforestation of the forests of Deerfold, Mocktree, Wigmore and Bringewood in north-western Herefordshire during the seventeenth century (Robinson 1921). There is potential here for the extensive earthwork remains of field systems, lynchets and ridge and furrow in this region to be correlated with the (sometimes very detailed) documentary and cartographic evidence. A particular example is the early seventeenth century creation of a forest boundary at Mocktree, which can now be followed in places as a cropmark feature.

Snodhill in Peterchurch parish is a good example of an enclosed park. The park pale itself survives as an extensive earthwork along the parish boundary (see above), consisting of a bank (or wall) and internal ditch. The morphology of the field divisions within the park boundary indicate post-medieval enclosure, though this is not dated. Deer parks were often succeeded by landscape parks, though not in this case. A limited number of enclosures may be associated with the deer parks; these include examples at Haye Park, Richards Castle (HWCM 6368), and Park Wood, Craswall (MUS 13418/01), both with banks and internal ditches.

Warrens

Rabbit warrens occur frequently as landscape features in the Marches. The primary characteristic of these warrens is the presence of earthwork pillow mounds, either singly or in groups of varying size; these are usually sited on unenclosed or late-enclosed uplands. Other feature types may be present, including warreners' houses (characteristically in small enclosures) and vermin traps. The evidence for overall enclosure of warren complexes seems to be very limited, but warrens were usually sited well away from areas of arable.

A number of larger warrens had been identified before the survey, and the record was augmented in two ways: firstly by the identification of new warrens, and secondly by the recognition of further features in known warrens. Aerial and ground survey have proved to be complementary. The four largest warrens were all known before survey; these are at Wapley Hill (HWCM 7096), Croft Ambrey (HWCM 7090; Dalwood and Waller 1992), Reeves Hill (HWCM 2372 etc; Owen 1994) and Middleton Hill (SA 1868); the first two are within hillforts. At each of these sites, the number of recorded mounds has been increased by survey (see table; at Wapley Hill there are also documentary references to further mounds outside the hillfort). Related enclosures for warreners' houses have been noted at the Wapley Hill and Reeves Hill warrens, as well as at other sites (eg Black Knoll).

Warren name	Pillow mounds before survey	Pillow mounds after survey	PRN	Source
Middleton Hill	9	10	SA 1868	SMR/MUS
Little Caradoc	1	1	SA 242	SMR
Wistanstow	3	3	SA 254	SMR
Black Knoll	1	1	SA 1560	SMR
Plush Hill	0	2	MU.34.9.1-2	MUMP
Norbury Hill	0	4	MU.386.3.1-4	MUMP
Myndtown	0	1	MU.314.2.1	MUMP
Stanley Knap	0	2	MUS 41177/15, /17	MUS
Croft Ambrey	5	10	HWCM 7090	SMR/ Dalwood and Waller 1992
Croft Park	1	1	HWCM 10397	SMR
Lucton	0	1	HWCM 12615	Dalwood and Waller 1992
Reeves Hill	3	10	HWCM 2372 etc, MU.381.15.1	SMR/MUMP
Wapley Hill	3	6	HWCM 7096	SMR/MUMP
The Globe, Willey	0	2	MU.381.2.1	MUMP
Cole's Hill, Kinsham	0	4	MU.383.15.2-3	MUMP
The Moor Farm, Stapleton	0	3	MU.383.17.1-2	MUMP
Craswall	1	1	HWCM 7256	SMR
Bircher Coppice	0	1	HWCM 15949	Dalwood and Waller 1992
Totals	**27**	**63**		

Previously unrecorded warrens were noted at the following locations: Stanley Knap, Cole's Hill, Kinsham, The Moor Farm, Stapleton, Plush Hill, Long Mynd, and Norbury Hill. Single mounds have a wide distribution (a total of 7 sites, 4 of

these newly discovered). The success of aerial photography, and to a lesser extent ground survey in adding to the numbers of mounds at the larger warrens suggests that scrutiny of the areas around these single mounds may reveal further features. In all, 27 pillow mounds were known before survey, at 9 locations; these figures have increased to 63 and 18 respectively. The greatest concentration is in north-western Herefordshire.

Dating evidence is rather ambiguous, although most pillow mounds are regarded as post-medieval (generally earlier rather than later). The Middleton Hill warren was depicted as an antiquity on the First Edition Ordnance Survey 6" map (surveyed 1882), although there is a documentary reference to one of the mounds being redug in 1887 (Chitty, in Shropshire SMR). The distribution of pillow mounds in the Marches should be set against published extensive and intensive survey from Glamorgan (Spurgeon 1982, including a distribution map of the whole Principality) and survey and excavation at Y Foel, Montgomeryshire (Silvester 1995). The concentration in east-central and south-east Wales is matched by the distributions of larger warrens in Herefordshire and Shropshire. The published examples from Wales also allow classification of mounds by form and size. Placename and documentary evidence imply a much wider distribution for warrens generally (though these may not always have incorporated earthwork structures). Of 64 records on the Hereford and Worcester SMR, only 20 have recorded earthwork remains, the remainder being recorded as placenames or from documentary sources. Of the earthwork sites, 9 are within the Marches Uplands Survey area, and a further 5 immediately outside, while none of the others are in this area.

Buildings and settlements

Whilst the majority of post-medieval buildings are still in use, the marginal nature of the area means that some farms have been abandoned within the last 100 years. Many of these are now falling into ruin, and are in the process of becoming archaeological sites in their own right (Fig 31).

Farms in use, and the few larger settlements which lay within the transects, were deliberately excluded from the survey. As a result, the only buildings which were systematically recorded were those which were disused or ruined. Therefore, the morphology of surviving settlements and the nature of the building stock cannot be fully covered here. The earthwork remains associated with the encroachment of settlement on to common land are discussed above.

With the exception of individual farms, few new or planned settlements seem to have been established in the uplands. Two exceptions to this are Cynynion (Oswestry) and Mocktree (Leintwardine). Both are now largely abandoned.

Industrial sites

The important developments which took place in the centre and east of Shropshire in the eighteenth century, and which have led to the county being hailed as the birthplace of the Industrial Revolution, hardly seem to be reflected in the south and west. The range of industrial remains recorded in the survey area is surprisingly

limited. Most features are widespread in occurrence, although the remains which are often thought of as the most characteristic (the lead mining sites around Shelve) are localised and not paralleled elsewhere. Some classes of industrial monuments are recorded on the SMRs but were not encountered in the field (eg pottery kilns). Some of the remains recorded may well have earlier origins, or indeed be earlier than the post-medieval.

Until the late nineteenth century, industrial siting was usually dependent on the existence of local primary resources or raw materials. This can be seen in the location of most industrial sites in the study area.

The ceramic industries are locally represented in the Marches. Brick, tile and clay pipe kilns occur, though these are poorly recorded on the SMRs. An example is a recently excavated clay pipe kiln at Pipe Aston (HWCM 6371).

There was a more extensive pottery industry in the Deerfold Forest area of north-west Herefordshire (Thomas 1982). Information on the location and nature of the production sites (of which several are known to have existed in the area between Lingen and Wigmore) is very poor. Production is currently dated to about the 16th-17th centuries, and was closely associated with the availability of large quantities of firewood from adjacent woodlands. The industry may have arisen as large numbers of squatters settled in the period (as referenced in the documentary sources) and sought to earn a livelihood.

Quarries

Quarries are ubiquitous in the Marches uplands; most are small, and appear mainly to reflect local use of building stone taken from common land or from under-used corners. Some of the later nineteenth century enclosure awards specify areas to be set aside for quarrying (Baugh and Hill 1989, 176-7), and some such areas may be seen today in the western part of the Clun Forest area. These are often linear in plan and shallow in depth; many are now planted as shelter belts or survive as scrub. Other quarries can be associated with estates. Some later and generally larger quarries occur; these can usually be identified as such from the Ordnance Survey maps. The total of 359 post-medieval (or probably post-medieval) quarries recorded includes only three from the SMRs before survey.

Limekilns

The burning of limestone to create lime, for fertiliser, cement or other purposes, is reflected in the number of limekilns recorded. 29 kilns have been recorded in all (doubling the 14 formerly on the SMRs), while many more are likely to have left no surface traces. As would be expected, the recorded kilns are all situated on or very close to limestone deposits. They occur only in the Selattyn, Ludlow Anticline (Fig 32) and Black Mountains survey areas; limekilns have been recorded only in the northern part of the Ludlow Anticline, while the Black Mountains examples are confined to the vicinity of the thin limestone outcrops within the Old Red Sandstone.

Some limekilns, for instance Croft (HWCM 12176), or Lawnwell Dingle (MUS 13800/01) are situated in quarries, while most are close. The majority of those recorded are small and simple; few, such as those at Craig Sychtyn (SA 7098; MUS 40959/01), are larger structures. An unusual occurrence is at Llan-oleu, Craswall (HWCM 6127; MUS 13404/02), where a limekiln seems to have been built into a prehistoric burial cairn on top of a small hill; the use of the site for burning is attested by fused sandstone, and it is indicated as a limekiln on the First Edition Ordnance Survey 6" map.

Charcoal burning

Charcoal burning is a minor industry which has left distinctive remains at several locations in the Marches. Dating of these is problematical, as charcoal burning in clamps may be as early as medieval, but continued into the twentieth century. Surface indications include earthwork platforms, mostly in surviving woodland (more than half of the 23 records from fieldwork are from woodland, although some platforms survive in grassland, mainly on steeper slopes, eg MUS 13630/01), and charcoal-rich soilmarks where the platforms have been ploughed (eg a very extensive area west of Onibury; SA 7084). This industry was poorly recorded before the survey (the 14 records on the Hereford and Worcester SMR were all from the Peterchurch Survey, and there were no records on the Shropshire SMR), and fieldwork indicates that there is still extensive survival. The distribution of recorded sites has a marked southern bias, with records from the Clun Forest (mostly the south-eastern quadrant), Ludlow Anticline and Black Mountains survey areas only.

Mills

Very few mills or associated features were recorded. These are concentrated in the Clun Forest and Black Mountains survey areas, where there are extensive river systems within the upland land blocks. Many of the remains recorded are those of large mill complexes, probably of 19th century date. Examples are at Newcastle, Clun (outside the Clun transect, but with associated leats, MUS 41265/01, 41324/01, 41325/01), and Bicton (MUS 41711/03). Both of these mills had leats extending for over 1km. Without detailed field and documentary survey it is not possible to say whether or not these mills had earlier origins.

Mining

Within the survey area, significant mining activity has occurred only in an area of about 80 km^2 in western Shropshire. Here, lead, copper, and later barytes were extracted from a series of deep mines; silver, zinc and fluorspar were minor by-products of the industry. Over 70 mine sites have been recorded (Dinn 1995). On long-lived sites, even where there is good documentary evidence for eighteenth century and earlier mining (eg Snailbeach, the Bog), the surface remains characteristically reflect the larger-scale later nineteenth and twentieth century mining rather than the earlier activity (Fig 33). By contrast and in common with other orefields, trial and failed works are often particularly well preserved.

In the later nineteenth century, a large number of trial shafts were sunk. While many of these were immediate failures, others, for a variety of reasons, were heavily developed and promoted, sometimes in the absence of proven ore deposits. An obvious example is Ritton Castle mine, where the almost total failure to produce ore is belied by the preservation of high-quality and complex earthwork and structural remains (Fig 34). Smaller trial works, such as Shelve Pool (Fig 35), and a number of mines on and around Stapeley Hill, also preserve many interesting features. Many of the larger mines continued in use well into the twentieth century, and some have suffered from extensive clearance. At the Bog mine, the surviving features (reservoirs, outlying adits etc) are mostly peripheral to the main complex.

Military sites

A small number of defence sites of the later nineteenth century or later are known. These include rifle butts, military practice works, and camps. Generally these have been identified from documentary sources or early maps, though one rifle butt survives as an earthwork at Llanfair Waterdine.

Churches, chapels and meeting houses

Many of the small settlements in the uplands were remote from their parish church, while non-conformity was also popular, especially in the newly-established or growing settlements in mining areas or on common edges. The demand for new churches, chapels and meeting houses was considerable. This was met to some extent by the use of private houses for meetings, for instance by the seventeenth century Baptist congregation at Llanveynoe (Stell 1986, 113), but a demand usually developed for a more permanent building. This could either be an adaptation of an existing building - for instance Bircher Common Primitive Methodist church (Fig 36; HWCM 23985) was converted from a barn in 1841 - or a new chapel could be built. Disused chapels are frequent in the uplands, and Shoesmith (1985) highlighted the loss of these buildings through abandonment and re-use in one small area of north-western Herefordshire. It is unusual for church buildings to disappear completely, although this has almost occurred at Mocktree (MUS 13578/01), where the Methodist chapel which opened in 1865 appears to have closed by the early twentieth century and is now represented by a single fragment of stone masonry.

Recreation

Recreation sites are seen for the first time in the post-medieval period. Under-used upland areas were a suitable location for activities which required large amounts of land (no doubt subject to the agreement of commoners), and the late nineteenth century saw the establishment of golf courses at Black Knoll and Bradnor Hill. Upland racecourses survive as earthworks at Oswestry (pre 1776-1848; Ruckley 1989) and Hergest Ridge (*c* 1820s-1880s; HWCM 13087). The earthworks of the latter (at an elevation of over 400m) are particularly well preserved, and include a cambered race track, with small rectangular bays inside the circuit, perhaps pens for horses or foundations for buildings. Several mid and late nineteenth century

enclosure awards in the Clun Forest include provision for public recreation grounds (Baugh and Hill 1989, 176-7).

Landscaped gardens and parks also demonstrate increased leisure. Many landscape parks were the direct successors of earlier deer parks, and some preserve features such as park pales (see above). While large parks are less common in the uplands than in the surrounding lowlands, the topography of the Ludlow Anticline area in particular did lend itself to designs in the 'Picturesque' style of the late eighteenth century (Daniels and Watkins 1994). Characteristics of this rather self-conscious style include a stress on 'natural' or minimally altered layouts, the incorporation of pre-existing historic or other features into the design, and the combination of decorative and utilitarian attributes. One of the type sites of this style (Downton) is in the study area, and a group of parks in the immediate area (Croft, Shobdon, The Lodge (Richard's Castle, Salop)) show the influence of the style to a greater or lesser extent. Oakly is an example of the more generally fashionable landscape design of 'Capability' Brown, while the two traditions seem to have mingled at Moccas Park, although the contribution of each is hard to disentangle.

Water management

While irrigation is understandably not a characteristic feature of the uplands, an important early (17th century) example, the Trench Royal (HWCM XXXX) survives in the upland fringe Golden Valley. Although some limited survey of this has been carried out (Kay 1974), it is not well understood in detail, neither is its full extent known.

Features relating to water supply and drainage include the two late-nineteenth century aqueducts, supplying water from the Elan valley to Birmingham and from Lake Vyrnwy to Liverpool.

Finds

Post-medieval findspots have rarely been recorded, and those that have usually relate to exceptional finds. A total of four records from both the Herefordshire and Shropshire SMRs and data collection comprise two hoards and two pottery finds (a further three records listed are not in fact finds and should be reclassified). That post-medieval finds are not in themselves rare is clearly borne out by the results from the Marches Uplands Survey fieldwalking; all 44 of the fields walked produced some post-medieval material, in all but two cases including ceramics.

3.10.3 Contribution of the Marches Uplands Survey

The Marches Uplands Survey fieldwork changed the recorded number of post-medieval sites dramatically, through the accessioning of nearly 400 records from documentary and aerial photographic sources, and the field recording of nearly 2500 monuments which have been assigned post-medieval dates. These throw light on a wide variety of activities, from agriculture to industry.

A wider range of sites and monuments naturally survives from the post-medieval, and this is reflected in a wider range of monument forms. Most of the monuments recorded are earthworks; however, buildings and ruins are also prominent. The rapid SMR enhancement was important in increasing the numbers of sites known from documentary or cartographic sources; in many cases, no physical traces were noted in the field. The occurrence of cropmarks, or earthworks recorded from the air, appear to be relatively low; however, many of the site types recorded during ground fieldwork would have fallen outside the scope of the National Mapping Programme. Recorded findspots of the post-medieval period are rare, though this obviously represents a severe under-recording of finds, with an emphasis on the earlier part of the period, and on large or unusual finds.

Figures 37.1 and 37.2 show the distribution of post-medieval sites and findspots within the survey area (records from fieldwork are excluded, since they merely serve to indicate the positions of survey transects, as is apparent from Fig 6 above).

3.10.4 Conclusions

The post-medieval period can be expected to afford the best opportunities for integrating individual features into landscapes and for developing an understanding of these broader landscapes. In some areas at least, fieldwork evidence can reveal the development of the landscape through time in a way which no other type of evidence can do; landscape archaeology has often been used in this way for the post-medieval period. When fieldwork evidence is combined with cartographic analysis and with the detailed picture of agricultural activities given by documentary records and historical synthesis (VCH 1989), a much more rounded picture can emerge.

The very large numbers of post-medieval sites identified indicate some limitations of rapid survey. Survival is often very extensive, with sites appearing to link into coherent or at least identifiable systems or landscapes, but the rapidity of the survey does not allow for consideration of this to any more than a superficial level. Many of the individual sites, such as roads and tracks, are themselves more extensive than those surviving from the medieval or earlier periods, and the full potential of these is certainly not realised by a 'site-based' approach. Documentary and cartographic research to an adequate level are usually essential for understanding, even in upland areas which are often less well documented than elsewhere. Indeed, many of the landscape changes which were represented in the field by recorded monuments were at least partly documented though records or maps. Documents can also provide close dating, which is more crucial here than for earlier periods. However, no research of this type could be carried out during the Marches Uplands Survey.

The uncertain definition of the nature and scope of post-medieval archaeology has already been referred to at the beginning of this section. However, there is a greater potential in the post-medieval period to understand the archaeological record with reference to other types of records of human activity, but currently very little sign of a specifically archaeological approach to the understanding of the period. As

Crossley has suggested (1990, 2), what is urgently needed to redress the balance is the practical demonstration of the application of archaeology to the understanding of economic and social activity in this period as well as to the definition of the resource. Far too often the archaeological approach has concentrated on industry or (though less often) on industry-related sites, to the exclusion of a broader view. Rural studies have too often been the preserve of the social and the economic historian, and this bias increases through the period. While the study of post-medieval urban archaeology has developed over a lengthy period, rural archaeology has lagged behind (see for instance Darvill 1986a, where the post-medieval period is split between medieval and industry, and coverage is very incomplete). It should not be necessary to stress the importance of the archaeology of this period, particularly in a region which includes one of the few post-medieval World Heritage Sites in Britain.

3.11 Modern

3.11.1 Upland areas in Britain

As a rule, modern features (generally defined as twentieth century) have not been recorded as archaeological monuments. The exceptions to this depend usually on a prior identification of research interest such as twentieth century defence sites.

3.11.2 Marches Uplands Survey area and environs

The numbers of sites on the SMRs or recorded by the Marches Uplands Mapping Project are minimal, and only in the rapid ground fieldwork were many modern monuments recorded. While in certain instances these were of intrinsic interest, other recent earthworks were recorded so their presence would not be confused with earlier monuments. This latter criterion was applied mainly to agricultural earthworks (mainly field boundaries, clearance cairns, ponds, reservoirs, and dams), but also to a number of buildings and trackways associated with agriculture.

Agriculture

Agricultural monuments of some intrinsic interest include clearance and cultivation traces associated with arable intake sponsored by the War Agricultural Commission during World War II, for instance the clearance cairns, field boundaries and ridge and furrow on Hergest Ridge (MUS 14803/07-10, /13, /14, /16, /19, /20).

Industry

Modern industrial remains are concentrated in the West Shropshire mining district (Heathcote and Holding 1992; Dinn 1995). Although the lead extraction industry in Shropshire was in terminal decline by the beginning of the twentieth century, this was more than compensated by a large increase in barytes output in the early years of the century. This too declined after World War I, with a brief revival during

World War II. Surface remains of barytes mines are often slight, as most of the processing was geographically separate, but shafts, adits and tips have been recorded at sites such as Coldyeld (MUS 40451/01), Knolls (MUS 40351/01), and Wrentnall (MUS 40566/01), as well as around Stapeley Hill (eg Cliffdale; SA 7204).

Other, more widely distributed, industrial remains of the twentieth century include quarries and limekilns.

Military

Twentieth century military features have received considerable attention recently, and were the most commonly recorded modern features prior to survey. They include anti-glider trenches on the Long Mynd (MU.66.3.1-2), surviving as earthworks, and a work camp at Shobdon (HWCM 11177). The latter is described together with the Second World War airfield and associated features in Pfuell's *History of Shobdon* (1994, 133-142). Further investigation by the Council for British Archaeology's Defence of Britain Project has added to the information given by Pfuell (M Wilks pers comm). A number of minor earthwork remains on Hergest Ridge (MUS 14803/21, /22) are likely to be practice works.

Unclassified

A small number of unclassified remains of the twentieth century recorded during field survey are described in the transect reports and their details held in archive.

3.11.3 Contribution of the Marches Uplands Survey

The Marches Uplands Survey considerably increased the number of modern sites within the fieldwork area. Relatively few 20th century defensive sites were located, but this area was not as significant as other parts of Britain during the Second World War, from which the majority of such sites survive.

3.11.4 Conclusions

Modern remains are ubiquitous in an area such as this, and the difficulty when surveying is to select what is significant. That decision must be based on clearly defined research aims or the results of work undertaken are of little value.

4 Overview of the archaeology of the survey area

4.1 Historic landscape changes through time

4.1.1 Introduction

The table which follows is a broad brush approach to understanding the historic landscape of the Marches Uplands Survey area. It does not attempt to distinguish the localised variation which can be observed across the survey area, since its aim is to identify trends.

The evidence upon which the table is based varies. In some cases it is concrete, in others it is conjecture based upon what comes before or after. In other places, evidence from the lowlands is an indication of what must have been happening in upland areas. In general, the evidence for later periods is more reliable than for the earlier. Detail of the evidence for upland areas in general, and for the Marches Uplands Survey area specifically can be found in section 3 above for each period in turn.

4.1.2 Period overview

Evidence for the palaeolithic is absent from the survey area, but it has been assumed that people may have ventured into the uplands for hunting and gathering food.

Evidence for the Mesolithic is sparse, but evidence from sites in lowland Herefordshire suggests that here, as in other upland areas in Britain, Mesolithic forest clearance and management had a dramatic effect. The national picture is discussed at length by Simmons (1996).

There is slightly more evidence for the Neolithic and early Bronze Age, but few indications of the broader landscape picture for the Marches Uplands Survey area specifically. Lowland alluviation continues, but with interruptions, and there are the first excavated signs of activity in the area.

Barrows, hillforts and enclosures provide more evidence for the later Bronze Age and Iron Age, but for this period too there has been little investigation into the historic environment of the Marches Uplands Survey area.

Fewer sites of definitely Roman date have been identified in the Marches Uplands. This is interpreted here as evidence for continuity from the preceding Iron Age, and for a population which was not highly Romanised. There is no direct evidence for the historic landscape or for the agricultural basis of the area during this period.

Evidence for the early medieval period is even slighter than for the Roman period, as the only archaeological site is Offa's Dyke. The monumentality of the dyke is such that it tends to have a disproportionate influence on investigation and study of the period.

There is much more evidence for the medieval period, but the table still contains a considerable amount of conjecture. It is only in the post-medieval period that the columns of the table can be filled in with conviction.

Despite the paucity of evidence, the framework set out is considered to form a useful framework for understanding the area, and for future research and investigation. In one sense it would have fulfilled its purpose well if it required complete revision in ten years time.

Table follows overleaf

	Landscape	Agriculture	Settlement	Industry	Religious/ ritual/ funerary	Communications	Political boundaries
Post-medieval	Enclosed Little open land Mostly pasture Some arable, esp on lower ground Some managed woodland Some areas of managed, Picturesque, landscape	Expansion of enclosure through the period Pastoral basis Periodic cultivation of marginal land, eg in times of war Some woodland management Warrens	Expansion of nucleated settlement Increase in dispersed settlement, both agricultural and industrial Decline of some medieval market towns, which become villages Manors, parkland, Picturesque movement Racecourses and golf courses on some hilltops	Quarrying (ubiquitous) Lime burning Lead and barytes mining Deerfold/Lingen pottery kilns Charcoal burning Water mills	Non-conformist chapels assoc with remote dispersed settlement Rebuilding of churches in nucleated settlements	Road improvements Toll roads Railways/tramways Tourism - spas (Church Stretton) and Picturesque movement Elan Valley aqueduct to Birmingham	Border now stable, no effects on landscape
Medieval	Lots of open land, esp higher ground, for pasture Some cultivation, some in open fields, poss some enclosed fields (CHK alluv) Managed woodland and wood pasture Deer parks	Predominantly pastoral on high open land Possibly some early enclosure Some cultivation - ridge and furrow, esp on lower ground Monastic holdings Fishponds Woodland and woodland management	Dispersed Some nucleated settlement (towns and villages) Manors, Mortcher Lords, and their Parks	Some quarrying Possibly lead mining Possibly early pottery kilns in the Deerfold/Lingen area Water mills Charcoal burning	Churches in nucleated settlements Churchyards Monasteries	Generally poor: unmetalled holloways, packhorse trails Mortcher Lords travelled extensively Transport of goods, eg wool and livestock Period of disturbance	Motte & bailey castles built from 1050 (Ewyas Harold and Richard's Castle pre-conquest) Castles disused as military sites by 1300, although continued as centres of power
Early medieval	Upland open pasture Cultivated fields in lowlands Managed woodland	Pastoral, esp on higher open ground Cultivation of lower ground Woodland management	Origins of parishes and of some nucleated settlements Dispersed settlement	Some quarrying	Burials Early churches, from c 900AD	Presumably poor Presumably use of Roman roads	Offa's Dyke built Period of disturbance
Roman	Upland open pasture Lowland cultivation and fields Managed woodland	Pastoral, esp on higher ground Cultivation of lower ground and sheltered higher ground Some woodland management	Occupation of ditched enclosure sites Roman small town of Leintwardine (*Branogenium*) Military sites (forts) from 50AD Some activity in hillforts, possibly settlement	Lead mining, since Roman lead pigs found in area	No evidence	Main roads built along natural routes, eg valleys Military communications Transport of materials for taxes and export Transport of goods to internal markets	Route into Wales; boundary zone between Wales and the conquered area of England
Later Bronze Age and Iron Age	Cleared open land for pasture Cleared land for cultivation, and created fields Cleared and managed woodland	Pastoral Cultivation of lower ground Clearance of woodlands, and woodland management	Occupation of ditched enclosure sites Hillforts built from 1000BC CHK		Barrows at Bromfield		More hillforts than surrounding areas, but this may be topographically determined
Neolithic to Early Bronze Age	Limited cleared areas for pasture (indicated by lowland alluviation) Limited cleared areas under cultivation	Cultivation and clearance Herding/pastoralism Sheep/cattle Hunting	(?unclosed) sites, eg Dorstone Hill		Barrows Stone circles Long Barrows	Flint imported to area	
Mesolithic	Clearance of upland areas (caused lowland alluviation) Management of the wildwood, eg burning to regenerate low growth	Gathering Herding and management of woodland to improve animal habitats Hunting				Flint imported to area	
Palaeolithic	Atlantic climax woodland forest	Gathering Hunting	Cave sites outside area				

4.2 Research priorities and directions

Survival

The table which follows summarises the survival of archaeological material in the Marches Uplands Survey area for the different periods identified in Section 3 and the table above. It demonstrates the different levels of knowledge, and the corresponding priorities which could be assigned to new information or research for each period.

Period	Earthworks*	Buried remains*	Finds*	Priorities
Modern	Ubiquitous	Ubiquitous	Ubiquitous	See table and below
Post-medieval	Ubiquitous	Ubiquitous	Common	See table and below
Medieval	Some	Some	Some	See table and below
Early medieval	Offa's Dyke	Rare	None	Any new information
Romano-British	Rare	Rare	Rare	Any new information
Later Bronze Age - Iron Age	Some	Some	Some	Any new information
Neolithic - earlier Bronze Age	Some	Some	Some	Any new information
Mesolithic	None	None	Some	Any new information
Palaeolithic	None	None	None	Any new information

* Assessed against a 5-point scale: None; Rare; Some; Common; Ubiquitous

Period-based and thematic priorities

The research priorities identified below are taken from the table of historic land-use in the preceding section, and augmented by other angles which that chronological approach cannot highlight. These, however, represent only a few of a much greater number of potential avenues for further investigation highlighted by the survey, since an extensive survey covering an area the size of the Marches Uplands Survey is bound to identify a considerable number of potential research topics.

Post-medieval

- Archaeological remains survive very well for this period, as do documents and maps, giving very good potential for research relating documentary sources to surviving remains.

4.2.1 The Deerfold/Lingen pottery industry

- Detailed survey of the Golden Valley irrigation system.

Medieval

- The origins and development of villages, and their relationship (if any) to Marcher Lordships.
- The agricultural basis of the economy, in particular noting any changes resulting from the imposition of Marcher Lords from other regions, as far afield as France in some cases.
- Survey focussed on sheepfolds. This has been combined with documentary research by Chris Dyer in Gloucestershire to very good effect (Dyer 1995). Also further investigation of rural buildings, in particular looking for evidence of medieval settlement beneath post-medieval farms and hamlets.
- Detailed survey of the earthworks at Kinnerton Grange and of the surrounding area to determine if further elements of the medieval grange survive. This could also include building survey.

Early medieval

- The identification of any archaeological remains of this period is a high priority, especially anything contemporary with Offa's Dyke.
- The relationship of early medieval settlement to the medieval settlement pattern, and any indications of the origins of the latter would be of great interest.

Roman

- Assessment of small enclosures (for areas not covered by Wroxeter Hinterland Survey), based on MUMP data, and fieldwork to refine morphology, dating and function. Prospection for new sites, through aerial photography.
- Investigation of the extent of continuity from the Iron Age, with non-Romanised population living in enclosures.
- Further investigation of hillforts in the area is needed, to establish how many continued to be used in the Roman period, and to determine the nature of this use. This could include both new fieldwork and reassessment of excavated data.
- The earthwork sites around Linley deserve full analytical field survey to test assertions of their association with mining.

Later Bronze Age and Iron Age

- Investigation into the relationship between hillforts and enclosures
- Further investigation of enclosures (see above).
- Sample excavation of the Iron Age - Romano British settlement at Black Knoll.

Neolithic to earlier Bronze Age

- Investigation into the distribution and nature of settlement and economy.

Mesolithic

- Investigation of the distribution and nature of human activity.

Palaeoenvironmental

- Further coordinated archaeological and palaeoenvironmental investigations of upland land exploitation in areas identified as having high potential, especially the Long Mynd, Black Mountains foothills, and parts of the Clun Forest.

Artefactual

- Assessment of the context and nature of lithic material, including the cataloguing and assessment of material in private hands. Many finds are only poorly dated, which affects the understanding of prehistoric activity in the area and its distribution.
- Assessment of other artefactual material.
- A programme of fieldwalking when pasture improvement is carried out, to refine the distribution of lithic and other material across the area. This should include careful definition of research questions and detailed consideration of the results and their meaning for settlement study and ceramic research.
- Reassessment of excavated material from hillfort excavations and reconsideration of the Roman material (see above).

Aerial photography

- The MUMP identified a relative paucity of specialist archaeological aerial photographic cover for the area, highlighting a need for continued aerial survey (Stoertz forthcoming). The generally unfavourable land-use makes this a less propitious area than lowland arable, but the likelihood of new discoveries is correspondingly greater.

5 Archaeological resource management implications

5.1 Introduction

This section of the report does not set out prescriptions for managing archaeological sites or landscapes in the Marches Uplands Survey area, although this was one of the original objectives of the project (1.4 above). The aim is rather to set out information which can be used by archaeological curators as they see fit. This information is presented as a summary of the characteristic and unusual types of archaeological sites, and of the methods which the project has identified as being most successful for investigating those sites.

5.2 The nature and management of the archaeological resource

5.2.1 Earthwork sites

Significant site types

- Earthwork sites of pre-medieval date (prehistoric to early medieval) are rare in the survey area
- Complexes of extensive earthworks are even rarer
- Earthwork sites of medieval date are relatively rare in the survey area
- Post-medieval earthwork sites relating to industrial processes are characteristic of certain areas

Characteristic threats

- Earthwork sites in fields are vulnerable to ploughing, even under pasture. The Marches uplands is an area of marginal land where pasture is the most common land-use, and pasture improvement by ploughing is the typical cultivation regime
- Earthworks may also be damaged or destroyed because they cause impediments to agricultural activities
- Earthworks may be damaged by developments, whether agricultural or for housing or industry, and by associated access and infrastructure works. Agricultural development is not subject to the same level of planning control as urban development
- Earthworks in areas of forestry plantation are likely to be destroyed or damaged by forestry operations
- Earthworks in the lead mining area associated with mine shafts are vulnerable when safety works have to be carried out

Management approaches

- Positive management of known earthwork sites should be encouraged through such means as management agreements, ESA agreements, Countryside Stewardship, or other similar initiatives
- The desirability of proposed development which would affect earthwork sites should be considered with care

5.2.2 Buried remains

Significant site types

- Identified buried remains of pre-medieval date are rare in the survey area due to lack of fieldwork/excavation
- Identified buried remains of medieval date are not common in the survey area
- Specialised buried remains of the post-medieval period are of interest, eg mining sites

Characteristic threats

- Gradual extensive attrition through regular ploughing, especially for sites on hill-slopes, including those under pasture (see 5.2.1 above)
- Destruction in association with specific works

Management approaches

- These sites are difficult to identify:
    - surviving arhcaeological deposits are difficult to detect through aerial photography in this mainly pastoral area
    - sites of all periods are characterised by low pottery use, so fieldwalking is not a completely reliable means of identifying sites
- Positive management of known areas of buried remains should be encouraged through such means as management agreements, ESA agreements, Countryside Stewardship, or other similar initiatives
- The desirability of proposed development which would affect buried remains should be considered with care

5.2.3 Landscapes

Significant site types

- Extensive areas of relict landscapes
- Post-medieval field pattern
- Mining landscapes

Characteristic threats

- Piecemeal and gradual attrition by development and by agricultural practices
- Deliberate destruction for development or agriculture
- Safety works on mining sites

Management approaches

- Positive management of known relict landscapes should be encouraged through such means as management agreements, ESA agreements, Countryside Stewardship, or other similar initiatives
- The desirability of proposed development which would affect relict landscapes should be considered with care
- Safety works on mining sites should be carried out with regard to archaeological issues and the desirability of recording such areas could be considered

5.3 Techniques for investigating sites

The results of the Marches Uplands Survey have implications for the techniques of prospecting for and investigating archaeological sites in the survey area. These can be summarised as follows:

- **Desk-based assessment** is of most use for the post-medieval period, but should not be ruled out for earlier periods, since useful documentation may exist for some areas. The Tithe maps of the early 19th century and estate maps were not searched for the Marches Uplands Survey, so their potential is untested.
- **Aerial photographic assessment** is a good source of information, but is hampered by the predominently pastoral land-use, and by the relatively low coverage on existing photographs. The land-use has probably contributed to the low coverage.
- **Fieldwalking** is of limited use in locating previously undiscovered sites: negative results cannot rule out the potential presence of aceramic sites; results

need careful consideration in the light of generally low ceramic use in this area, especially when small amounts of Roman pottery are found. Fieldwalking is, however, a very good means of identifying sites represented by flint scatters, especially as flint is not local to the area. An extensive programme of fieldwalking would, however, have great potential (see 4.2 above).

- **Survey** Earthworks do survive in some areas, but may have been ploughed down, so care must be taken not to miss degraded examples.

- **Geophysical survey** can be assumed to have potential for positive results, but this was not tested by the Marches Uplands Survey.

- **Trial trenching** would identify archaeological features, but interpretation must be carefully considered, due to low ceramic use.

- **Palaeoenvironmental investigation** by a variety of means has considerable potential, especially in relation to earlier periods. Areas where buried soils may survive could be significant.

5.4 Conclusions

5.4.1 State of knowledge

The survey has established that our current state of knowledge of the archaeology of the uplands is patchy, in terms of chronological understanding, understanding of particular site types, and across the geographical area. The survey has improved this to some extent, but only for the sample parts of the survey area.

5.4.2 Interpretation of archaeological sites and landscapes

Interpretation of the archaeology of the survey area can present a challenge for a number of different reasons:

a) The effect of post-medieval enclosure and land-use has been to mask or destroy earlier archaeological sites. Although pasture is considered by many archaeologists to be no threat to earthwork or buried remains, in the survey area much is ploughed for pasture improvement on a regular basis, maybe once every 3 or 5 years. The cumulative effect of this is to reduce or flatten earthworks.

b) The area is characterised by low incidence of ceramics (possibly due to low ceramic use) in the later prehistoric to early medieval periods. This can have a serious effect on both discovery and interpretation of archaeological sites. It also serves to enhance the significance of what might elsewhere be considered to be low-level scatters of pottery.

c) There are indications that within the survey area, Romano-British settlement was not very Romanised in material terms. As with the preceding point, this enhances the significance of even small quantities of Roman pottery, and suggests that the assemblages from hillforts in the area need to be reconsidered.

d) The archaeology of the early medieval period has so far proved virtually invisible, with the exception of Offa's Dyke.

e) The archaeology of the post-medieval period is almost overwhelming, both in quantity, and because so much continues in use to the present day. This problem is not unique to the Marches Uplands Survey area, however, but faces all archaeologists in both urban and rural contexts.

5.4.3 Threats to archaeological remains

The nature of the threat to archaeological remains in rural areas such as the survey area is different from that common in built-up areas. The majority of potentially harmful activities in the survey area do not require planning permission, and are therefore not covered by the planning system currently used to protect and record archaeological remains. A 'hearts and minds' campaign to persuade landowners to adopt sympathetic approaches can sometimes be the only way forward.

5.4.4 Positive management

There are a range of opportunities for positive management of the land which can be used to benefit archaeological sites, even though this may not be the primary aim. Schemes such as Environmentally Sensitive Areas and Countryside Stewardship can be used to protect archaeology as well as for nature conservation.

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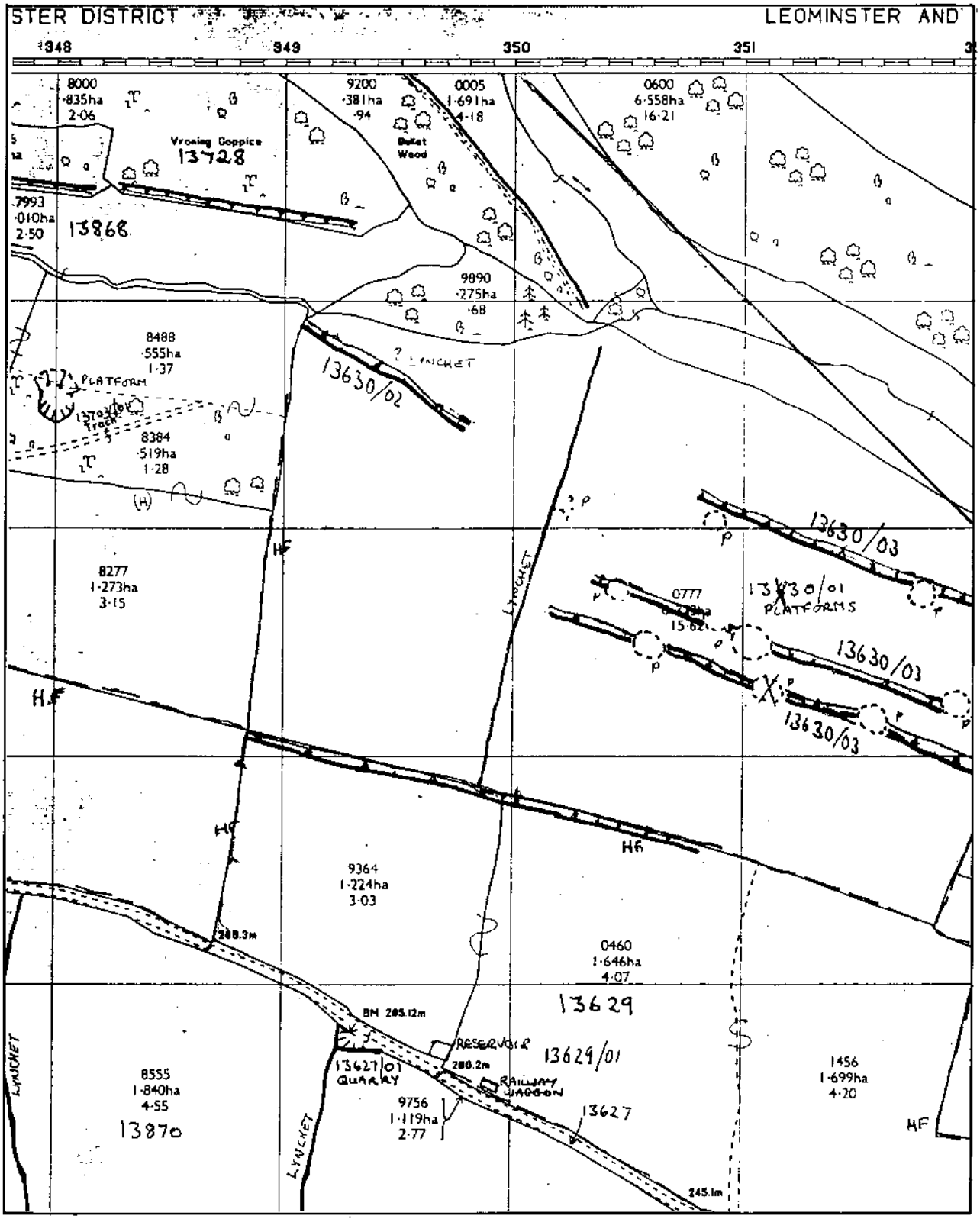
Appendix 2: Sample fieldwork records and maps

MUS 23456	Parish	OS Field no. 9234
NGR SO 39 25 5829	Site status	Area status
Site Name Field 300m SW Yarpole village		
Owner	Occupier	
Access Up lane opposite The Lodge, S of Yarpole on B4929		
Solid	Drift	
Soil	Aspect SW	
Landuse Pasture	Landform Gentle slope	
Boundaries		
General description Gently sloping field with ridge & furrow N-S		
Known data		
Monument nos. 23456/01 /02		
Field work LEE	Date 1·2·92	Desktop Date Sheet 1 of 1
Date	Type	Form
SMR Transfer / number	Management recommendations	

Sample monument record

Monument Name				MUS
EARTHWORK ENCLOSURE 350m SW YARPOLE VILLAGE				23456/01
NGR SO 3906 5802		**OS Field no.** 9234		
Length 20m	**Width** 15m	**Height**	**Depth** 0·4m	**Diameter** —
Description Rectangular enclosure in SW corner of MUS 23456. W & S sides = field boundary; N & E sides = earthwork ditch				
Provisional interpretation and date Post medieval stock enclosure				
Relationships Cuts Ridge & furrow MUS 23456/02				
Condition Most; Fair		**Vegetation** Grass		
Photos Film 3; 32, 33, 34		**Plan** S5		
Survey method Rapid	**Scale** 1:2500	**Date** 1·2·92	**Initials** RCE	**Checked**
Date	**Type**		**Form**	
SMR transfer / number	**Management recommendations**			

Sample field record



Sample fieldwork map

Appendix 3: Table of excavated sites in the survey area and environs (to 1995)

Parish	Site name	Pa	Me	Ne	BA	IA	RB	EM	LM	PM	U	Site type	Exc date	Excavator/author	Surv area
Craswall	Craswall Priory								●			Priory	1904-07	Lilwall	BM
Craswall	Craswall Priory								●			Priory	1962	Wright	BM
Aymestrey	Croft Ambrey					●	●			●		Hillfort	1960-66	Stanford	LA
Wigmore	Wigmore Castle								●			Castle	1995	CHAU	LA
Kington Rural	Offa's Dyke, Rushock Hill							●				Offa's Dyke	1989	Hill (unpub)	LA
Kington Rural	Offa's Dyke, Box Folly							●				Offa's Dyke	1989	Hill (unpub)	LA
Huntington	Huntington Castle								●			Castle	pre 1940s	unpub	LA
Huntington	Huntington Castle								●			Castle	1970s	unpub	LA
Longtown	Longtown Castle								●			Castle	1965	Hurst	BM
Longtown	Longtown Castle								●			Castle	1972	unpub	BM
Dorstone	Dorstone Hill		●	●	●	⌀	●					Enclosure & settlement	1965-69	Pye (unpub)	BM
Llanveynoe	Beaker cists				●							Cist burials	1932	Marshall	BM
Downton	Old church								●			Church	1993	Brown	LA
Richards Castle	Richards Castle								●			Castle	1962-64	Curnow & Thompson	LA
Wigmore	Deerfold pottery kiln									●		Kilns	1948	Griffiths	LA
Longtown	Longtown								●			Town	1988	Taylor & Woodiwiss	BM
Longtown	Longtown 'vineyard'										●	?Natural	1980	van Laun	BM
Craswall	Beaker cist burial				●							Cist burial	1982	CHAU (unpub)	BM
Richards Castle	Church								●			Church	1987	Shoesmith	LA
Pipe Aston	Clay pipe kiln, Juniper Cottage									●		Kiln	1992	Peacey	LA
Aymestrey	Beaker burial				●							Cist burial	1987	Woodiwiss	LA
Michaelchurch Escley	Kings Arms, Clothiers Farm								●	●		??	post 1989	Shoesmith	BM
Kington Rural	Offa's Dyke, Sheepwalk							●				Offa's Dyke	1982	Hill (unpub)	CF
Lower Harpton	Walton cursus			⌀	⌀							Cursus	1995	Gibson (unpub)	LA
Walford Letton & Newton	Roman barrow, west of Brandon Camp						●					Barrow	1662	Harley	LA
Dorstone	Mynydd-Brith								●			Castle	1981	Stirling-Brown	BM
Longtown	Longtown Castle, outer earthwork								●			Castle	1965	Jarrett & Jones	BM
Michaelchurch Escley	Cist, Upper Llanon Farm				●							Barrow	1934	Marshall	BM
Brampton Bryan	Kiln, near Boresford									●		Pottery kiln	1946	Griffiths	LA

Parish	Site name	Pa	Me	Ne	BA	IA	RB	EM	LM	PM	U	Site type	Exc date	Excavator/author	Surv area
Wigmore	Kiln, near Grove Head Farm									●		Pottery kiln	1948	Griffiths	LA
Wigmore	Kiln, Deepmoor Farm									●		Pottery kiln	1940s	Griffiths	LA
Wigmore	Pottery scatter?, Deepmoor Farm									●		Pottery kiln or scatter	1948	Griffiths	LA
Wigmore	Pottery at Dickendale									●		Pottery kiln	1945	Griffiths	LA
Wigmore	Kiln, Deerfold Farm									●		Pottery kiln	1945	Griffiths	LA
Wigmore	Kiln, Shirley Farm									●		Pottery kiln	1945	Griffiths	LA
Wigmore	Kiln, Crookmullen									●		Pottery kiln	1945	Griffiths	LA
Richards Castle	Medieval dovecote								●			Dovecote	1962-64	Curnow & Thompson	LA
Peterchurch	Urishay Castle								●			Chapel	1981	Shoesmith	BM
Adforton?	Barrow, between Wigmore and Leintwardine				●							Barrow	1912	Jack	LA
Longtown	Longtown Castle (geophysical survey)								●			Castle	1984	Bartlett	BM
Longtown	St Peter, Longtown								●			Church	1983	Wills	BM
Longtown	Longtown Castle								●			Castle	1995	Appleton-Fox	BM
Longtown	'Penbailey', Longtown Castle								●			Castle	1991		BM
Church Stretton	Watling St West						●					Road	1894	Dyke	MY
Church Stretton	Watling St West						●					Road	1989	Sterenberg	MY
Bishops Castle	Castle								●			Castle	1937	Lavender	CF
Hopesay	Burrow Hill					●						Hillfort	1978	Toller (unpub)	CF
All Stretton	Robin Hood's Butts				●							Round barrow	pre 1841	unpub	MY
Ratlinghope	Shooting Box barrow				●							Round barrow	1992	MUS (unpub)	MY
All Stretton	High Park Cottage cross-dyke				●							Linear earthwork	1992	MUS (unpub)	MY
Woolstaston	Castle								●			Castle	1965	Rowley (unpub)	MY
Church Stretton	L Caradoc pillow mound										●	Pillow mound	C19	unpub	MY
Church Stretton	Devil's Mouth cross-dyke				●							Linear earthwork	1992	MUS (unpub)	MY
Selattyn & Gobowen	Selattyn Tower barrow				●							Round barrow	1851	Wynne Foulkes	SE
Wentnor	Robury Ring					●						Enclosure	1990	Hughes	MY
Selattyn & Gobowen	Offa's Dyke, Woodside							●				Offa's Dyke	1979	Hill (unpub)	SE
Selattyn & Gobowen	Offa's Dyke, Orseddwen							●				Offa's Dyke	1976	Hill (unpub)	SE

Parish	Site name	Pa	Me	Ne	BA	IA	RB	EM	LM	PM	U	Site type	Exc date	Excavator/author	Surv area
Selattyn & Gobowen	Offa's Dyke, Carreg-y-big							●				Offa's Dyke	1981	Hill (unpub)	SE
Oswestry Rural	Offa's Dyke, Bakers Hill							●				Offa's Dyke	1922	unpub	SE
Mainstone	Offa's Dyke, Nut Wood							●				Offa's Dyke	1986	Hill (unpub)	CF
Mainstone	Offa's Dyke, R Unk							●				Offa's Dyke	1983	Hill (unpub)	CF
Llanfair Waterdine	Offa's Dyke, Kinsley Wood										●	Offa's Dyke	1981	Hill (unpub)	CF
Pontesbury	Pontesford Hill Camp			●		●						Hillfort	1963	Barker	MY
Pontesbury	Castle								●			Castle	1961, 1964	Addyman, Barker	MY
Clun	Caer Caradoc					●						Hillfort	1995	Hannaford (unpub)	CF
Bettws-y-Crwyn	Casteil Bryn Amlwg								●			Castle	1963	Alcock	CF
Clun	Castle								●			Castle	1990s	CHAU various	CF
Chirbury	Middleton moat								●			Moat	1975-76	Roper (unpub)	MY
More	Roveries		●	●		●						Hillfort	1935	unpub?	CF
More	Roveries		●	●		●						Hillfort	1960-3	Thomas (unpub)	CF
More	Linley Hall villa						●					Villa	1856	More & Wright (unpub)	MY
Chirbury	Mitchells Fold			●								Stone circle	1994	CAS	MY
More	Linley Hill enclosure										●	Enclosure	1954	Webster	MY
Church Stretton	Brockhurst Castle								●			Castle	1959	Barker	MY
Stowe	Church Field Villa						●					Villa	1924	Morris (unpub)	CF
Bettws-y-Crwyn	Grey Stones				●							Round barrow	1955	unpub	CF
Llanfair Waterdine	Monaughty Poeth			●								Chambered tomb	pre 1818	unpub	CF
Stowe	?Pigsty								●		●	Building	pre 1955	unpub	CF
Clun	Oaksfield barrow			●	●							Round barrow	1936	Jones	CF
Clun	?Pleasance										●	?Pleasance	C19	unpub	CF
Ratlinghope	Belmore Ring									●		Tree ring	1992	Millin & Barrett (unpub)	MY

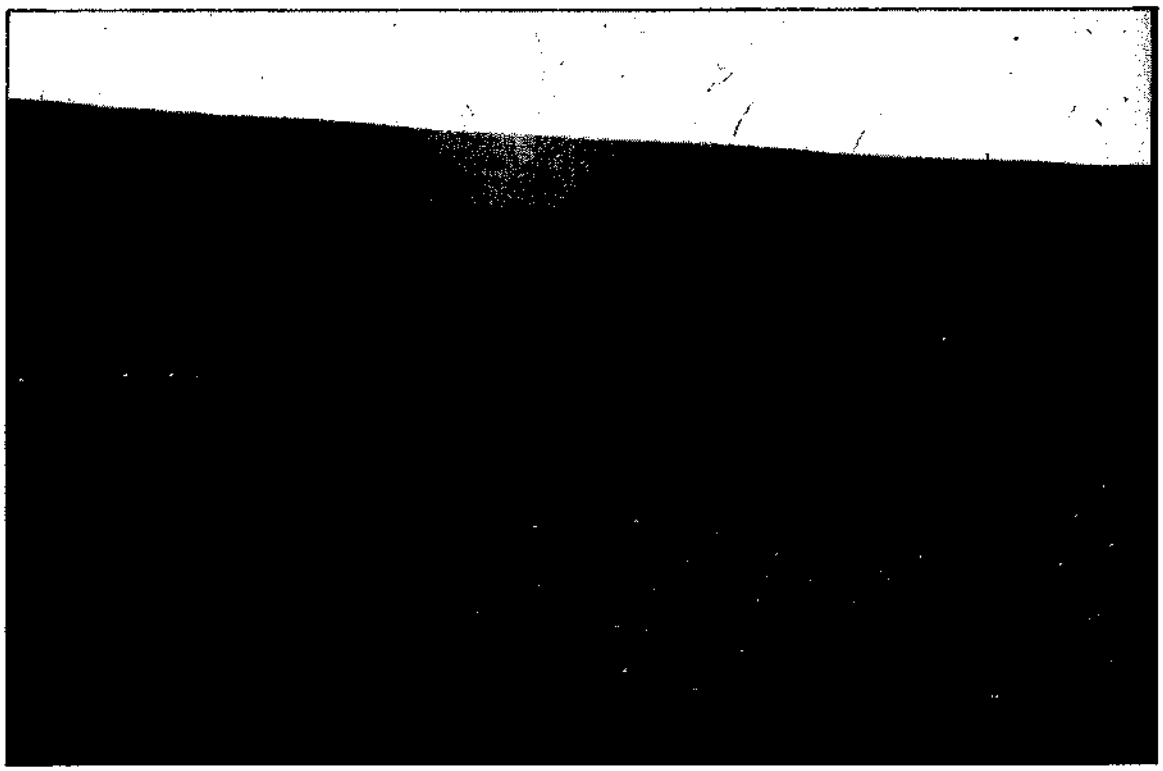


Figure 1 Characteristic landscape of the Marches Uplands Survey area

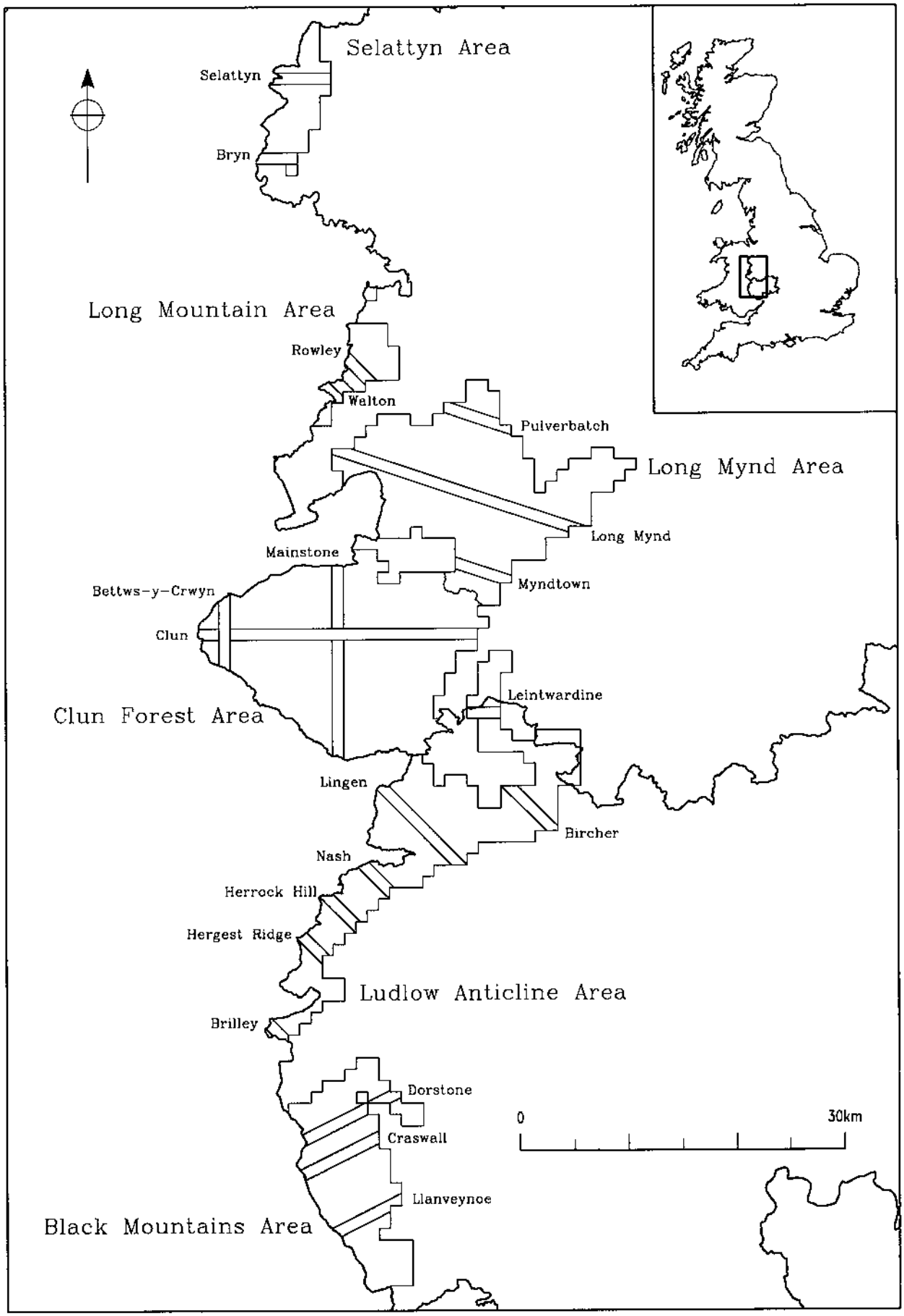


Figure 2 Location of Marches Uplands Survey area, individual survey areas and transects

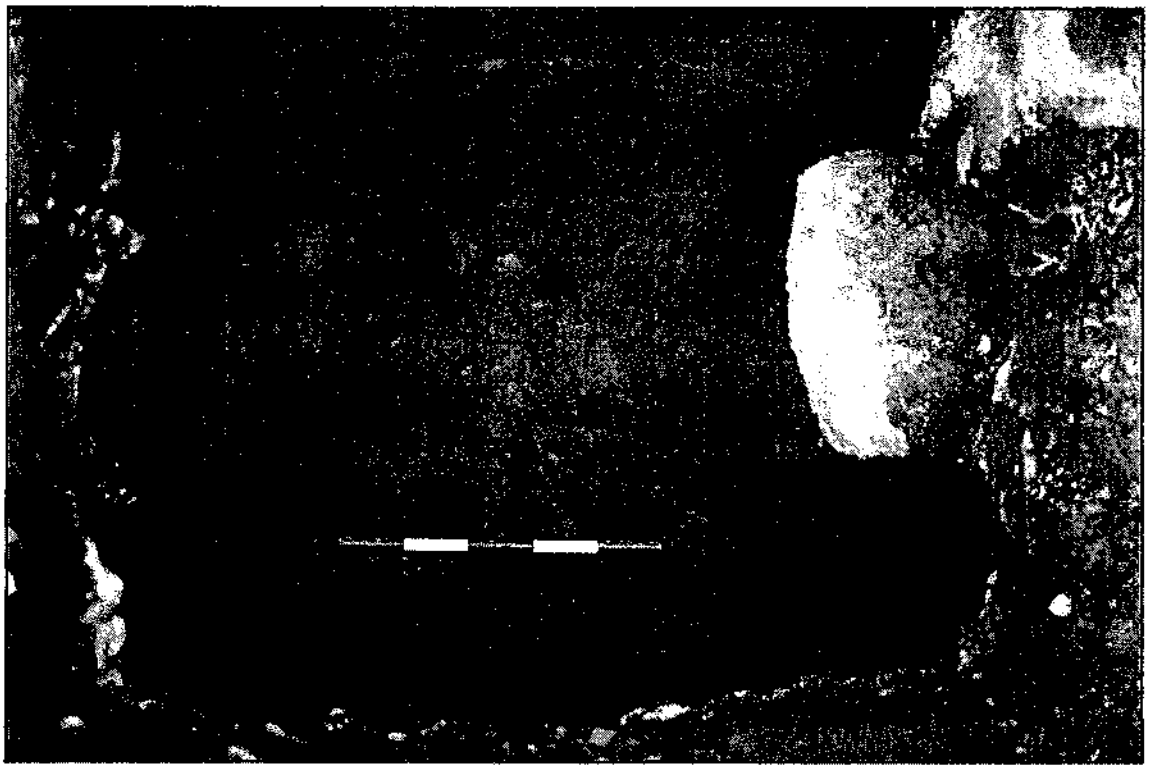


Figure 3 Sample excavation beneath the Shooting Box barrow, Long Mynd, Shropshire

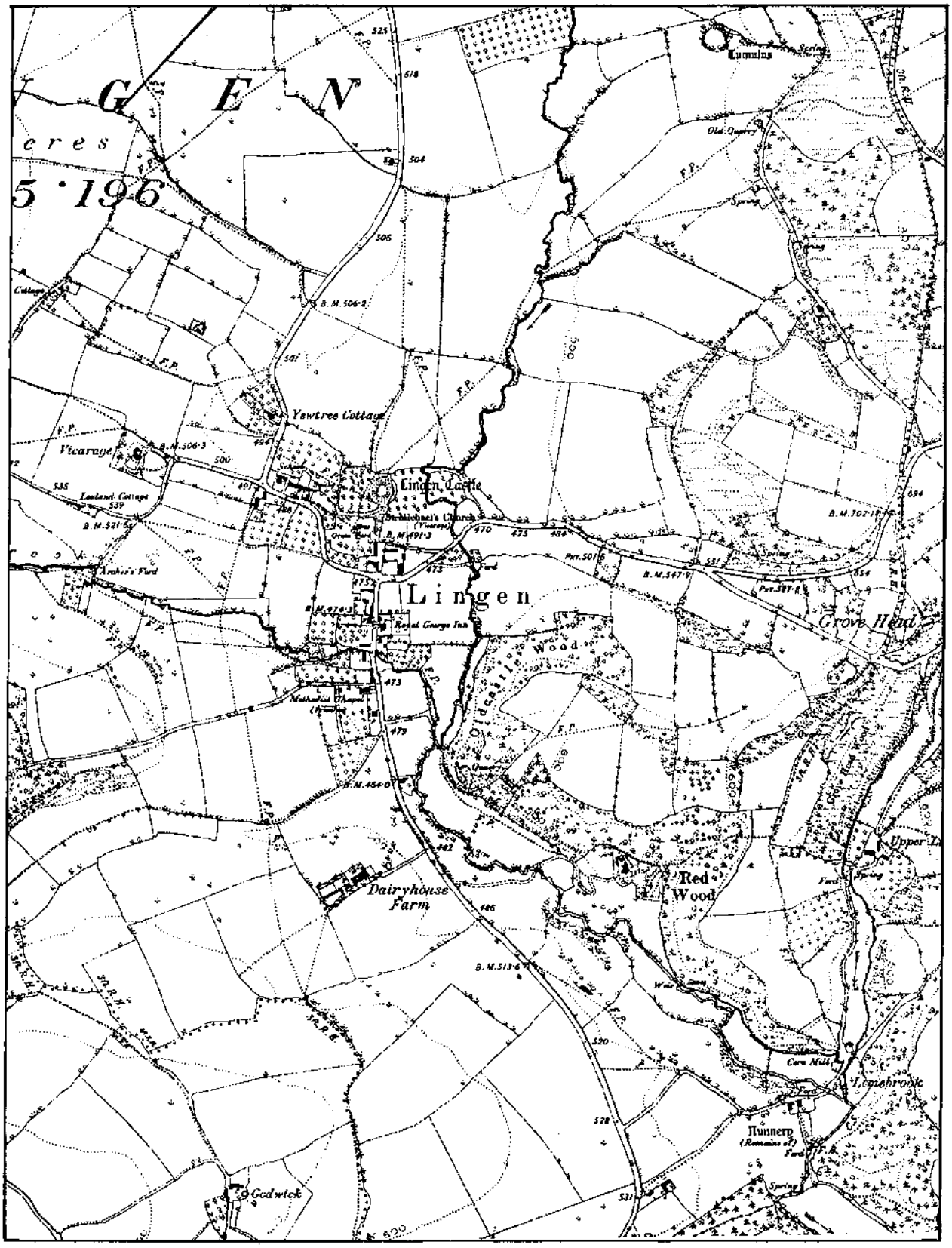


Figure 4 Ordnance Survey First Edition 6" County Series map

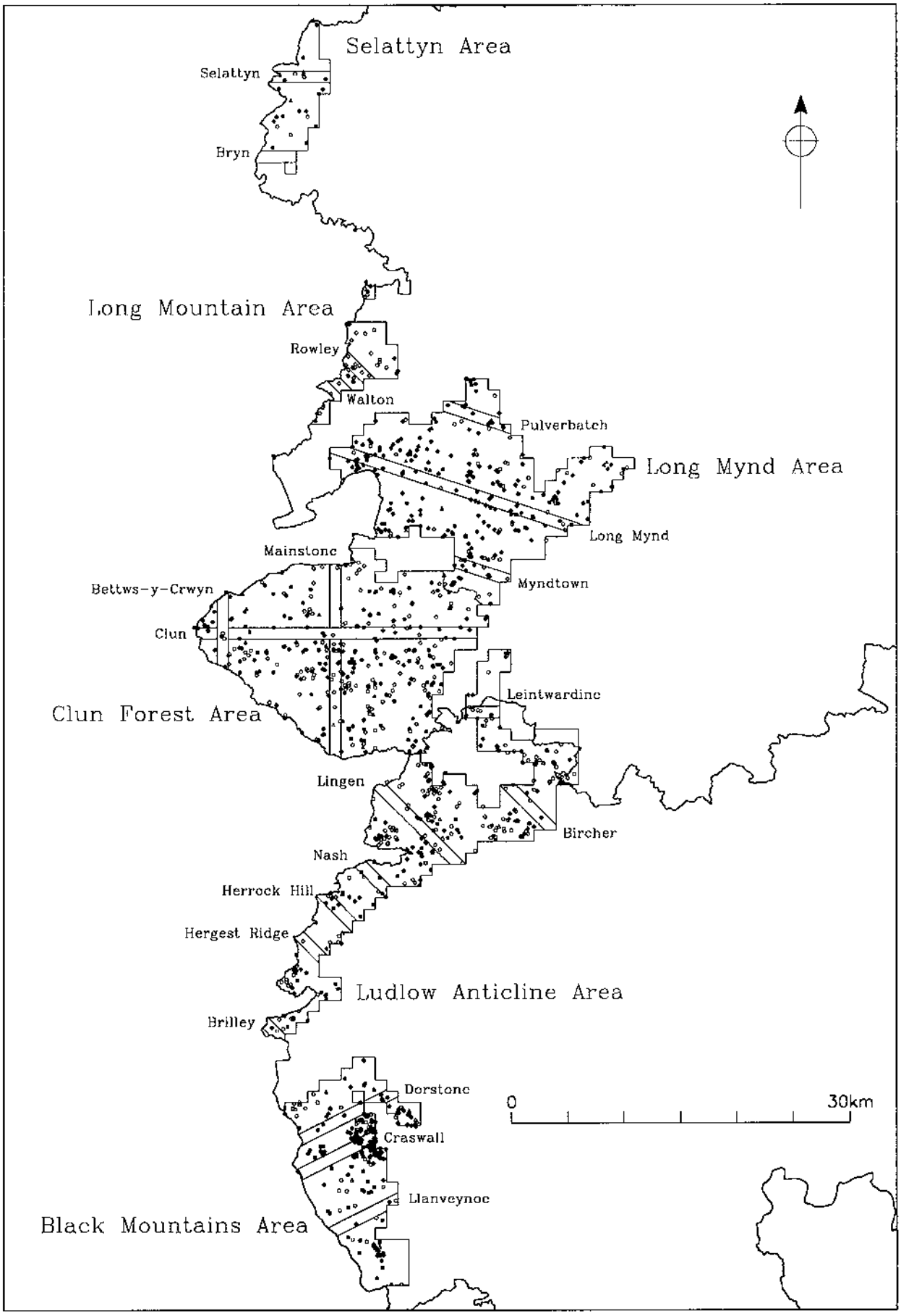


Figure 5 Marches Uplands Survey: all sites before survey

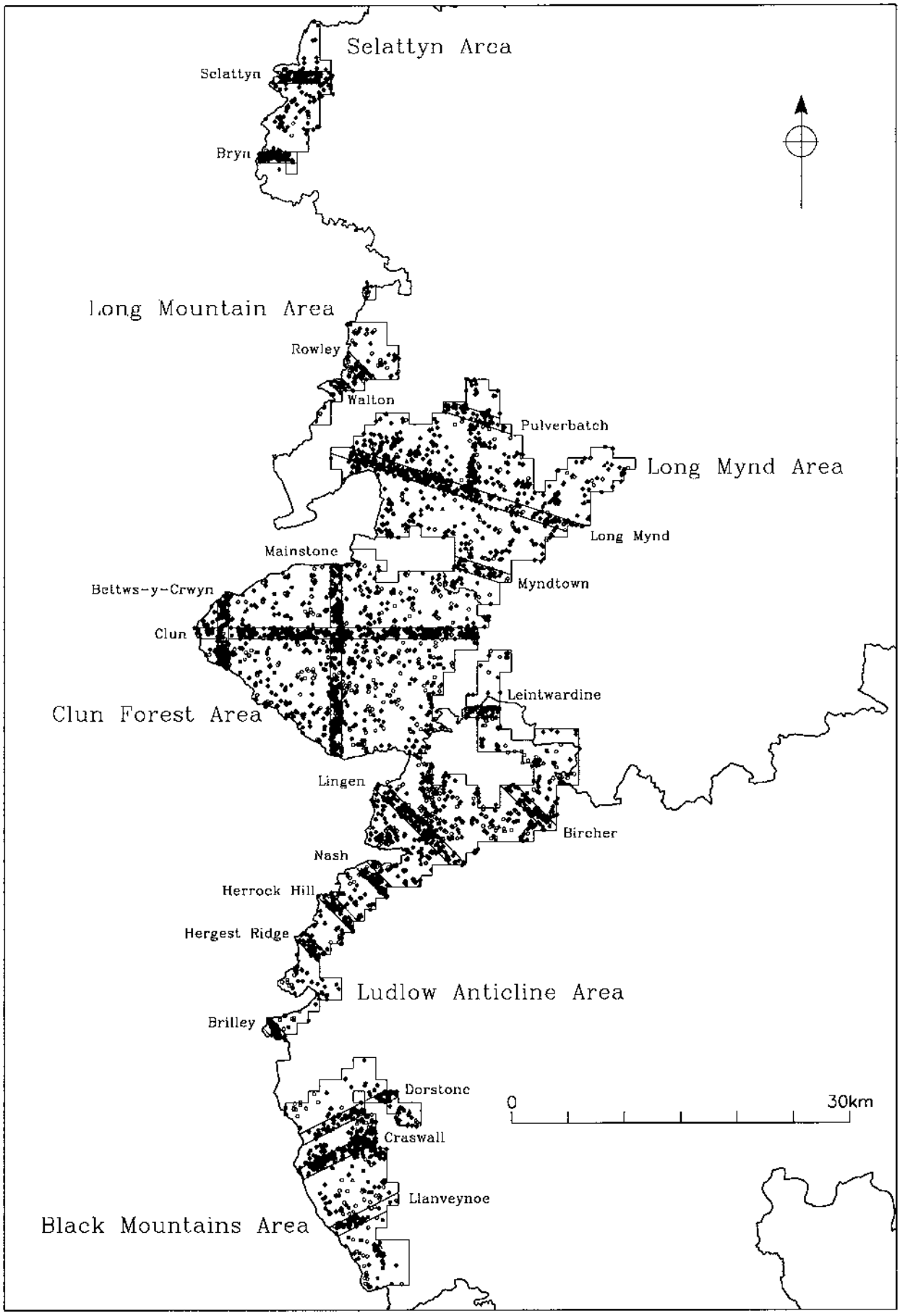


Figure 6 Marches Uplands Survey: all sites after survey

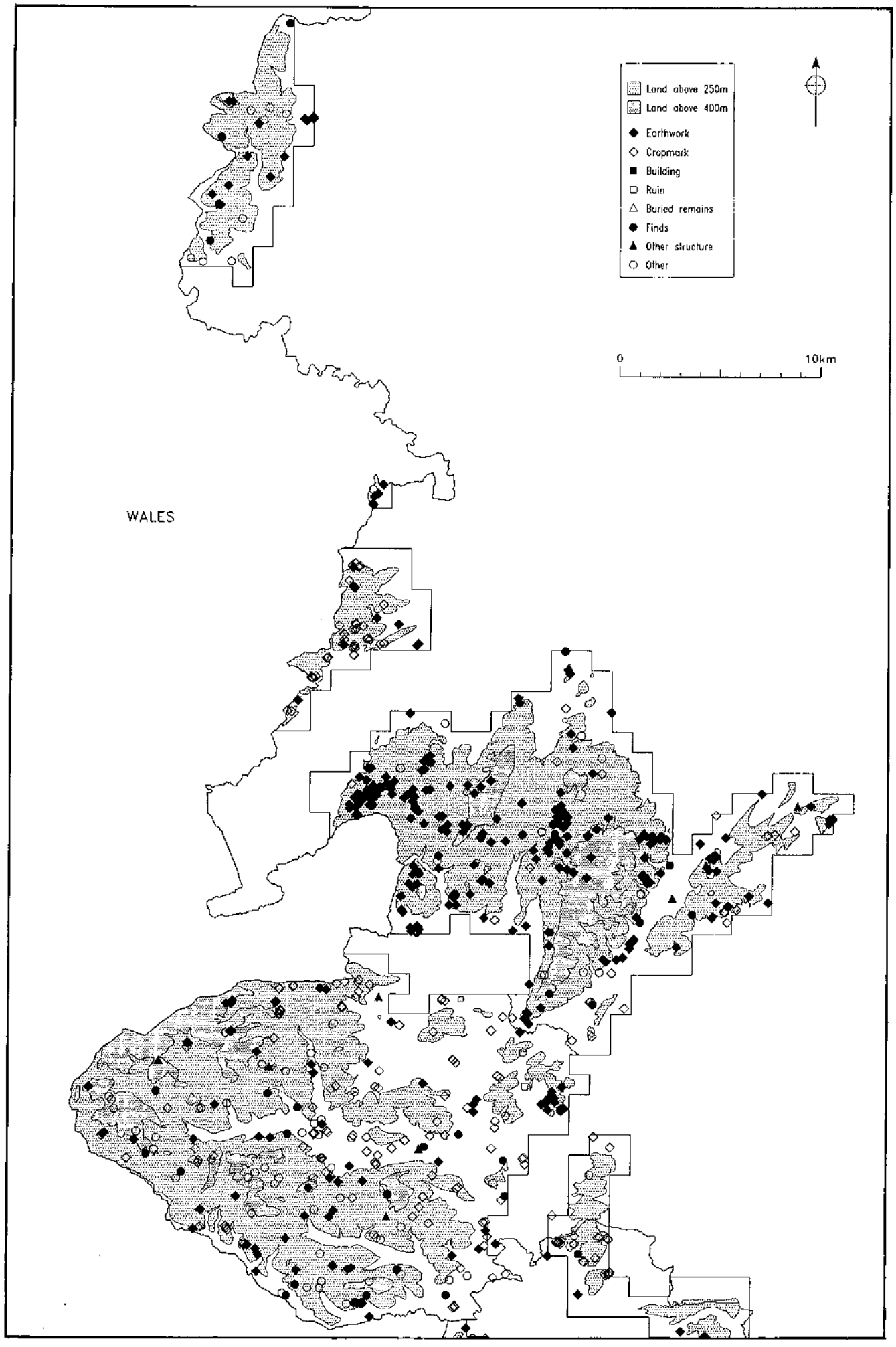


Figure 7.1 Distribution of undated sites and findspots: Shropshire

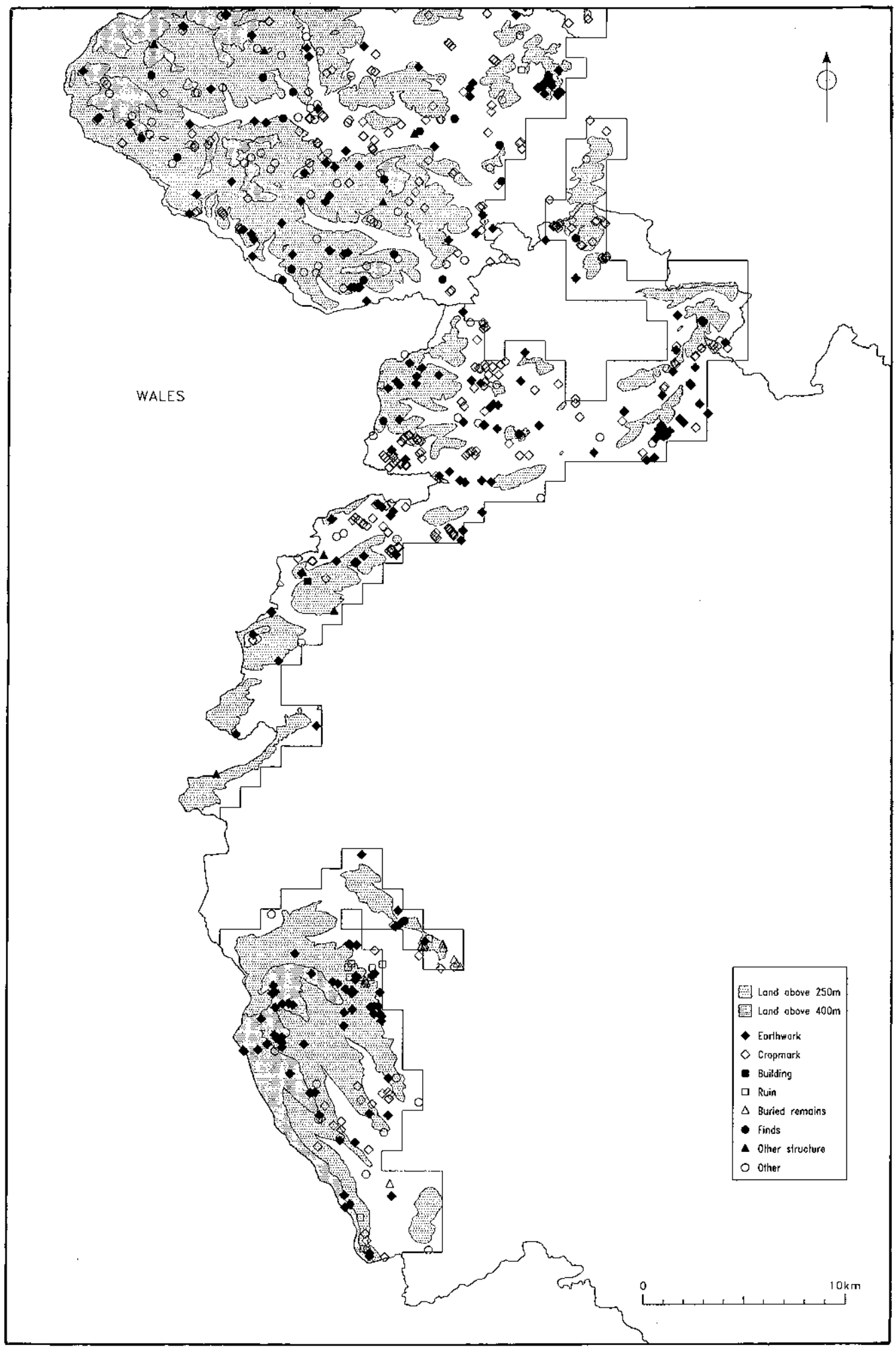


Figure 7.2 Distribution of undated sites and findspots: Herefordshire

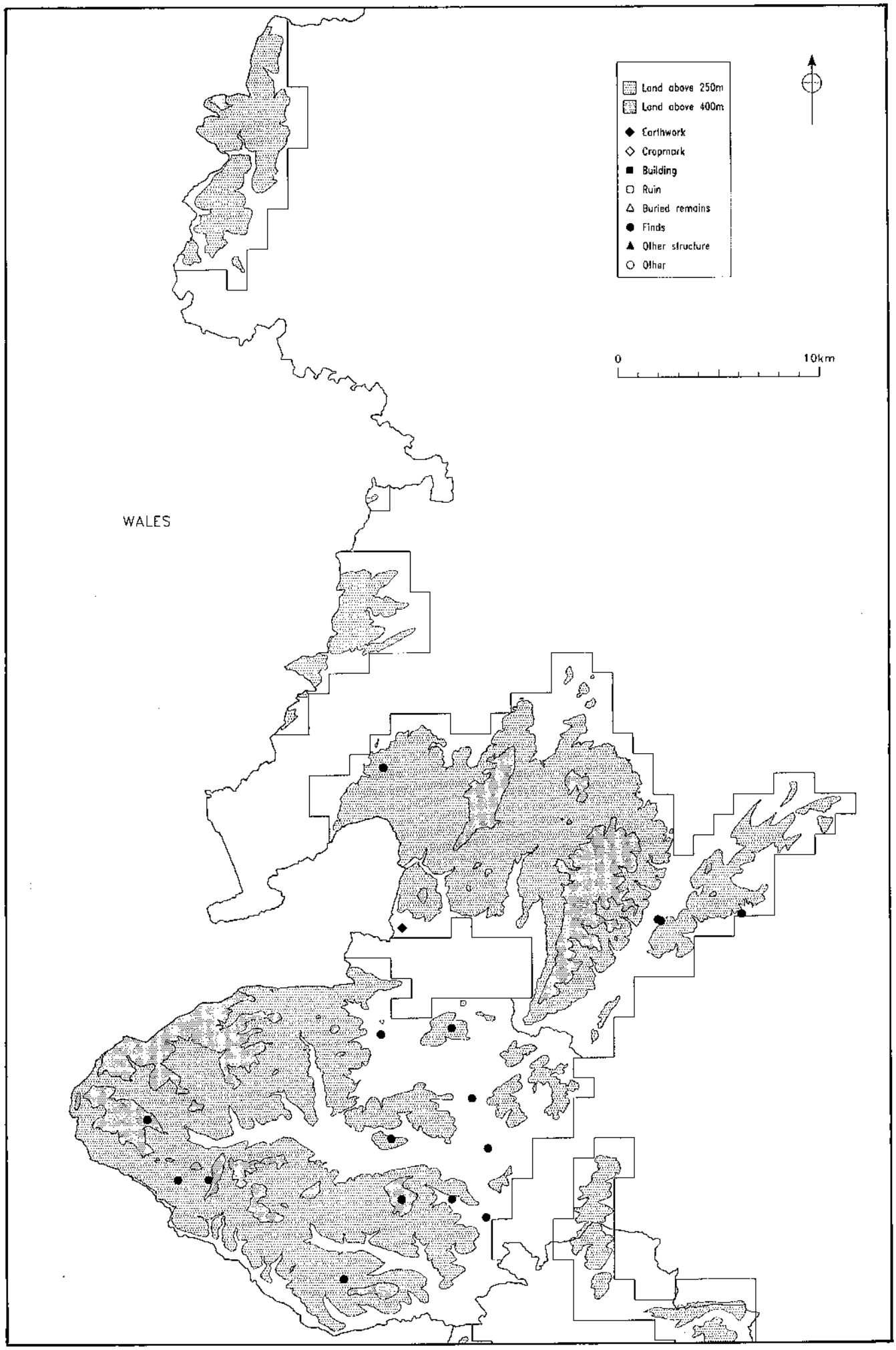


Figure 8.1 Distribution of Mesolithic sites and findspots: Shropshire

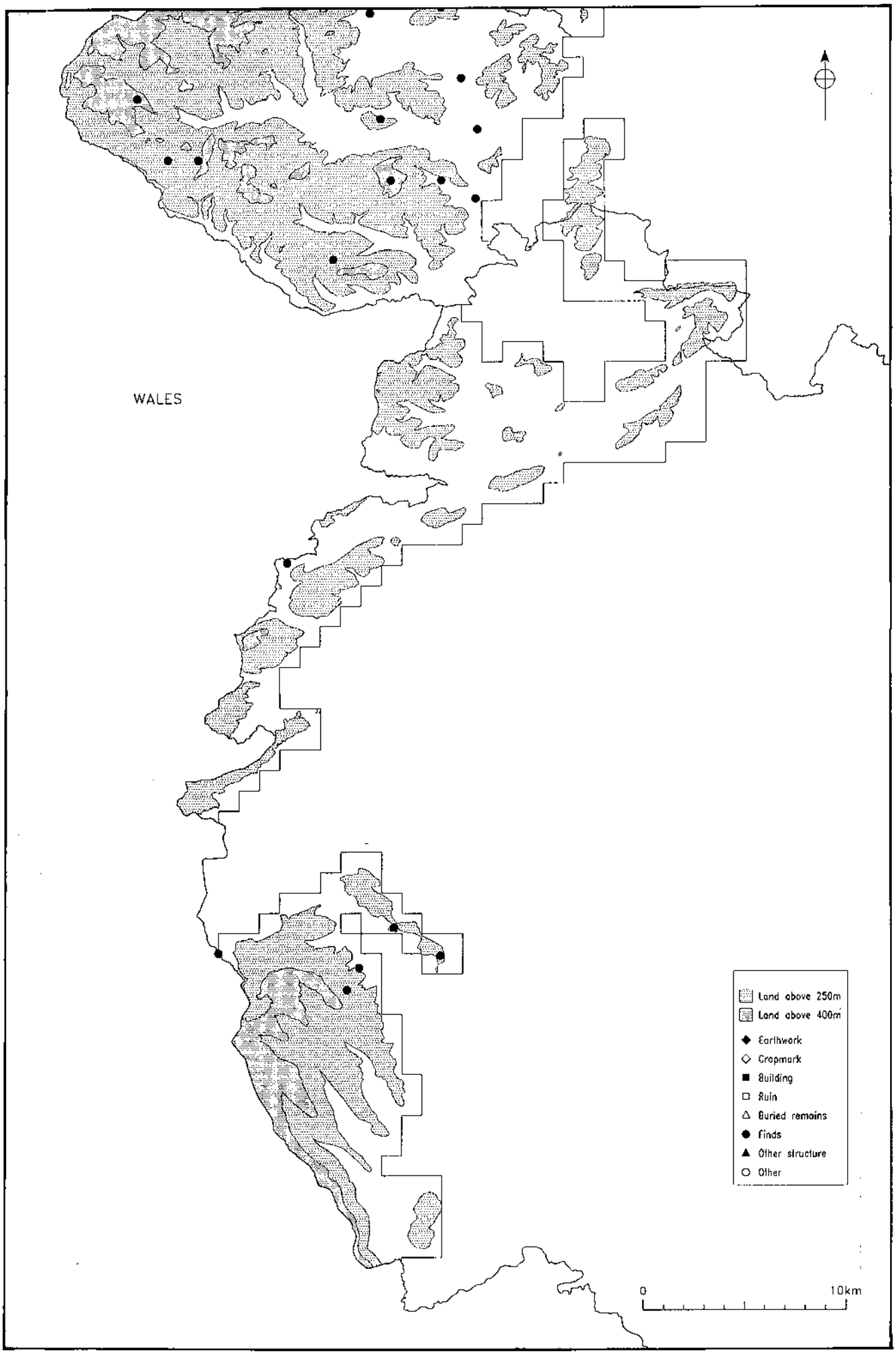


Figure 8.2 Distribution of Mesolithic sites and findspots: Herefordshire

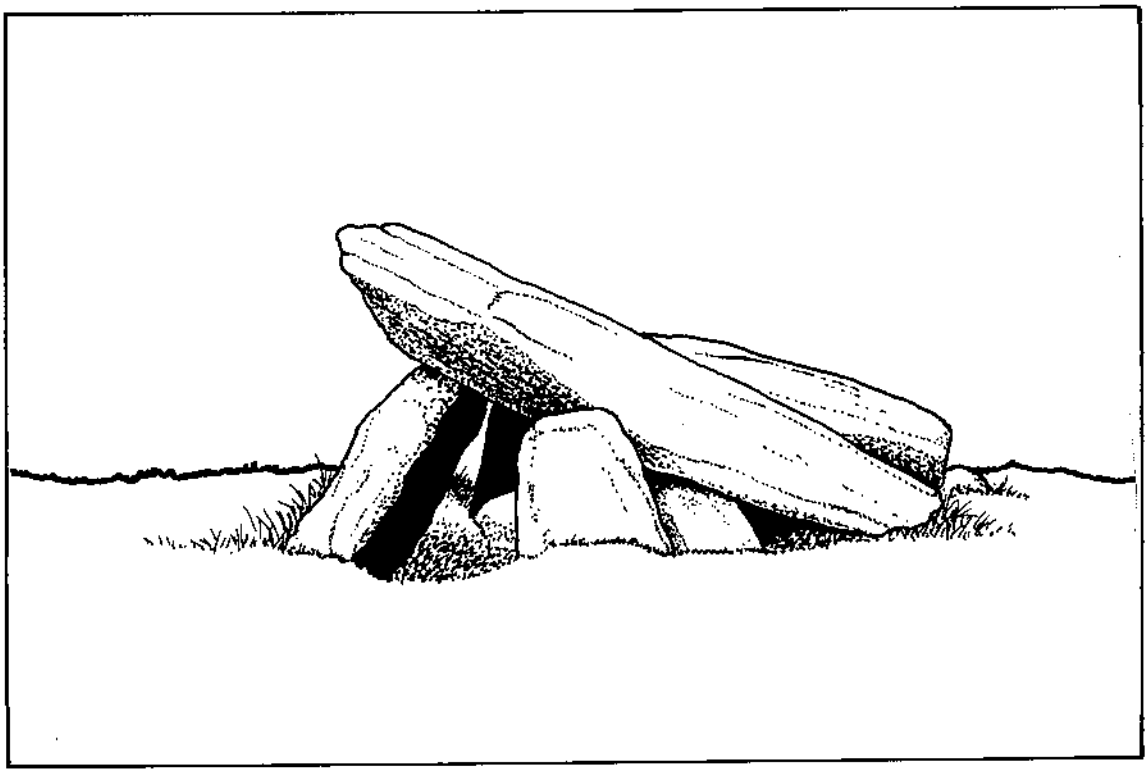


Figure 9 Arthur's Stone, Black Mountains, Herefordshire

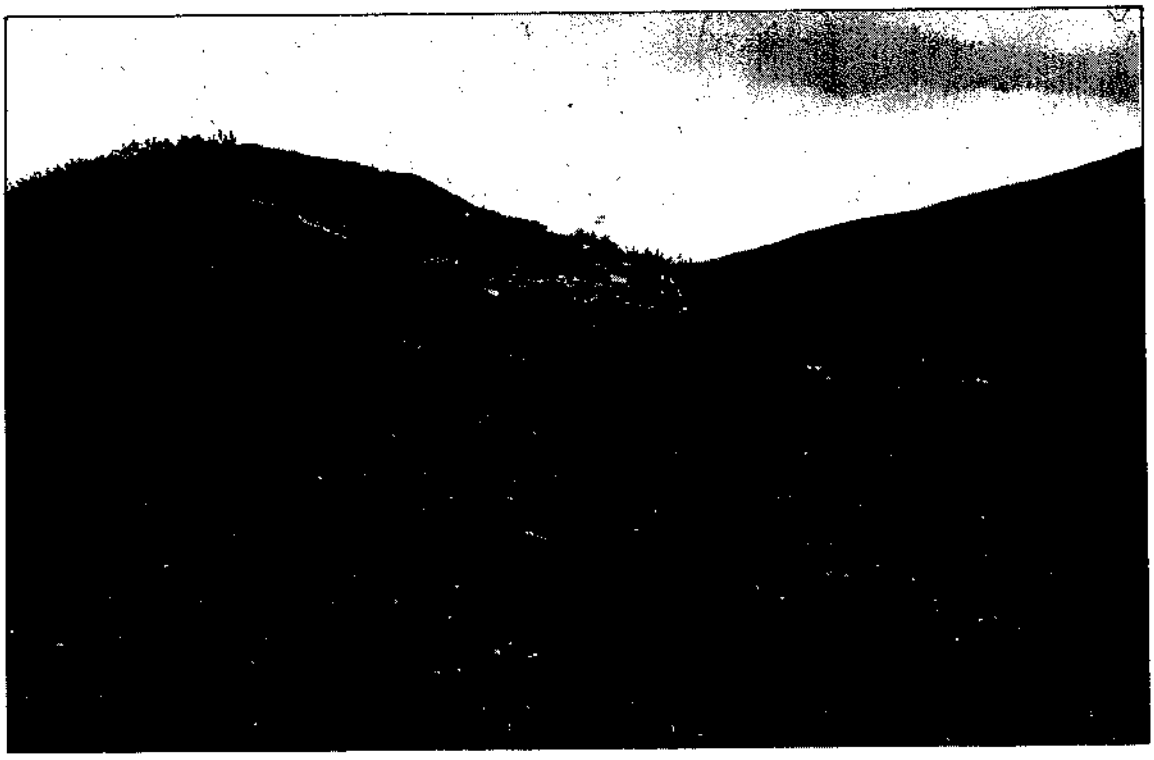


Figure 10 Barrow at Llan-oleu, Herefordshire

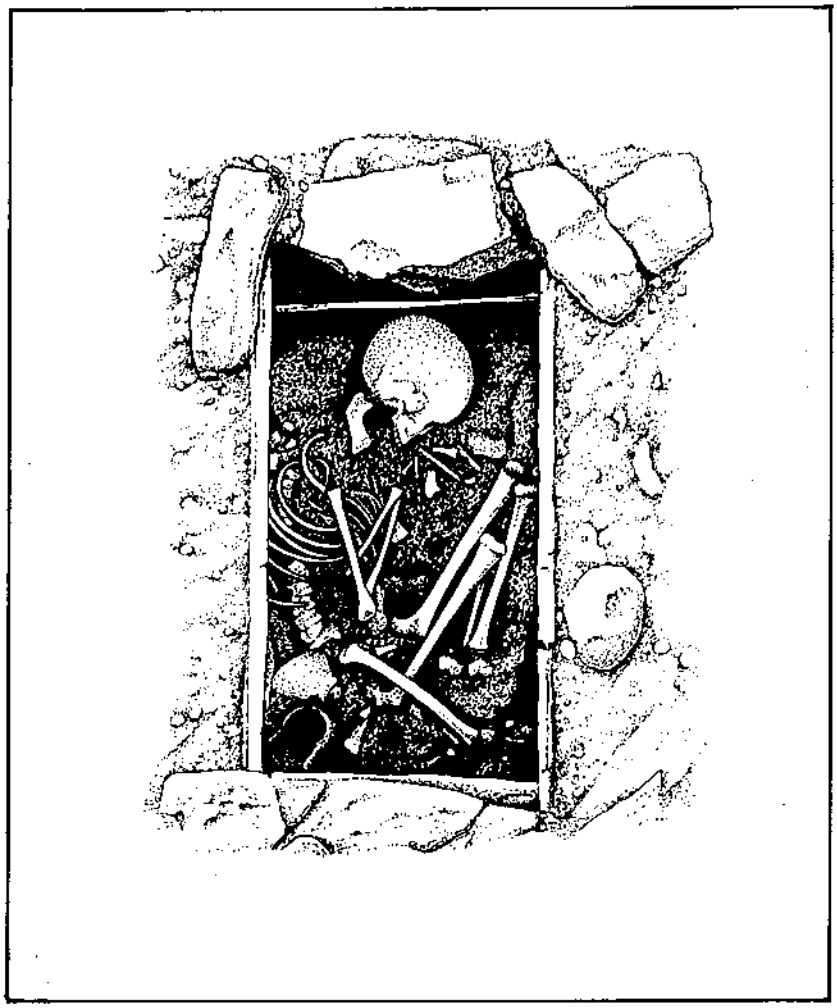


Figure 11 The Aymestrey Beaker burial, Herefordshire (drawn by Carolyn Hunt)

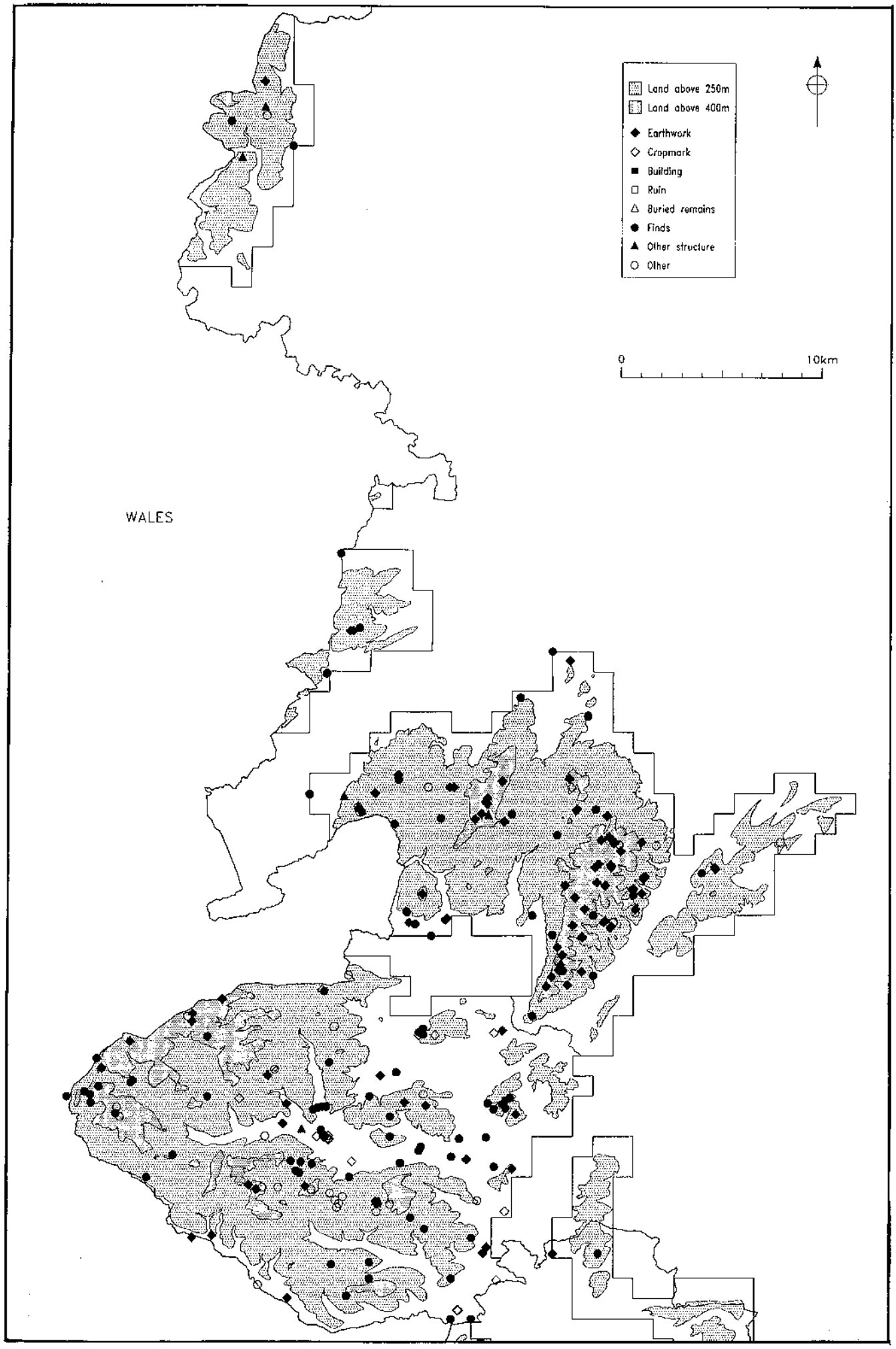


Figure 12.1 Distribution of Neolithic and Bronze Age sites and findspots: Shropshire

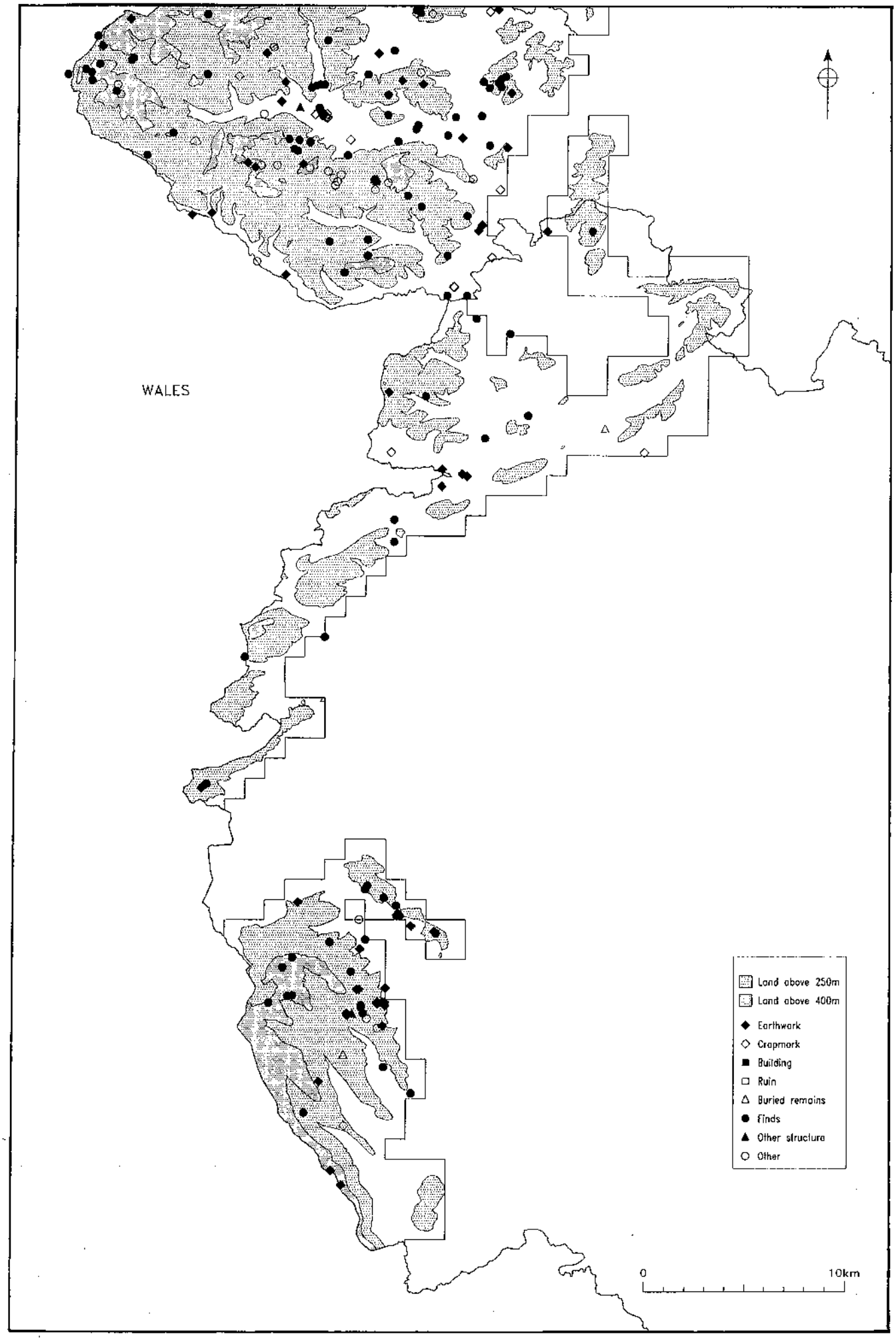


Figure 12.2 Distribution of Neolithic and Bronze Age sites and findspots: Herefordshire

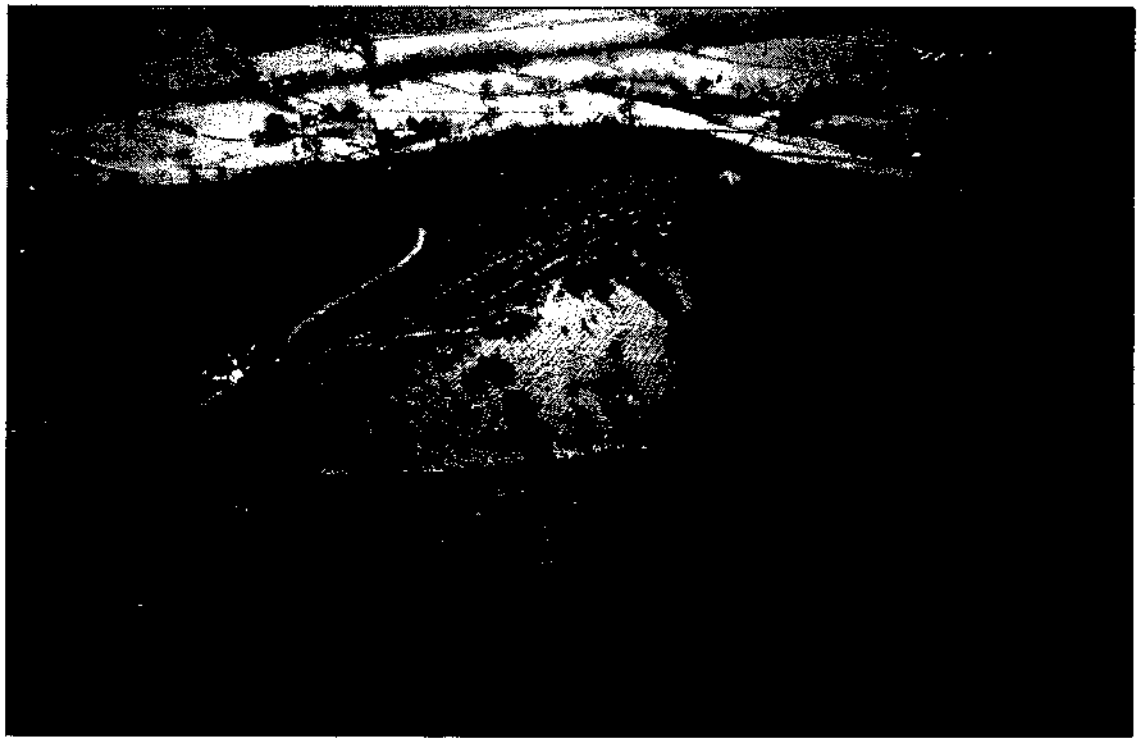


Figure 13 Wapley Hill hillfort

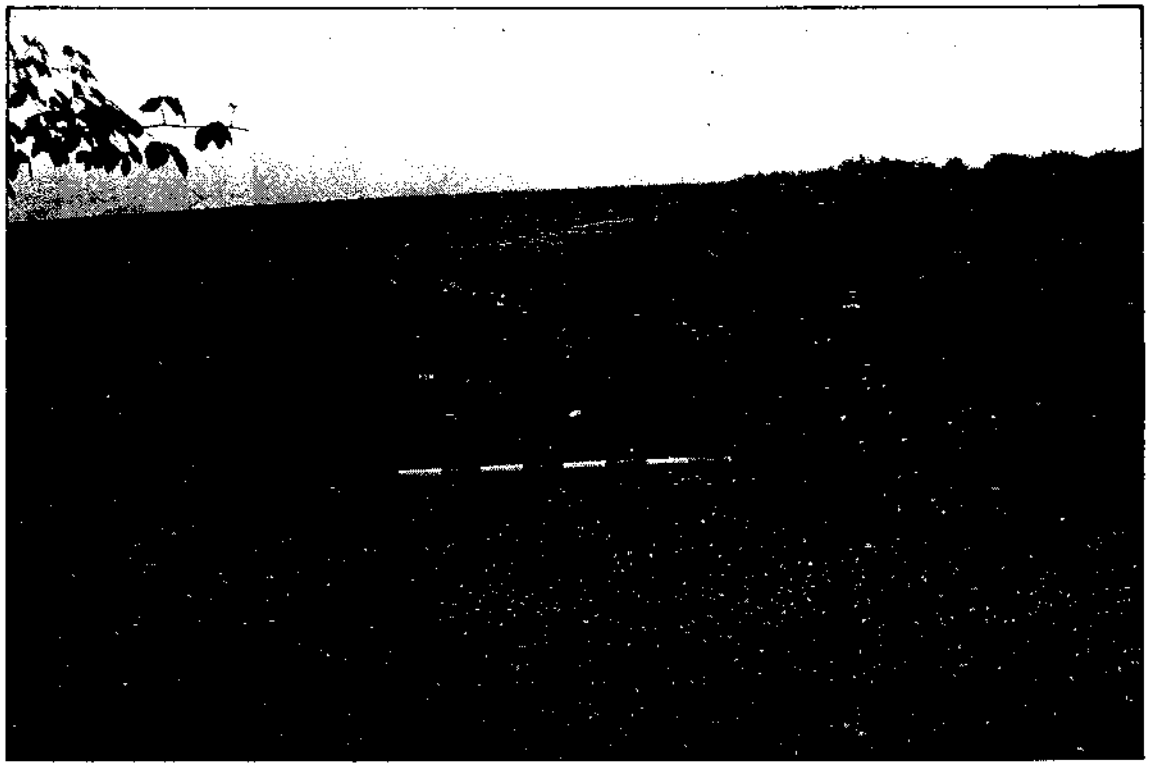


Figure 14 Cross dyke at High Park cottage, Long Mynd, Shropshire from the ground

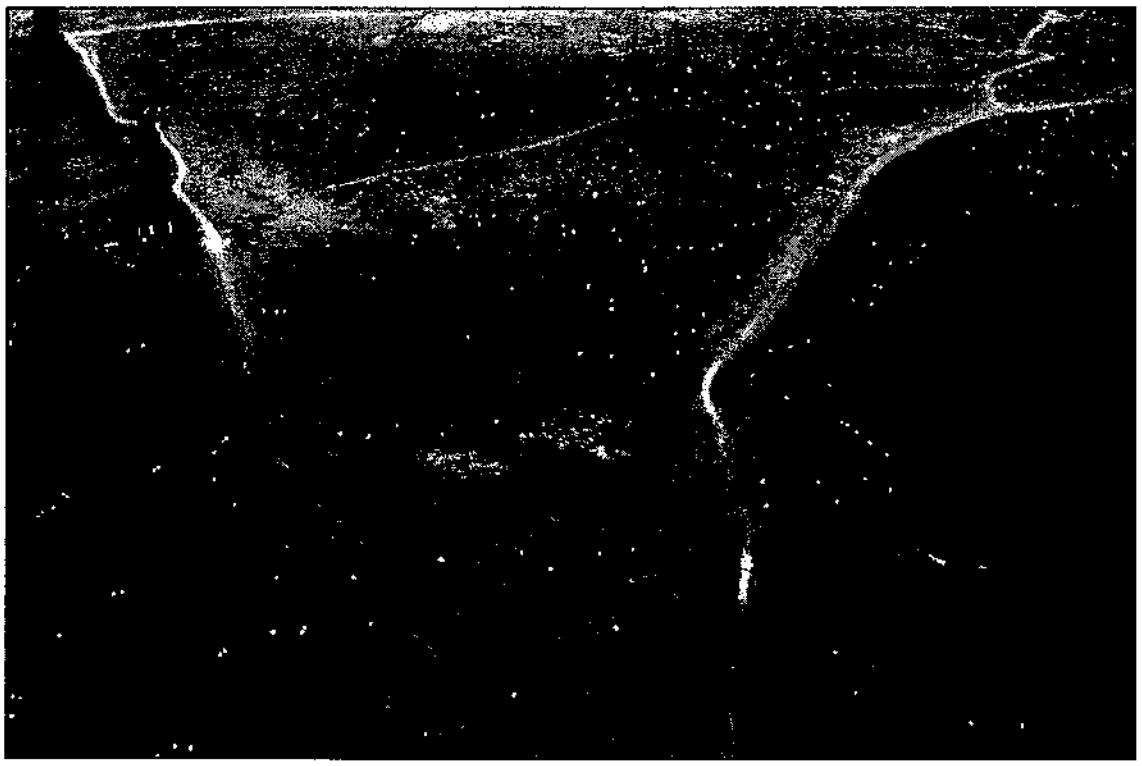


Figure 15 Cross dyke at High Park cottage, Long Mynd, Shropshire from the air

Figure 16 Stone row at Stapeley Hill, Shropshire

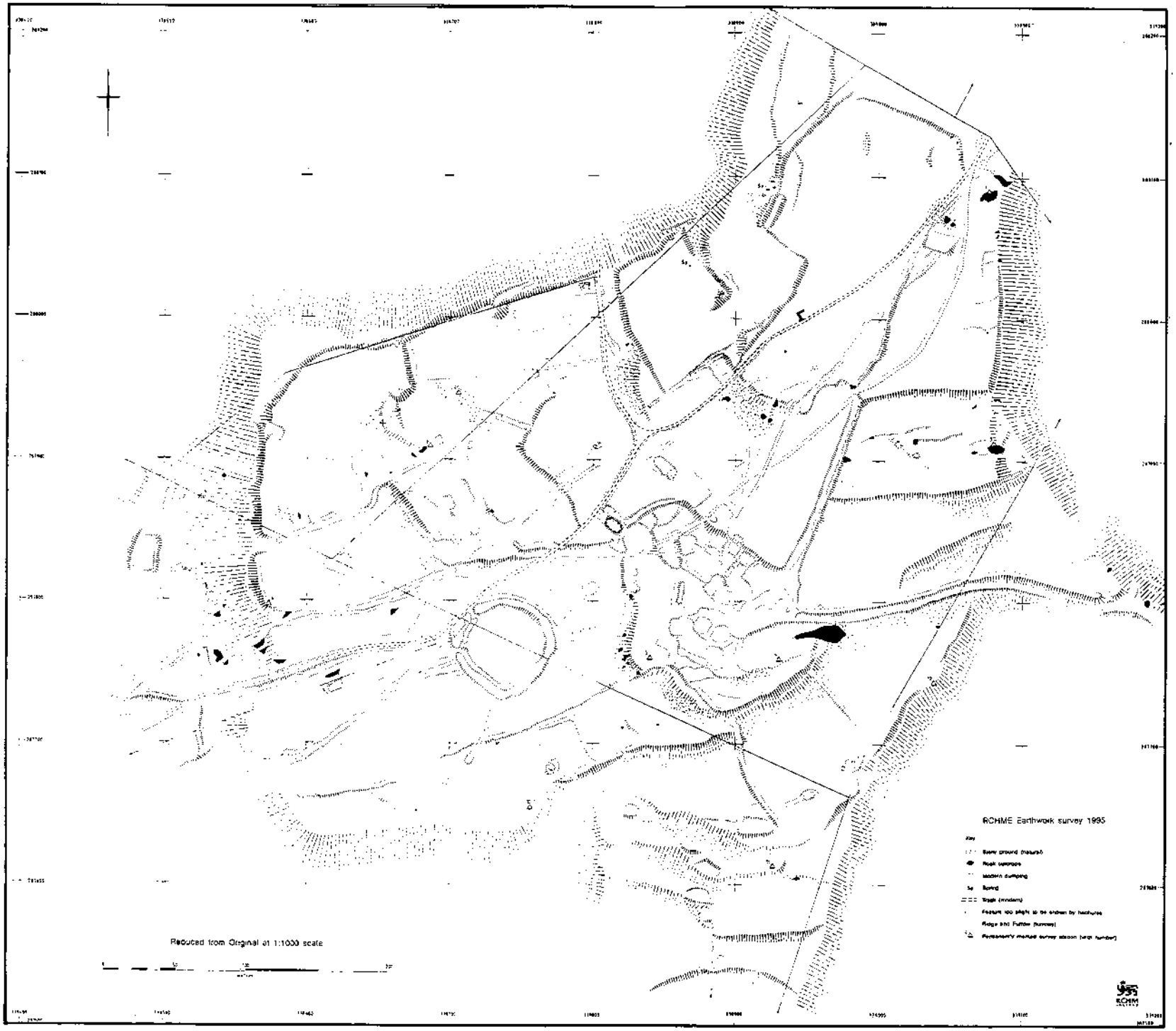


Figure 17 Earthworks at Black Knoll, Long Mynd, Shropshire, surveyed by RCHME (source: Ainsworth and Donachie 1995)

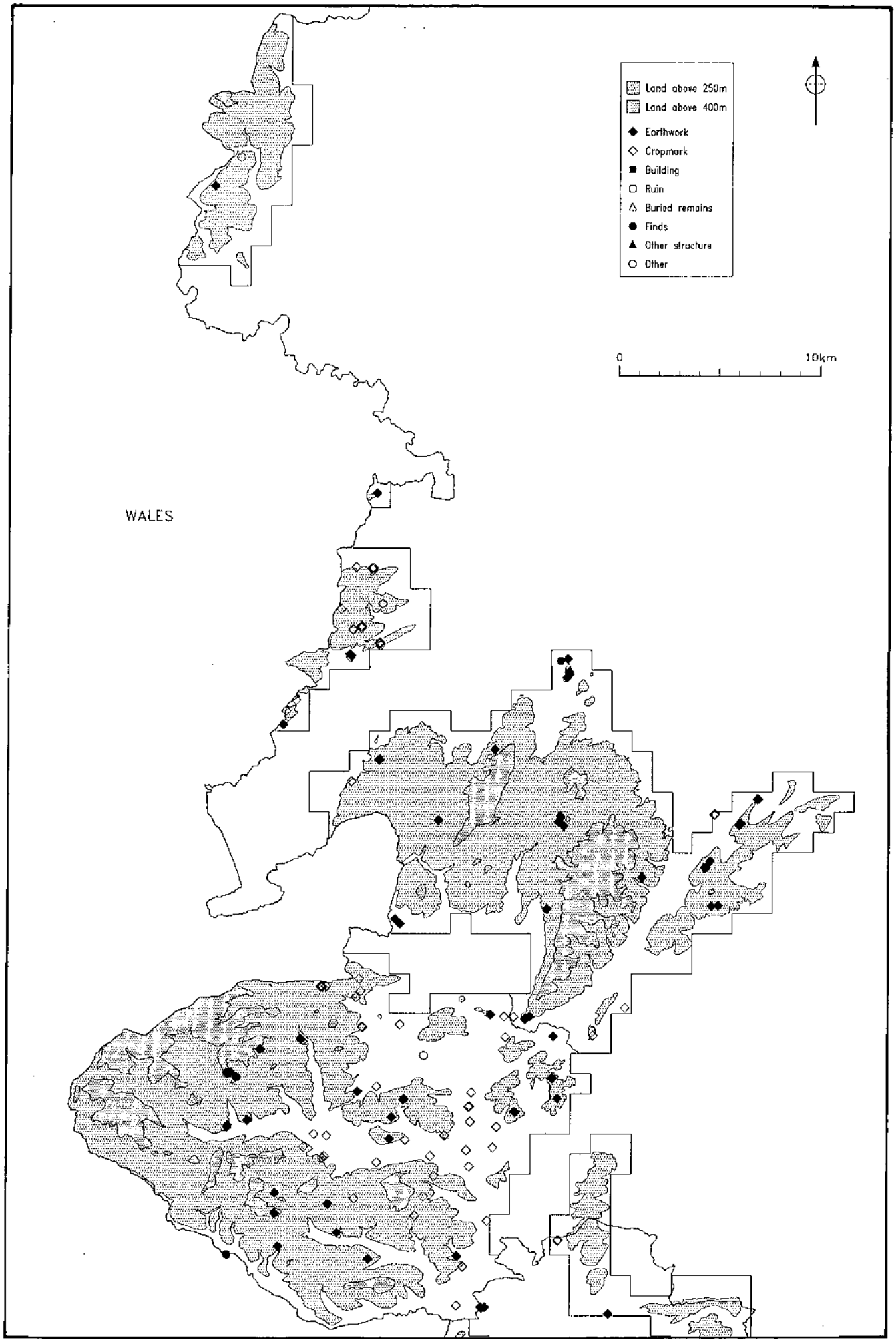


Figure 18.1 Distribution of Iron Age sites and findspots: Shropshire

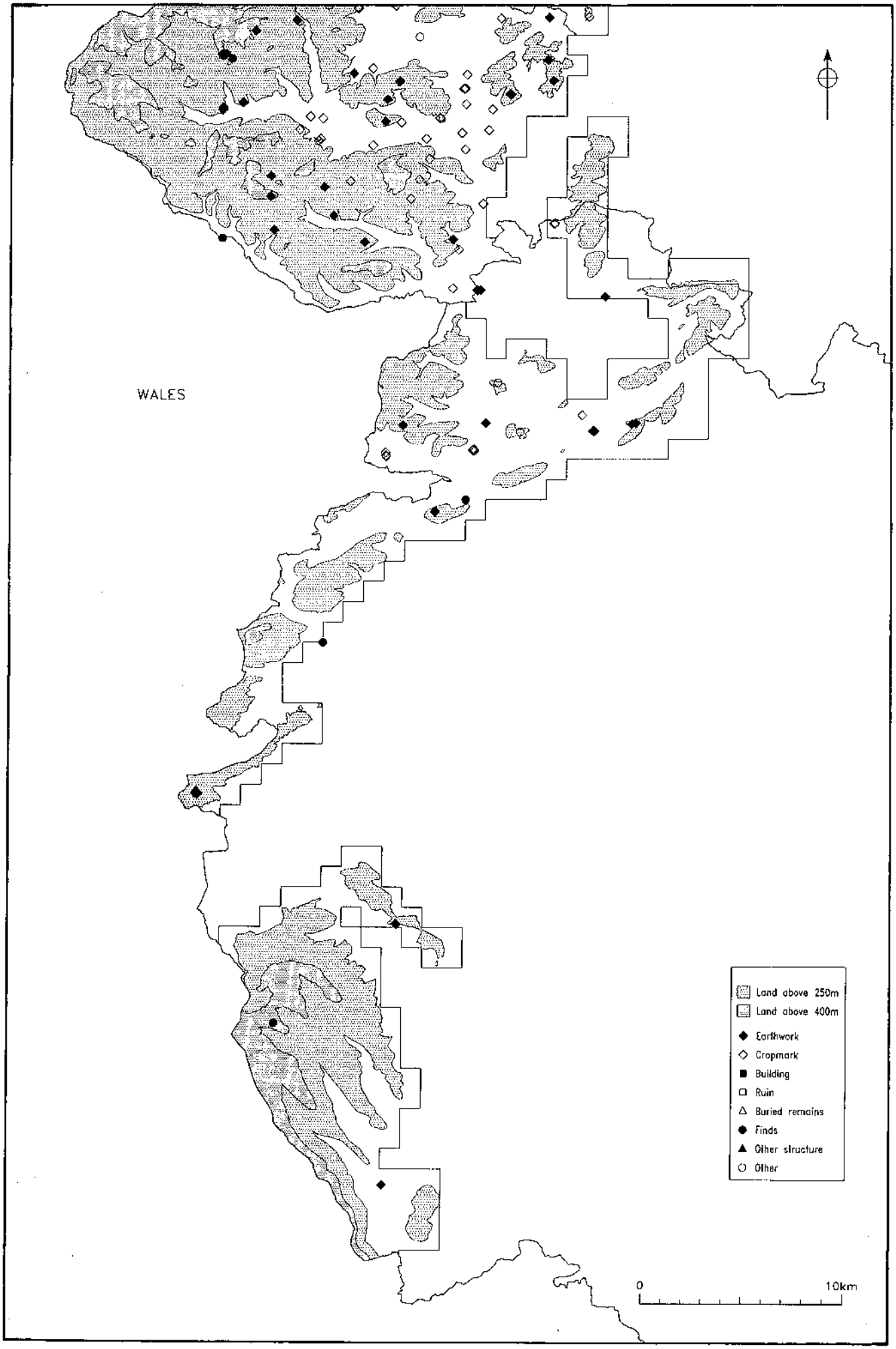


Figure 18.2 Distribution of Iron Age sites and findspots: Herefordshire

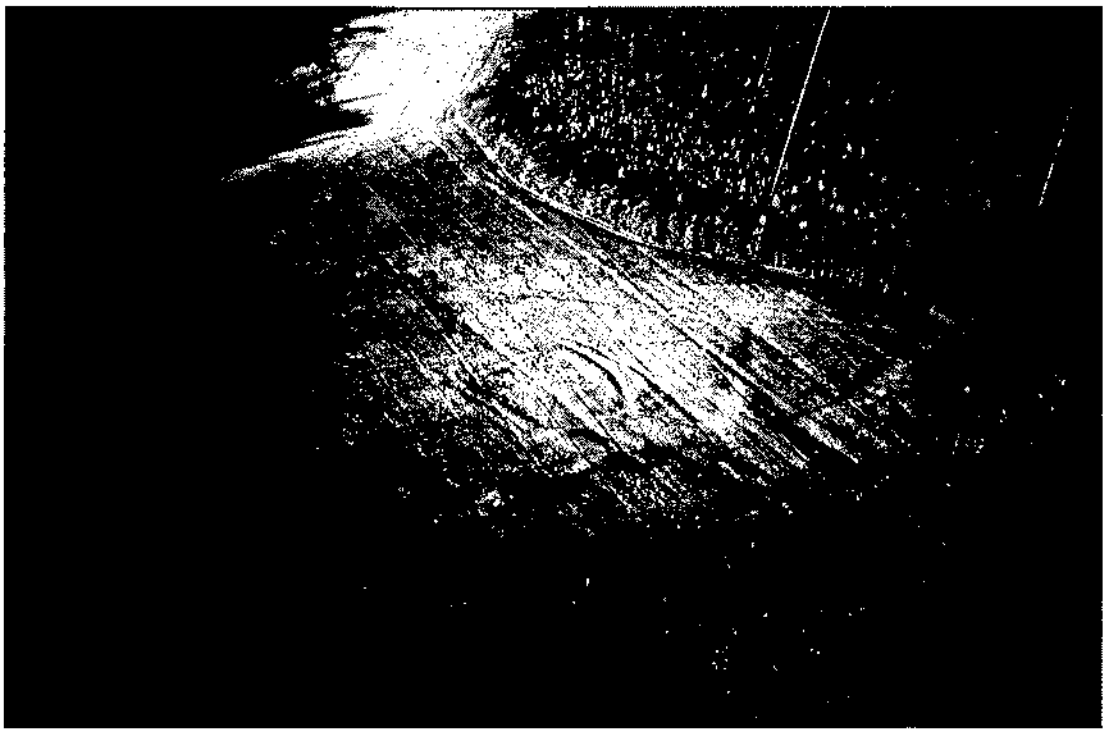


Figure 19 Earthwork enclosure at Bircher Common, Herefordshire

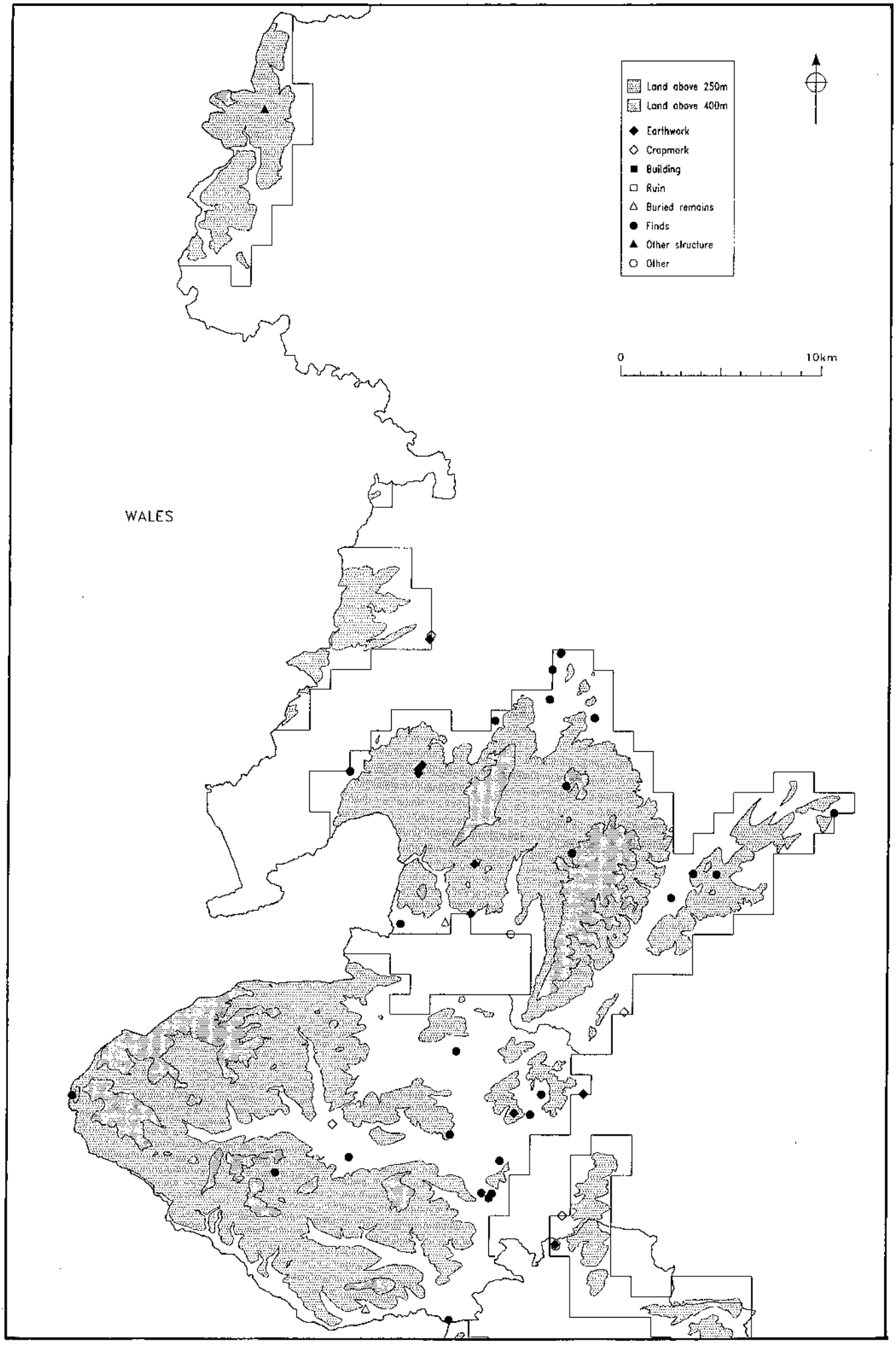


Figure 20.1 Distribution of Roman sites and findspots: Shropshire

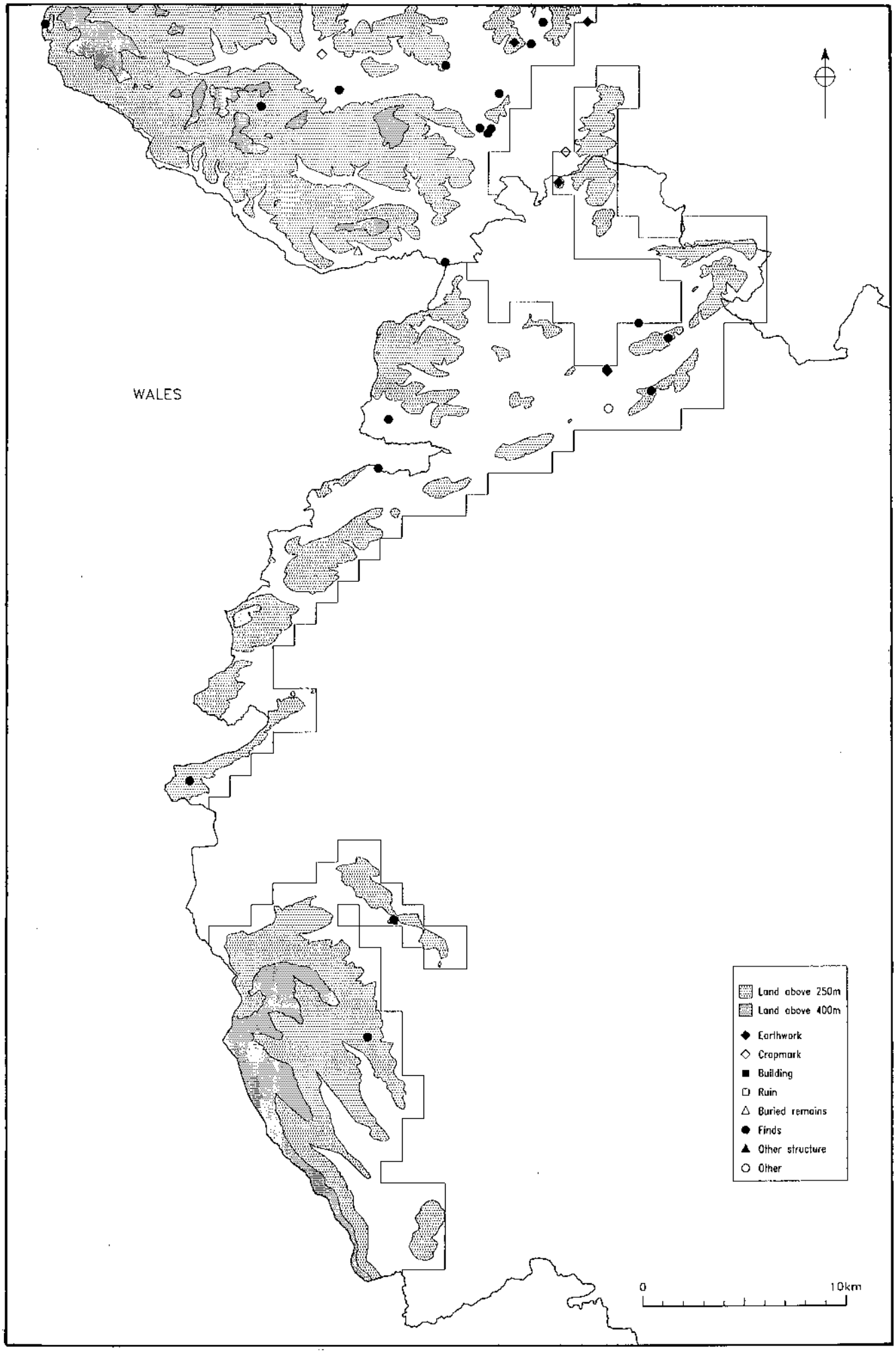


Figure 20.2 Distribution of Roman sites and findspots: Herefordshire

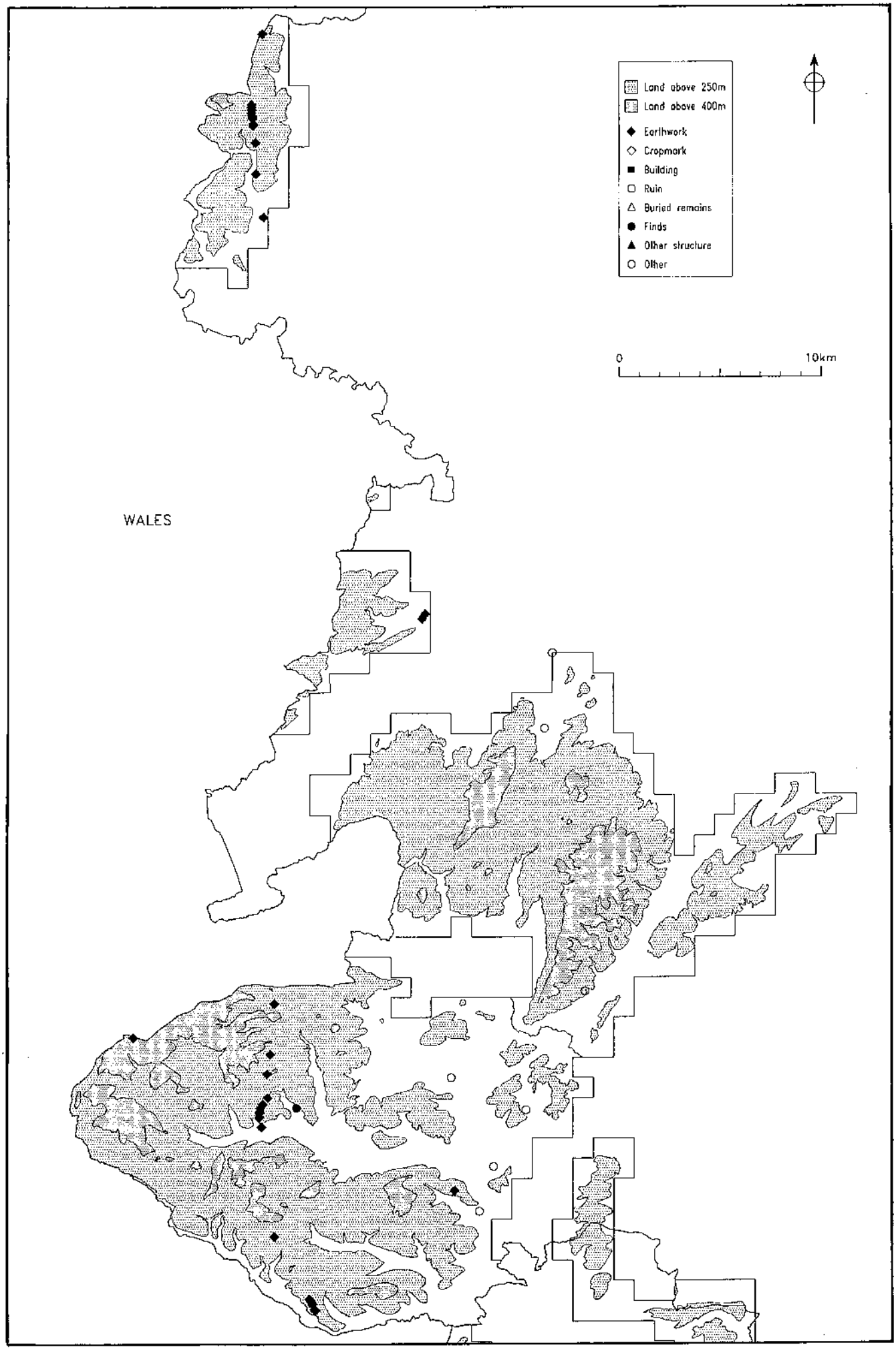


Figure 21.1 Distribution of early medieval sites and findspots: Shropshire

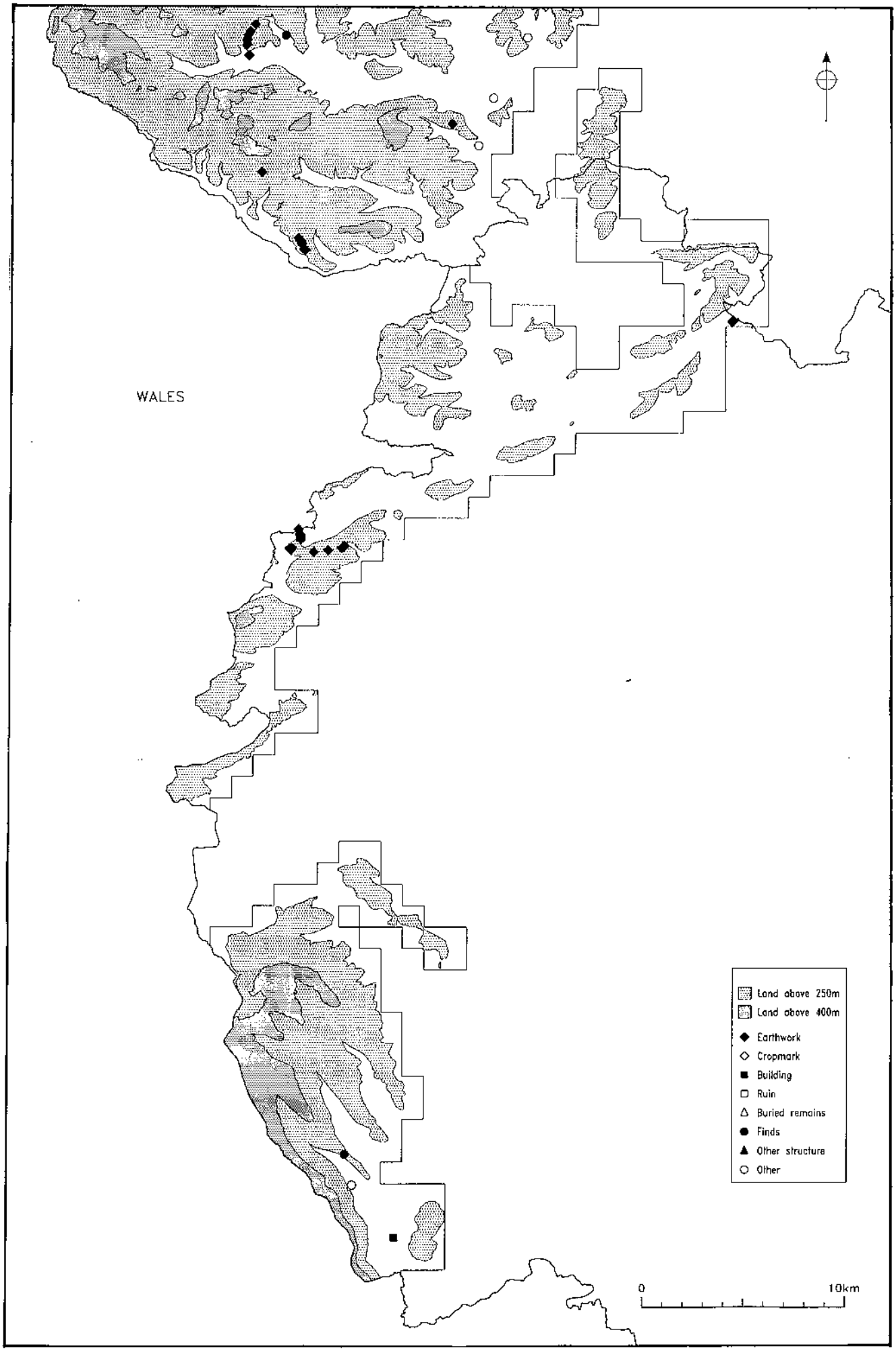


Figure 21.2 Distribution of early medieval sites and findspots: Herefordshire

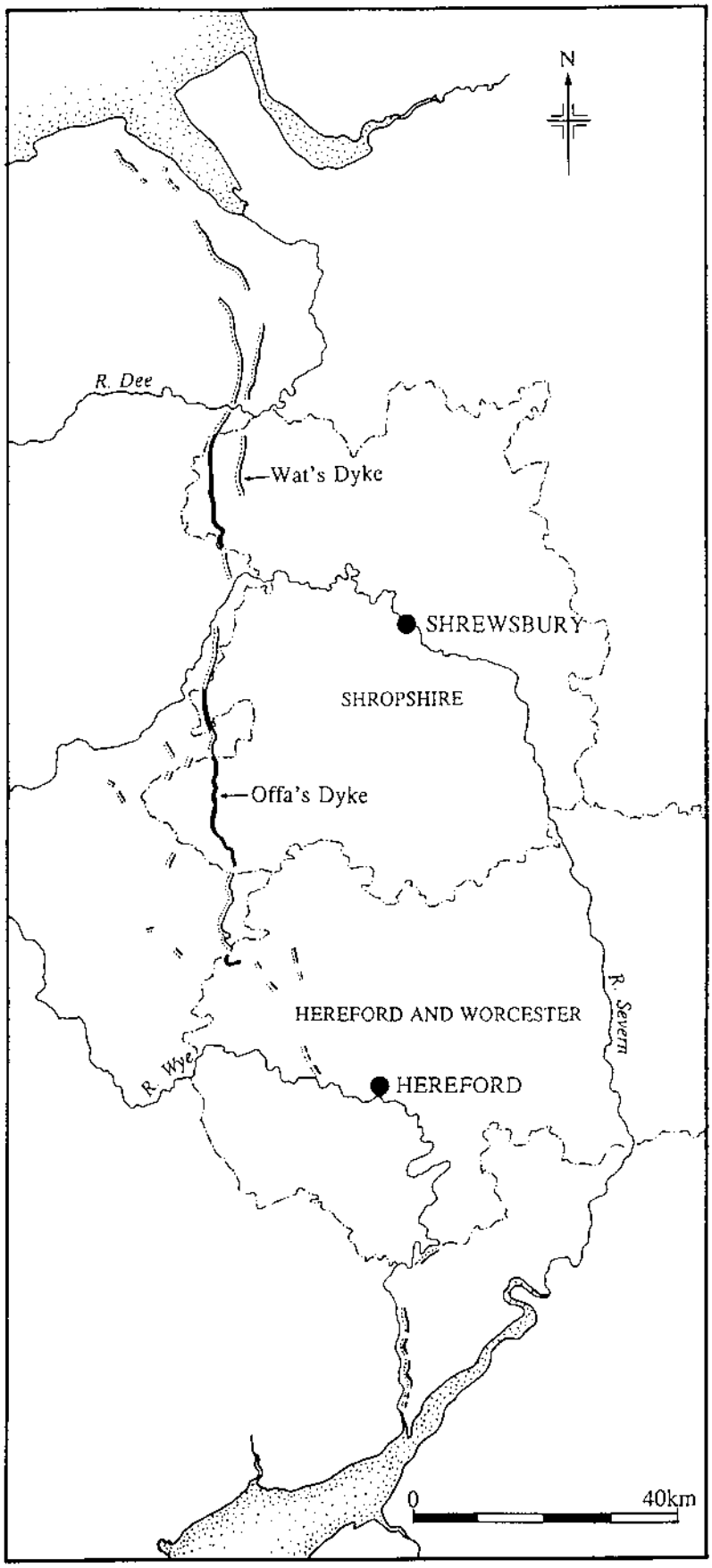


Figure 22 Map showing the line of Offa's Dyke (drawn by Carolyn Hunt)

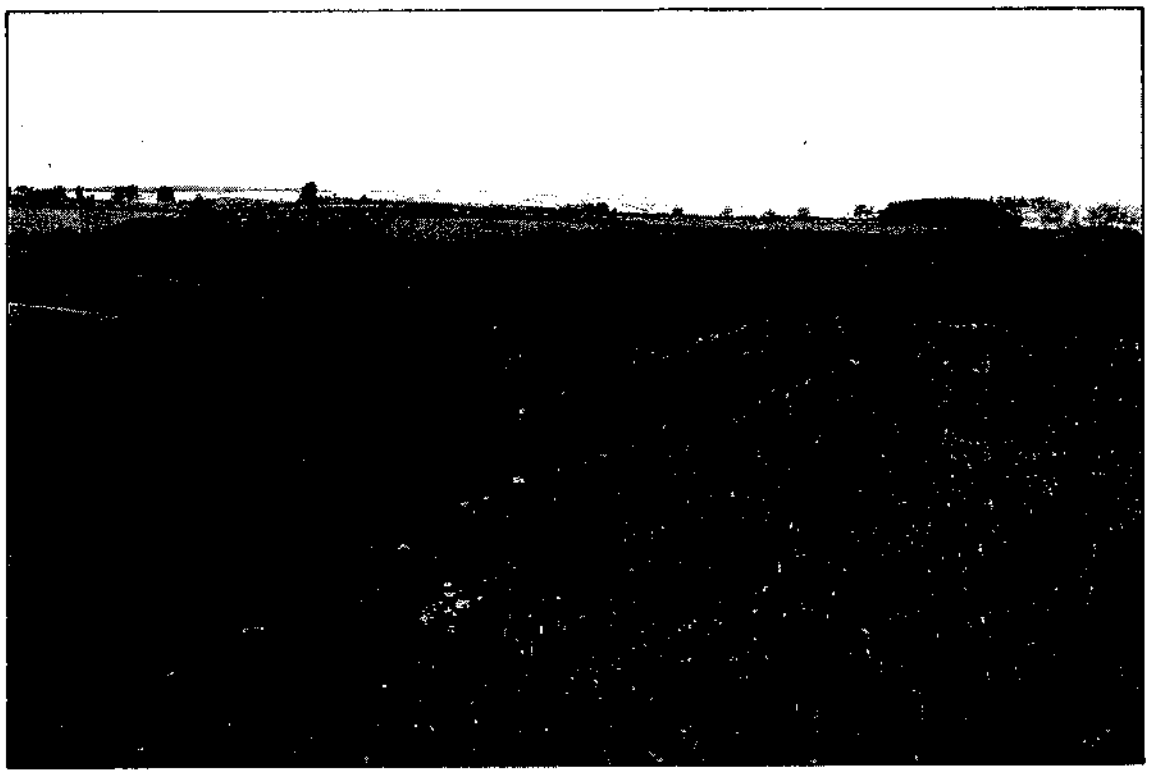


Figure 23 Offa's Dyke on Llanfair Hill

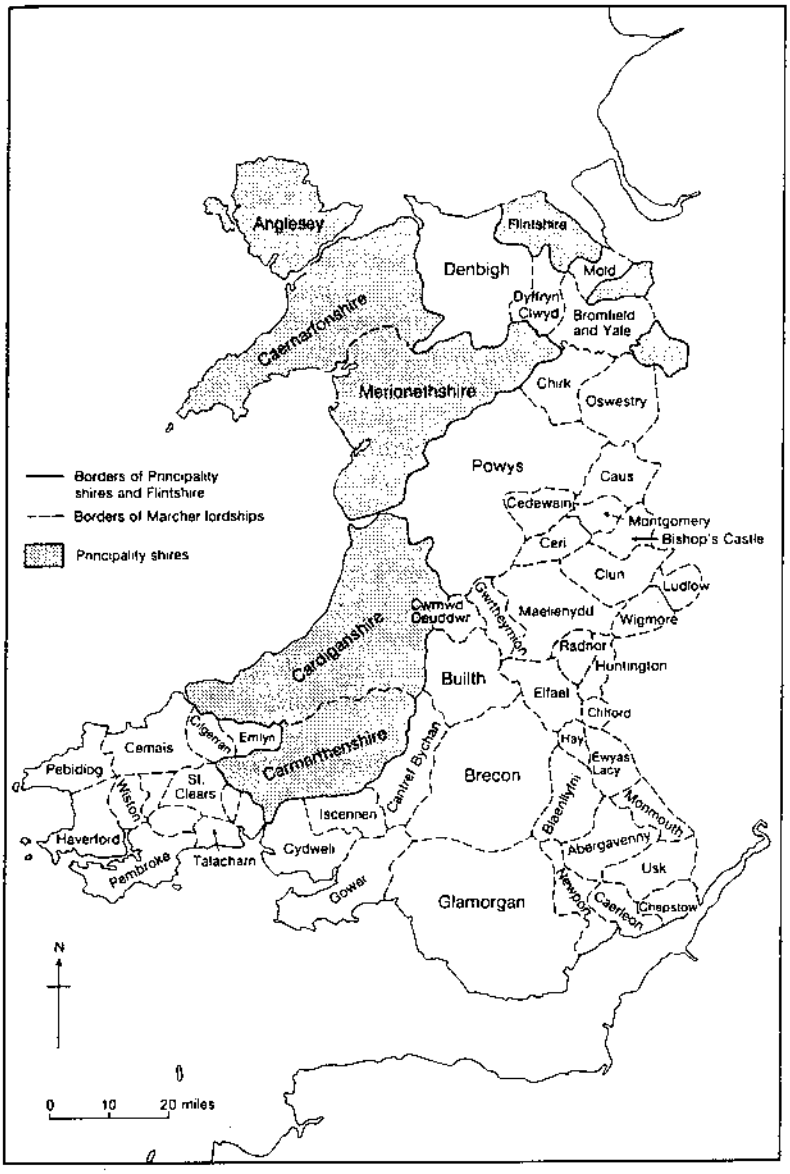


Figure 24 The 14th century Marcher Lordships (source: Davies, R, 1989, map 8)

Figure 25 Strip lynchets at Lingen, Herefordshire

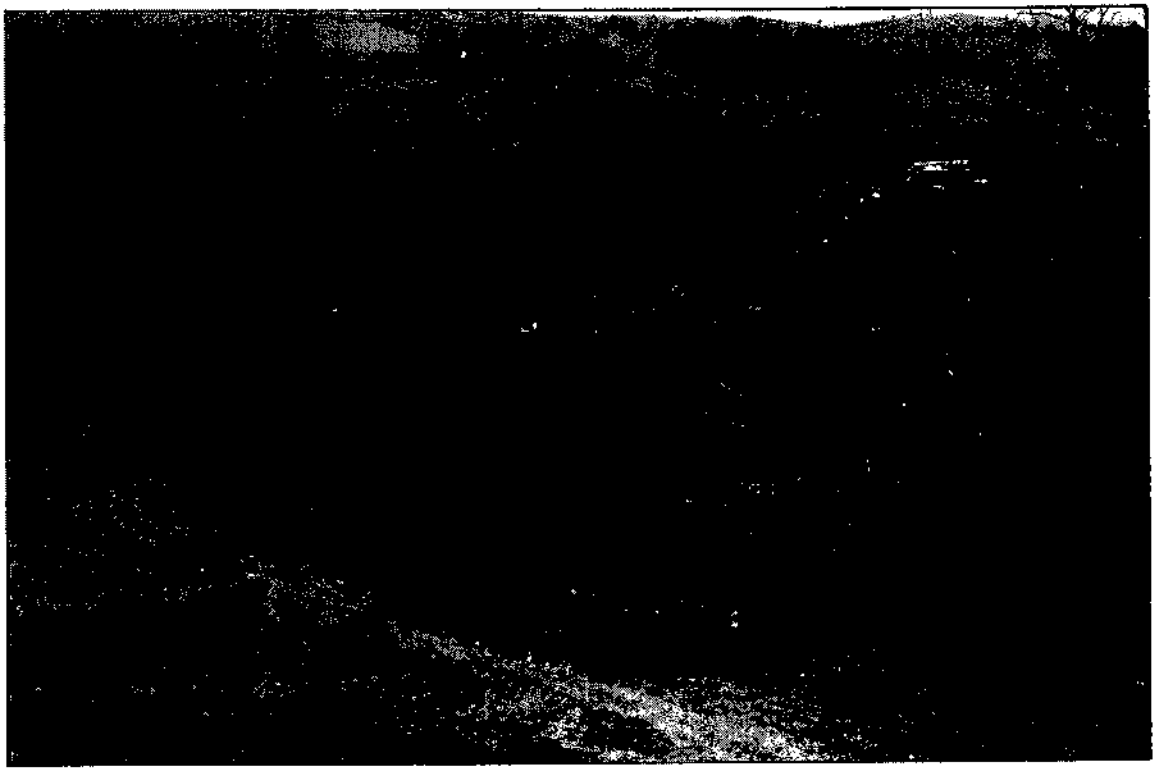


Figure 26 Monastic fishpond dam at Kinnerton grange, Shropshire

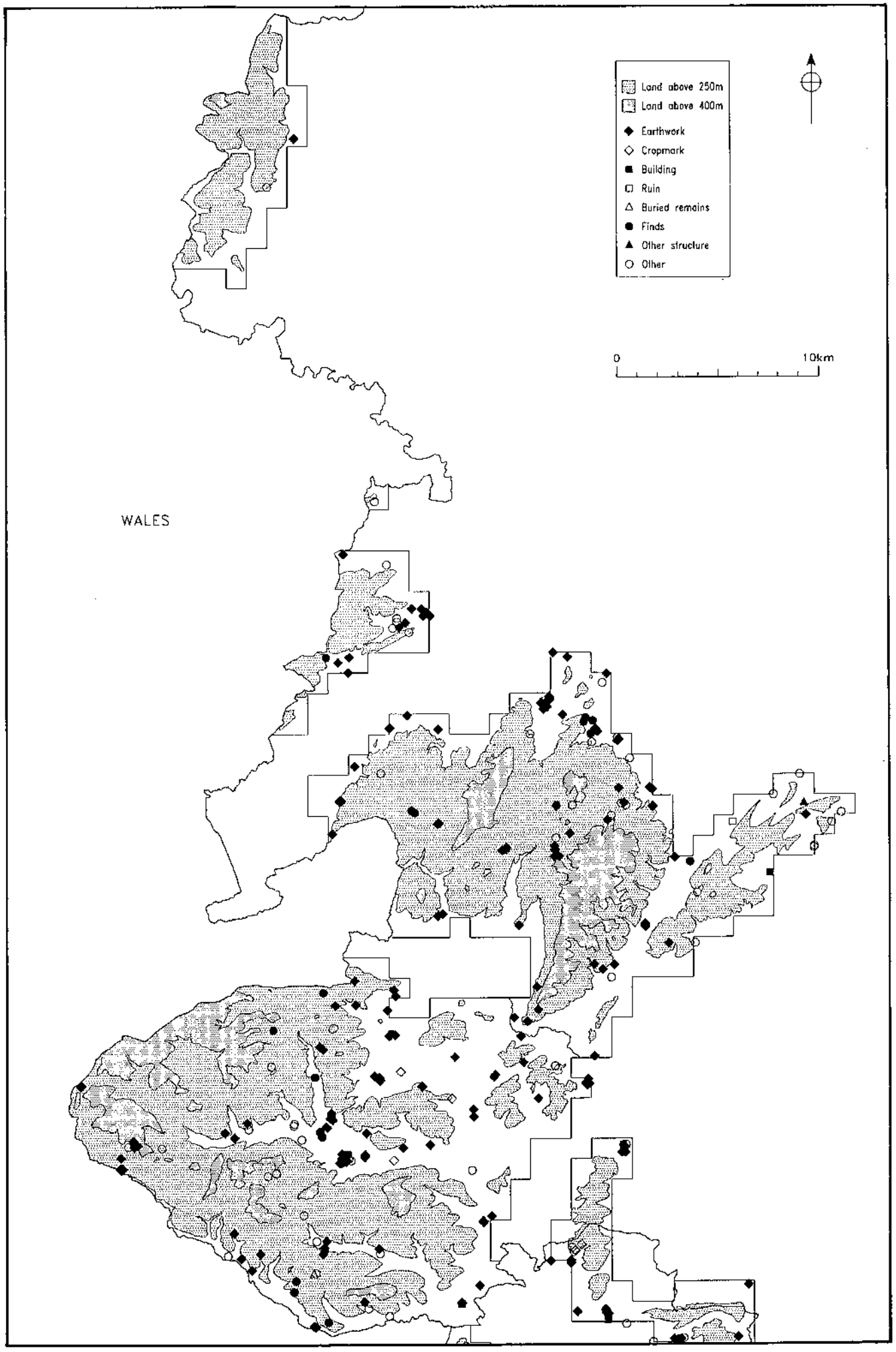


Figure 27.1 Distribution of medieval sites and findspots: Shropshire

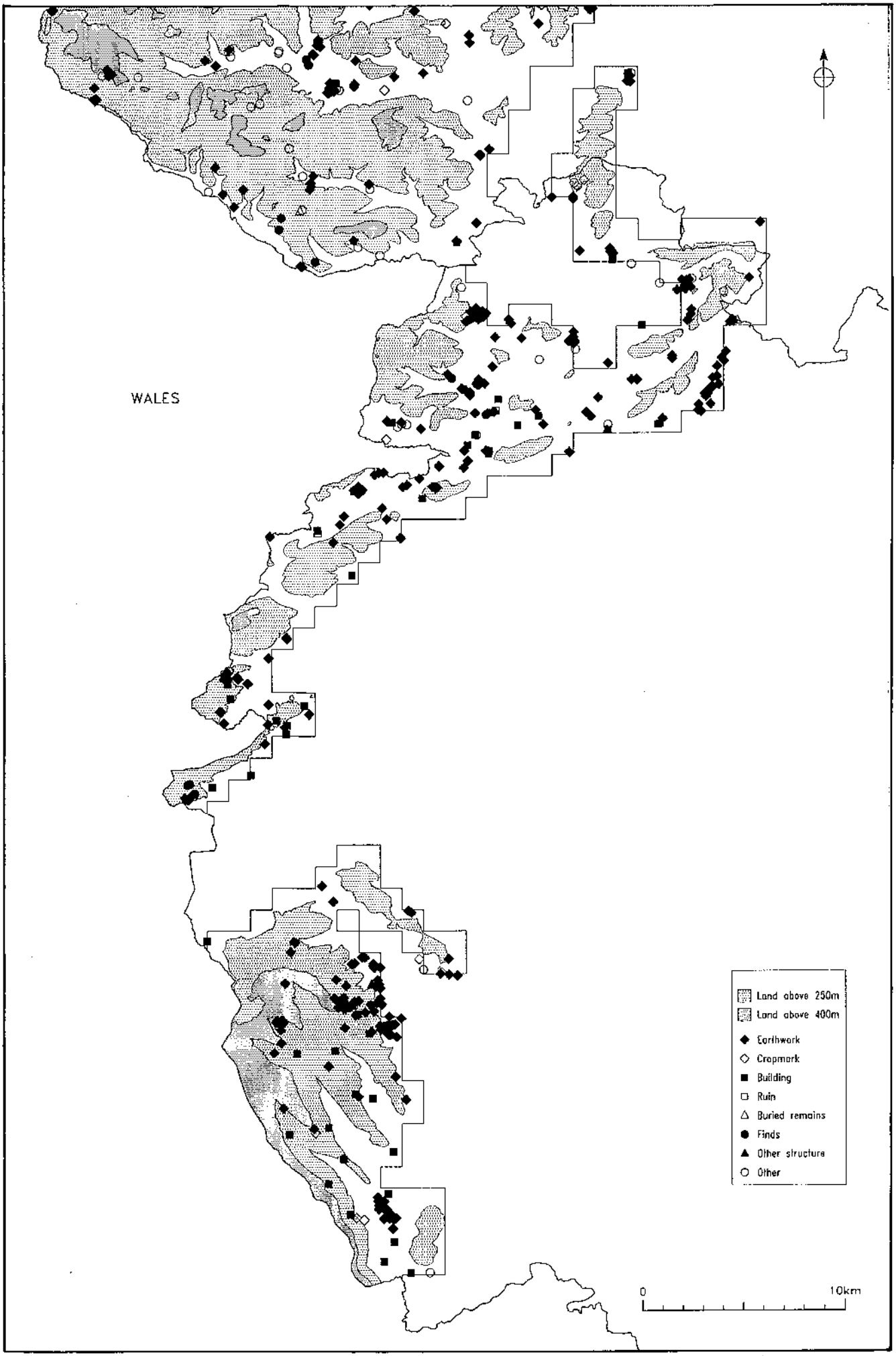


Figure 27.2 Distribution of medieval sites and findspots: Herefordshire

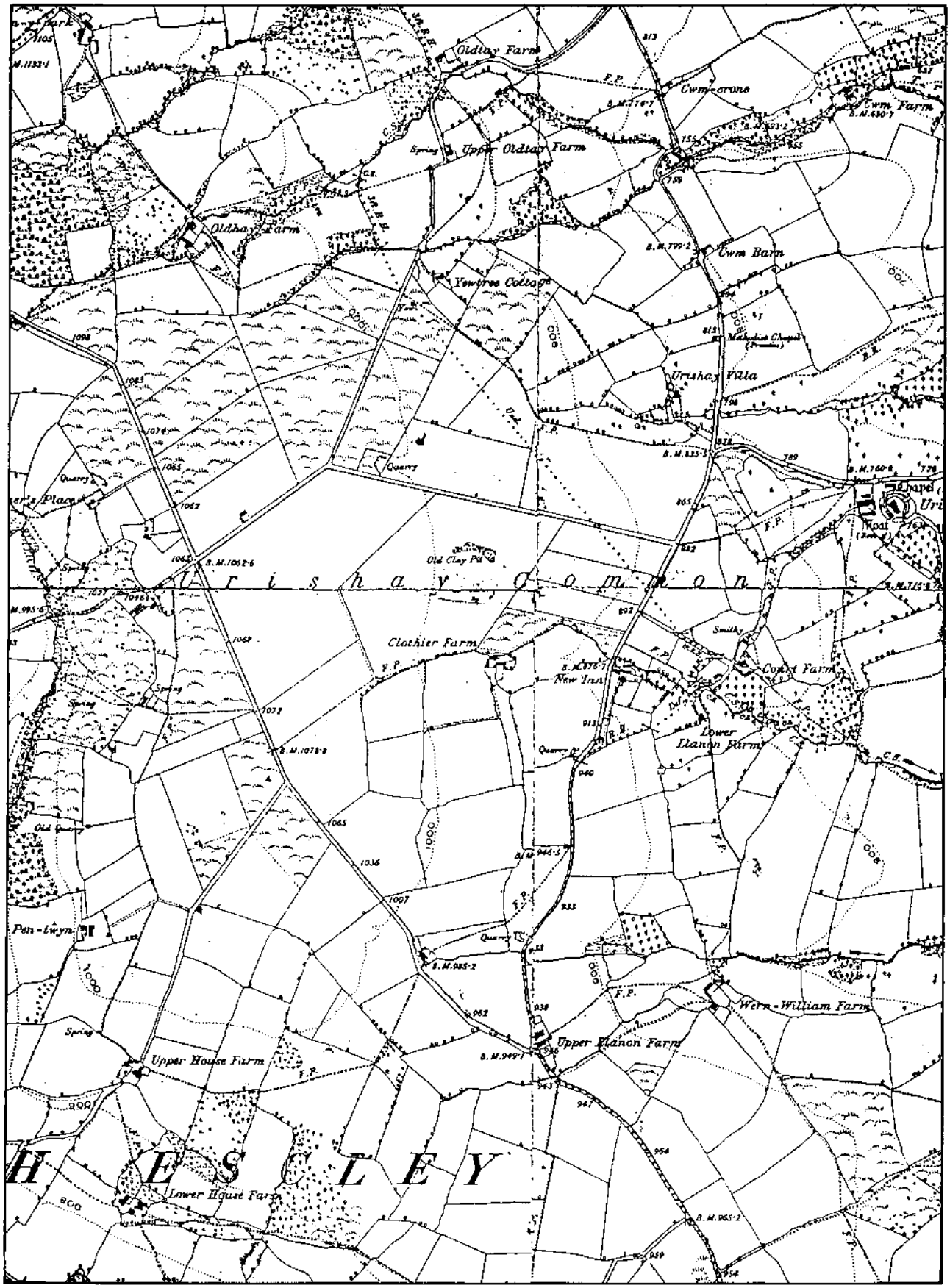


Figure 28 Ordnance Survey First Edition 6" County Series map showing 19th century enclosure

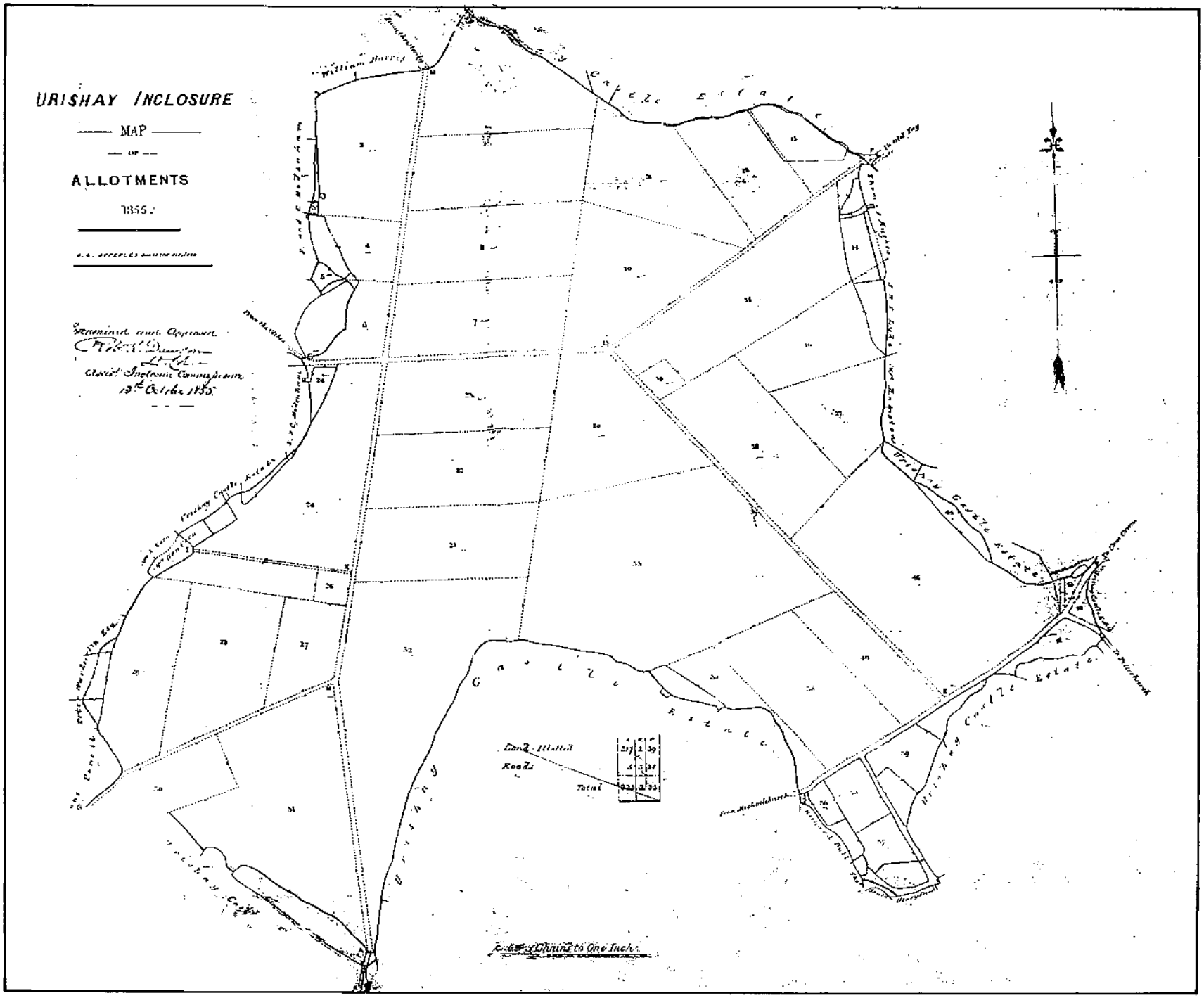


Figure 29 Enclosure map. Michaelchurch Escley, Herefordshire

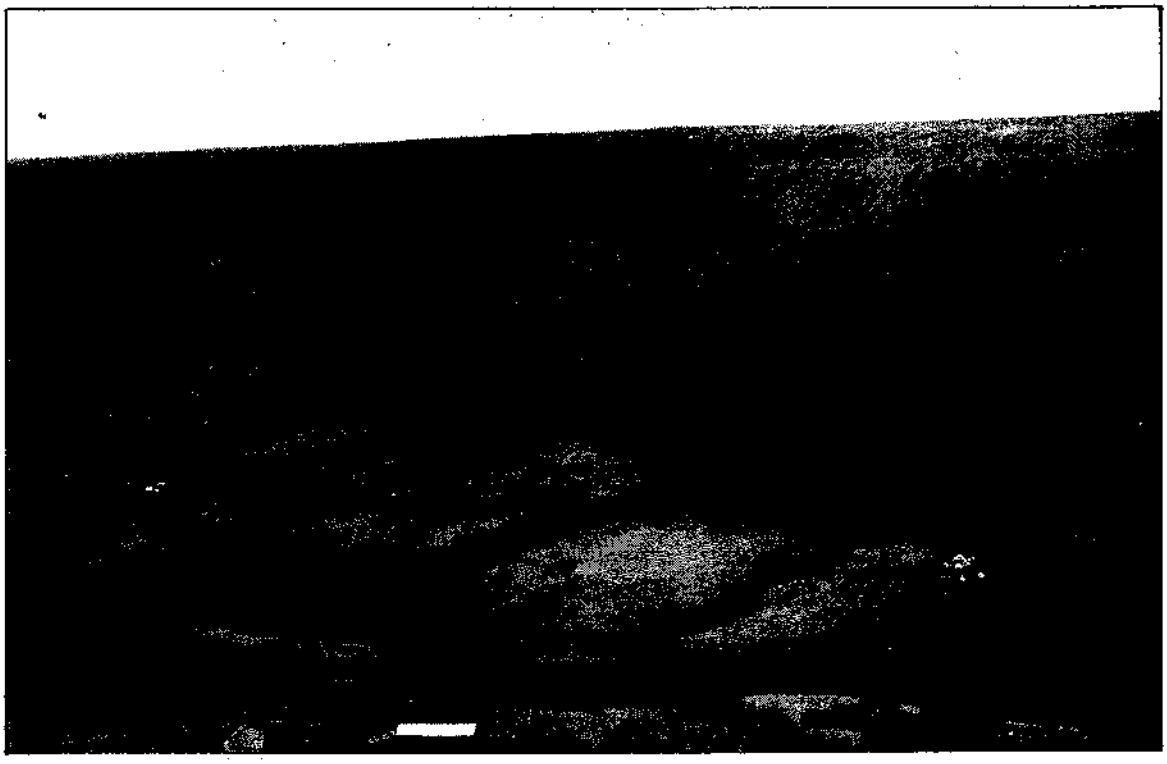


Figure 30 Moorland and encroachment onto the Black Mountains, Herefordshire

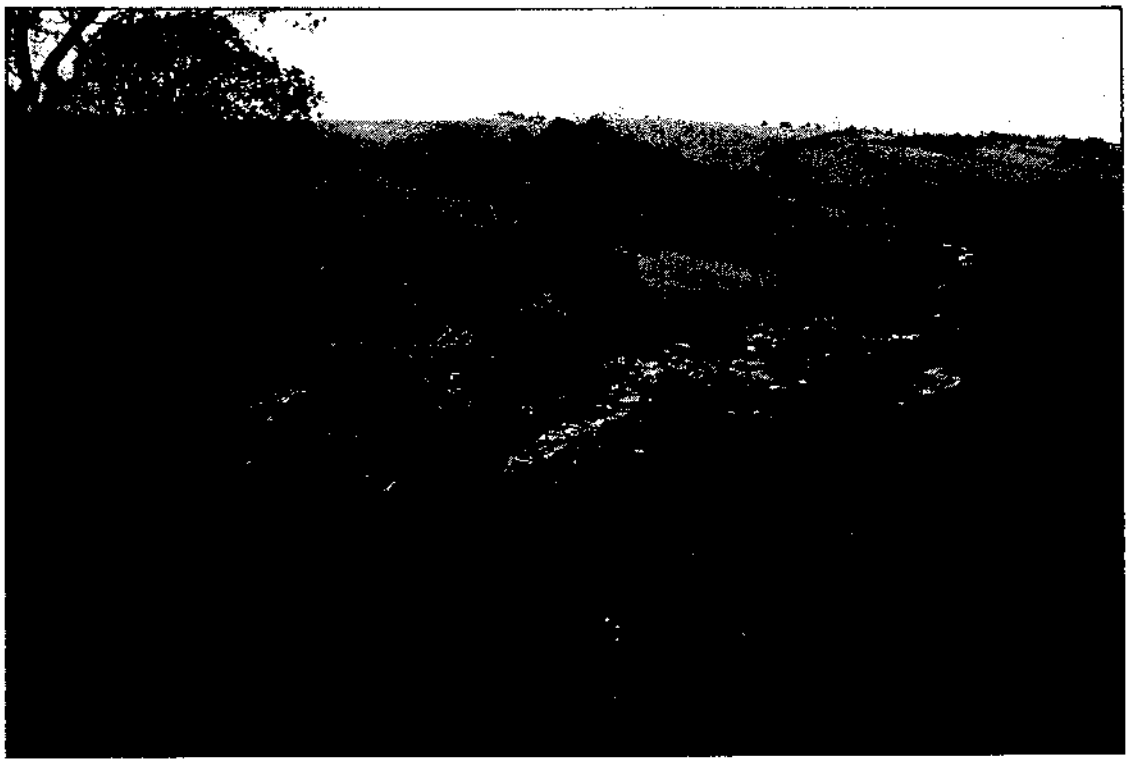


Figure 31 Ruined farm at Craswall, Herefordshire

Figure 32 Limekiln at Lawnwell Dingle, Mocktree, Herefordshire

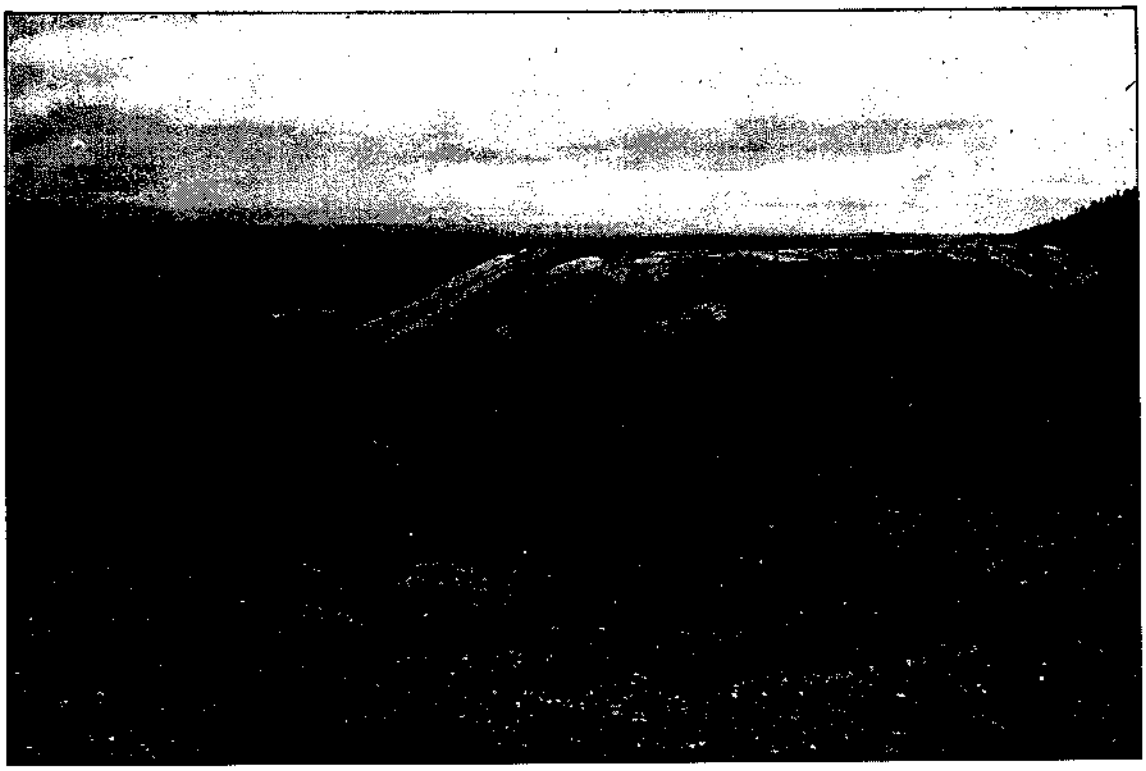


Figure 33 Spoilheaps from lead mining at Snailbeach, Shropshire

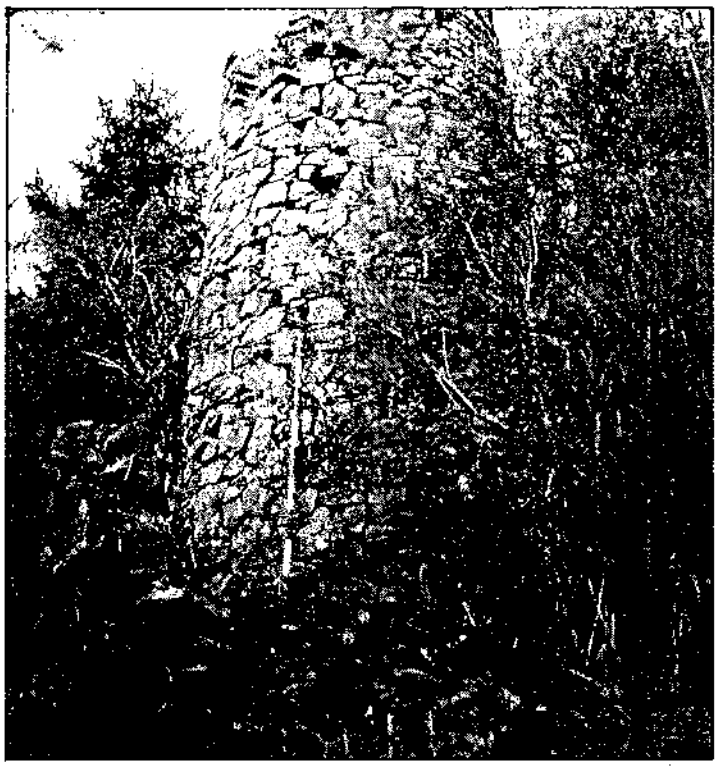


Figure 34 Chimney from lead mining works at Ritton Castle, Shropshire

Figure 35 Disused mineshaft at Shelve, Shropshire

Figure 36 Primitive Methodist Chapel at Bircher Common, Herefordshire

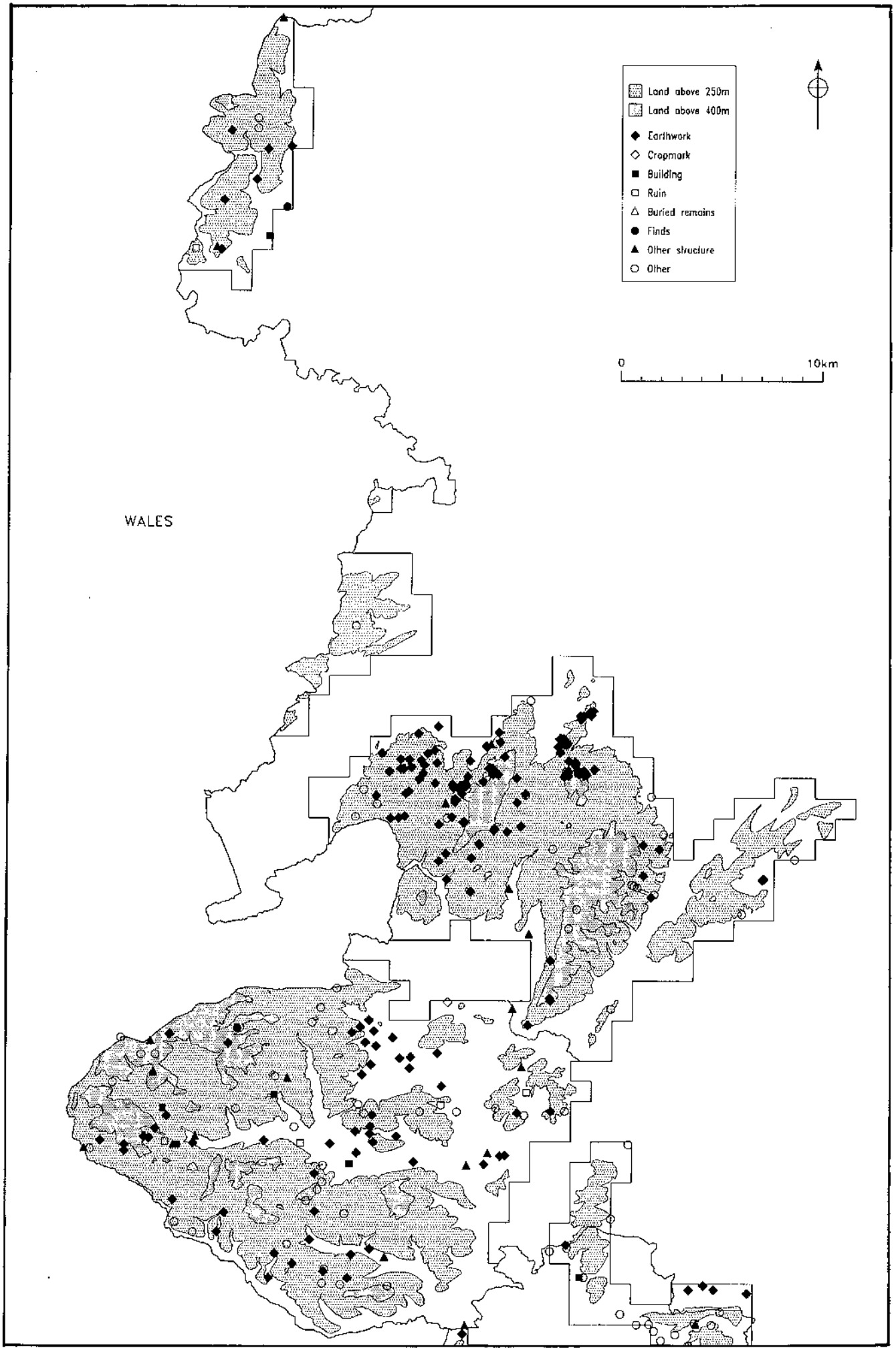


Figure 37.1 Distribution of post-medieval sites and findspots: Shropshire

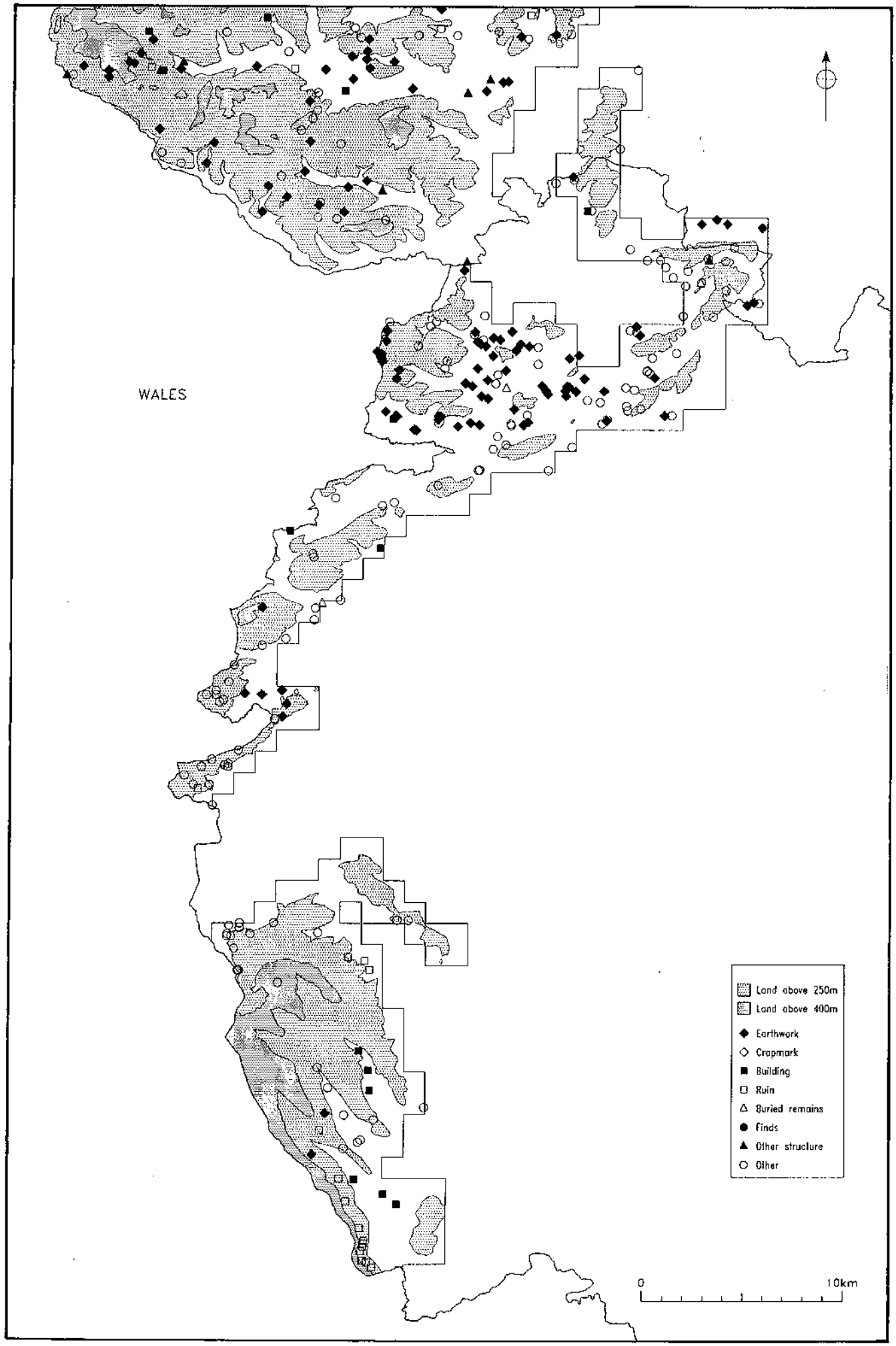


Figure 37.2 Distribution of post-medieval sites and findspots: Herefordshire